Intersectionality recognises that people’s identities and social positions are shaped by multiple factors. Among others, a person’s age, disability, ethnicity, gender, gender identity, religion and belief, sexual orientation and socioeconomic background contribute towards their unique experiences and perspectives. This briefing provides guidance and examples of intersectional approaches to research design, and quantitative and qualitative equality research and data analysis.

Contents

- Why is intersectionality important? 3
- Intersectional approaches to research design 4
- Intersectional approaches to qualitative equality research and data analysis 5
- Intersectional approaches to quantitative equality research and data analysis 6
- Summary 14
- Useful resources 15

© Equality Challenge Unit 2017
Intersectionality is increasingly a topic of consideration for equality and diversity practitioners. Apart from general growing interest in this area, this trend is also driven by institutional and procedural requirements, such as the new Athena SWAN Charter principle on intersectionality, the inclusion of intersectionality in the Race Equality Charter principles, and the addition of requirements on intersectionality to outcome agreement guidance in Scotland (agreements between universities and colleges and the Scottish Funding Council that set out delivery plans).

The fundamental benefit of adopting an intersectional approach to equality research (for example, looking at data for students who are disabled and from a particular ethnic background, or sexual orientation etc) is that it provides an understanding of the issues that is closer to the lived experiences of the equality groups that you are interested in, thus allowing you to develop effective strategies to address them. It therefore aids in the development of appropriate equality objectives and equality outcomes for your institution or college.

A common perception is that research into intersectionality is complicated, as it means moving beyond thinking about equality issues singularly. In practice, conducting intersectional research is not necessarily complicated, provided that you formulate adequate research questions, choose your methods carefully and interpret your results from an intersectional perspective.
Why is intersectionality important?
The term intersectionality was first used by black feminist and legal scholar Kimberlé Crenshaw. Although first published in 1989, the ideas used by Crenshaw can be found in black women’s thought and writing going back much further than this (for example Truth 1851; Cooper 1892; Wells 1892). Black feminist thought and activism is still the primary site where intersectionality theory develops.

Crenshaw used the term intersectionality to describe how black women’s experiences and identities at the intersection of race and gender are marginalised by tendencies to treat race and gender as mutually exclusive categories. She found these tendencies in antidiscrimination law, feminism, and antiracist movements, with all focusing on the most powerful/privileged members of groups (white women, black men) and taking them as representatives of the group as a whole.

Crenshaw shared examples of legal cases wherein black women were forced to choose between bringing a claim of discrimination on the basis of either race or gender, and could not say that they had been discriminated against because of the combination of both.

Figure 1

This critique has been very influential to current thinking about discrimination, gender, race, and other equality areas.

Intersectionality tells us that elements of identity are interdependent and structure one another. A person is not, for example, a woman on one hand and disabled on the other; rather she is the combination of these at the same time, that is, a disabled woman. In this example her identity as a woman is shaped by her identity as disabled, and vice versa as the elements of identity are not lived or experienced separately.

Looking at the interaction between different elements of identity is a key aim of intersectionality, as different combinations can lead to different lived experiences of individuals in comparison to other individuals who might share one or more, but not all of the same elements. This intersection between different aspects of her identity results in a specific experience of her gender which is qualitatively different to others. Intersectionality tells us that social groups, such as women and disabled people, are not homogeneous.

This also applies to discrimination and inequality – both can be experienced by an individual due to the particular combination of their different elements of identity, and not just one singular identity that they possess. It is therefore important that your equality and diversity research and work with data is mindful of this complexity when exploring issues.
2 Intersectional approaches to equality research and data

Questions for research participants
When designing questions for research participants, be this for surveys, interviews, or focus groups, from an intersectional perspective it is advised to include meaningful concepts that people can relate to holistically, without assuming that one equality area alone will provide an explanation for an experience of inequality (Bowleg 2008).

When researching equality issues, avoid asking research participants to attempt to separate out aspects of their identity, for instance:
Do you think that your race or your gender influenced your experience of the recruitment process?

Ask open questions about experience. Avoid asking participants, explicitly or implicitly, to rank or otherwise separate aspects of their identity.
Do you think that your identity influenced your experience of the recruitment process?

Intersectional approaches to research design
Conducting intersectional research requires that data and results be put into context. You need to be aware of the historical and contemporary structuring of inequalities in wider society, and, most importantly, among staff and students at your institution or college.

Considering context at the onset of the research process aids in accounting for the contribution of contextual issues when it comes to analysing and interpreting data.

Research questions
An intersectional perspective influences the research questions that are asked at the outset of equality research and data analysis.

For example, a research question for your institution or college may be:
Do female academic staff experience barriers to career progression, compared with men? If so, what are they?

From an intersectional perspective, this question would become:
Do groups of female academic staff experience barriers to career progression, compared with groups of men and with other women?

An intersectional approach to such research questions would consider what barriers are experienced by different groups of women (white women, black and minority ethnic (BME) women, disabled women, non-disabled women, lesbian, bisexual, transgender and genderqueer women, women of faith, younger and older women, women with caring responsibilities, pregnant women, women on maternity leave).

From an intersectional perspective, it would not be assumed that these diverse women academics would experience the same barriers to career progression. For example, disabled women may experience barriers due to the specific combination of aspects of their identity and social position, namely their gender and disability status.

Without specifically opening research design and research questions up to distinct experiences, in this case for different groups of women, you risk your research primarily uncovering only those barriers experienced by women who do not experience inequality due to the interaction of other aspects of their identity with their gender. Any strategies developed on the basis of this research would therefore not necessarily be effective at mitigating barriers to career progression for all women.
2 Intersectional approaches to equality research and data

Intersectional approaches to qualitative equality research

Qualitative methods include interviews and focus groups, as well as narrative production (open ended descriptions of a particular experience written by individuals and sent to a researcher).

More on qualitative methods can be found in ECU’s first research and data briefing: https://www.ecu.ac.uk/guidance-resources/using-data-and-evidence/working-with-data

An important consideration when conducting qualitative research from an intersectional perspective is reflexivity. As a researcher, this means considering one’s own social positions, values, assumptions, interests and experiences and how these can shape the research process, as well as putting the research into context. For example, when conducting interviews or focus groups with an identity based group (for example LGBT students) about experiences related to their identity, it is worth considering whether greater trust might be built between researchers and research participants if the facilitator identified as being from the same community as the participants.

However, it is recognised that it is not always possible for the facilitator to have a shared identity with research participants. In these cases it is a good idea for the researcher to familiarise themselves with some of the issues described by people with that identity, and to acknowledge to the research participants that they do not share that identity with them. Including research participants in the research (for example advising on wording of questions, double checking emerging interpretations), if feasible, can bring in a richer, more diverse research perspective.

Recruiting research participants

From an intersectional perspective, even when conducting research focused on a particular equality area, it is important to take whatever steps you can to ensure a diversity among research participants. For example, if you are conducting focus groups with your institution’s BME students, you may wish to consider several different benchmarks to ensure you recruit an adequate mix of students, including the:

- current ethnic composition of students across specific ethnicities in your institution or college
- current composition of students across all other equality areas, intersected with ethnicity
- ethnic composition of your local area/region

There are a number of practical steps that institutions and colleges can take to aid in diverse research recruitment, including:

- considering the timing of significant religious and cultural days when scheduling focus groups and interviews
- using fully accessible venues that are appealing and well located for your target groups
- asking participants in advance if they have any particular dietary or access requirements that you may be able to accommodate
- considering diverse dietary requirements and preferences when providing refreshments (for example provision of vegetarian and non-vegetarian food, specifying that any meat served be halal)
- considering the provision of incentives and expenses to value research participants’ time and contribution.
Equality monitoring
Although monitoring would technically be considered as quantitative, even in qualitative research equality monitoring is important. This should be done in order to ensure an appropriate range of participants, as well as to document who the research participants were. Monitoring may be done at different stages: during research recruitment, to ensure a diverse range of the target group is registering to participate, or to target underrepresented groups if not; and at the point of the research being conducted.

After the research is conducted, it is useful to consider the equality characteristics of participants during analysis. This can be easily done in a one on one interview context, however, this may pose practical difficulties when transcribing focus groups/group interviews or working with transcripts provided by a professional transcriber. With many voices in the audio recording, it is difficult to determine the personal characteristics of each speaker, and any assignations should be made based on self-reported equality data rather than based on inference or assumption. In these cases, it is useful to consider the overall composition of the group based on equality monitoring forms filled out on the day when analysing and reporting data.

Interpretation of data
Our first research and data briefing Working with data describes ways of analysing data gathered through qualitative techniques. From an intersectional perspective, it can be useful to read texts (transcripts or narratives) from two distinct perspectives.

For example, if analysing data from a focus group with BME students, the researcher could first consider:
Does/how does the ethnicity of the participant(s) inform what they are describing?

Then, when the texts have been considered carefully from this perspective, the researcher could read them again, asking of the data: Does/how does ethnicity interact/intersect with other equality areas (gender, disability status etc) to inform what they are describing?

Intersectional approaches to quantitative equality research and data analysis
Staff and student record equality data
ECU includes tables examining the intersection of different equality areas in its reports:


ECU has also published a report examining the intersection of equality areas with socioeconomic status among students at Scottish HEIs www.ecu.ac.uk/publications/intersectionality-scottish-heis

Often, tables can tell us something new when other equality areas are taken into consideration. To illustrate this we will use examples of professorial status, gender and BME/white identity for staff, and gender, BME/white identity and degree attainment for students.
Professorial status, gender and BME/white identity

Table 1 shows that among academic staff, 5.1% of female staff are professors, compared with 13.8% of male staff.

The Pearson Chi-Square test (a statistical test) presented in table 1.1, performed on table 1, tells us that there is a statistically significant difference in the proportions of men and women who are professors (the value of the right hand column is 0.0, which is less than 0.05), meaning that we can be confident that there is a relationship between gender and professorial status. Pearson Chi-Square tests are useful to determine whether there is a meaningful relationship between types of variables.

However, the overall proportions in table 1 change when ethnicity is considered along with gender, as shown in table 2.

---

### Table 1 Academic staff by professorial status and gender

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th></th>
<th>Male</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Professor</td>
<td>4535</td>
<td>5.1</td>
<td>15065</td>
<td>13.8</td>
<td>19600</td>
<td>9.9</td>
</tr>
<tr>
<td>Not a professor</td>
<td>84690</td>
<td>94.9</td>
<td>94045</td>
<td>86.2</td>
<td>178735</td>
<td>90.1</td>
</tr>
<tr>
<td>Total</td>
<td>89225</td>
<td>100.0</td>
<td>109110</td>
<td>100.0</td>
<td>198335</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: HESA staff record 2014/15

Percentages based on total number of academic staff minus those whose professorial status or gender is unknown. Weighted by FPE.

---

### Table 1.1 Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Degrees of freedom (df)</th>
<th>Asymptotic significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>4198.481</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>198335</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

1. The number of values in the calculation that are free to vary
2. Also called the p-value, which determines the statistical significance of the relationship between the variables
Compared with table 1, in table 2, a slightly higher proportion of white female academic staff are professors (5.4%) than BME female staff (3.3%).

Among men, there are considerably more white male staff that are professors (14.8%) than BME male staff (8.9%).

This indicates that while there is a gender gap in professorial status overall, taking ethnicity into account reveals that there is a gap between the proportions of BME and white women who are professors. While higher proportions of men are professors overall, among men there is a gap between BME and white men. The greatest difference is between white men and BME women (11.5 percentage points).

This suggests that there could be a relationship between gender and professorial status, and between ethnicity and professorial status, for example that a staff member’s gender or ethnicity may impact on their likelihood of being a professor.

Indeed, the Pearson Chi-Square test – table 2.1 – performed on table 2, tells us that across professorial marker, gender, and BME/
white identity, there are statistically significant differences between the sub groups (white female, white male, BME female, BME male) (the value of the right hand column is 0.0, which is less than 0.05), meaning that we can be confident that there is a relationship between gender, professorial status and BME/white identity.

However, while the Chi-Square test tells us that there are significant differences across professorial marker, gender, and BME/white identity, Chi-Square tests do not tell us exactly where these differences lie. Importantly, Chi-Square tests also do not allow us to control for other factors (in other words, assume a level playing field in terms of other factors that might be related to professorial status, to really hone in on the effects of gender and ethnicity).

This is why a popular quantitative method for understanding intersections is regression analysis. Regression pinpoints the differences and allows for controlling for other factors.

**Gender, BME/white identity and degree attainment**

Regression seeks to understand the effect of one variable (predictor) on another variable (outcome). For example, regression can be used to examine the effect of ethnicity on degree attainment. It can also be used to understand the differing effects of multiple predictors on the outcome (for example ethnicity or gender) while holding other predictors constant (assuming a level playing field in the other variables).

However, holding gender constant while looking at the impact of ethnicity (and vice versa) does not tell us whether the impact of these individual equality areas differ when they are allowed to fluctuate; in other words, what is the effect of ethnicity when gender is allowed to be either male or female? What is the effect of gender when ethnicity is allowed to be BME or white?

To address this question we need to add an interaction term. An interaction term is essentially the product of the predictor variables (for example in this case, our gender variable multiplied by our BME marker variable). The addition of an interaction term (BME $\times$ gender in table 3) then asks the question of whether our two predictors (gender and BME/white identity) have the same effect on the outcome (degree attainment) across different situations.

Interactions between equality categories can be examined in relation to many issues, with the right data. For example, the interaction of disability status and gender could be examined in terms of its effect on promotion.

Examining interactions is important because intersectionality is not simply ‘additive’ - you cannot get a true understanding of the intersection of gender and race by simply adding gender to race.

This is because the intersection is more than simply the sum of its parts. From an intersectional perspective, gender and race interact, so that race changes the qualities of gender, and gender changes the qualities of race. Together, they produce a different effect from the one that each on their own would produce. In experience, these two elements are not actually able to be separated out, and are not mutually exclusive categories, as an additive approach would suggest. Examining interactions accounts for the fact that equality categories are affected by one another, so that
the particular effect of gender is conditional on its simultaneous intersection with other factors (in this case ethnicity).

Specifically, the interaction term allows us to consider a) the association between ethnicity and degree attainment separately for male and female students and b) the association between gender and degree attainment separately for students from each (BME/white) ethnic group.

Running a logistic regression provides us with odds ratios (Exponentiation of B in Table 3, a measure of the association between the predictor variable and outcome variable) that explain the associations between our two predictors and our outcome. In this example, these ratios tell us that among UK domiciled student qualifiers:

- male students are 92.7% as likely to achieve a first/2:1 compared to female students, while controlling for BME status
- BME students are 58.2% as likely to achieve a first/2:1 compared to white students, while controlling for gender

### Table 3 Interaction between gender and BME status in predicting degree attainment

<table>
<thead>
<tr>
<th>Step 1a</th>
<th>B^1</th>
<th>Standard error</th>
<th>Wald Chi Square value</th>
<th>Degrees of freedom (df)^2</th>
<th>Significance^3</th>
<th>Exponentiation of B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.075</td>
<td>.008</td>
<td>78.954</td>
<td>1</td>
<td>.000</td>
<td>.927</td>
</tr>
<tr>
<td>BME</td>
<td>-.541</td>
<td>.012</td>
<td>2201.568</td>
<td>1</td>
<td>.000</td>
<td>.582</td>
</tr>
<tr>
<td>BME x Gender</td>
<td>-.066</td>
<td>.018</td>
<td>14.031</td>
<td>1</td>
<td>.000</td>
<td>.936</td>
</tr>
<tr>
<td>Constant</td>
<td>.831</td>
<td>.006</td>
<td>22590.418</td>
<td>1</td>
<td>.000</td>
<td>2.296</td>
</tr>
</tbody>
</table>

---

^1 The values for the logistic regression equation for predicting the outcome variable from the predictor variables

^2 The number of values in the calculation that are free to vary

^3 Also called the p-value, which determines the statistical significance of the predictor variable in predicting the outcome variable
Regression analyses also provide information about whether or not these differences are meaningful; for instance, the values in the **significance** column tell us that these gender and ethnicity differences are statistically significant. Also significant in this example is the interaction term – that is, the link between degree attainment and gender differs for BME and white students.

But how do we interpret these differences? Odds ratios are on a particular type of scale which can make it difficult to interpret what our interaction term means for each of sub-group of interest (for example what the odds of obtaining a first/2:1 are if you are from a BME background and female).

The best way to see where this difference lies is to graph the different attainment levels of each of the four subgroups as seen in **figure 2**.

This graph not only highlights the different attainment levels of white and BME students, but also clarifies how ethnicity impacts gender differences in degree attainment. Specifically, the gap between attainment levels for males and females was much larger for white students than that seen for BME students.
Lastly, logistic regression also provides **predicted probabilities** for each subgroup, which can often be a more intuitive way of understanding what our regression results mean beyond our own sample (that is for the population).

Essentially, predicted probabilities tell us the probability of a student obtaining a first/2:1 at the different levels of our two predictor variables (that is BME female, BME male, white female, white male).

**Table 4  Predicted probabilities**

<table>
<thead>
<tr>
<th>Sub-group</th>
<th>Predicted probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female, white</td>
<td>0.697</td>
</tr>
<tr>
<td>Male, white</td>
<td>0.680</td>
</tr>
<tr>
<td>Female, BME</td>
<td>0.572</td>
</tr>
<tr>
<td>Male, BME</td>
<td>0.537</td>
</tr>
</tbody>
</table>

In this example, our predicted probabilities tell us that (beyond our current sample) white female qualifiers have the highest probability of obtaining a first/2:1, at 69.7%, followed by white male qualifiers (68.0%). The probability of obtaining a first/2:1 is lower for both BME female and BME male qualifiers, at 57.2% and 53.7%, respectively. However, it should be noted that this regression model does not include other factors related to degree attainment, such as institution attended, socioeconomic background, and prior school attended.

Moreover, whilst the **BME marker** field is useful to compare white and BME students, institutions and colleges are encouraged to also consider their data by specific ethnicity wherever possible. It is recognised that at times institutions will have small numbers of individuals particularly when considering data in this level of detail. However, the Pearson Chi-Square test presented here is still able to produce meaningful results when used on small samples.

This illustrates the importance of considering the intersectionalities, in this case of ethnicity and gender.

**Surveys**

From an intersectional perspective, when conducting any staff and student surveys, including those that do not necessarily have a specific equality focus, it is important to ensure that you ask respondents their equality monitoring information, and **disaggregate** responses by equality area.

ECU’s recommended monitoring questions are available on the data resources section of our website: [www.ecu.ac.uk/guidance-resources/using-data-and-evidence/monitoring-questions](http://www.ecu.ac.uk/guidance-resources/using-data-and-evidence/monitoring-questions)

While **binary fields** that aggregate categories into two groups (for example BME/white, disabled/non-disabled) are useful, in order to examine among and between group differences, use of detailed fields is necessary (for example specific ethnicity, and impairment type). ECU’s recommended monitoring questions therefore include this level of detail.

From an intersectional perspective, when conducting equality research on a specific area, such as staff and student surveys on gender or race equality for equality charters applications,
it is important to further disaggregate this data by other equality areas, to see if there are any differences within and between groups.

It is also important to allow respondents to tick all that apply when asking about identity factors that affect their experience.

**Challenges**

Quantitative data is not always organised in a way that easily facilitates intersectional analyses. Institutions will be accustomed to collecting and considering data on the number of staff or students who are women, and the number who are BME, but not necessarily on the number who are women and BME.

One practical solution to this is to keep your data organised by individual record or individual survey respondent on an ongoing basis, so that you can determine who is, for example, both white and disabled, and so that multiple categories can be considered (so not just disabled and non-disabled, but white disabled, BME disabled, white non-disabled and BME non-disabled).

---

**Figure 3**

Do you think that your identity influenced your experience of the recruitment process?

Please tick all factors that you feel influenced your experience.

- Yes, my ethnicity
- Yes, my gender
- Yes, my gender identity
- Yes, my disability status
- Yes, my age
- Yes, my sexual orientation
- Yes, my religion or belief
- Yes, my marriage or civil partnership status
- Yes, my pregnancy

Please describe if you would like to.
Summary

In summary, intersectionality tells us that the protected characteristics are interdependent and that we need to consider how they are related to one another. This understanding can be applied to qualitative and quantitative research design, through consideration of context at the outset of research and during interpretation of results, and the formulation of research questions.

In qualitative research, intersectional perspectives can inform reflexivity; recruiting an appropriate diversity of participants across your target group; equality monitoring; and analysing results.

In quantitative research, intersectionality can be applied in the consideration of more than one equality field, which can tell us something new about equality data. Regression is a particularly useful method for exploring the interaction of different equality fields, and what that interaction means.

Intersectionality can also usefully inform staff and student surveys.

The previous higher education information database for institutions (heidi) was not organised in a way that easily facilitated comparisons between people of different groups across more than one protected characteristic at the same time (for example between staff of all ethnic groups across disability status). However, the new heidi plus system allows greater flexibility for this kind of analysis.

For more information about heidi plus, visit: www.business-intelligence.ac.uk/heidi-plus

If you have any questions based on the contents of this briefing, and how it might relate to research or data in your institution or college, the ECU research team can be contacted on research@ecu.ac.uk
2 Intersectional approaches to equality research and data

Useful resources


ECU (2016) Intersectionality in Scottish HEIs www.ecu.ac.uk/publications/intersectionality-scottish-heis


ECU guidance on recommended questions to ask about equality information: www.ecu.ac.uk/guidance-resources/using-data-and-evidence/monitoring-questions

The higher education information database for institutions (heidi plus) www.business-intelligence.ac.uk/heidi-plus


Equality Challenge Unit (ECU) supports higher education institutions across the UK and in colleges in Scotland to advance equality and diversity for staff and students.

ECU provides research, information and guidance, training, events and Equality Charters that drive forward change and transform organisational culture in teaching, learning, research and knowledge exchange. We have over ten years’ experience of supporting institutions to remove barriers to progression and success for all staff and students.

We are a registered charity funded by the Scottish Funding Council, the Higher Education Funding Council for Wales and Universities UK, and through direct subscription from higher education institutions in England and Northern Ireland.