Are local students disadvantaged? Understanding institutional, local, and national sense of belonging in higher education

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Ethics

This study complied with the General Data Protection Regulations (GDPR), and the ethical approval was granted by Bangor University.

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Research on inequality in higher education is often dominated by class-based assumptions about traditional and non-traditional students. This binary distinction emphasising students' socio-economic status tends to oversimply the complexity of educational inequality, neglecting crucial factors which affect their perception of social position. Therefore, this study aims to investigate the understanding of inequalities in higher education with new data on the meaning of locality, using evidence from comparative studies of institutions. Locality is interpreted as an inclusive concept capturing place identity as well as local attachments based on language, culture, and natural environment. The qualitative and quantitative data was collected from 192 participants in three distinctly different higher education institutions, which are deliberately selected according to their socio-economic, cultural, and institutional status. This mixed methods research confirms the importance of different types of belonging at institutional, local and national levels, and their different effects on student groups. The study captures to what extent geographical mobility is associated with social class, by examining students' sense of belonging and their interpretation of locality in universities across Wales. It challenges the notion of disadvantaged background, and poses a critical question about cultural and geographical familiarity. This study therefore enriches the current debates about the impact of social inequality alongside social class on students' belonging, success, and retention in higher education.

Keywords: sense of belonging, higher education, locality, educational inequality, disadvantage

Key Insights

What is the main issue that the paper addresses?

This study aims to investigate the understanding of inequalities in higher education with new data on the meaning of locality, using evidence from comparative studies of institutions.

What are the main insights that the paper provides?

We hope that it will provide academics, researchers, practitioners and policy makers with a more comprehensive understanding of students' sense of belonging in higher education. Our discussion should therefore enrich a current strand of higher education research on sense of belonging, engagement and retention.

Introduction

Existing literature on inequalities observed in British higher education is dominated by class-centred theories about traditional and non-traditional students. Defining non-traditional students involves certain characteristics such as working class, local, living at home, and being relatively immobile. These students are often referred to as 'disadvantaged' (Christie 2007; Forsyth and Furlong, 2003; Reay 1998; Reay 2002; Wakeling and Savage 2015). Several studies (e.g. Forsyth and Furlong, 2003; Keane 2011; Lynch and O'Riordan 1998; Mallman 2017; O'Donnell and Tobbell 2007; Patiniotis and Holdsworth 2005; Platt 2007; Reay 2002; Thiele et sl. 2017) argue that students from disadvantaged backgrounds are more likely to have lower levels of engagement as well as sense of belonging, having a further effect on retention and success in higher education (HE). Socio-economic status seems to be regarded as the most crucial factors to determine disadvantage in the existing literature.

Whilst it remains of importance to acknowledge the on-going debates about social and geographical mobilities in the transition to and association with HE, considering middle class and working-class backgrounds as two dichotomous entities oversimplifies the complexity of educational inequality and institutional habitus (Ahn, 2017). Reay et al. (2001) defined institutional habitus as class-based influences and milieu generated by the higher education institution, stemming from Bourdieu's cultural capital and habitus. Furthermore, this binary distinction poses potential risks of incompleteness, since it tends to neglect additional pertinent factors in the higher education context. For instance, as shown in the recent study (Ahn and Davis, 2020a), the concept of locality is often investigated with a limited view in the existing literature, when it should imply a broad range of individual, cultural, and social representations based on geographical location, language, community, and historical backgrounds, natural environment and even cultural and national identity, which substantially affect students' perceptions of their social position.

The research project on Students' Sense of Belonging at Bangor University undertaken in 2014 began to address this issue (Ahn, 2017), revealing the complexity of students' sense of belonging to their university. Amongst 800 participants, 150 self-identified Welsh students reported the weakest sense of belonging and participation in comparison with other groups (Ahn and Davis, 2020a). Considering the character and reputation of Bangor University, which has a strong Welsh linguistic ethos and engagement with the local community, this result seems counterintuitive. This project revealed that tensions between perceptions of socio-economic, institutional, cultural and national identities could lead to the multi-faceted educational inequality. Addressing the limited explanation from the class-based assumptions, therefore, it requires further study on a broad scale to identify the determining factors to alienation in the higher education context.

Some research (Donnelly and Evans, 2016; Hinton, 2011) argues that cultural and geographical familiarity, and emotional support from family and friends are crucial to Welsh students in terms of their selection of the university. However, the Higher Education Statistics Agency (HESA) 2019/20 reported that only 75.3% of the total 35,380 Welsh domicile students who enrolled first year in UK higher education institutions (HEIs) selected HEIs in Wales. Compared to other countries such as England (96.0%), Scotland (95.5%), and even Northern Ireland (76.9%), this figure seems to be considerably low. For the last five years, less Welsh domicile students tend to choose universities in Wales, as the proportion has been steadily declining from 78.7% in 2013/14 to 74.6% in 2017/18ⁱ. It should be noted that individual preferences can explain transition to higher education only to a certain extent, because it remains necessary to consider structural factors such as inequality, social class and institutional habitus.

The present study aims to explore whether there is any difference in students' belonging and participation amongst student groups with different backgrounds within or

across universities by investigating HE institutions in Wales. Three higher education institutions were chosen for their contrasting historical, socio-economic, cultural, and institutional features: Bangor University, with a reputation as a 'Welsh University in the heart of Wales'; Cardiff University, one of the elite institutions situated in the Welsh capital; and Third University, one of the post-1992 institutions prioritising work-based learning. In north Wales, Bangor University, founded in 1884, is one of the middle-ranked (39th) UK institutions (the Times Higher Education World University Rankings 2018). Cardiff University in south Wales, established in 1866, has the highest student population of 31,935 (the Welsh Government Statistical Bulletin 2017/18), amongst Bangor University (11,155) and Third University (10,435). Third University is also located in south Wales, and chosen for contrast, as it tends to emphasise vocational aspects in HE.

This study seeks to explore institutional, local, and national belonging, and its impact on student engagement on the institutional and national levels, by using the Welsh example. It aims to examine how these crucial factors affect educational inequality other than social class, with the research questions such as:

- How does the belonging and participation of Welsh students compare with that of other students in each institution?
- What are the differences in Welsh students' sense of belonging and participation across selected institutions in Wales?
- What are the relationships between institutional, local, and national belonging (students' belonging to the institution, place, and Wales)?

Methods

Research design and instrument

This comparative and cross-sectional study involves two forms of data collection, namely '10

Words Question' and a short survey questionnaire. The 10 Words Question instrument was used in previous research (see Ahn and Davis 2020a), which consists of a single open-ended question asking participants to write down up to ten words that comes to their mind when they think about belonging to their university.

The survey questionnaire was comprised of two parts: Belonging and Demographic Information. The questions about belonging asked participants' belonging to their university (Institutional Belonging), local community (Local Belonging) and Wales (Wales Belonging) on a 5-point Likert scale. Items for demographic information were included under Welsh domicile, national identity and socio-economic status. In order to avoid unnecessary confusion about self-assessed language competence, speaking Welsh language was not used for this study. Instead, it was assumed that studying through the medium of Welsh was a sufficient proxy for proficiency, demonstrating attachment to national identity. Two indicators (e.g. first university entrant in family, and receiving any university bursaryⁱⁱ) were applied to measure socio-economic status, as students who are first in family to enter university are reported to feel less engaged socially (O'Shea 2020) and academically (Soria 2012).

Data collection

The participants were recruited and drawn from the undergraduate student populations across the three HE institutions, namely Bangor University, Cardiff University, and Third Universityⁱⁱⁱ. This study applied a purposive, non-random sampling strategy to recruit a maximum-variation sample including students studying through the medium of Welsh, as they tend to choose Healthcare, Social Sciences and Education according to the Welsh Government Statistical Bulletin (2014/2015). A sample size of 150 (50 participants from each institution) was anticipated with a response rate of 50% (margin of error of 5% and a

confidence level of 95%), learned from previous experience of a similar research process. The recruitment occurred in scheduled lectures during term-time to increase the response rates. The 192 students participated in the survey from Bangor, Cardiff and Third University between the 4th March and 13th May in 2019.

An information sheet with a consent form was given to participants, with the offer to opt out of the survey at any time and without giving a reason. All the responses were anonymised, and stored on a secure, encrypted, and password protected university server.

This study complied with the General Data Protection Regulations (GDPR), and the ethical approval was granted by Bangor University.

Participants

Female participants outnumber males by a wide margin (85.9%), as shown in Table1. Mature students^{iv} account for 45.3% of the total 192 participants, where the average age is 23.5. Healthcare (48.4%) is the academic discipline with the highest number of participants, followed by Social Sciences (28.6%) and Education (17.2%). More than half of participants (53.1%) chose their national identity as Welsh, the majority of whom (90.2%) lived in Wales even before they entered university. In terms of socio-economic status, around half (44.8%) were the first person in family studying at university, while more than half (61.5%) received means-tested bursaries from university. The participants' profile seems to reflect the recruitment patterns in health and education, where the proportion of female and mature students is generally high.

Table 1: Participants demographic information

| Variable | n = 192 (%) |
|----------|-------------|
| Gender | |
| Female | 165 (85.9%) |

| Male | 22 (11.5%) | |
|-------------------------------|------------------|--|
| | Range: 17 – 62 | |
| Age | IQR: 19, 20, 24 | |
| | M=23.5 SD=8.170 | |
| Female | M=23.6 SD=8.163 | |
| Male | M=23.2 SD= 8.617 | |
| Institution | | |
| Bangor University | 87 (46.0%) | |
| Cardiff University | 86 (45.5%) | |
| Third University | 16 (8.5%) | |
| Academic Discipline | 186 (96.9%) | |
| Healthcare | 93 (48.4%) | |
| Social Sciences | 55 (28.6%) | |
| Education | 33 (17.2%) | |
| Others | 5 (2.6%) | |
| Welsh National Identity | 192 (100.0%) | |
| Welsh | 102 (53.1%) | |
| Not Welsh | 90 (46.9%) | |
| Welsh Domicile | 188 (97.9%) | |
| Have lived in Wales before HE | 154 (90.2%) | |
| No | 34 (7.7%) | |
| First in Family to HE | 187 (97.4%) | |
| Yes | 86 (44.8%) | |
| No | 98 (51.0%) | |
| Don't Know | 3 (1.6%) | |
| University Bursary | 187 (97.4%) | |
| Yes | 118 (61.5%) | |
| No | 63 (32.8%) | |
| Don't know | 6 (3.1%) | |

(Due to missing data, the sum might not always be 100%)

Results

Research Question 1. How does the belonging and participation of Welsh students compare with that of other students in each institution?

The survey analysis reveals that participants seem to agree that they belong to the university (University Belonging, M=3.76, SD=1.039) and Wales (Wales Belonging, M=3.87, SD=1.443), whilst their belonging to local tends to be neutral (Local Belonging, M=3.17,

SD=1.248) (Table2). There is no statistical difference between University Belonging and Wales Belonging (Z=-1.084, P= 0.278).

Table 2: Students' belonging to university, local and Wales

| | University Belonging | Local Belonging | Wales Belonging |
|------|----------------------|-----------------|-----------------|
| N | 189 | 187 | 189 |
| Mean | 3.76 | 3.17 | 3.87 |
| SD | 1.039 | 1.248 | 1.443 |

Next, the whole data was divided into two groups of Welsh (N=102) and Not-Welsh (N=82, including British, English, Scottish, Irish, Northern Irish, and European) (Table 3), to focus on Welsh students. Between Welsh and Not Welsh groups, there is no statistically significant difference in University Belonging (U = 4391.5, p = 0.899) or Local Belonging (U = 4181.5, p = 0.639), whereas a large gap (1.44) is found in Wales Belonging (U = 2039.0, p = 0.000). Compared to Welsh students who express firm belonging to Wales (M= 4.53), those non-Welsh have the lowest level of belonging to Wales (M=3.09), even than their University Belonging (M=3.75) and Local Belonging (M=3.13). Similarly, a Mann-Whitney U test also confirms that only Wales Belonging shows significant differences between Welsh domicile (N= 154, M=4.29) and Not Welsh domicile (N= 34, M=1.91) groups (U = 472.5, p = 0.000).

Further statistical tests (Wilcoxon signed rank) confirm that the means of all three types of belonging are different depending on identifying as Welsh and Welsh domiciled (p < 0.01). The exception is the difference in Local and Wales Belonging between Not Welsh groups (Z=-0.132, P= 0.895). Amongst Welsh students, their belonging to Wales is the highest (M=4.53, SD=0.992), followed by their belonging to university (M= 3.76, SD=1.045) then local (M=3.20, SD=1.295). However, to the 82 students who do not self-identify as

Welsh, University Belonging (M=3.75, SD=1.037) is higher than Wales Belonging (M=3.09, SD=1.507) as well as Local Belonging (M=3.13, SD=1.199). Although there are similar results for living in Wales before the university or not, there is a larger gap between Local Belonging (M=2.82, SD=0.936) and Wales Belonging (M=1.91, SD=0.965) amongst those who have not lived in Wales (Z=-3.661, P<0.01).

Table 3: Students' belonging to university, local and Wales by Welsh identity and Welsh domicile, M(SD)*

| | University Belo | onging Local Belonging | Wales Belonging |
|--------------------------|-----------------|------------------------|-----------------|
| Welsh identity | | | |
| Welsh (n=102) | 3.76 (1.045) | 3.20 (1.295) | 4.53 (0.992) |
| Not Welsh (n=82) | 3.75 (1.037) | 3.13 (1.199) | 3.09 (1.507) |
| Welsh Domicile | | | |
| Welsh domicile (n=154) | 3.75 (1.070) | 3.23 (1.294) | 4.29 (1.149) |
| Not Welsh domicile (n=34 | 3.82 (0.904) | 2.82 (0.936) | 1.91 (0.965) |

(*M=mean, SD=standard deviation)

The 10 Words Question was analysed in a series of steps: In Vivo coding, systematic coding, thematic analysis, and contingency analysis (see Ahn and Davis 2020a). The analysis showed that 'friends' is the most frequent word from 162 participants, occurring 63 times out of 976 words (6.5%); followed by 'education' (38 times), 'support' (36 times) and 'community' (32 times). The previous study revealed that four domains of students' sense of belonging are Academic Engagement, Social Engagement, Surroundings and Personal Spaces (Ahn and Davis, 2020a), which the present 10 Words Question data fitted completely into. Half of the data were categorised as Social Engagement (463 times, 47.4%), followed by Academic Engagement (25.3%), Personal Spaces (19.8%) and Surroundings (7.5%). Almost everyone out of the total 178 participants (116 participants, 91.6%) wrote down at least one response related to Social Engagement (e.g. university clubs and societies, community

feelings such as 'home', 'included', 'respected', 'welcoming', 'together', and socialising), then 65.2% for Academic Engagement, 61.8% for Personal Spaces, and 30.9% for Surroundings; as the salience of social engagement is confirmed in this study (Ahn and Davis 2020; Beard et al.2007). On the daily level, their belonging to local (Surroundings) tended to be expressed by describing their living spaces ('living in halls', 'living on campus', 'living away from home', 'apart', 'familiarity') as well as the city ('local', 'city', 'living in Cardiff', 'living here', 'location', 'access to park and ride').

The analysis of the qualitative data from the 10 Words Question reveals the importance of the Welsh national identity. Amongst 101 self-identified Welsh students, Welsh related words are frequently found (24 times), although the meanings can be either positive or negative; 'Welsh seminars', 'Welsh group', 'learning in Welsh', 'being Welsh', and 'segregated from English sides'. Welsh language seems to be crucial in this context:

'Having Welsh seminars makes me feel a part of uni. Being able to study bilingually benefits me massively. With writing I am confident in English medium, however I enjoy carrying out placement in Welsh as I prefer continuing my Welsh.'

Research Question 2. What are the differences in Welsh students' sense of belonging and participation across selected institutions in Wales?

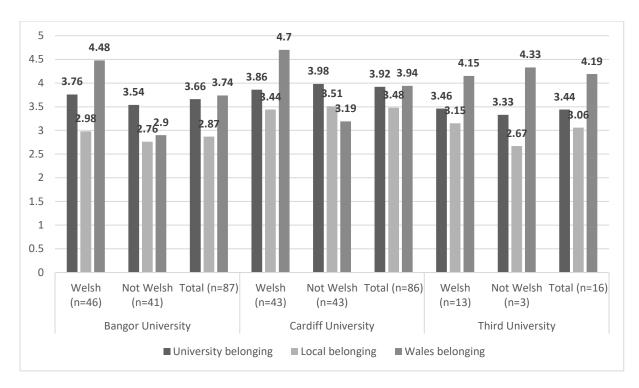


Figure 1. University, Local and Wales Belonging by Bangor, Cardiff and Third Universities by Welsh identity

Cardiff University shows the highest level of institutional belonging (M=3.92), compared to Bangor University (M=3.66) and Third University (M=3.44), as shown in Figure 1. However, no statistically significant difference was found between Bangor University and Cardiff University in University Belonging (U= 3248, P=0.117) nor in Wales Belonging (U=3480, p=0.391)^v. In contrast, a statistical test confirms that Cardiff University students seem to have higher belonging to local (Local Belonging M=3.48) than Bangor University students (Local Belonging, M=2.87) (U=2680.5, P=0.002).

Between Welsh and not Welsh student groups in both Bangor and Cardiff University, there is no statistically significant difference found in University Belonging (Welsh M= 3.76, Not Welsh M=3.54 in Bangor University; Welsh M=3.86 and Not Welsh M=3.98 in Cardiff University) as well as Local Belonging, whereas there are large gaps in Wales Belonging in both universities (Bangor University=1.58, Cardiff University=1.51).

Furthermore, Welsh students in both Bangor and Cardiff University tend to have the same level of University Belonging (Bangor M=3.76, Cardiff M=3.86, U= 942.0, P=0.686), Local Belonging (U=749.5, P= 0.088) and Wales Belonging (U=923.0, P=0.465). Even between students who do not self-identify as Welsh in both Bangor University and Cardiff University, there is no statistical difference in University Belonging (U=685.5, P=0.07) and Wales Belonging (U=783.5, P=0.370). On the other hand, not-Welsh students in Cardiff University tend to show higher Local Belonging (M=3.51) than those in Bangor University (M=2.76) (U=578.0, P<0.01).

In contrast to the statistical analysis, qualitative data analysis reveals different stories: there are quite distinctive differences to be found across three universities. Bangor University students tend to display strong feelings about their professions (e.g. 'nursing', 'placement', 'NHS', 'April intake'), since the vocational aspects of belonging was found from the 76 participants. University icons such as 'uni logo', 'uni merchandise', 'hoodies' were also mentioned. Notably, many negative comments such as 'disorganised', 'stress', 'excluded', and 'loan' were found across all four sense of belonging domains. Nearly three in ten participants (27.6%) in Bangor University expressed negative sides of belonging, that accounts for more than half of the negative responses (56.8%, 37 participants) in total.

The least data related to Academic Engagement was collected by Cardiff University (46 participants, 53.5%), compared to Bangor University (75.0%) and Third University (81.2%). Unlike Bangor University, many students in Cardiff University tended to write down words related to community feelings such as 'respected', 'involved', 'common interest', and 'friendly'; and positive emotions (e.g. 'happy', 'proud', 'safe', 'joy'). Noticeably, words related to Welsh as well as locality in general were rarely found amongst students in Cardiff University.

In contrast, 'Welsh' is the most frequently used word in Third University. Words related to Surroundings (e.g. 'Welsh', 'living away', 'Welsh group') were recorded from most of the total 16 participants. Since they were one subject cohort, the responses seemed to be relatively homogeneous.

Research Question 3. What are the relationships between institutional, local, and national belonging (students' belonging to the institution, place, and Wales)?

The moderate associations between the three types of belonging are found, as Table 4 shows.

Table 4: Correlation analysis results of University, Local and Wales Belonging

| | | Wales Belonging |
|----------------------|------|-----------------|
| University Belonging | .382 | .276 |
| Local Belonging | | .294 |

(Correlation is significant at the 0.01 level.)

The survey analysis revealed no statistical differences, whereas students across three universities reported the different characteristics of the meanings of their belonging to their university in the 10 Words Question. Further research was carried out in order to explore the divergence between the two methods, and particularly to understand the quantified measure more objectively: comparing the present research to the previous Bangor research by performing further statistical analysis. The mean of students' belonging to their university across three institutions in Wales in the present study (M= 3.76 SD=1.039) seems to be somewhat low, especially compared to the previous Bangor research in 2014 (N= 380, M=3.96, SD=1.020) (U=31525.5, P<0.05). Compared with the average of Bangor University students in the present study (M=3.66, SD=1.108) (U=13826.5, P<0.05), the gap is larger. The present study has participants who are studying in Education, Social Sciences and Healthcare from three different institutions, hence, the characteristics of participants such as

national identity and academic discipline are the main differences between the present study and previous Bangor research.

The statistical analysis confirms that there is no difference between Welsh participants in the present study (N=102, M=3.76, SD=1.045) and the previous Bangor research (N= 138, M=3.78, SD=1.009) (U=7035, P=0.995). Furthermore, the mean of Welsh participants in Bangor University (N=46, M=3.76, SD=1.079) in the present study did not differ from the previous Bangor research (U=3165, P=0.976). In addition, when the participants in Education, Social Sciences and Healthcare in the previous Bangor research (N=143, M=3.67, SD=1.033) are compared with the present study, there is no significant difference (U=12770, P=0.371). Considering that Welsh students in Bangor research tend to show lower belonging to Bangor University than English students, and the same level of University Belonging is found in the current Welsh participants, there can be other reasons to explain the current findings of no difference in belonging between Welsh and Not Welsh. And it seems fairly logical to assume that there is no difference found between Welsh and Not Welsh students in the present study, not because their belonging levels are the same, but because their characteristics are homogeneous (i.e. the same distribution of academic discipline, ethnicity, social class).

Two socio-economic measures are used in this study: receiving a bursary (Bursary receiving) and being the first person in family to study in higher education (First in family to HE) (Table 5). A statistical test confirms that participants in receipt of a university bursary (M=3.98) show higher belonging to their university than those who are not (M=3.41) (U=2688.0, P<0.01), whereas there is no difference whether a participant is the first in family in HE or not (U=4017.5, P=0.568).

Table 5: Students' belonging to university, local and Wales by bursary receiving and first in family to higher education, M(SD)*

| | University Belonging | Local Belonging | Wales Belonging |
|-----------------------|----------------------|-----------------|-----------------|
| Bursary receiving | | | |
| Yes (N=118) | 3.98 (0.906) | 3.33 (1.193) | 3.93 (1.357) |
| No (N=63) | 3.41 (1.159) | 2.79 (1.272) | 3.70 (1.623) |
| First in family to HE | | | |
| Yes (N=86) | 3.72 (1.056) | 3.13 (1.252) | 3.78 (1.450) |
| No (N=98) | 3.81 (1.042) | 3.19 (1.244) | 3.93 (1.459) |

This result seems to contrast with the previous Bangor research which showed that the belonging of bursary recipients (N=190, M=3.82, SD=1.075) was lower than for Non recipients (N=162, M=4.19, SD=0.914) (U=12455.5, P<0.01). More interestingly, there is no difference between bursary recipients in the present study and previous Bangor research (U=10397.5, P=0.263). This pattern seems consistent as shown in the comparison with Bangor research; although the figures of the analysis results indicate objectively the same value, they must be interpreted differently in the different context.

Discussion

This study started with a question about lower sense of belonging of a student group with a certain type of background, as previous research (Bangor research) suggested that Welsh students' belonging turned out to be weaker than English in the same institution, whereas other measures such as age, gender, and disability indicated no differences (Ahn and Davis, 2020b). This result gave rise to the question of how self-identified Welshness contributes to student's belonging and disadvantage, and to what extent. A lack of sense of belonging, particularly due to disadvantaged backgrounds is considered as one of the crucial elements to explain educational inequality in higher education (Forsyth and Furlong, 2003; Keane 2011; Lynch and O'Riordan 1998; Mallman 2017; Reay 2002).

For this study, students' sense of belonging in higher education is defined as being accepted, engaged and connected to their institution (Ahn and Davis, 2020a; Goodenow 1993), which consists of four domains, namely academic and social engagements, surroundings and personal spaces (Ahn and Davis, 2020a). The conceptual framework has been established, considering sociological perspectives which regard belonging as a linkage between individual and society (May 2011; Savage et al. 2004; Yuval-Davis 2011). Sense of belonging is generated by one's self-identification (i.e. a mixture of various sociodemographic elements such as ethnicity, gender, age) and its interaction with place (May 2011). This study, therefore, aims to explore students' sense of belonging to their university focusing on students' cultural and national identity, and local attachment across three distinctively different higher education institutions. In contrast to our previous research, the initial analysis reveals that there is no statistical difference between Welsh and non-Welsh students in their belonging to university, even within and across three institutions. However, when applying the qualitative approach, the three institutions show clear differences.

This result led to the further investigation with the empirical research about students' belonging with the quantitative approach in higher education in the UK. For instance, there are two studies applying a 5 points scale to measure students' sense of belonging: Kane et al (2014) and Yorke (2016). The averages of three universities in London are 3.59 (N=651), 3.58 (N=537) and 3.70 (N=77) according to Kane et al. (2014), whereas Yorke (2016)'s analysis of 13 universities across the UK shows the mean of 3.99 (SD=0.81, N=2834)^{vi}. Although it is statistically inappropriate to directly compare these figures to the present research, it offers a brief glimpse into the average of students' sense of belonging that is measured quantitatively in the higher education institutions across the UK. Noticeably, the range of the figures (between 3.58 and 3.99) remains decidedly narrow, in which the mean of the present research (M= 3.76 SD=1.039) fits. Furthermore, the direct comparative study with

Bangor research unfolds some interesting aspects of students' belonging; most importantly, Welsh students' belonging to their university remains stable, regardless of the time, locations and institutional differences. And Welsh students' sense of belonging tends to be weaker than their counterparts, according to previous Bangor research.

Investigating different student groups' belonging to universities across Wales is particularly important, as it is related to the long-standing debate about disadvantage. Previous literature on non-traditional or disadvantaged students in HE argues that students in the disadvantaged group generally are less likely to be engaged academically and socially, leading on to weak sense of belonging to their institution (Keane 2011; Lynch and O'Riordan 1998; Mallman 2017; O'Donnell and Tobbell 2007; Patiniotis and Holdsworth 2005; Platt 2007; Reay 2002). Students from non-traditional or disadvantaged backgrounds are generally regarded to be mature, ethnic minority, socio-economically marginalised and working class, therefore, they tend to stay local and often live at home (Christie 2007; Reay 1998; Reay 2002; Wakeling and Savage 2015). This study reveals that in contrast to Welsh students, the characteristics of English students in universities in Wales seem remarkably similar to traditional students, that is 'young, white, male, and middle-class' (Read et al. 2003) who left home for university. Unlike ethnic identity, which is clearly defined and applied as Black, Asian, and Minority Ethnic (BAME) population in the UK higher education, the national identity such as Welsh, Scottish and Irish or British has received little attention. This study confirms that Welshness, which is traditionally associated with language, natural environment and geographical location, and sense of community belonging (Day, 2010) seems to be crucial to students' sense of belonging. Examining Welsh students, therefore, enables us to understand to what extent geographical mobility is associated with disadvantage and inequality in higher education.

Welsh, as national and cultural identity in the higher education context, is deeply embedded in geographical and natural environments, and cultural boundaries in Wales (Day, 2010). Despite ongoing debates about social and geographical mobilities in the transition to HE (e.g. Forsyth and Furlong, 2003 and Duta et al. 2021 in Scotland; Hannon et al. 2017 in Ireland; Thiele et al. 2016 in England), there is insufficient research on regional factors such as national identity (i.e. Welsh, Scottish, Irish and English) and attachment to local areas established from language, cultural, historical, and natural environments; and their impact on belonging in the higher education context. In the case of Scotland (Christie, 2007), financial benefits and emotional support from family and friends are the most salient factors to higher education transition of local students to local universities, just like those from non-traditional backgrounds. Keane's study about Ireland (2011) identified the separation between student groups from different backgrounds based on social class, and hence the weaker social capital of working-class students. Holton (2015a, 2015b)'s research in Portsmouth found inequality between local and non-local students, which was more likely to affect local students. The tension between their local and university friends can cause unbalanced sense of place to local students. The majority of research argues that students living at home are likely to have less engagement and belonging (Brooman and Darwent, 2014; Hope and Quinlan 2020; Pokorny et al. 2017), although the benefits of staying at home such as emotional support through the local network are rarely mentioned (Hope and Quinlan 2020).

There have been many sociological debates on belonging and locality. According to Antonsich, belonging should be studied in relation to both 'place-belongingness' and 'politics of belonging' (2010:645); the former refers to personal feelings of being safe and comfortable, attached to a certain place, while the latter is associated with more political, structural meanings on the macro level. Belonging, as 'an emotional or even ontological attachment, about feeling at home' (Yuval-Davis 2011: 10) is not a single, fixed concept,

because it is multi-layered and multi-scale (May 2011; Savage et al. 2004; Yuval-Davis 2011). In order to comprehensively understand territorial aspects of belonging and geographic mobility, a more inclusive definition of locality is applied to the present study and measured on two levels: attachment to the local space (Local Belonging, close to 'place-belonging'), where the university is situated; and belonging to Wales (Wales Belonging, close to 'politics of belonging'), where a unique historical and cultural atmosphere prevails.

This study captures the importance and complexity of locality in the higher education context. Firstly, Local Belonging is important, as it is associated with other types of belonging (University and Wales Belonging), where different attitudes towards Local Belonging are cultivated between Welsh and not Welsh students depending on geographic locations. Unlike formal national identity which should be defined and given by the authority, locality is socially constructed, nurtured and often chosen by individuals (Savage et al. 2004). For instance, to Welsh students, there is no difference of Local Belonging, either in Cardiff or Bangor, whereas students who are not self-identified as Welsh show that Local Belonging to Cardiff is much higher than Bangor. One participant, not self-identified as Welsh, expressed their belonging to Cardiff University, by describing the city;

'Cardiff is the capital city of Wales, I like it because of its geographical position to link by railway, road, air and sea to other cities. It is near home.'

In addition, around one in three participants tend to choose expression related to their surroundings, where the meaning of locality encompasses a broader spectrum such as daily living spaces such as 'student halls', 'flats'; location like 'city', 'town', 'natural environment'; and cultural elements including 'Welsh' and 'Wales'. More than one third of the total participants including non-Welsh mentioned one or more words about Welshness or Wales. This finding is in line with the previous research (Ahn and Davis, 2020a), which

establishes the conceptual frame of sense of belonging in higher education with four domains and argues the importance of surroundings on the geographical level (Antonsich, 2010).

The finding from the socio-economic status variables also reveals similar stories to those of national identity. The participants receiving a means-tested bursary are more likely to have higher belonging to their university than those who are not receiving it in the present study. However, when compared with the previous research, the bursary recipients in both present and previous studies tend to have lower belonging than non-recipients in the previous research (Ahn and Davis 2020b). A recent study of non-traditional students in three universities in Cardiff shows that those mature students who are working full time often face difficulties in balancing work, study, and other commitments (Mercer et al 2016). In general, non-traditional students, particularly from working class background, struggle with financial issues (Moreau and Leathwood 2006), and academic and social engagement (Rubin and Wright 2017). They are often worried that they will never become fully accepted (Christie et al. 2008: 579).

In both key dimensions - national identity and socio-economic status-, the results in the present study seem controversial at first^{vii}. However, further comparative analysis indicates that the statistical difference might not be reflected adequately, as the data obscures the differences due to the specific sampling method. It implies that no significant differences between Welsh and not Welsh are found in the present study because they are recruited within the purposely selected sampling boundary. The key difference between the current and previous research projects is students' profile, as participants for the current research were recruited mainly from three academic disciplines (i.e. Education, Social Sciences and Healthcare), where vocational aspects such as teaching, social work, and nursing play crucial parts.

The analysis of the 10 Words Question data highlights the importance of vocational dimensions in students' belonging, where the responses include frequent references to professions and educational purposes. This finding is in line with the existing research that students who are studying academic subjects which prioritise vocational training tend to regard their professionalism as 'specialist knowledge and skills', 'a member of a professional community', and 'a service ethic' (Wilson et al. 2013: 1236). Instead of ambiguous, literary, abstract, or figurative responses, the 10 Words Question data are rather straightforward and literal in general, compared to the previous Bangor Research (Ahn and Davis 2020a).

Yet, there are noticeable differences between students in Bangor and Cardiff
University in the 10 Words Question data. Participants in Bangor University are more likely
to consider their sense of belonging related to their profession, with explicit vocational
references. They often express negative aspects in their responses. This finding seems to be
deeply related to the existing research about the strikingly low level of retention amongst
nursing students (Andrew et al. 2014; Glogowska et al. 2007; Wray et al 2014). Unlike
Bangor University, students studying healthcare in Cardiff University seem to regard
belonging as positive feelings. It seems important to feel proud as a student in university
(Slaten et al. 2018), particularly to non-traditional students (Christie et al. 2008; Reay 2001;
Wong 2019).

Further investigation of Welsh students in the higher education institutions across the UK will be needed with a large population including a wider range of characteristics such as national identity, academic disciplines, pre-and post-1992 institutions, and ranking. In relation to methodology, the survey questionnaire could be improved in the future; a revised survey design with more refined questions about sense of belonging and identity will be useful to enhancing validity and reliability.

Conclusion

This study examined students' sense of belonging in three different HE institutions in Wales, which include a Russell group university, a middle-ranked institution, and a post-1992 university. It seeks to address critical questions about different types of students' belonging such as institutional and local belonging, and its impacts on engagement on individual, institutional, and national levels. It challenges the notion of disadvantaged background by revealing the importance of local, cultural, geographical, and environmental familiarity, which affects geographical mobility, social inequality in the higher education context alongside social class. This study, therefore, provides compelling evidence and an empirical and methodological basis from which to further explore the crucial determinants of disadvantage in the future educational research. Concerning the role of higher education in inequality, specifically, the socially uneven distribution of cultural capital in UK society, this study facilitates consideration of the ways in which the experience of higher education provides a basis for a distinctive contribution to understanding organisations. By doing so, it will help to advance current debates about students' sense of belonging, engagement, success, and retention in higher education.

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Declaration of interest statement

No potential conflict of interest

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Figure 1. University, Local and Wales Belonging by Bangor, Cardiff and Third Universities by Welsh identity

 $David, Aberystwyth\ University, Bangor\ University, Cardiff\ University, Cardiff\ Metropolitan$

ⁱ The Welsh Government Statistical figure (Stats Wales, 2021) shows that there are eight universities in Wales: Glyndwr University, University of South Wales, University of Wales, Trinity Saint

University and Swansea University. Except for the last three universities, the rest five universities are located in rural areas and Cardiff University is the only Russel group university.

ii There are means-tested bursaries available in all three institutions depending on house-hold incomes below £42,000 (Cardiff University), £40,000 (Bangor University) and £30,000 (third institution).

https://www.cardiff.ac.uk/study/undergraduate/funding/bursaries

https://www.bangor.ac.uk/studentfinance/info/bangorbursary.php.en

http://www.(university).ac.uk/study/finance/bursaries/Pages/Clearing-Study-Pack.aspx

- The institution originally selected as Third University declined to participate in the study, so a close equivalent was found and neither is named in order to preserve anonymity. The negotiations led to an unavoidable delay and the number of participants in the second- choice Third University is fewer than the original target. The refusal by one first-choice institution raised a question about institutional sensitivity, since belonging is connected to students' satisfaction, and by extension, to university rankings.
- iv Mature students are defined as any student aged 21 or over at the start of their studies. (UCAS Mature student guide https://www.ucas.com/file/35436/download?token=2Q6wiw-L)
- Third University is often excluded from the statistical tests, due to the difficulty of running an analysis effectively with a small sample size. Welsh students' belonging to Wales in Third University (M=4.15) is the lowest in Welsh students in all three universities, although the sample size is small (N=13).
- vi The most similar question was selected, Item q02B 'I feel at home in this university' (Yorke 2016: 159)
- vii It might be a positive sign in terms of the policy for non-traditional students in higher education, known as widening access policy. Or it might be a failing sign of an ineffective indicator. For instance, as the population to enter higher education has increased dramatically, it is no longer exclusive. In addition, the definition and boundary of the family can cause confusion, failing to reflect a biographic trajectory. The cut-off points for means-testing might be unreliable for capturing the current status of social class.