

Submissions Abstract Book - All Papers (All Submissions)

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Student Satisfaction in Higher Education: A Multilevel Analysis.

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Research Domain: Student experiences (SE)

Abstract: The current study investigated which individual and institutional factors are the strongest predictors of students' overall satisfaction in UK Higher Education. The existing literature tends to focus on factors at one level and at a single institution or course (Bell & Brooks, 2016). The current study analysed the Student Academic Experience Survey data and [examined individual and institutional level factors simultaneously. Hierarchical Linear Modelling was used to determine the factors which best predict students' overall satisfaction with their Higher Education.](#) The results revealed that factors at the individual level were the greatest predictors of student satisfaction and that the strongest predictor was a students' life satisfaction rating. Thus, it was concluded that student satisfaction is a multidimensional phenomenon which can primarily be predicted by factors at the individual level. It is suggested that it is important for institutions to invest in students' personal wellbeing as well as their academic needs.

Paper: Introduction

Student satisfaction has been extensively researched. Previous studies have, however, focused on a single institution or course type, and on a single level, either the institution or the individual. This limits the generalisability of the findings (Bell & Brooks, 2016). This study examined both individual and institutional factors simultaneously using hierarchical linear modelling (HLM) in order to determine which type of factors have the greatest influence on a students' overall satisfaction with their Higher Education. HLM allows for the disaggregation of the various influences on student satisfaction and this study draws on the 2017 Student Academic Experience Survey (SAES).

The SAES is a UK-wide survey conducted by Youthsight and designed by the Higher Education Policy Institute (HEPI) and the Higher Education Academy (HEA). The survey has been conducted annually across the UK since 2006 and recruits' respondents from Youthsight's student panel. The survey has 90 items, obtaining individual level data such as age, gender and ethnicity and institution level data, such as contact hours and class size. The survey also measures students' overall satisfaction with the

question, "To what extent are you satisfied, or not, with the overall quality of your course?" which is rated on a scale of one to five. The current study used this measure as the outcome variable.

The satisfaction of students, it is widely argued, is of critical importance for institutions both strategically and economically (Santini, Ladeira, Sampaio, & Costa, 2017). It is argued that institutions focus on student satisfaction expecting to see increased retention rates and academic achievement, as well as to receive good public rankings and reputation in order to recruit the best quality students (Letcher & Neves, 2010). In a climate of increasing competition, recruiting and retaining the highest quality students is thought to be more important than ever, and increased student satisfaction critical to the financial stability of HEIs (Trowler, 2010).

Previous research in the field has examined various factors that may be drivers of student satisfaction in HE. A significant number have examined *institutional factors* such as teaching and physical facilities. For example, Douglas, Douglas and Barnes (2006) found the most influential factors on student satisfaction to be those associated with teaching and learning, whereas the least important related to the physical facilities of the institution. Class size, teaching style and teaching quality have also been found to significantly influence student satisfaction (Krentler & Grudnitski, 2004; Dana, Brown & Dodd, 2001; DeBourgh, 2003; Clemes et al., 2008). In addition, factors relating to the *individual characteristics* of the student including gender, learning style, personality and employment (Brokaw, Kennedy & Merz, 2004; Fredericksen, Shea & Pickett, 2000) have also been noted to influence students' satisfaction levels.

The current research therefore examined student and institution level factors which may predict student satisfaction. Due to the hierarchical nature of the data, HLM was employed to allow both levels of predictors to be analysed simultaneously whilst reducing the risk of identifying a relationship between the variables where none exists (*a false positive*).

Method

The data comprised of 12,607 student responses to the 2017 SAES. Data were analysed using HLM. This is a form of Ordinary Least Squares (OLS) which takes the hierarchical structure of data into account. HLM allows the individual and group effects on the outcome variable to be isolated, therefore reducing the risk of a false positive (Feldstain, Woltman, MacKay & Rocci, 2012). In the current study, HLM allowed us to consider the impact that predictors at the student level and the institutional level had on student satisfaction (the outcome variable). The model was first run with only the outcome variable to produce a baseline model. Subsequently, all individual level predictors were included in the analysis, with all non-significant variables being removed from the model. Then, all institutional level variables were analysed and only those that were significant were added to the model. Accordingly, the final model only contained the individual and institutional level factors which significantly predicted overall satisfaction.

Results

The final model suggested that the majority of variance in overall student satisfaction was due to individual level factors (ICC 1%). Of the thirteen individual level factors input into the model, five of these were found to significantly predict student satisfaction. These were: *ethnicity* ($y_{10} = -.09, p < .001$), *nationality* ($y_{20} = .06, p < .001$), *residency* ($y_{30} = -.05, p < .001$), *life satisfaction* ($y_{40} = .11, p$

<.001) and staff-student liaison ($\gamma_{50} = .03, p <.001$). Of the eight institutional level factors inputted into the model, only one significantly predicted student satisfaction; number of hours spent in tutorial-style classes ($\gamma_{01} = .03, p = .015$). Of all significant predictors, the strongest predictor of student satisfaction overall was a students' life satisfaction rating.

Discussion

The current study aimed to gain an overview of factors which predict student satisfaction by analysing a large sample of HE students from a variety of UK institutions studying various subjects. Using HLM allowed individual and institutional level factors to be examined across the large sample, taking into account the hierarchical nature of the SAES data; students are individuals within the institution.

The findings suggest that individual level factors are the greatest predictors of overall student satisfaction. These findings suggest that further research into individual level factors and how they impact student satisfaction with the HE experience may be beneficial for HE institutions as well as students. Findings may also help inform HE investment to increase their students' satisfaction ratings. For example, as the strongest predictor of student satisfaction was a students' life satisfaction, this suggests an importance of student wellbeing for satisfaction with university experience. This may influence institutions to invest resources into increasing students' wellbeing. Research in this area is increasing and a recent international study found that in the last year, 31% of students screened positive for at least one common mental health disorder (Aurebach et al., 2018). This supports the importance of institutions focusing on students' general happiness and wellbeing as well as their academic needs.

References

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