Acknowledgement:

We would like to thank the organisers of LSE GROUPS, in particular Dr Ellis Saxey, for providing us with the opportunity to conduct this research project. In addition we would like to thank all of our survey respondents and interviewees for their assistance, as well as the academic departments and staff who helped us distribute the surveys. We collectively thank Gordon Li for his assistance in the creation and analysis of our survey, We are especially thankful to our supervisor Nora Ratzmann, for her unwavering support and guidance throughout the research process.
Introduction

Hardly any topic evokes a stronger response from an LSE student than the issue of student experience. The results of recent National Students Surveys (NSS) have consistently reported low student satisfaction among LSE students. Given the potential link between students’ sense of belonging to their academic institution, their overall experience (Freeman et al., 2007) and the pivotal role academic departments may have in shaping student satisfaction (Umbach and Porter, 2002), the purpose of this study is to investigate how sense of belonging to LSE varies across students.

Using an online survey, with 111 respondents, and six semi-structured interviews with current LSE undergraduate students, this research aims to address the following questions:

1. To what extent do different department-related factors impact students’ sense of belonging to LSE?
2. What does a sense of belonging to LSE mean to students in terms of their lived experiences?

This research hopes to inform the development of policies to narrow the gap in sense of belonging across departments, and thus improve the overall student experience at LSE.
Literature Review

In an effort to gain a more comprehensive understanding of the topic of ‘belonging’ in the context of a university community, we have reviewed a range of existing literature. We reviewed a range of existing literature and have summarised this below.

The importance of sense of belonging: The case of students and the associated school community

It is important to outline from the outset how belonging is defined within the scope of this paper. Upon completion of our literature review, we have elected to use Levett-Jones’ and Lathlean’s definition of belongingness which holds that:

“Belongingness is a deeply personal and contextually mediated experience that evolves in response to the degree to which an individual feels (a) secure, accepted, included, valued and respected by a defined group, (b) connected with or integral to the group, and (c) that their professional and/or personal values are in harmony with those of the group.” (Levett-Jones and Lathlean, 2007).

Numerous studies have examined the essentiality of the sense of belonging for a human being. According to Baumeister et al (1995), the sense of belonging is a fundamental human need such that if we feel as though we do not belong, we experience detrimental psychological impacts. For students specifically, Osterman (2000) stated that the sense of belonging could have an impact on multiple aspects of students’ behaviour, and schools which fail to create sense of belonging among students may undermine students' experience of membership in a supportive community. Their finding is aligned with the empirical study conducted by Freeman et al (2007), in which the sense of belonging to school community has also been discovered to have significant influence on both education experience and academic motivation. Particularly, the students who exhibit higher sense of belonging to school are generally more motivated in terms of studying and are more likely to perceive their education experience as positive.

Exploring the potential factors contributing to differences in the sense of belonging across students
Research focusing on first year college students (Hoffman et al., 2002) suggests that increasing the likelihood of student-student and student-faculty interaction could strengthen the sense of belonging among students by enabling students to make connections with peers and faculty more easily. The study conducted by Freeman et al (2007), identifies that the most important variables in student sense of belonging is student peer acceptance and staff-student interactions. They specifically draw on other literatures, in particular the work by Tinto, to highlight that student-peer relationships dictate student integration. They claim that these relationships act as a predictor of sense of belonging. This existing body of literature seems to achieve consensus in terms of the role of interaction in contributing to students’ sense of belonging.

Departmental influence on student satisfaction: understanding the necessity of examining departmental factors

With regard to department-related factors that could impact on students’ sense of belonging to university, the previous literatures have only focused on interaction as an interest of study. This is surprising given that there are numerous studies examining the impact of departments on overall student satisfaction. These papers use quantitative survey techniques to examine many of the factors involved in this including career preparation and advice, class sizes (Corts et al., 2000), faculty contact with with students, research emphasis and level of department endowment (Umbach and Porter, 2002). The results of these studies identify that if there is positive engagement with the department and departmental staff, then student satisfaction will be higher (Braskamp et al., 1979). The aim of our study is to begin to bridge the gap between the existing literature on departmental impact on student satisfaction and more general studies into the factors affecting belongingness. We attempts to do this by examining how department-related factors, traditionally examined in relation to student satisfaction, influence students’ sense of belonging to a university institution.

Discoveries made within our literature review and group discussions have led us to reach the following hypotheses. We hypothesise that frequency of group work, the frequency of class discussions, level of interaction with staff, attendance of department events, and the degree to which a department is career focused, could all have an influence on students’ sense of belonging to the LSE.
Methodology

Quantitative survey:

To gather quantitative data about students’ engagement with their department through social, academic and career aspects alongside their overall sense of belonging to LSE, an online survey focusing on undergraduate students has been conducted through Google Forms. To ensure that we maximise the chances of getting a representative sample, the survey was distributed through social media and emails to department mailing lists. The survey uses a mixed style approach incorporating closed-ended questions alongside linear scale questions. The first part of the survey asked participants to share general information about themselves such as gender, nationality and academic year. The second part of the survey asked in-depth questions in relation to different department-related factors that affect sense of belonging, such as the frequency of attending department events and the contact hours with department staff. Frequency, such as the number of events a participant has attended over the past year and the number of new people met give a picture of how department events help foster a sense of belonging to LSE. We hypothesised a link between sense of belonging and sense of community such that the higher the sense of community, the higher the sense of belonging. To help investigate this link, a question on the extent to which sense of belonging is affected by sense of community has been asked in the survey. The data collected for this question is on a linear scale of 1-10. To analyse the data, a regression analysis approach conducted through SPSS had been selected. This will help in establishing the dominant departmental factors that affect sense of belonging to LSE, and analyse how they may vary across different departments. The survey questionnaire was developed in accordance with information from informal pilot interviews amongst our research group and fellow LSE students, and in response to the literature review.

Qualitative interviews:

Alongside a quantitative survey, we also utilised the method of qualitative semi-structured interviews with current LSE undergraduate students. We believe this to be necessary given that the emotional sensation of belonging is so difficult to quantify. By encouraging people to explain their own perceptions and experiences in conversational form, we are better able to capture the nuances of an individual’s lived experience of belonging here at the LSE. The purpose of utilising interviews as a method of data collection is thus not to provide data
which can be generalised, rather it is an attempt to garner in depth understanding into the views and experiences of participants.

The interview sample is comprised of six undergraduates, four from second year and two from first year. Each interview participant comes from a different department covering a range of different types of subject backgrounds. Due to practical constraints, given the limited availability of those within our target research group and the short window within which we had to conduct our research, interviewees were selected through convenience sampling. All interviews were conducted on a confidential and anonymous basis where consent was obtained through the signing of a consent form before the interview was conducted. The intended means of analysis for the data we gather is through the identification of common and key themes across all interview scripts. There was initial concern that some people may have had bad experiences regarding their feelings of belonging here at LSE. For these individuals, recounting these memories may be slightly painful. We mitigated this by reminding people that they are under no obligation to participate and could withdraw at any time.
Analysis

Significant Factors:

Statistical analysis of the survey data yielded several key results. Firstly, across all 111 survey respondents, there was a general sense of belonging to LSE, though not to a very large extent. This is indicated by an overall mean of 6.15 and median of 7.00 on a scale of 1 to 10. It was interesting to note that students’ sense of belonging to LSE did not differ significantly across academic departments, with a one-way ANOVA yielding a p-value of 0.245. Secondly, this sense of belonging is generally derived from a sense of community within the university, as shown by a mean of 5.95 and median of 6.00 on a scale of 1 to 10. In other words, the degree to which a tightly-knitted student community is fostered within LSE is generally important in influencing students’ sense of belonging.

Survey results have reflected that there are 2 departmental factors indeed have a critical role in shaping this sense of belonging. Firstly, attending events organised by departments, especially social events, were found to be highly significant. It was observed that the greater the number of department events attended, the higher the sense of belonging to LSE, as a linear regression of these variables yielded a p-value of 0.001. Of these department events attended by students, 75.7%, 55.0%, and 39.6% were social, academic, and career events respectively. In addition, most students felt that attending these department events generally helped to foster a sense of community within LSE, as indicated by a mean of 6.25 and median of 6.00 on a scale of 1 to 10. Thus, it can be concluded that department events influence the sense of community and belonging to LSE. This result is interesting given that interview participants did not state that department events fostered a sense of belonging. Three interviewees stated that event attendance is dependent on the number of friends also attending, but also claim that this has no bearing on their sense of belonging to either the department or the school as a whole.

Additionally, the survey results showed that departmental engagement with students is a significant factor. The greater the degree that students felt that their overall interactions with department staff had been positive, and the more students felt that their department puts in effort to engage them in a meaningful way, the higher the sense of belonging, as indicated by a p-values of 0.000 and 0.000 respectively when each variable was individually regressed against sense of belonging. It is worth noting that both variables were correlated with each
other to a some extent, with a Pearson correlation coefficient of 0.650. In contrast, the average number of hours in a week spent interacting with department staff is insignificant in influencing sense of belonging (p-value 0.515). The results suggest that quality rather than quantity of interaction with department staff is the key determinant of sense of belonging. The interviews reinforce this finding and help us to understand why this is the case. Of particular importance to individuals, was the relationship they have with their academic advisor. The experiences recounted were exceptionally varied, from no relationship to close relationship between the student and the academic advisor. Our interview discussions suggest that those with more positive interactions with their academic advisor, have a greater sense of belonging to the school as they feel that there is a staff member who cares about their personal wellbeing.

Insignificant factors:

The survey results have demonstrate that certain factors which we anticipated would be significant, actually have minimal impact. The p-value of hypothesis test of linear regression between number of group projects and sense of belonging to LSE is 0.725 which provides strong evidence that there is no correlation between those two variables. This finding is also supported by the fact that our respondents on average reported that they did not feel that the group projects significantly help to create a sense of community within LSE (mean of 4.95 on a scale of 1 to 10). This result thus contradicts our initial hypothesis as we had expected that group projects help to encourage students to collaborate and work towards the same goal with other students they otherwise have not talked to. However, qualitative interviews confirmed the results from the survey and showed that the presence of group projects within the degree is largely insignificant in affecting the sense of belonging to LSE. It is possible that students tend to work on group projects with their friends (if allowed by class teacher) which prevents them from expanding their social circles in the first place. Another possibility is a free rider problem. Random formation of groups puts together people with different objectives, willingness to work and intellectual capacities, but they are assessed collectively as a group. This can result in potential conflicts when some members of the group undeservedly benefit from the hard work of other students. However, further research will have to be done to validate credibility of these explanations.
Identification of other factors:

One of the benefits of conducting interviews is that they provide a platform for students to discuss the factors affecting their sense of belonging that were not analysed in the survey. Four of our six interviewees mentioned that the size of their department had an important bearing on their sense of belonging to LSE. Individuals from larger departments explained this in relation to classes. Larger departments have a greater number of students taking a course, and therefore a larger number of class groups. Consequently, people are often not in more than one class with the same people. Larger departments were also described as less personal, as staff have more students to spread their attention across. Interviewee D, from the statistics department, highlighted that it is challenging to have a relationship with their academic advisor, as they are only ever able to see them for ten minutes at a time given the number of students making appointments. In contrast, students from smaller departments described a much more personal attachment to department and the school as a whole. Interviewee C, from the anthropology department, thought their views on the department could be encapsulated by the fact that their academic advisor saw them one-to-one for 45 minutes.

Most notably, our interviews drew our attention to the fact that frequently, sense of belonging to LSE is derived from sources other than departmental factors. Interviewee C described LSE as a “community comprised of sub-communities”. Whilst a department is one such sub-community, societies, halls and friendship circles, all have significant influence on sense of belonging. All interviews mentioned halls and societies as sources of belonging as they were sites where friendships are established.
Limitations

With approximately 4000 undergraduates at LSE, our survey responses only represent 2.7% of the undergraduates. Due to time constraints, it was not possible to get a representative sample. As a result, some departments had more than 17 representatives whereas others had only one representative. Any analysis that make use of only a few data points should thus be treated with caution. In addition to the survey, only 6 interviews were carried out, which did not constitute a representative sample.

Every effort was made to ensure that the survey questions were clear and easy to understand. However, the question asking participants about the number of courses that incorporate class discussions was interpreted in different ways by the participants. Some assumed that the questions was asking the number of class discussions in the past year whereas a few assumed that it was asking about the number of class discussions in their entire degree. This led to a large variance in the responses that were received.

Response bias and false results have the ability to distort analysis conducted on the data and unfortunately has a stronger impact on small samples. Response bias is quite hard to eliminate in the sample collected since the number of responses was quite low. In terms of interview, a majority of the interviewees had strong opinions about LSE which might drive them to answer in a specific direction. There is a possibility of bias since not all LSE students have strong opinions which is a statement that can be checked by investigating further. There is a possibility that participants may not answer truthfully about their true opinions of LSE. This could lead to distortion of results.
Conclusions

Our mix-methods analysis has further strengthened the argument from previous literature that the staff-student interaction within the department is a significant factor in influencing students’ sense of belonging to their university. Furthermore, a positive correlation has been found between the frequency of attending department events and students’ sense of belonging in the survey, this is yet to be corroborated through interviews. Surprisingly, other department-related factors which we hypothesized would be correlated with students’ sense of belonging, such as participation in group projects, have not been found significant in predicting students’ sense of belonging. We believe the underlying reasons behind this finding is worth investigating in further research. Meanwhile, the results from interviews have suggested a need for further analysis by identifying factors which have yet to be analysed but students claim have an impact on their sense of belonging to LSE. Thus we hope our work could act as a catalyst for further research with regard to the topic of belonging in the context of school community.
Bibliography:


Appendix A: Interview Participants Department and Year Group

<table>
<thead>
<tr>
<th>INTERVIEWEE</th>
<th>DEPARTMENT</th>
<th>YEAR OF STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Geography and Environment</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>Sociology (Y1); Government (Y2)</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>Anthropology</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Statistics</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>Management</td>
<td>2</td>
</tr>
<tr>
<td>F</td>
<td>Economics</td>
<td>1</td>
</tr>
</tbody>
</table>

Appendix B: SPSS output tables

Table B1: Descriptive statistics for survey question “On a scale of 1 to 10, to what extent do you feel a sense of belonging to LSE?”
Table B2: Descriptive statistics by academic department for survey question “On a scale of 1 to 10, to what extent do you feel a sense of belonging to LSE?”

Table B3: ANOVA output for survey question “On a scale of 1 to 10, to what extent do you feel a sense of belonging to LSE?” with academic department factor

Table B4: Descriptive statistics for survey question “To what extent is your sense of belonging to LSE derived from a sense of community?”
Table B5: Regression of number of department events attended against sense of belonging to LSE

Table B6: Frequency tables of department events attended by type

Table B7: Descriptive statistics for survey question “On a scale of 1 to 10, to what extent do you feel that attending department events fosters a sense of community within LSE?”
Table B8: Regression of “On a scale of 1 to 10, to what extent would you describe your overall interactions with staff from your department as positive” against sense of belonging to LSE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>B</th>
<th>Std. Error</th>
<th>95% Wald Confidence Interval</th>
<th>Wald Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.326</td>
<td>.6307</td>
<td>1.090 to 3.562</td>
<td>13.598</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>Onscaleof1to10towhatextentwouldyoudescribeyourov</td>
<td>.533</td>
<td>.0840</td>
<td>.368 to .698</td>
<td>40.286</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>(Scale)</td>
<td>3.784</td>
<td>.5079</td>
<td>2.908 to 4.922</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Onscaleof1to10towhatextentdoyoufeelseofbel
Model: (Intercept), Onscaleof1to10towhatextentdoyoudescribewyourov
a. Maximum likelihood estimate.

Table B9: Regression of “On a scale of 1 to 10, to what extent do you feel that your department puts in effort to engage with students in a meaningful way?” against sense of belonging to LSE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>B</th>
<th>Std. Error</th>
<th>95% Wald Confidence Interval</th>
<th>Wald Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>3.819</td>
<td>.5554</td>
<td>2.730 to 4.908</td>
<td>47.282</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>Onscaleof1to10towhatextentdoyoufeethatyour depa _A</td>
<td>.353</td>
<td>.0786</td>
<td>.199 to .507</td>
<td>20.239</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>(Scale)</td>
<td>4.361</td>
<td>.5854</td>
<td>3.353 to 5.674</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Onscaleof1to10towhatextentdoyoufeelseofbel
Model: (Intercept), Onscaleof1to10towhatextentdoyoufeethatyourdepa_A
a. Maximum likelihood estimate.

Table B10: Correlation table of “On a scale of 1 to 10, to what extent would you describe your overall interactions with staff from your department as positive” against “On a scale of 1 to 10, to what extent do you feel that your department puts in effort to engage with students in a meaningful way?”

<table>
<thead>
<tr>
<th></th>
<th>Onscaleof1to10towhatextentdoyoudescribeyourov</th>
<th>Onscaleof1to10towhatextentdoyoufeethatyourdepa_A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.650***</td>
<td>.650**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>111</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onscaleof1to10towhatextentdoyoufeethatyourdepa_A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.650**</td>
<td>.650**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>111</td>
<td>111</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
Table B11: Regression of “On average, how many hours a week do you spend interacting with staff from your department? (excluding teaching hours)” against sense of belonging to LSE

Table B12: Regression of “How many group projects (graded or not) do you have as a part of your degree programme, excluding LSE100 projects?” against sense of belonging to LSE

Table B13: Descriptive statistics of survey question “On a scale of 1 to 10, to what extent do you feel that the group projects help create a sense of community within LSE?”