

## **‘What drives students’ affective commitment towards their university?’**

### **ABSTRACT.**

This paper suggests how universities can build on-going, committed relationships with students, able to withstand the financial and emotional challenges of studying in higher education. The research proposes that students’ ongoing attachment to their university, based on positive feelings towards the university, is an important aspect of the student experience. This ongoing attachment is conceptualised here as students’ affective commitment towards their institution. Using an online survey-method and a research sample comprising undergraduate students studying in the UK, the research identifies three factors which drive students’ affective commitment towards their institution. These factors include students’ affective commitment towards academics and students’ calculative commitment towards the institution; factors which draw from the relational literature. A third factor, commitment balance, was developed within this research. Commitment balance occurs when a student’s commitment to their university is perceived to be reciprocated by the university’s commitment to the student. The study found that commitment balance was the most important driver of students’ ongoing attachment to their institution. The paper proposes that commitment balance is a key idea to consider within relational studies generally, but has a particular relevance in the higher education context for understanding the student experience. Commitment balance reflects the pulse of reciprocity which energises relational exchanges between students and institution. The findings of this research reinforce how critically important it is for universities and academics to build relationships with students. The desired outcome is to enhance the student experience, create positive attachment between students and university and ultimately improve student retention.

### **KEY WORDS:**

affective commitment, commitment balance, higher education, relationship marketing, student experience, reciprocity.

## **Introduction.**

Universities are working hard to enhance the student experience with the aim of promoting student engagement, achievement and retention. The aim of generating a committed student body is certainly in the interests of universities, but commitment is an important facet of the student experience. It is important for students to study at an institution where they *want* to be for three or four years of their life. Disconnected students can undermine cohort engagement, cause disruption and may be the source of negative word-of-mouth. Thus affective commitment encapsulating students' ongoing desire to be connected with their institution of study, is an important concept within higher education.

Affective commitment brings with it a future-orientation not necessarily characteristic of other relational concepts such as loyalty. Indeed Bowden and Wood (2011) find affective commitment to be a strong driver of loyalty within the context of higher education. In short, Universities retain students who are affectively committed towards them. This paper seeks to address the problem higher education institutions face in understanding how best they can build on-going, committed relationships with students which withstand the financial and emotional challenges of higher education. In doing so, the ideas proposed in this study aim to contribute to our understanding of student experience and retention.

A relational approach emphasising on-going exchanges between students, institutions and academics, is a valuable analytical lens, increasingly adopted by scholars writing about the higher education context (e.g. Bowden and Wood 2011; Raciti 2012; Bowden 2013; Li 2014; Southcombe et al. 2015; Chen 2016). This paper argues that commitment is the most important element of a relational approach, encompassing notions of dedication and on-going interaction. Early and important work by Tinto (1975 and 1982) and Bean (1985) focused on student attrition and drop out. However, Hennig-Thurau et al.'s (2001) seminal work on student loyalty, informing subsequent studies, focussed on commitment as a key factor within higher education. Indeed, more recently, commitment has been the focus of a series of scholars' work within the context of higher education (e.g. Kara and De Shields 2004; Rojas-Mendez et al. 2009; Coleman 2010; Mizusawa et al. 2012; Wong and Wong 2012; Southcombe et al. 2015). Further work enabling us to understand commitment within higher education is of value. This paper seeks to contribute to our understanding and is a response to scholars' calls for study of commitment within higher education (e.g. Kara and De Shields 2004; Wong and Wong 2012).

### ***Research approach.***

The research proposes a conceptual framework, combining calculative and affective dimensions of commitment, with institution and academics as the focus of that commitment. In addition, the concept of commitment balance is developed, operationalized and incorporated within the framework. The conceptual framework seeks to provide an explanation of commitment constructs and their inter-relationships within undergraduate students' experiences of higher education. Commitment constructs are developed and defined using exploratory factor analysis. Relationships between constructs are hypothesised and regression analysis is used to examine the evidence and strength of these relationships. Managerial implications for higher education are proposed, responding to the findings of this research.

Conceptually this study has the potential to contribute new knowledge about affective commitment alongside the development of a new construct, commitment balance. Such knowledge also aims to enhance scholars' broad understanding of commitment within contexts beyond higher education.

### **Conceptual underpinning.**

#### ***Commitment.***

This paper argues that commitment must be at the heart of any study bringing a relational lens to higher education. Commitment speaks to the on-going nature of relational exchanges; sustained exchanges taking place in our universities characterised by interdependency. Such relational exchanges exist between students, institutions and academics. This study starts by defining commitment as an on-going connection, based upon a desire, need or obligation to maintain that connection and a preparedness to invest in perpetuating that connection (drawing from Allen and Meyer 1990; Moorman et al. 1992; Morgan and Hunt 1994).

#### ***Adopting a dimensional approach to commitment.***

Whilst commitment was defined by Morgan and Hunt (1994) as a single latent variable within their Key Mediating Variable framework, increasingly literature within the relational context has moved to break down the notion of commitment into two (e.g. Fullerton 2003; Fullerton 2005; Bowden 2011) three (Allen and Meyer 1990; Fullerton 2011) or even more (e.g. Sharma et al. 2005) dimensions. The dimensional approach was pioneered by Allen and Meyer

(1990) within an organisational context. Three commitment-based constructs were defined, affective commitment, calculative (also known as continuance) commitment and normative commitment. Much work points to the importance of affective commitment. Dalziel et al. (2011) proposed that positive, functional relationships within the banking sector are characterized by affective commitment. Evanschitzky et al. (2011) found that affective commitment amplifies service consumers' willingness to help and tolerate problematic situations. Within the context of higher education, Bowden and Wood (2011) find affective commitment to be a strong driver of students' loyalty.

Table 1 provides a summary of scholars' approaches to dimensions of commitment. It draws from extant scholarship (Gruen et al. 2000; Harrison-Walker 2001; Hennig-Thurau et al. 2001; Hansen et al. 2003; Fullerton 2005; Sharma et al. 2005; Gustafsson et al. 2005; Gonzalez and Guillen 2008; Tsai and Huang 2008; Meyer and Parfyonova 2010; Fullerton 2011) to define the three dimensions of commitment first proposed by Allen and Meyer (1990). Scholarship therefore largely demonstrates the distinctiveness of affective commitment, calculative (continuance) commitment and normative commitment and thus supports this study's use of a dimensional approach to commitment. Table 1 notes overlaps between scholars' definitions of affective and calculative commitment within the area of 'competitiveness of the value proposition' and between affective commitment and normative commitment within 'shared values and loyalty'.

**Table 1: Developing the conceptualisation of commitment dimensions.**

<b>Calculative/continuous</b>	<b>Affective</b>	<b>Normative</b>
Effort of change- time cost and disruption	Attachment, participation, belonging, involvement	Morality, ethically sound
Benefits lost	Enjoyment, liking	Responsibility, duty, obligation, indebtedness
Difficulty of changing one's mind	Personal meaning, identification, caring	
Investments (side bets) made	Pride, inspiration	
	Shared values, loyalty	
Competitiveness of value proposition		

### ***Commitment towards institution and people.***

This study argues that just as different dimensions of commitment are important, so are different foci for commitment. Much of the empirical work conducted on commitment sees the organisation as a focus for commitment, be the organisation a retailer (e.g. Brown et al., 2005; Lacey et al., 2007) or as in this study, a university (Hennig-Thurau et al. 2001; Rojas-Mendez et al, 2009). However Meyer and Parfyonova (2010) find that employees have many foci for their commitment within the workplace and recommend that organisations actively seek to develop multiple foci for employees' commitment. Meyer and Parfyonova's (2010) particular interest is normative commitment, nevertheless their thoughts regarding commitment towards foci beyond the institution, inform this study. Within the higher education context, Hennig-Thurau et al.'s (2001) work introduced a diverse range of foci for commitment within higher education, including the institution, but notably, excluding academics. This study addresses that omission.

Outside higher education, Hansen et al. (2003) examined commitment towards institution and employees within the context of banking. They examined the relationship between 'affective commitment towards salespeople' and 'affective commitment towards bank', finding that 'affective commitment towards salespeople' contributed to 'affective commitment towards bank', which in turn had a positive relationship with customers' intention to stay with that bank. This study seeks to examine a similar relationship within the context of higher education, that is students' affective commitment toward academics drives their affective commitment towards institution. Affective commitment towards institution and affective commitment towards academics are distinct constructs but are both characterised by inspiration, belonging, pride, caring and identification.

### ***Commitment balance.***

Authors have argued for many years that reciprocity is central to relational exchange in consumer (Bagozzi 1995) and business-to-business contexts (Houston and Gassenheimer 1987; Nevin 1995; Rao and Perry 2002). However there is a lack of reference to reciprocity within previous conceptualisations of commitment. An exception is Gundlach et al.'s (1995:78) recognition of the importance of mutual commitment and their suggestion that disproportionate commitment can influence opportunistic behaviours.

This study draws from Gundlach et al.'s (1995) early ideas and proposes that commitment balance is a new and useful way of thinking about commitment. Commitment balance reflects the pulse of reciprocity which energises relational

exchange. Commitment balance compares the levels of commitment students feel towards their institution, with the levels of commitment students perceive emanate from their institution, towards themselves and the broader student body. High levels of commitment balance mean that students consider that there is equivalence between the commitment they feel towards their institution and the commitment they perceive comes back from their institution. Low commitment balance suggests a mismatch between the commitment students feel towards their institution and perceive to be reciprocated.

This study suggests that commitment balance may be an important idea about students' interactions with their educational institution. This is a new conceptualisation within commitment, both in higher education and outside education. It stresses the importance of the relative levels of commitment between two exchange partners. This may be a useful addition to our current thinking about commitment which predominantly focuses on commitment's absolute nature.

The notion of commitment balance is therefore proposed as central to universities' interactions with students. Institutions seek to encourage academic, social and financial commitment from students, reflected in the increasing financial commitments students must make within their lives at university. Institutions must be prepared to demonstrate high levels of reciprocal commitment to their students. As student commitment rises, institutions must demonstrate a parallel increase in their commitment to students.

Commitment balance can be assessed in two ways. One option is to measure the commitment students feel and perceive and deduct one from the other. Alternatively a construct can be measured representing students' overview of the reciprocal commitment apparent within their experiences of higher education. This paper chooses the latter approach, developing and operationalising commitment balance as a distinct construct, as this better conveys a holistic sense of reciprocity.

To summarise, whilst scholarship within relationship marketing acknowledges the importance of mutuality as both parties benefit from relational exchange (e.g. Morgan and Hunt 1994; Gundlach et al. 1995), the notion of commitment balance is a new concept defined as:

*Commitment balance is the extent to which students perceive that the commitment they feel is equally matched by the reciprocal commitment they perceive to be emanating from the relational partner.*

### ***Conceptual Framework.***

This study is underpinned by a conceptual framework proposing affective commitment towards the institution as the dependent construct, predicted by three commitment-related independent constructs (see figure 1). Affective commitment towards the institution was found to be a strong driver of loyalty for both female and male students by Bowden and Wood (2011) and thus is a worthy endogenous construct for this study.

It is defined as:

*Affective commitment towards the institution is a student's positive attachment towards their university based on feelings of inspiration, belonging, pride and identification and which in turn contributes to a sense of care towards the university and a desire to maintain an existing relationship with the university.*

The first relationship within the conceptual framework, builds on Hansen et al.'s (2003) findings of a relationship between affective commitment focussed towards people and affective commitment towards the institution of which those people are a part. Thus sustained commitment harnessing feelings of attachment, belonging, enjoyment, liking, caring, identification, loyalty and inspiration at a people-orientated level (academics, see appendix 1 for definition) will drive feelings of sustained commitment of a similar nature, at institutional level.

Hypothesis 1:

*Students' affective commitment towards academics is positively related to affective commitment towards the institution.*

Second, the framework suggests that calculative commitment directed towards a focus will undermine affective commitment towards that focus (Fullerton 2005). On-going commitment characterised by concerns about benefits lost, efforts of change, costs of disruption, difficulties in changing one's mind, is expected to undermine commitment towards the same object characterised by belonging, liking, caring, inspiration and attachment. Therefore calculative commitment towards the institution (see appendix 1 for definition) will undermine affective commitment towards the institution.

Hypothesis 2:

*Students' calculative commitment towards the institution is negatively related to affective commitment towards the institution.*

Finally, the study suggests that the balance of commitment students feel towards their institution and perceive to be reciprocated (commitment balance, see

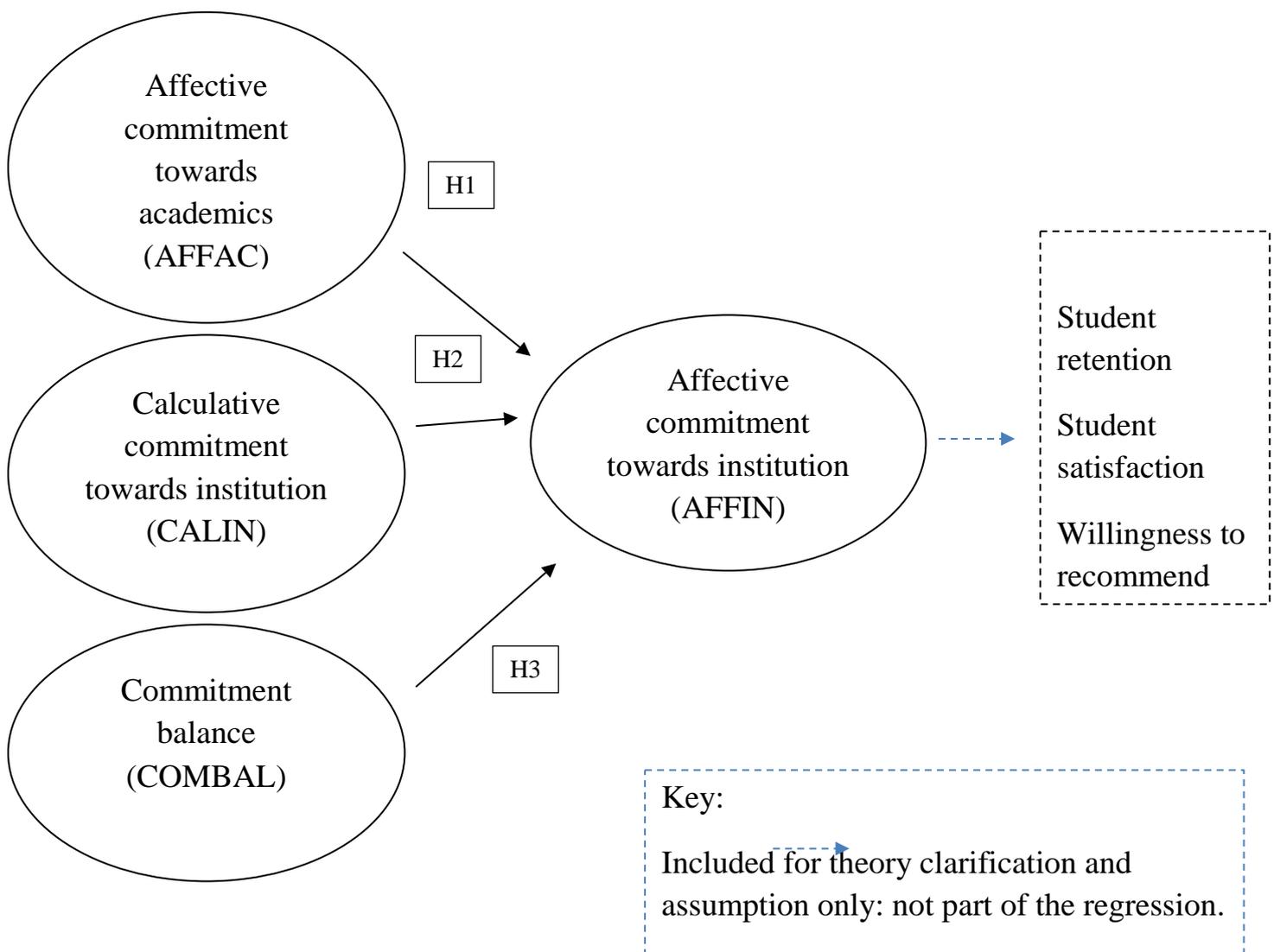
appendix 1 for definition) will be related to students' affective commitment towards the institution. If students perceive that their commitment (of whatever level) is reciprocated by their university, then that will build commitment towards the institution characterised by participation, attachment, involvement and identification.

Hypothesis 3:

*Students' commitment balance is positively related to affective commitment towards the institution.*

The research seeks to empirically test this conceptual framework, using a series of items drawn from literature (Allen and Meyer 1990; Gruen et al. 2000; Harrison-Walker 2001; Hansen et al. 2003; Fullerton 2005; Sharma et al. 2005; Tsai and Huang 2008) to measure three of the four constructs, and developing reliable items for the new construct commitment balance.

**Figure 1: Conceptual Framework.**



## **Research Methodology.**

This research used an online survey method amongst a research population comprising undergraduate students studying at modern (post-1992) universities within the UK. Modern universities were selected due to the importance of the student experience, student recruitment and student retention for their operation. This is particularly the case in the current competitive context as student numbers are deregulated and Russell-Group universities are actively increasing their student numbers. Modern universities have been the subject of previous studies within higher education (e.g. Bennett and Ali-Choudhury 2009; Chapleo 2011; Southcombe et al. 2015). Variation within the study was maintained by the inclusion of students from all year groups and both genders. This meant that outcomes could be applied to the wider body of students without due concern that they were relevant only to a comparatively small section of the undergraduate student community. Four universities agreed to participate within the study, with an overall undergraduate population of 56, 230 (Higher Education Statistics Agency 2011).

### ***Items.***

The survey was drawn from a series of items adapted from extant scholarship (e.g. Allen and Meyer 1990; Fullerton 2005) and using a 7-point ordinal scale anchored by 'strongly disagree' 1 and 'strongly agree' 7 the mid-point, 4, labelled as 'neutral'. Items are provided in appendix 1.

Items for commitment balance, as an entirely new construct, were developed for the HE context. The conceptualisation of commitment balance informed the definition of ten initial items (see appendix 2). These items embraced commitment balance between students and the institution, alongside commitment balance between students and academics. Exploratory factor analysis on pilot data (principal components analysis; direct oblimin rotation) identified the emergence of three factors (66.23% cumulative loading). Of these, two commitment-balance possible constructs were clearly identifiable: commitment balance between students and institution; commitment balance between students and academics. It was clear from the pilot data that commitment balance between students and institution had the greater potency, variance and relevance to this study. Thus it was judged that the items associated with commitment balance between student and institution would be selected as measures of commitment balance. Appendix 2 shows the loading of the ten items on this construct based on analysis of pilot data. The Cronbach Alpha of .800 (using pilot data) provided assurance that the four selected items

comprised a reliable set of measures for the commitment balance construct within this study.

Affective and calculative commitment constructs were measured by items adapted from the work of Allen and Meyer (1990), Gruen et al. (2000), Harrison-Walker (2001), Hansen et al. (2003), Fullerton (2005) and Sharma et al. (2005). All items were initially reviewed by a small number of students to assure face validity.

Exploratory factor analysis using pilot data was used to reduce the number of items for each factor. Calculative commitment towards the institution's eight items were reduced to four; affective commitment towards the institution's ten items were reduced to five; affective commitment towards academics' ten items were reduced to four; commitment balance items were reduced from ten to four.

The Cronbach Alpha for all items together was reliable at .889. Cronbach Alphas using the full dataset indicated reliable measures for: affective commitment towards institution .918; affective commitment towards academics .880; commitment balance .812. The least reliable scale was for calculative commitment towards institution. Tests were undertaken to see if reliability increased if any of the items were deleted: it did not. At .667 the Cronbach Alpha for this construct was close to, but not at the acknowledged acceptable level of 0.7. Clearly this would have implications for the robustness of any relationship between this construct and the dependent variable. Nevertheless the importance of calculative commitment within this study, justified the continued use of the calculative commitment towards institution construct. Students' increasing financial investment as they progress through their studies, means that 'needing' to stay committed to their institution is likely to be an important (probably negative) force within the student experience. Thus the relationship between affective commitment and calculative commitment is an important aspect of the overall argument regarding key commitment constructs within the student experience.

### **Empirical study.**

The research tool comprised questions measuring constructs within the conceptual framework (figure 1, appendix 1). It was distributed through gatekeepers in four participating institutions, thus generating a largely purposive but substantial sample. The questionnaire was distributed through face-to-face, email and web-based communication. Of the estimated 7190 students who were given the opportunity to participate, 1474 chose to do so (20% response rate). Of these respondents, 1129 completed all questions. Distribution was largely in

line with the undergraduate population: 41% within the first year of their study; 27% within year two of study; 32% within their final year of study. Females, accounted for 62% of respondents, compared to the 56% of undergraduates within UK universities at the time of data collection (Higher Education Statistics Agency 2014), so were over-represented in the sample.

The survey was completed on one occasion by each participant. Podsakoff et al. (2012) note that this is common practice but can introduce issues of method bias. Indeed potential for single respondent bias is acknowledged, as respondents were asked to respond to questions related to both the independent and dependent constructs with no temporal separation (Podsakoff et al. 2012). The challenge of securing sufficient responses through a two-part distribution of the questionnaire was considerable. Nevertheless on reflection, a sacrifice of completion rates may have been worthwhile in order to minimise single respondent bias.

The layout of the questionnaire sought to provide some proximal separation between dependent and independent constructs to reduce single respondent bias (Podsakoff et al. 2012). Questions relating to commitment towards academics and commitment towards institution, were located within separate sections of the questionnaire. However items relating to the institution (in particular relating to affective commitment towards institution and calculative commitment towards institution) were co-located to enhance questionnaire flow. This increased the potential for single respondent bias within responses relating to these constructs. Podsakoff et al. (2003: 879) note the longstanding interest in method bias and its impact on measurement error which can 'threaten the validity of the conclusions about the relationship between measures'. Initially a Harman's single factor test was conducted on the data, which showed a high level of variance accounted by a single factor (40.65%) but less than the 50% advised (Gaskin 2011) to be of great concern. However it would be important to consider the potential impact of common method bias on the data.

### **Factor analysis.**

The research hypotheses predicted relationships between three independent constructs or factors (affective commitment towards academics, commitment balance and calculative commitment towards institution) and the dependent factor, affective commitment towards institution. Factor analysis facilitated the measurement of these factors. To progress from the ordinal items (questions in the survey), exploratory factor analysis (EFA) was used to convert these ordinal items into factors which reflected the constructs described in the conceptual

framework. Exploratory factor analysis generated four factors measured on continuous scales which could then be used within regression analysis.

Participant scores on the four factors were extracted using Statistical Package for Social Sciences (SPSS) version 23. Exploratory factor analysis (extraction method: principal axis factoring; factors limited by Kaiser’s Criterion; Eigen values>1) was conducted. This provided measures of variation in the four constructs which were accounted for by the extracted factors, affective commitment towards institution, affective commitment towards academics, calculative commitment towards institution and commitment balance. The KMO (0.917) indicated that factors were likely to load satisfactorily.

The factors were then rotated (rotation method: promax; default parameters applied). Oblique rotation was selected, permitting correlation between the factors to enable them to be used collectively in a multiple regression. The rotation generated reasonably similar variance-explained amongst the factors.

**Table 2: Total Variance Explained.**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	6.813	40.076	40.076	6.462	38.010	38.010	5.623
2	2.037	11.980	52.057	1.536	9.038	47.048	5.022
3	1.587	9.334	61.390	1.123	6.605	53.653	4.101
4	1.021	6.007	67.398	.666	3.919	57.572	1.920
5	.950	5.589	72.987				
6	.595	3.501	76.488				
7	.545	3.205	79.693				
8	.533	3.135	82.827				
9	.452	2.659	85.486				

10	.426	2.505	87.991				
11	.359	2.113	90.104				
12	.349	2.054	92.158				
13	.330	1.939	94.097				
14	.296	1.740	95.836				
15	.281	1.655	97.492				
16	.245	1.438	98.930				
17	.182	1.070	100.000				

The initial pattern matrix indicated that measures loaded on the predicted constructs (for example measures with affin-related codes, loaded onto the affective commitment towards institution construct) however one measure, 19.1combal9 (*'students are equally as proud to study at this university as the university is as proud to have me as a student here'*) did not load on the predicted construct, and was removed from the set of measures for commitment balance. Once this measure was removed, an examination of total variance-explained found that four factors explained 57.5% of cumulative variance (table 2). Appendix 1 includes the factor loadings for each of the items. Regression factor scores for all cases were generated from the pattern matrix and the variables created were named (factor 1 affin; factor 2 affac; factor 3 calin; factor 4 combal).

Distributions for each for the new factor variables (affective commitment towards institution, affective commitment towards academics, commitment balance, calculative commitment towards institution) were examined for normality and minor departures considered acceptable. Field (2013) recommends researcher judgement regarding the extent of non-normality and the descriptive data suggests that here the normality was acceptable.

Oblique rotation provided sufficient correlation between these four variables to support their use within multiple regression analysis. Correlation coefficients were insufficiently large to raise concerns about multi collinearity (table 3).

**Table 3: Correlations.**

Constructs		Correlated against			
		AFFIN	AFFAC	COMBAL	CALIN
AFFIN	Pearson Correlation	1	.645	.724	.360
	Significance. (2-tailed)		<.001	<.001	<.001
	Number of cases	1129	1129	1129	1129
AFFAC	Pearson Correlation	.645	1	.614	.188
	Significance. (2-tailed)	<.001		<.001	<.001
	Number of cases	1129	1129	1129	1129
COMBAL	Pearson Correlation	.724	.614	1	.348
	Significance. (2-tailed)	<.001	<.001		<.001
	Number of cases	1129	1129	1129	1129
CALIN	Pearson Correlation	.360	.188	.348	1
	Significance. (2-tailed)	<.001	<.001	<.001	
	Number of cases	1129	1129	1129	1129

AFFIN: Affective commitment towards institution.

AFFAC: Affective commitment towards academics.

CALIN: Calculative commitment towards institution.

COMBAL: Commitment balance.

### **Multiple regression.**

Multiple regression was conducted to examine the relative impact of the independent factors (affective commitment towards academics, commitment balance, calculative commitment towards institution) alongside demographic predictors, on the dependent factor affective commitment towards the institution. Dummy variables were created for a variety of participant characteristics: year of study (year); gender (gen); origin of student (UK); parental experience of higher education (uni/poly); and institution of study (uni). Gender and parental experience of higher education were not significant ( $p < 0.05$ ) and were therefore removed from the regression.

A two-stage regression including ANOVA was then conducted. First with the demographic variables alone (model 1), then with the demographic variables alongside the independent factors (model 2). Table 4 shows the R square for model 1 was very low (.008) suggesting that demographic variables alone contributed very little to the variation in affective commitment towards institution. The R square increased to .611 when the independent factors (affective commitment towards academics, commitment balance, calculative commitment towards institution) were added to the regression.

**Table 4: Model Summary.**

Model	R	R square	Standard error of the estimate
Model 1: Demographic variables only.	.091	.008	.96708531
Model 2: Demographic variables plus independent factors (constructs).	.782	.611	.60660440

Thus the analysis showed that the variance of affective commitment towards institution is explained substantially by affective commitment towards academics, commitment balance, calculative commitment towards institution. The R square indicated that approximately 60% of the variation in affective commitment towards institution is explained by affective commitment towards academy, calculative commitment towards institution, commitment balance alongside the significant demographic variables.

The two-stage analysis of variance (ANOVA) (table 5) indicated a change from a non-significant result when demographic variables alone were regressed against affective commitment towards institution (affin), to a significant result with an F of 175.496 when the regression comprised the dependent factors alongside the demographic variables as regressors of affective commitment towards institution. Residuals were relatively well distributed close to the normal distribution required.

**Table 5: Analysis of variance (ANOVA).**

Model		Sum of Squares	Degrees of freedom	Mean Square	F (ratio of variances)	Significance
1	Regression	8.742	7	1.249	1.335	.230
	Residual	1048.420	1121	.935		
	Total	1057.161	1128			
2	Regression	645.772	10	64.577	175.496	.000
	Residual	411.389	1118	.368		
	Total	1057.161	1128			

Model 1: Demographic variables only.

Model 2: Demographic variables plus independent factors (constructs).

The multiple regression coefficients (table 6) illustrated how the non-significant relationships between demographic variables alone and affective commitment towards institution, changed with the addition of the three independent factors (affective commitment towards academics, commitment balance and calculative

commitment towards institution). Model 2 (table 6) shows highly significant relationships between affective commitment towards institution and the three independent factors.

All three relationships were positive, commitment balance demonstrating the strongest relationship with affective commitment towards the institution (standardised coefficient .482). Affective commitment towards academics had a moderate relationship with the dependent variable (standardised coefficient .325). Calculative commitment towards institution showed a weak relationship with affective commitment towards institution, (standardised coefficient .129).

Importantly, commitment balance and affective commitment towards academics accounted for the greatest contribution to the dependent factor. Calculative commitment towards institution accounts for roughly a third of the variation in the dependent factor as the strongest driver, commitment balance. Probabilities for all parameters are significant ( $p < .001$ ) but this should not be taken too seriously given the large sample size.

Of the remaining participant characteristics, year of study (yearcat2dum), country of origin (UK v overseas; UKDum) and university of study (unicat2) showed evidence of significant differences ( $p < .050$ ) compared to the impact of their reference variable on affin (table 6). This suggested that they might be weak regressors of affective commitment towards the institution.

**Table 6: Coefficients.**

Model	Standardized Coefficients	Significance
1 (Constant)		.358
yearCat2Dum	-.054	.100
yearCat3Dum	-.028	.395
yearCat4Dum	-.010	.765
ukDum	-.004	.902
uniCat2Dum	-.045	.144
uniCat3Dum	-.017	.594
uniCat4Dum	.053	.088

2	(Constant)		.004
	yearCat2Dum	-.051	.015
	yearCat3Dum	-.033	.111
	yearCat4Dum	-.031	.128
	ukDum	-.043	.024
	uniCat2Dum	-.041	.036
	uniCat3Dum	-.023	.241
	uniCat4Dum	.004	.843
	AFFAC	.325	<.001
	COMBAL	.482	<.001
	CALIN	.129	<.001

AFFAC: Affective commitment towards academics.

CALIN: Calculative commitment towards institution.

COMBAL: Commitment balance.

Model 1: Demographic variables only.

Model 2: Demographic variables plus independent factors (constructs).

All significant dummy variables showed a weak, negative relationship with affective commitment towards the institution in comparison to their respective reference variables. Overseas students showed a reduction in their impact on affective commitment towards the institution compared to their UK counterparts (standardised coefficient  $-.043$ ;  $p .024$ ). Second-year students also showed a reduction in their impact on affective commitment towards the institution compared to their first-year counterparts (standardised coefficient  $-.051$ ;  $p .015$ ). Whilst university of study was shown to be a significant regressor of affective commitment towards the institution, only one of the categories (uniCat2Dum: university 1 v university 2) accounted for the effect (standardised coefficient  $-.041$ ;  $p .036$ ).

Therefore whilst there is evidence that some participant characteristics may be weak regressors of affective commitment towards the institution, the greatest explanation of variance in affective commitment towards the institution comes from the independent factors (in order of strength) commitment balance,

affective commitment towards academics and calculative commitment towards institution.

### **Reflections on regression.**

This analysis suggests that affective commitment towards institution is principally influenced by three constructs or factors. The conceptual framework suggests that there is a positive relationship between students' affective commitment towards academics and their affective commitment towards the institution. This is confirmed by multiple regression and corroborates Hansen et al.'s (2003) findings in the banking sector, that affective commitment towards salespeople drives affective commitment towards the bank. However the relationship appears to be weaker than that identified in the banking context which was strong with an estimate of 0.62 ( $p < 0.01$ ) (Hansen et al. 2003:365). Therefore this research finds a relationship between affective commitment towards academics and affective commitment towards institution, and supports hypothesis 1. This relationship is weaker than expected, with a standardised estimate of .325 (when considered alongside participant characteristics).

Calculative commitment towards the institution has a significant weak but positive relationship with affective commitment towards the institution. This is contrary to the negative relationship between calculative and affective commitment found by Fullerton (2005) outside the education context. Thus hypothesis 2 is not proven, indeed the evidence suggest a relationship between the constructs of the opposite valence as that predicted by hypothesis 2. The outcome suggests that students' commitment based on the cost of moving and availability of options, importantly does not undermine their affective commitment as originally hypothesised.

Given the increasing cost of studying at university, it is feasible (but not yet tested) that the calculative commitment to institution will rise, therefore this outcome is positive for universities. It may be that the value-based aspects of both calculative and affective commitment (see table 1) play an active role in the positive correlation between students' commitment towards their institution based upon liking and need. However it should be noted that during the early stage of the analysis, the Cronbach Alpha for this construct was less than the recommended level of 0.7, therefore this relationship is the least robust of the three predicted. Thus this research finds a possible relationship between the calculative commitment towards institution and the affective commitment towards institution, but does not support hypothesis 2 which had proposed a

negative rather than positive relationship. This is an interesting outcome as defined by MacInnis (2011) because it is unexpected.

Finally, the strongest relationship uncovered was that between commitment balance and affective commitment towards institution, as predicted in hypothesis 3. With a standardised coefficient of .482 ( $p < .001$ ) this justifies the inclusion of the construct commitment balance within the framework and thus more broadly, the analysis of commitment balance within HE. It corroborates Gundlach et al.'s (1995) initial ideas that mutual commitment has a role to play within relational exchange. In summary, hypothesis 3 is supported by this research. Whilst this is cross-sectional research and therefore cannot lay claim to the identification of causal relationships, the sense here is that no matter the level of commitment, commitment balance is likely to enhance affective commitment towards the institution. Importantly this means that balance of commitment may be as important as extent of commitment.

### **Limitations.**

A key limitation of this study was the potential impact of single respondent bias. Given these concerns, a test for common method bias was conducted, by building in a common factor via AMOS 23, imputing the data and then re-running the multiple regression via SPSS 23. The common factor reduced the strength of all three relationships considerably and thus suggests that there may be broader factor, perhaps the overarching nature of commitment which overrides the relationships within the regression equation. This challenges the dimensional approach adopted within the study. Future research should prioritise temporal and proximal separation within research design. It could also test rival frameworks, one which articulates commitment in a dimensional manner (like this study) against a framework with commitment as a single construct as used by Hennig-Thurau et al. (2001).

Whilst this study went beyond the case-study context of many relational studies within higher education (e.g. Kara and de Shields 2004; Helgesen and Nettet 2007; Rojas-Mendez et al. 2009; Hayes et al. 2009; Southcombe et al. 2015) nevertheless the convenience sampling approach confers limited generalisability upon the results. Whilst over 1,000 undergraduates responded, this is arguably a small number of respondents in comparison to the overall undergraduate population of the four institutions participating in the study.

A further limitation of the study relates to the identification of the affective commitment towards institution as the sole outcome worthy of study. This was because the affective commitment towards institution was thought to be a key

influence on important concepts within higher education, such as loyalty (Bowden and Wood, 2011). However this is an assumption and may overestimate the importance of the affective commitment towards institution. Nevertheless, the affective commitment towards the institution, defined as a student's positive attachment towards their university based on feelings of inspiration, belonging, pride and identification which in turn contributes to a sense of care towards that object and a desire to maintain an existing relationship, remains an important concept within higher education, whether or not it drives behavioural outcomes. Research outside higher education (e.g. Harrison-Walker 2001; Brown et al. 2005; Fullerton 2005; Fullerton 2011) indicates that affective commitment drives co-operative and word-of-mouth based outcomes. These could be confirmed in future research, alongside additional higher education-orientated outcomes such as student engagement and student satisfaction as measured within the National Student Survey.

An additional limitation of the study is that the normative commitment toward the institution is not measured. Normative commitment is generating increasing interest from scholars (e.g. Meyer and Parfyonova 2010; Fullerton 2014). Future studies within the context of higher education could usefully include the analysis of the normative commitment towards institution alongside the affective and calculative commitment towards the institution.

## **Discussion and Conclusion.**

This paper sought to contribute an understanding of how higher education institutions can build on-going, committed relationships with students. It did so by focussing on key ideas within commitment which together would help explain ongoing, committed relationships between universities and their students. The study saw the affective commitment towards institution as an important way in which ongoing, committed relationships between institutions and students could be articulated. Previous scholarship (Bowden and Wood 2011) had already shown how the affective commitment towards institution is a proven predictor of the loyalty within higher education.

The study found that three constructs appeared to have a positive relationship with the affective commitment towards institution: affective commitment towards academics; calculative commitment towards institution; and most strongly commitment balance. It is important to reiterate that when common method bias was introduced then the strengths of these relationships diminished, suggesting that a broader influence of commitment as a single factor may overlay these identified relationships, thus challenging the dimensional

approach to commitment adopted in this and many other studies (e.g. Fullerton 2003; Hansen et al. 2003; Fullerton 2005; Bowden 2011).

The variation in affective commitment explained by the three independent factors was 57%, thus other factors may have an important impact upon affectively committed relationships. It is likely that trust and even gratitude identified as mediating variables alongside commitment by Morgan and Hunt (1994) and Palmatier et al. (2009), could be among those factors. Future work could certainly usefully incorporate trust and gratitude within an analysis of relationships between universities and their students.

Commitment balance emerged as a potentially important concept, reflecting the reciprocal nature of relational exchange. Its operationalisation focussed on the commitment balance between student and the institution. As commitment balance is new to the higher education context, indeed has not been defined and operationalized in previous relational research outside higher education, extant measures were not available. Three items were finally used, these provided reliable measures of the commitment balance construct. Operationalisation of commitment balance as a construct is worthy of further consideration in future research within and outside the context of higher education.

Data for this research was drawn from post-1992 ‘modern’ universities. Whilst these universities were situated within a range of geographic environments, industrial, non-industrial, cathedral cities, future research could usefully broaden out the research population to include all types of universities within a broader geographic area.

Finally, the research population who participated within this research were all studying within the lower fee regime operating prior to September 2012 in the UK. Future research in this area will be able to engage with the responses of student cohorts who are all subject to the higher fees and this may impact the analysis presented here.

In conclusion this paper argues that commitment is an important concept to be considered by higher education leaders, managers and academics. The paper places the affective commitment to institution as a key outcome and identifies three contributing factors: affective commitment towards academics; calculative commitment towards institution; and commitment balance. These relationships are reflected within the framework presented in figure 1 and support two of the original hypotheses. Higher education institutions can build on-going, committed relationships with students by demonstrating reciprocal commitment to students and creating environments to support academics to interact with students in a manner which is inspiring and generates a sense of belonging. The research suggests that once committed relationships are established, these are

not undermined by the financial and social investments students make which increase the perceived cost of leaving their university.

Given the importance of commitment balance emerging from this research, its implications should be given consideration within practice. To foster and maintain on-going relationships with their students, Universities must clearly demonstrate their commitment to students.

Such a demonstration must start within the application process in which Universities must communicate and behave in a manner to applicants (in particular offer-holders), which demonstrates the University's on-going dedication to working with those applicants/offer-holders over the forthcoming years. Universities may usefully emphasise the inter-dependency between the reputation of students and their university within industry.

Academics must listen carefully to students to gauge their sense of commitment and in part mirror that to produce a sense of balance. Clearly in situations in which students demonstrate very low levels of commitment, academics must demonstrate commitment to those students, but they should take care not to smother their tutees. Arguably this study highlights ethical challenges for institutions and academics who are working with groups of students with low levels of commitment. Whilst the outcomes of this work suggest that low levels of student commitment should be met with low levels of reciprocal commitment from the institution to enhance (or not diminish) affective commitment towards the institution, this could be problematic both morally and practically.

Commitment balance might usefully be measured within programme or institutional level mid-year or end-of-year surveys. Indeed the National Student Survey might consider adding affective commitment and commitment balance orientated questions to its optional question bank. Affective commitment would be a useful consideration within approaches to the Teaching Excellence Framework.

Clearly there is an opportunity to further research the concept of commitment balance. This research did not adopt a dimensional approach to commitment balance. 'Commitment balance' had a focus of institution. Further research might explore whether 'course' is a focus for commitment balance alongside institution and whether commitment balance is better thought of in calculative, affective and normative terms. It might be interesting to examine the notion of commitment balance within the context of academics' experiences of working in higher education. Academics' perceptions of commitment balance between themselves and institution may be of interest. Ultimately it is of interest to discover whether commitment balance is a factor with the variance and ability to explain important outcomes within the higher education environment.

This study therefore presents findings which are of value for higher education and more broadly within relational contexts within the service sector. Commitment balance is an area which can be pursued in terms of research and practice. This study confirms the importance of students' commitment towards their tutors. Whilst the strength of the relationship between the affective commitment towards staff and institution is weaker than that in Hansen et al.'s (2003) study in the banking sector, clearly students' affective commitment towards their institution of study is driven in part by their affective commitment towards those academics with whom they work. It is important that individual academics engage in practice which seeks to build affective commitment from students.

Academics must seek to inspire their student cohorts, but also might work to demonstrate those relational interactions which are characterised by care and belonging. Such attributes should be prioritised within selection criteria for academic posts which are largely student-facing. Managers must provide tutors with the resource to deliver in this area.

Finally the positive relationship between calculative and affective commitment towards institution suggests that the value-aspect of commitment may be worthy of further examination and analysis. This is particularly pertinent to the current HE context with tuition fees now over £9000 per year.

Therefore this study provides additional empirical evidence about commitment, relationships between affective and calculative commitment, and affective commitment towards different foci. It introduces commitment balance as a concept worthy of consideration. Together these new insights further conceptual understanding within relationship marketing and reinforce the importance of commitment as an important area of study.

This study reinforces the importance for universities and academics to build relationships with students, to enhance the student experience and retention. More broadly there is an opportunity for further study of higher education from a relational perspective, with the potential to examine commitment further alongside behavioural outcomes such as word-of-mouth, engagement and achievement. In addition, the potential role of gratitude within a relational context has recently been identified (Palmatier et al., 2009; Dewani and Sinha 2012; Raggio et al. 2014; Cownie 2016) as having a critical role to play within sustained relational exchange, this could usefully be pursued in the higher education context. Thus this study contributes to a relational approach to higher education and this lens appears of value for future research.

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## Appendix 1: Construct definition and items.

<b>Construct</b>	<b>Definition</b>	<b>Items</b>	<b>Factor loading</b>	<b>Cronbach Alpha</b>
Affective commitment towards institution (Affin)	Students' positive attachment towards their university based on feelings of inspiration, belonging, pride and identification and which in turn contributes to a sense of care towards the university and a desire to maintain an existing relationship with the university.	I feel a strong sense of identification with my university (21.4 affin 8) I am proud that I study at this university (21.2 affin 7) I feel a strong sense of belonging to this university (21.4 affin 8) I care about the future of this university (21.6 affin 10) The university inspires me to be a good student (20.1 affin 4)	.996 .953 .924 .796 .606	0.918
Affective commitment towards academics (Affac)	Students' positive attachment towards academics based on feelings of inspiration, belonging, pride and identification and which in turn contributes to a sense of care towards their tutors and a desire to maintain an existing relationship with their tutors.	I genuinely enjoy my relationship with my tutors (11.3 affac 2) The image I have of my tutors is very positive (12.2 affac 4) Studying with my tutors is enjoyable (15.2 affac 9) I care about the future of my tutors (13.1 affac 6) My tutors inspire me to be a good	.898 .856 .822 .789 .754	0.880

		student. (14.1 affac 7)		
Calculative commitment towards institution (Calin)	Students' negative attachment towards their university based upon the perceived personal penalty (including time, financial and social costs) of moving away from their existing interactions which create a perceived need to retain an existing relationship.	I feel that I have too few options to consider leaving this university (20.4 calin 5) Too much of my life would be disrupted if I decided I wanted to leave my university now (18.4 calin 2) There is just too much time and effort involved in switching to another university (20.5 calin 6) It would be hard for me to leave this university right now even if I wanted to (18.3 calin 1)	.735  .726  .715  .658	0.670
Commitment balance. (Combal)	The extent to which students perceive that the commitment that they feel is equally matched by the reciprocal commitment they perceive to be emanating from the relational partner. Commitment balance is not directional, low levels of commitment	My university and its students need each other equally (18.1 combal 7) This university depends upon its students as much as its students depend upon the university. (19.4 combal 10) I feel that the university is as committed to me as I am to the university (18.2 combal 8) Students are equally	.989  .783  .532	0.812 (later 0.722 when reduced to three items* after EFA)

	balance do not give an indication of the direction of any imbalance.	as proud to study at this university as the university is as proud to have me as a student here* (19.1combal9) * item removed after EFA		
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**Appendix two: Analysis of commitment balance items using pilot data.**

<b>Code</b>	<b>Item</b>	<b>Factor loading</b>
18.1combal7	My university and its students need each other equally	.877
18.2combal8	I feel that the university is as committed to me as I am to the university	.768
19.4combal10	This university depends upon its students as much as its students depend upon the university	.743
19.1combal9	Students are equally as proud to study at this university as the university is as proud to to have me as a student here.	.720
13.5combal3	I feel that my tutors and I are not equally committed to each other	.219
15.4combal6	My tutors and I have an equal sense of moral obligation towards each other	.152
15.3combal 5	Staff and students do not feel an equal 'sense of duty' to work hard.	.041
14.4combal4	My tutors and I are equally committed towards my achievement	.035
13.2combal2	My tutors and I are equally as committed to each other	-.035
11.4combal1	I have the same level of emotional attachment to my tutors as they have towards me	-.075