Multilingual Manchester

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How the Brexit Debate Affects Language Learning Choices for UK Undergraduate Students

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1 Introduction, Research Questions and Methodology

The Brexit referendum caused massive controversy over the future of the UK. In 2017, British Council (2017a) published the report *Languages for the Future*, highlighting the five most important languages British people should learn, sparking debates over whether British people should learn more foreign languages in the post-Brexit era, and which languages those should be.

Focusing on these debates, we aim to assess how Brexit influences UK undergraduate students' attitudes to language learning, and how this relates to governmental and media rhetoric following the referendum. Our research question consists of two parts: firstly, whether there is a general change in interest in languages, and secondly, if there is an increase in interest, whether EU or non-EU languages are preferred. Our hypothesis postulates a change in UK students' rate of language learning since the referendum.

We initiated the study by examining sources such as media debates, academic publications and official government reports, which revealed a disparity in government policies, media rhetoric and the public's expectation: the media mostly favour non-EU languages such as Chinese and Arabic, while the public prefers EU languages; the government strives to develop a language policy that balances EU and non-EU languages[1].

Current literature on Brexit gives a thorough analysis of the causes and effects of monolingualism (Morphet, 2017; Koglbauer, 2018; Kelly, 2018; Holmes, 2018), the importance and benefits of multilingualism (Mackey, 2014; Hogan-Bran, 2018; Bradley, 2008), and current language policies and public response (Koglbauer, 2018; Wyburd, 2018). However, few directly compare official rhetoric for the multilingual future of the UK and the actual public response to language learning. Our study aims to fill this gap by ascertaining whether the conflict exists and investigating the logic behind the divergence in language choices.

Our fieldwork is devised as a quantitative study – specifically, a questionnaire (Appendix A) surveying undergraduates' language experience, attitudes and awareness of Brexit-related issues - and qualitative research in the form of interviews. Our respondents are limited to UK undergraduate students, who are more likely to be impacted by Brexit-related issues such as funding for study abroad and employment opportunities.

For the questionnaire, we encountered difficulties in obtaining a large sample, which was anticipated in our research plan. To garner more responses, we distributed a paper version of the survey across the campus, soliciting 62 responses by hand, and kept the survey online for an extra week. We acquired 135 respondents, however six had to be deleted due to data irregularities. One row was removed, for example, because the

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[1] For example, news articles emphasised non-EU languages in headings: "Why your child will need to learn Mandarin and Arabic after Brexit" (Kershaw, 2017), "British Council: Arabic must be taught in schools" (Staufenberg, 2017). The public, however picked EU languages as the most desirable languages to learn in an online poll (British Council, 2017b). The government, on the other hand, increased funding in programmes boost both EU languages learning (UK-German Connection programme), and non-EU languages learning (Mandarin Excellence Programme).

respondent was from India, outside our scope. Finally, we had 129 valid rows in the dataset, achieving a 7.24% margin of error at a 90% confidence level.

We analysed the data with the program SPSS. Firstly, we produced frequency tables to examine the overall distribution of each dependent variable and displayed the results as pie charts. Following this, we performed multiple logistic regressions to investigate the correlation between dependent and independent variables; based on data type, we used either a linear or multinomial regression. The R programming language was used to produce the regression tables (Appendix C). We used cross-tabulations to explore the multivariate frequency distribution of the variables, represented in stacked bar charts.

Interviewees were selected from survey participants, p4rioritized based on awareness and experience score. They were informed of the study's purpose, and were asked to sign a consent form and verbally agree to have their responses recorded. These were then paraphrased for evaluation (Appendices D, E, F, G).

2 Findings

Quantitative

In accordance with our hypothesis, we defined three dependent variables: how much Brexit influenced the participant's course decision, the difference in the importance of language for employment before and after Brexit, and which language group was favoured as more significant after Brexit. The latter was calculated by comparing which language group they believed had been reported to be most important currently and which they estimate will be most important after Brexit, out of: mixed, correct, EU, non-EU. If a participant's response for after Brexit changed to a group with more EU languages (e.g. mixed to EU), then it was labelled as favouring 'EU' languages; the same method applies for the non-EU group. Any other combinations were labelled 'other' (e.g. correct to correct).

Languages	Label
Chinese Mandarin, Japanese, Arabic, Hindi, Russian	Non-EU
French, Spanish, Italian, German, Portuguese	EU
French, Japanese, Hindi, Spanish, Russian	Mixed
Spanish, Chinese Mandarin, French, Arabic, German	Correct

We defined five independent variables: firstly, an 'experience score' relating to the participants' language experience by summing values recoded from survey questions recoded into scales, including study experience, travel experience, native bilingualism and whether their degree program contains a study abroad period. Then, we produced each participant's 'awareness score' by recoding the variables 'news experience', 'EU teacher

statistic' and 'language programs they know' (Appendix B). The rest were gender, region, and political stance - inferred based on participant's preference of newspaper.

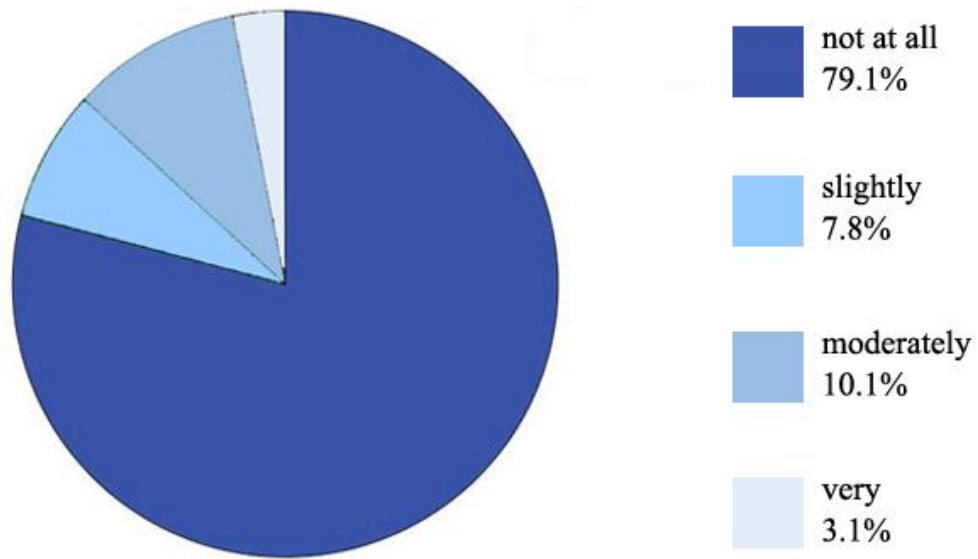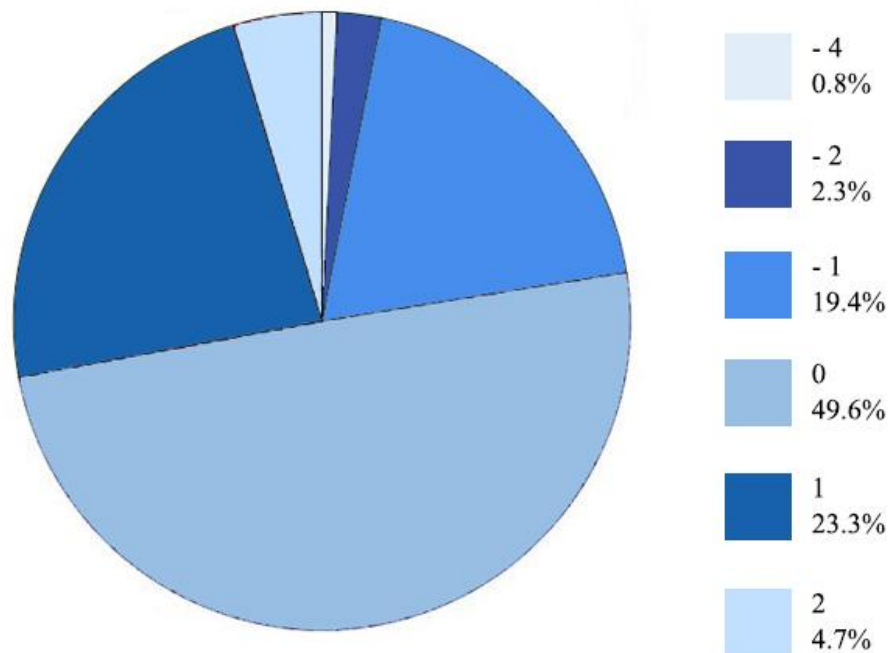
Figure 1.1 How Brexit referendum affects course decision

not at all
79.1%

slightly
7.8%

moderately
10.1%

very
3.1%

Figure 1.2: "importance difference" before and after Brexit

- 4
0.8%

- 2
2.3%
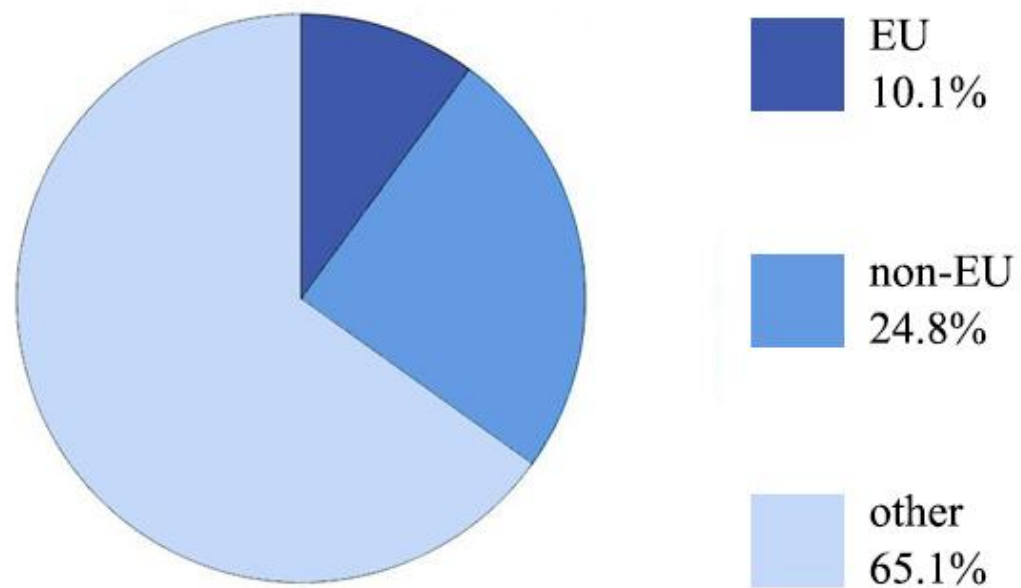
- 1
19.4%

0
49.6%

1
23.3%

2
4.7%

Figure 1.3: change favours EU, favours non-EU, or other

We started by looking at the overall distribution of each dependent variable. The Brexit does not affect much on course decision, as 96.9% reported little or slight impact (Figure 1.1). Almost half of the respondents disagreed that the importance of languages for employment will change after Brexit (Figure 1.2), and more than two-thirds reported that the most important language group would remain the same before and after Brexit (Figure 1.3).

Logistic regression models were applied to further understand each dependent variable. According to a multiple linear regression analysis, the PR of 'Brexit course decision' and 'importance difference' are expressed respectively as 'experience overall', 'awareness overall', political stance, gender, subregion and political stance, as seen below:

$$PR(\text{Brexit course deision}) = a \times \text{experience overall} + b \times \text{awareness overall} + c \times \text{political stance} + d \times \text{gender} + e \times \text{subregion}$$

$$PR(\text{importance difference}) = a \times \text{experience overall} + b \times \text{awareness overall} + c \times \text{political stance} + d \times \text{gender} + e \times \text{subregion}$$

According to multinomial logistic regression analysis, the PR of 'change favour' is expressed as presented:

$$PR(\text{change favour}) = \frac{\exp(a \times \text{experience overall} + b \times \text{awareness overall} + c \times \text{political stance} + d \times \text{gender} + e \times \text{subregion})}{a \times \text{experience overall} + b \times \text{awareness overall} + c \times \text{political stance} + d \times \text{gender} + e \times \text{subregion}}$$

Table 1 Coefficients from the Regression of "Brexit Course Decision" and "Language Importance Difference" on Selected Independent Variables

Independent Variables	Brexit Course Decision	Importance Difference
Experience Overall	.174	.011*
Awareness Overall	.004**	.576
Political Stance		
Left	.332	.210
Right	.581	.540
Gender		
Male	.121	.134
Other	.629	.013*
Sub-region		
South	.136	.828
Other	.019*	.809
Control Variables: Neutral (Political Stance); Female (Gender); North (Sub-region)		

We firstly examined the influence of Brexit debates to course decision. Table 1 indicates that awareness score has a strong correlation with it. Meanwhile, though the 'other' group in sub-region shows a correlation, its sample is too small to be considered.

Figure 2. How overall awareness of Brexit influences course decision
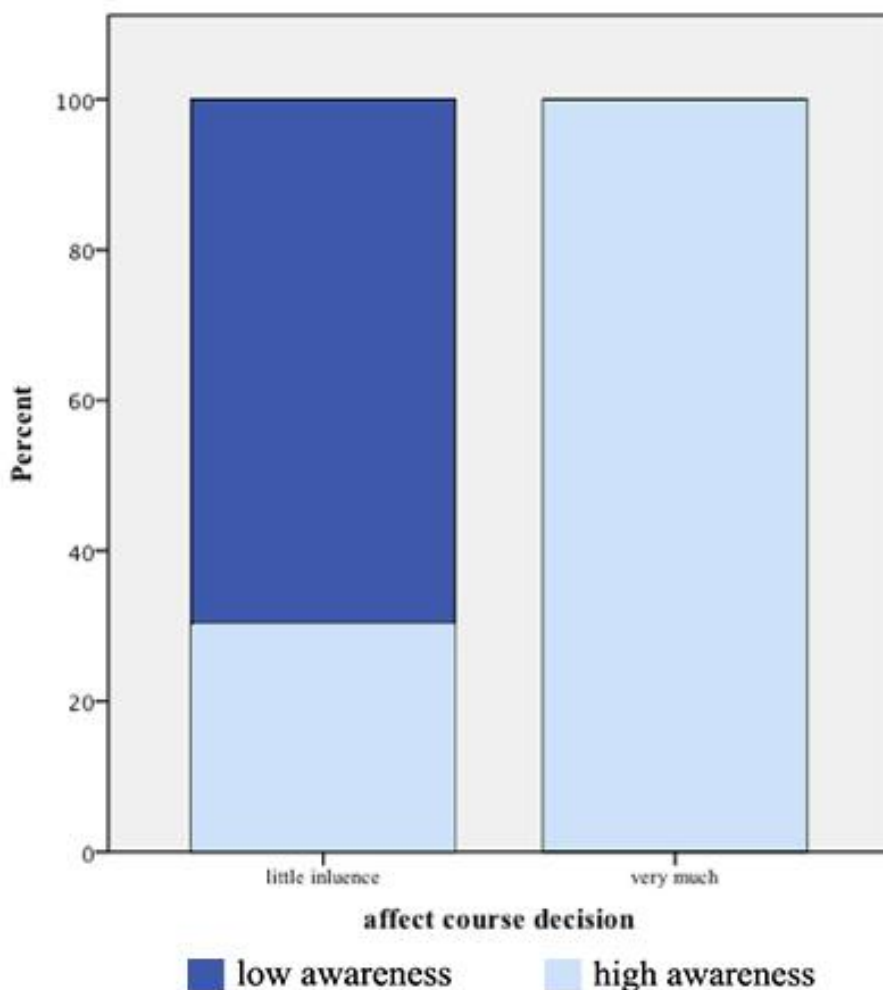
To explore the correlation of awareness and course decision, we recoded awareness scores 0 – 3 into 'low awareness' and 4 – 6 into 'high awareness'. Course decision variables ranging from 'not at all' to 'moderately' were recoded 'little influence', while 'very much' remained the same. Figure 2 illustrates that approximately 70% of respondents who reported low influence were of low awareness, while 100% of participants who think Brexit influenced their course decision showed a high awareness score. The higher awareness of Brexit, the more influential Brexit is to one's course choice.

The second dependent variable we analysed was 'importance difference', which is strongly affected by experience score (Table 1). The samples of the 'other' group in gender and language importance difference are too small to have an influence.

The relationship between 'experience score' and 'importance of language for work' is also explored. 'Importance difference' values below, equal and above 0 were recoded 'down', 'same', and 'up' respectively, which means weighing language learning as less, the same or more important. As figure 3 presents, the experience score is negatively correlated with importance difference.

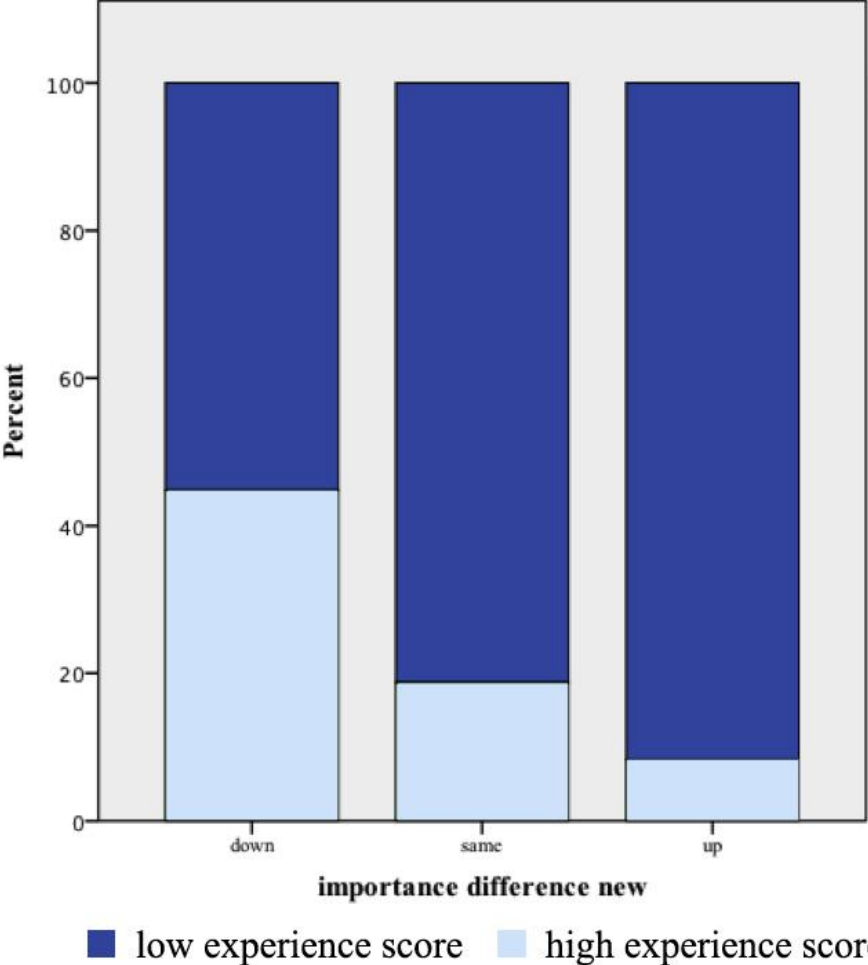Figure 3. How experience score affects importance difference

Independent Variables	Estimate	Std. Error	Z value	Pr (>|z|)
Non-EU				
Experience Overall	-.241	.193	-1.248	.212
Awareness Overall	.586	.282	2.078	.038*
Political Stance				
Left	-.877	.734	-.119	.905
Right	.052	1.005	.052	.959
Gender				
Male	-.063	.675	-.093	.926
Other	-12.771	1377.846	--	--
Sub-region				
South	-.955	.693	-1.380	.168
Other	.217	.933	.233	.816
EU				
Experience Overall	.120	.111	1.071	.284
Awareness Overall	.106	.192	.552	.581
Political Stance				
Left	.290	.515	.563	.573
Right	-.402	.893	-.450	.652
Gender				
Male	.113	.464	.243	.808
Other	-14.649	1378.645	--	--
Sub-region				
South	-.577	.466	-1.239	.215
Other	-.144	.771	-.187	.852

Table 2. Coefficients from the Regression of "Change Favour" on Selected Independent Variables

Control Independent Variables: Neutral (Political Stance); Female (Gender); North (Sub-region)

Control Dependent Variables: Other (Change Favour)

Finally we looked into factors affecting 'change favour', finding that only awareness score influences preference for non-EU languages after Brexit (Table 2).

Figure 4. The correlation between awareness score and change favour
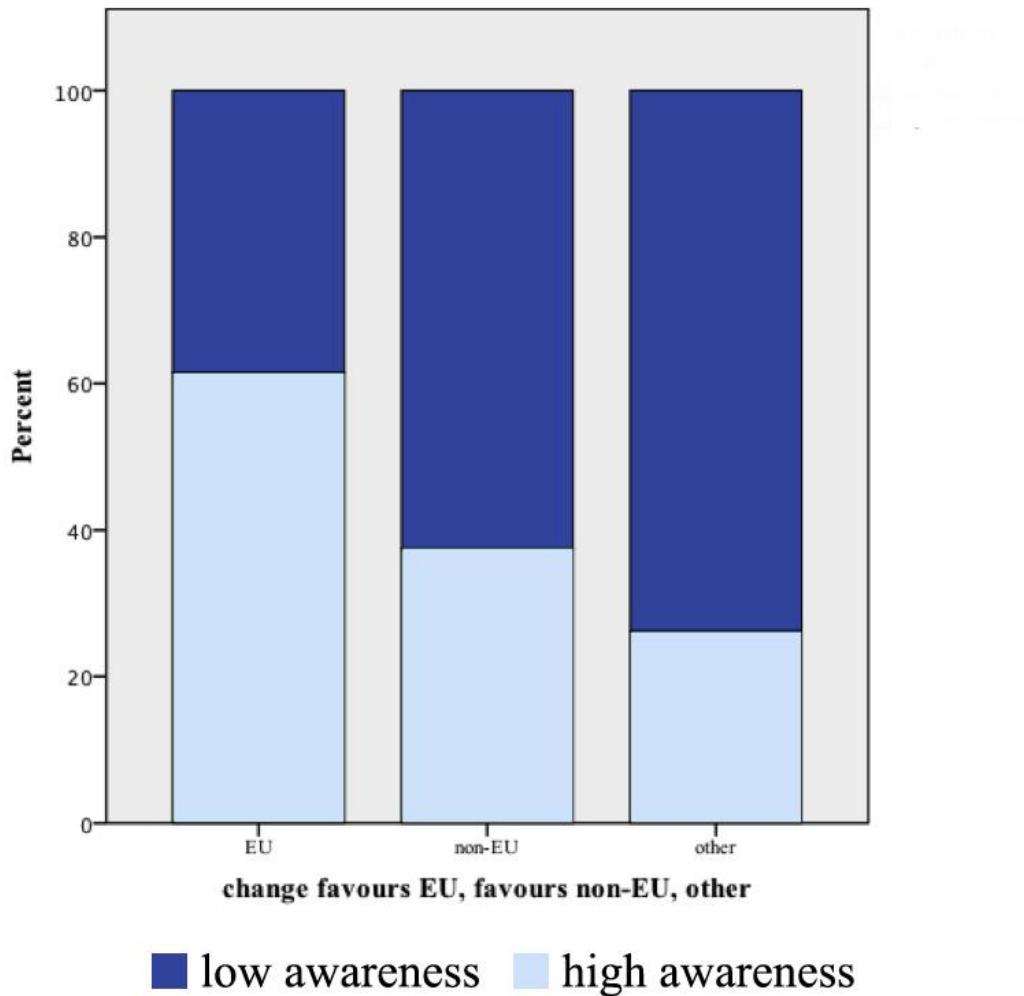
Further analysing this correlation, figure 4 was made to demonstrate that more than 60% who favour EU are of high awareness score, in contrast to over 60% who favour non-EU of low awareness score. The gap becomes more salient in 'other': over 70% are of low awareness and under 30% are of high awareness. In summary, a positive correlation is found between awareness score and 'change favour'.

Qualitative

<u>Student A</u>

Student A studied Latin with French, and emphasised the importance of interest when choosing a language. He considered languages helpful for job prospects in a wide range of companies: language learning provides essential skills outside of linguistic ones, but modern languages are more practically useful.

He believed that Brexit makes language learning more important yet discourages students from studying languages; he said the study of EU languages is becoming less common due to anti-EU sentiment in the media. He thought the year abroad was "crucial" to undergraduate language learning attitudes, given Brexit uncertainties such as the continuation of Erasmus funding.

He commented that the media mistakenly prioritises non-EU languages because of anti-EU rhetoric, but that "EU languages will always be the most important" due to trade and proximity. He said Brexit represents "isolation", so we need more students and teachers of EU languages.

<u>Student B</u>

Student B studied both an EU (Spanish) and non-EU (Japanese) language at A-level. This led her to take both at university, which she began in September 2017, a year after the referendum. The Brexit result concerned her, particularly regarding Erasmus funding and future work opportunities.

She considered language learning highly important overall, and emphasised that the "world is becoming smaller"; she highly supported cross-cultural engagement. She said that language importance is mainly related to the number of speakers because of economic opportunities and globalisation, so she predicted a large increase in the importance of Mandarin Chinese, and a sizeable increase in Arabic.

She said she avoided news because it might "confuse" her, however she thought anti-EU rhetoric would discourage students, especially younger ones, from learning EU languages.

<u>Student C</u>

Student C studied French at A-level, and continues to study French in a joint-honours undergraduate degree. The referendum result did not necessarily change her course decision, yet motivated her do a language course more because of employment prospects, fearing it would become more difficult to find work in Europe in future.

She considered it "urgent" to study languages to maintain a relationship with Europe and the wider world. She supposed more students would study non-EU languages after Brexit because of the huge population base and market potential of countries outside the EU. However, she stated that currently most people study EU languages because those are offered in schools and colleges.

She said she was influenced by "the discussion on the news about the relationship [between the UK and the EU]" yet still felt unclear about how Brexit could influence her course.

<u>Student D</u>

Student D had an experience score of 0, and was not interested in or "good at" languages, which is why Brexit had no impact on her course. She believed the EU group to be the most important because of its prominence at secondary school, and geographical proximity. She supposed that language learning outside the EU will be more important in future to make "deals" with other nations.

She said it is too soon to deduce whether Brexit will affect language learning, and was doubtful, suggesting people study languages because of interest, so changes in practical application are irrelevant. When prompted, she suggested a lack of Erasmus funding might discourage language learning.

3 Discussions

The quantitative analysis revealed that the Brexit debates hardly affect UK undergraduate students' language learning choices. This contradicts our hypothesis that there will be a change in attitude towards language learning among UK undergraduate students.

We identify four possible reasons regarding why there is not a significant statistical correlation: Firstly, the respondents have a relatively low experience and awareness score, with a median of 2 (out of 7) and 3 (out of 6) respectively, indicating that they are neither interested in language learning nor aware of Brexit's influence discussed in the debates. Secondly, while Brexit debates mostly centre on its political or economic impact, the majority of respondents study languages primarily out of interest, and thus are less influenced by practical reasons: 69.3% of people chose "learning language is interesting" as their motivation for language learning. Interviewees also suggested that politics and trade are not the most important factors in language learning choices. Thirdly, it may be too soon to see the impact of Brexit. For example, our respondents include a considerable number of second and third-year students, who started university less than three months after or even before the referendum, thus they are barely affected by Brexit debates. In the interview, when asked whether Brexit debates would influence his course decision if it were a year earlier, Student A from second year stated that he would reconsider taking French as part of his degree. Furthermore, all respondents suggested that the ambiguities plaguing the referendum process make it even harder to assess the exact scale of influence. **Finally**, some questions in the survey may have been misleading. For example, during the interview, Student A contradicted his survey response for 'most important language group after Brexit', and clarified that he had misunderstood this to mean 'which language group has been reported as expected to be the most important group after Brexit'; this may have affected results.

Although statistics such as experience and awareness did not show a significant influence on language learning attitudes, this does not mean that Brexit debates had no impact at all. For example, respondents who had a higher awareness score reported a higher impact of the referendum on their course decision (Table 1), indicating that news

reports indeed influence attitudes. Student A gave an anecdotal example of a GCSE classroom where students disliked studying French, due to the anti-EU media rhetoric which had influenced their parents' views. Student B expressed concern over news reports that universities were imposing redundancies on language staff, many of whom are EU citizens. She said that the news might cause younger people to underestimate the benefits of and ultimately forego EU languages. Additionally, while the majority thought the most important language group would not change before and after Brexit, among those who did change attitude, there was a preference of non-EU languages over EU languages (24.8% V.S. 10.1%), which is also consistent with news reports. These facts highlight the potential influence of Brexit debates on UK undergraduates' language learning attitudes, suggesting that Brexit will discourage students from learning languages, especially EU languages, in the future.

Notably, while the media shows a bias towards non-EU languages as mentioned in our literature review, students who show more awareness of news in media prioritise EU languages: awareness score demonstrated a significant positive correlation with selecting EU languages as most important to learn after Brexit. This might be because young people are more likely to have a positive attitude towards the EU. As stated by Student A, young people voted "overwhelmingly" to remain; 73% of 18-24 year-olds who voted in the referendum supported remain (Becker, S.O.O., Fetzer, T. & Novy, D., 2017), which implies positive attitudes among young people towards the EU.

However, this at least partly reveals that students expect the country to prioritise the relationship with the EU after Brexit and that Brexit debates influence attitudes to language learning in a way that the anti-EU rhetoric would in fact make EU languages appear more important. Student C mentioned the importance of "protecting" and "maintaining" the relationship with EU since the situation is "more precarious than ever" after Brexit. Student A think that media and politicians are inaccurately spread the view that non-EU languages are more important, leading to a deficit in the "multilingual workforce" in the UK. He also spoke of an increased necessity for diplomatic and cultural exchange with the EU following Brexit.

Moreover, although it is also reported that the government intends to develop a balanced language policy, given that the policies are poorly publicised, the governmental rhetoric hardly influences students' attitude. The UK-German Connection Programme, as referenced in our literature review, is poorly publicised, appearing solely on the government website (GOV.UK, 2017) and its own site. The same is true for the Mandarin Excellence Program (British Council, 2016), and only five of our respondents indicated having heard of it. Interviewees also reported to be reliant on lower education for information, which has bias tendencies: student D explained that she selected the EU group of languages as most important because at secondary school the options are typically French, German or Spanish; student C also said that EU languages were "the only options".

4 Critiques

Flaws in the research process may have affected our results. For example, issues with questions in the survey, such as the one Student A misunderstood, could have contributed to a lack of significant data. Similarly, the analysis of participants' political leaning involved heavy assumptions, which might not have accurately reflected their views. It would have been percipient to conduct other methods to analyse political leaning, for example, explicitly asking whether they support remaining or leaving the EU.

If we were to repeat this study after the Brexit deal was concluded, we would expect to see significant results in more factors, however currently there is still much ambiguity. Moreover, students may see Brexit as a distant and politically uncertain event, plagued with ambiguity and yet to have tangible repercussions. Hence, the issue most likely to have affected our results was the fact that most respondents were second or third years; we should have recorded the start date of a participant's course and attempted to get the responses of first-year students.

5 Conclusions

In conclusion, while issues with our method may have contributed to a lack of significant data, our interviews reveal that despite the limits of our statistical analysis, Brexit debates may still affect undergraduates' attitudes to language learning. The media promotes an anti-EU rhetoric, which either discourages some from learning EU languages, or conversely promotes a renewed importance in language learning as a diplomatic tool.

It is also reflected in the research that secondary schools language education suffers from both a deficit in language teachers, coinciding with Koglbauer's research (2018), and a scarcity of non-EU languages offered. Moreover, universities should be in a strong position to provide students with language skills, as Wyburd (2018) suggests, however they are accused of discouraging students from learning languages through academic redundancies, insinuating a "drawing back from the EU" (Student B). News reports on this can greatly influence students' attitudes to language learning.

Therefore, we strongly recommend the government and universities work together to promote this essential skill; more non-EU languages courses should be provided, and the importance of language learning should be emphasised at lower stages of school. Also, regarding the flaws in our method, we recommend a similar study be conducted in future when the consequences of the referendum are more concrete.

6 References

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Appendix A

Questionnaire - Attitudes to Language Learning

1. Are you an undergraduate student and UK national? *

Yes / No

Experience

2. What is your degree? *

3. Have you or do you study a foreign language outside of school? *

Yes, native bilingual / Yes, out of interest / No

4. If you typically read or watch the news, from which (if any) of the following publications?

***Tick all that apply.**

BBC News

The Guardian

The Telegraph

The Daily Mirror

The Independent

Social media, nonpolitical

Social media, political news

Other

Attitudes

5. Do you study a foreign language within your degree (including individual units)? *

Yes, I am or have studied an EU language

Yes, a non-EU language

No

6. Please tick the statements that most affect your motivation with regards to language learning * Tick all that apply.

Language learning is an essential practical skill for my future career

It is not useful to learn languages

Language learning is interesting

I'm not interested in learning languages

Language learning lets me learn about other cultures

Most people speak English

Learning a language is a good way to socialise

It's too difficult to learn a language

7. Have you ever visited a country outside of the UK? * Tick all that apply.

On holiday / To study / To work

8. Have you or do you expect to undertake a study abroad period as part of your degree? *

No

Yes, at least part of which will be in the EU before 2020

Yes, at least part of which will be in the EU after 2020

Yes, none of which will be in the EU

9. Did the Brexit referendum affect your course decision? *

1 (Not at all) / 2 / 3 / 4 / 5 (Very much)

10. How important do you think language learning is for getting work? *

1 (Not at all important) / 2 / 3 / 4 / 5 (Very important)

11. How important do you think language learning will be for work after Brexit? *

1 (Not at all important) / 2 / 3 / 4 / 5 (Very important)

Awareness

12. Are you aware of the following programmes in terms of what they offer? Tick all that apply.

Erasmus

Routes Into Language

IWLP

Mandarin Excellence Programme

UoM LEAP

13. How many UK teachers would you estimate are EU nationals? *

50

5000

50,000

14. Which languages do you think have been reported as the most important to learn in general? *

Chinese Mandarin, Japanese, Arabic, Hindi, Russian

French, Spanish, Italian, German, Portuguese

French, Japanese, Hindi, Spanish, Russian

Spanish, Chinese Mandarin, French, Arabic, German

15. Which languages do you think will be the most important to learn after Brexit? *

Chinese Mandarin, Japanese, Arabic, Hindi, Russian

French, Spanish, Italian, German, Portuguese

French, Japanese, Hindi, Spanish, Russian

Spanish, Chinese Mandarin, French, Arabic, German

Background

16. How do you identify in terms of gender? *

Male

Female

Prefer not to say

Other

17. Which UK region do you come from? *

South East England

London

North West England

East of England

West Midlands

South West England

Yorkshire and the Humber

East Midlands

North East England

Scotland

Ireland

Wales

18. We are looking to follow up our research with interviews about these attitudes at a later stage. If you would be willing to be contacted about the possibility of holding an interview, please leave your email address below:

Appendix B

Score Calculation and Labelling Guidelines

We summed these values to calculate the participant's <u>"overall experience score"</u> in relation to language learning:

1. **Degree language score**: 0=no language relation, 1=linguistics and English language, 2=with foreign language, 3=foreign language as main, 4=more than one foreign language We researched the modules in different degrees to get an idea of how they should be scored, e.g. American Studies and Drama had no linguistic element despite having literature, and Speech and Language Therapy being related to linguistics

2. **"Do you speak any languages other than English" score**: 0=no, 1=selected one response, 2=selected multiple responses

3. **"Do you study a language within your degree" score**: 1 if "yes" and degree was 0 or 1, 0 otherwise in order not to repeat the count made in the first part of the score

4. **"Have you ever visited a country outside the UK" score**: 1=one response, 2=study and work, 0=everything else

5. **Study abroad score**: 1 if will study abroad and not doing a language major (i.e. obligatory placement), 0 otherwise

We summed these values to calculate the participant's **<u>"overall awareness score"</u>** in relation to awareness to news:

1. **News score**: 0=haven't chosen any newspapers or only choose non-political newspapers such as BBC, 1=selected one political newspapers, 2=selected multiple political newspapers

2. **Aware of programs score**: 0=know none of the programme, 1=know one of the programmes, 2=know two of the programmes, 3=know more than 2 of the programmes

3. **"How many EU teachers in the UK" score**: 1 if correct, 0 if wrong

Other Calculations and Labelling:

1. **<u>"Importance Difference"</u>** = rating of importance of language to work after Brexit – rating of language to work before Brexit

2. **<u>Political Stance</u>**: L for choosing more leftist newspapers such as the Guardian; R for choosing more rightist newspaper such as the Daily Mirror; If choose BBC or choose same number of leftist and rightist newspapers, then neutral.

3. **<u>"Change Favour"</u>**: Recategorised questions on important language groups into "Correct answer", "mixed" (wrong), "EU", "non-EU" and same for after Brexit; If a participant's response for after Brexit changed to a group with more EU languages (e.g. mixed to EU, or non-EU to mixed), then it was labelled as favouring "**EU**" languages; the same method applies for the **non-EU** group. Any other combinations were labelled as "**other**" (e.g. correct to correct, or mixed to correct).

Appendix C

Original Programming Used to Produce Regression Tables

Programme 1: How 'Brexit Course Décision' correlates with independent variables

```
Call:
lm(formula = Brexit_course_decision ~ subregion + Exp_overall +
    news_political + gender + awareness_overall, data = m)

Residuals:
    Min      1Q  Median      3Q     Max
-0.9303 -0.4718 -0.1951  0.2060  2.0611

Coefficients:
                  Estimate Std. Error t value Pr(>|t|)
(Intercept)        0.78267    0.17141   4.566 1.21e-05 ***
subregionOther     0.56045    0.23539   2.381  0.01885 *
subregionSouth     0.20868    0.13888   1.503  0.13557
Exp_overall        0.04817    0.03522   1.368  0.17402
news_politicalL   -0.15015    0.15424  -0.973  0.33229
news_politicalR    0.13070    0.23594   0.554  0.58065
genderMale        -0.21796    0.13942  -1.563  0.12061
genderOther       -0.26086    0.53780  -0.485  0.62853
awareness_overall  0.16550    0.05647   2.931  0.00405 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.7357 on 120 degrees of freedom
Multiple R-squared:  0.1894,    Adjusted R-squared:  0.1354
F-statistic: 3.506 on 8 and 120 DF,  p-value: 0.001128
```

Programme 2: How 'importance difference' correlates with the independent variable

```
Call:
lm(formula = importance_difference ~ subregion + Exp_overall +
    news_political + gender + awareness_overall, data = m)

Residuals:
    Min      1Q  Median      3Q     Max
-3.9171 -0.4772 -0.0227  0.5568  1.9012

Coefficients:
                  Estimate Std. Error t value Pr(>|t|)
(Intercept)       -0.04991    0.20607  -0.242   0.8090
subregionOther     0.24575    0.28299   0.868   0.3869
subregionSouth    -0.03640    0.16697  -0.218   0.8278
Exp_overall       -0.10910    0.04234  -2.576   0.0112 *
news_politicalL    0.23355    0.18543   1.259   0.2103
news_politicalR    0.17448    0.28365   0.615   0.5396
genderMale         0.25272    0.16761   1.508   0.1342
genderOther        1.63061    0.64655   2.522   0.0130 *
awareness_overall  0.03808    0.06789   0.561   0.5759
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.8845 on 120 degrees of freedom
Multiple R-squared:  0.1195,    Adjusted R-squared:  0.06076
F-statistic: 2.035 on 8 and 120 DF,  p-value: 0.04781
```

Programme 3: How 'change favour' correlates with independent variables

```
Pearson residuals:
                     Min      1Q  Median       3Q     Max
log(mu[,1]/mu[,3]) -0.818 -0.3651 -0.2449 -0.1232  6.883
log(mu[,2]/mu[,3]) -1.065 -0.5965 -0.4701 -0.1833  2.445

Coefficients:
                     Estimate  Std. Error z value Pr(>|z|)
(Intercept):1        -2.78235     0.93648      NA       NA
(Intercept):2        -1.46748     0.57900  -2.534   0.0113 *
subregionOther:1      0.21710     0.93290   0.233   0.8160
subregionOther:2     -0.14416     0.77082  -0.187   0.8516
subregionSouth:1     -0.95538     0.69250  -1.380   0.1677
subregionSouth:2     -0.57684     0.46567  -1.239   0.2154
Exp_overall:1        -0.24081     0.19302  -1.248   0.2122
Exp_overall:2         0.11938     0.11148   1.071   0.2842
news_politicalL:1    -0.08760     0.73377  -0.119   0.9050
news_politicalL:2     0.28984     0.51466   0.563   0.5733
news_politicalR:1     0.05205     1.00565   0.052   0.9587
news_politicalR:2    -0.40229     0.89307  -0.450   0.6524
genderMale:1         -0.06283     0.67522  -0.093   0.9259
genderMale:2          0.11285     0.46436   0.243   0.8080
genderOther:1       -12.77080  1377.84620      NA       NA
genderOther:2       -14.64934  1378.64525      NA       NA
awareness_overall:1   0.58642     0.28219   2.078   0.0377 *
awareness_overall:2   0.10584     0.19173   0.552   0.5809
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Number of linear predictors:  2

Names of linear predictors: log(mu[,1]/mu[,3]), log(mu[,2]/mu[,3])

Residual deviance: 202.2648 on 240 degrees of freedom

Log-likelihood: -101.1324 on 240 degrees of freedom

Number of iterations: 14

Warning: Hauck-Donner effect detected in the following estimate(s):
'(Intercept):1', 'genderOther:1', 'genderOther:2'

Reference group is level  3  of the response
```

Appendix D

Information Sheet

We are students at the University of Manchester who are investigating attitudes to language learning in the UK in relation to Brexit debates. Following our questionnaire, in which you were a participant, we are holding interviews to get a deeper understanding of these attitudes.

Interviewees' responses will be used by students enrolled in LELA20102 at the University of Manchester as part of a class research project. We will record the responses, transcribe them and evaluate them for our report, in which they will be used anonymously. Once the project is over, the recording will be destroyed.

Appendix E

Consent Form

Before signing the consent form, please make sure you are familiar with the participant information sheet and do not hesitate to ask the researcher if you have any questions or concerns. If you are willing to participate in this study, please complete and sign the following consent form.

	Please tick if agreed
I understand that my participation is entirely voluntary and I am free to withdraw myself at any time without providing a reason.	
I understand that interviews will be recorded and transcribed.	
I agree to the anonymous use of quotes or paraphrases of my responses.	
I understand that any data collected will be anonymised and agree that the results of this study may be published and shared with other researchers.	

By signing, you agree to participate in this project:

Name of participant   Signature   Date

Name of researcher   Signature   Date

Appendix F

Interview Guide

Once you have begun recording, state your name and ask the participant to state their name and give verbal consent:

My name is ... and I'm interviewing ... for Societal Multilingualism. Do you give your consent for your answers to be recorded?

At the end of the interview, make sure to include in the recording:

This is the end of the interview.

Try to let the respondent engage in as much spontaneous speech as possible so as not to ask leading questions. The following questions are a guideline. Some are based on the participant's individual answers, which are listed below:

Student	Degree/Units	Brexit Impact	LL Before/After	Langs Before	Langs After
A	Latin with French	1	5 / 5	Correct	Non-EU
B	Psychology	1	3 / 2	EU	EU
C	Spanish & Japanese	2	4 / 4	Correct	Correct
D	English Lit & French	3	4 / 4	Correct	Correct

Language Groups

Languages	Label
Chinese Mandarin, Japanese, Arabic, Hindi, Russian	Non-EU
French, Spanish, Italian, German, Portuguese	EU
French, Japanese, Hindi, Spanish, Russian	Mixed
Spanish, Chinese Mandarin, French, Arabic, German	Correct

Questions

1. How did you decide whether or not to study a language at university?
    ➢ Were you aware of which languages have been reported as being the most important for UK citizens to learn, and did this have any effect?
2. Can you explain how you rated the effect of Brexit on your course decision? Were news reports relevant?
3. Can you explain how you rated the importance of language learning before and after Brexit? Were news reports relevant?
4. How did you decide to estimate the most important language groups before and after Brexit? Why was/wasn't there a change? Were news reports relevant?
5. Do you think there's a relationship between Brexit and the number of students learning languages?
    ➢ If so, does this relationship relate to EU or non-EU languages?
6. If the Brexit referendum had happened a year earlier, would this have changed its impact for you on your course choice?

Appendix G

Interview Notes

<u>**Student A**</u>

Course Choice
- Had a head start from learning French from age 7, mother was a French teacher
- At secondary school, the options were: German, Spanish and Latin
- Latin was unusual, didn't want to waste the opportunity
  - French shouldn't be an unusual choice, used to be more common in school, but languages at GCSE are becoming more uncommon - too much work/too difficult
  - People in the language profession say it's harder to get students to study French at a higher level "and it shouldn't be like that" [expresses concern]

Language Learning Importance
- Latin not useful but enriching in terms of wider language learning
- French helpful for understanding French culture, e.g. news and literature
- French can be used in lots of workplaces as the primary language
- Latin is useful for academic careers but little other application, but skills like structure of language, understanding grammar, understands English much better; literary analysis, historical analysis
- French would be advisable over Latin because of its practical application and engagement in media - radio/TV/newspapers
- Latin interesting but not appealing for secondary schools
- Excited to use language skills abroad, but native French speakers usually speak English
- Languages helpful for job prospects but some UK businesses have no international
- The need to be able to speak a foreign language in business is becoming more important, and opportunities are opening up

Cuts
- Lack of language teachers because we don't have a multilingual workforce and there is a gap, higher demand
- The method of teaching of languages (seminars) means a lack of teaching staff is problematic
- We need bigger departments and more students
- Redundancies don't necessarily send a message to EU citizens as a whole, but the redundancies and cuts are affecting EU citizens most because many tutors in the school of arts are not UK citizens
- Brexit represents isolation, so we need skilled language speakers to bridge that gap

- EU languages will always be the most important - simply geographically, largest trading partner

Most important group
- Media and politicians are wrong that non-EU countries should be our priority
- Learning EU languages doesn't create a barrier with other countries; English is an international language
- Political bias [anti-EU rhetoric in the news] means the non-EU language group will be considered most important, inaccurately
- English (culture) are international and common in other countries, but the same isn't true the other way round, so the incentive to learn languages is higher for non-UK citizens because our culture (e.g. USA) is in English
- We start language teaching far too late; lots of EU kids learn around the age of 7
- English teachers who don't have the skills in languages are teaching younger kids inadequately

Year Abroad
- Crucial part of choosing his course is doing a year abroad in the EU with Erasmus funding; would be much less attractive without that funding, but his subject is ideal
- Future students may be put off by a lack of Erasmus funding - "scary" for them, ambiguity about rights and funding
  - Freedom of movement
  - Work permit
  - Funding
- How can people make a decision when there are still lots of ambiguities
- Brexit means we should be more determined to connect internationally (business, politics, public life, EU sponsored projects) because we're no longer in an organisation that does that for us; because of this, more people than ever should study languages, but the way Brexit is conducted will discourage people, especially before the outcome is clear, and mentions the year abroad
- Young people overwhelmingly voted to remain, but thinks young people's attitudes have "slowly shifted" to make them less militant about remain - more "reserved in rejections to Brexit"

Anti-EU rhetoric
- Someone doing work experience in a secondary school French class said kids weren't interested in French because it was "EU" and their parents had told them "EU was bad"
- Political institutions and figures reflect the language of the country they represent; so much focus of Europe in British media, which is why people are mixing French language and culture with modern politics; all people are seeing is the politics of modern France, for example news reports suggesting France is being difficult in

Brexit negotiations will make people dislike the French language and the worldwide francophone culture

Importance Again

- When the government encouraged science learning with campaigns, the number of arts dropped
- It's important we be honest with people about which languages will be useful in the post-Brexit world, but needs to be objective
- "Much more important" that they study what they enjoy rather than what they will be useful
- With a languages degree, you can work in any sort of company; transferable skills, any company needs that (HR, management, civil services) - equips people "roundedly"
- Language learning opens doors
- Even without French, his degree wouldn't limit his opportunities; while speaking a modern language is useful, language learning teaches other skills, e.g. Latin leads to philosophy and history and debating, in language degrees, one studies culture and history even aside from the language
  - Language learning give cultural, historical and philosophical knowledge about that language
- Brexit means language learning is more important, however is currently and will make fewer people want to learn these languages (because of negative attitudes from parents, news reports)
- If Brexit were called off, this would renew interest in the EU, linguistically, culturally and in business - would change public attitude
- Believes there is a "huge amount of anxiety" over Brexit in the public, that people would be relieved if it were called off (and he would be relieved)
- Brexit benefit is that it has forced people to look beyond the EU and think about the EU, so people will realise that the UK is not big and important - and partly because the English language is so dominant, but now people will realise Britain/English aren't so important, so they will need to make more effort with other countries
- English is a common language across Europe
- Considers that "mixed" group will be the most important, but we don't have much trade with Russia so their language is not important; but doesn't think we have a major amount of trade with Italy, so not the EU group
- Practical application/politics/trade are not the most important factors in choosing a language to learn; interest is key, and culture/media will encourage people; to encourage people to learn languages, emphasise the importance of practical application - although this shouldn't be why
- Language learning always has and always will be important, because the UK cannot become complacent in expecting others to learn English

- Young people don't think they need to learn languages because everyone speaks English

Student B

Course Choice
- Interested in languages; did both at A-level
- World is becoming more globalised so learning languages is important and being open-minded
- As a first year, made course decision after the referendum
- Had considered working in the EU in the future, but the referendum made her worry about her options - caused uncertainty, but in the end stuck with choice
- Brexit won't affect her if she goes to Latin America, but mentions concern of Erasmus funding if goes to somewhere like Spain

Language learning importance
- Language learning important regardless of referendum; 'world is becoming smaller', more important we communicate through language learning
- Skills in languages really helpful for job prospects, e.g. international company - more valuable employee
- Agrees with original choice on language groups - no change (correct)
- Decided course earlier on, before referendum
- Chinese economy is growing and Chinese people are moving to other countries, so Mandarin is more important as a business language and generally for communication (such a large population)
- Reckons Arabic will become a very important language; the other (EU) languages in the group aren't going to be as important as Mandarin and Arabic, but are still quite big
- Would prefer a language she's interested in, but Mandarin would be more practically useful than Spanish because it's such a big market

News
- Wanted to avoid listening to the news, didn't want it to confuse her thought, but thinks it'll have a big effect for learning of EU languages - especially for people who are younger, whether they can study EU languages and whether they will benefit them (Brexit/anti-EU rhetoric)

Cuts
- Before coming to uni, had heard about big cuts at UoM, especially in humanities departments, was worried "quite a bit", but came anyway
- Spanish class has about 20 to 30 people

- On intake of fewer languages students: perhaps more important to study languages now because we're leaving an international market; it's "sad", isolate us more
- Making EU professors redundant sends the message that they're not needed/wanted, that we're drawing back from the EU

Importance of learning/English in the EU
- Language learning has always been really important, "just as important if not more, but Brexit shines a light on how important it is" and how not many UK citizens can speak a foreign language
- English will be used all across the world and is a big language, but if the EU decide to remove English as an official language, it may in fact encourage more anglophones to learn other languages
- Thinks that if English is removed as an official EU language, more young people may decide to pick up a language in order to not feel isolated, but as a country we're becoming more isolated
- Would have chosen Spanish over Japanese because of its wide base (America and Europe) - Japanese would 'limit options'

Student C

Course Choice
- Always interested in language learning; language degree open up more opportunities for employment both inside and outside the UK
- Choosing French because it is the only language she has learned before university
- Brexit didn't "change her course decision", but influence her in a way that she would "want to do language course more"; she thinks learning a EU language can help maintain the relationship with EU.
- Give reasons why she didn't choose a non-EU language: If she wants to do a non-EU language, she will have to do a beginner course like French and Chinese. She does not want to "limit herself to languages" because she has no interest in translation while learning English literature as a joint honours degree with French provides more job opportunities.

- Still feels unclear about how Brexit could influence her course. "People didn't know how it would change"; doesn't think Erasmus would change because it is beneficial for both the UK and the EU. [Express worries]

Language learning importance/ Relationship with the EU
- Brexit wouldn't change the "necessity of learning languages"; The UK always has to "maintain the relationship" with EU countries, and all other countries in the world

- Relationship with the EU "more precarious now than ever"; definitely need to "protect" the relationship

- Suggests that more people would choose language as part of a joints honours degree or a minor to science

Most important group
- Choose EU languages because of the importance of the EU

- Choose non-EU languages because the huge population base

- Talks about hearing news of there being more applicants for French studies than ever in university

- Thinks most people would prefer to do non-EU languages; The decisions are based on work choices

- A lot of people are still doing EU languages because few schools and colleges only offer non-EU languages

News
- News reports would influence people's decision, especially the discussion about the future of Brexit and its possible influence
- Mentioned discussions among students that before Brexit it would be easier for UK nationals to find a job in the Europe than other countries, however Brexit makes everything even. [express worries of being more difficult to find a job]
- Language students in general by nature want to have a relationship with EU countries and other countries
- Emphasized the role of social media

Student D

Course Choice
- Not interested in or good at languages
- Believes she was told at school that the most important languages to learn are French, German and Spanish
- Brexit had no impact on her course because she doesn't study a language

Language learning importance
- Originally rated language learning importance as going down after Brexit because of a growing independence from the EU, but now thinks language learning might be more important in order to make "deals" with other nations
- EU language group most important because of geographical proximity, and again, school would influence this attitude
- Too soon to tell whether Brexit has an effect on language learning, since the process is still going on
- People who study languages would choose it because they find it interesting, especially for younger students, rather than practical applications

- Doesn't think many students choose languages because of the EU
- Lack of Erasmus funding might put people off (once prompted about the year abroad)