Documenting diversity: The experiences of LGBTQ+ doctoral researchers in the UK

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DOCUMENTING DIVERSITY: THE EXPERIENCES OF LGBTQ+ DOCTORAL RESEARCHERS IN THE UK

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ABSTRACT

Aim/Purpose	This article provides a much needed insight into the experiences of doctoral researchers in the UK that identify as Lesbian, Bisexual, Gay, Trans-, Queer, or outside of heteronormative or cis-normative identities (LGBTQ+) to address the question of what support, culture, and pedagogy might better support doctoral researchers who identify as LGBTQ+.
Background	While experiences of LGBTQ+ students in UK Higher Education have been explored in recent studies, the experiences of doctoral students have not been differentiated, documented, or analyzed.
Methodology	Through an online questionnaire sent to UK institutions, this study captures and reflects on the diverse experiences of doctoral education. The study took a predominantly phenomenological approach, placing the focus on understanding how individual researchers experienced their working environment.
Contribution	This questionnaire offers a 'campus climate' study, providing a much-needed insight into the experiences of doctoral researchers in the UK in 2017. The study also highlights the importance of acknowledging the diversity of doctoral researchers and adapting supervisory and institutional support to meet the differing needs of doctoral researchers. It considers themes such as the impact of the working environment, experiences of macroaggressions and harassment, the need for researchers to work internationally, and the visibility of role models. The complex nature of the supervisor-student relationship is also considered throughout.
Findings	Although many LGBTQ+ doctoral students felt they were studying in a supportive institution, the questionnaire highlights a diverse range of inclusivity issues as well as direct instances of homophobic and/or transphobic behavior.

Recommendations for Practitioners	From this questionnaire, it is concluded that there is a need for a critical examination of systems and spaces in which doctoral education takes place and the implementation of systems and spaces that are inclusive. There is a need for all those involved in doctoral education to understand how identifying as a LGBTQ+ researcher can impact on your experience of doctoral education. And, finally, there is a need for better LGBTQ+ visibility, better representation, and better mentoring.
Recommendations for Researchers	If doctoral education is to meet the needs of an increasingly diverse workforce, research needs to take into account the views and experiences of minority and marginalized groups that may challenge or be in tension with the views of the larger research population.
Impact on Society	As the demographic of the doctoral researcher population diversifies, it is increasingly important that our approach to doctoral education and the systems and processes that underpin doctoral education are adapted to meet the needs of that diverse population.
Future Research	There is potential scope for future studies to focus specifically on issues of intersectionality, disciplinary differences, health and wellbeing, representation, voice, and agency, as well as productivity, attainment, and career development of LGBTQ+ doctoral researchers.
Keywords	LGBTQ+, supervision, doctoral education, postgraduate research, equality, diversity, inclusion

INTRODUCTION

This article provides a much needed insight into the experiences of doctoral researchers in the UK that identify as Lesbian, Bisexual, Gay, Trans-, Queer, or outside of heteronormative or cisnormative identities. While experiences of Lesbian, Gay, Bisexual, Transsexual and Queer (LGBTQ+) students in UK Higher Education have been explored in recent studies, the experiences of doctoral students have not been differentiated. Surveys and questionnaires of LGBTQ+ students have either treated undergraduates and postgraduates as a single body or, where mention has been made of a distinct postgraduate experience, the references has been fleeting and have not distinguished between postgraduate taught students and those studying for a doctoral degree (Ellis, 2009; Equality Challenge Unit [ECU], 2009; Mckendry & Lawrence, 2017; National Union of Students [NUS], 2015). Given the unique character of doctoral study, encompassing the often complex and close relationship between supervisor and student (Johnson, Lee, & Green, 2000) and the transitional nature of the doctoral journey in terms of identity and personal and professional development (Baker & Pifer, 2011; McAlpine & Amundsen, 2009) there is certainly a need to better understand the experiences of LGBTQ+ doctoral researchers and to determine whether there are distinct challenges that some LGBTQ+ researchers may face.

LITERATURE REVIEW

EXPERIENCES OF LGBTQ+ DOCTORAL RESEARCHERS

There has been no study, to date, that provides a detailed insight into the experiences of the doctoral researchers that identify as LGBTQ+. For this study, an iterative literature review that drew on English-language research from across the social sciences and humanities disciplines was undertaken. Both discipline-based and generic search tools to identify relevant literature were used. This included keyword combination searches of relevant terms (LGBTQ+, LGB*, Queer, Higher Education, Academ*, Postgraduate Researcher, PGR, Doctora*, PhD, diversity, and inclusion) in the databases: Academic Search Complete, ASSIA (Applied Social Sciences Index and Abstracts), ProQuest Educa-

tion Database, as well as searching Google Scholar, Google Books and our Library Search Engines to expand the disciplinary limits of our literature review. In addition, the UK Council for Graduate Education's (UKCGE) extensive *Research Supervisor's Bibliography* (Taylor, 2018) was consulted, which contains sections dedicated to social class, gender, ethnicity/race, age, disability, indigeneity, and sexuality. The bibliographies and cited works of the articles were also used to identify other significant studies and/or scholars working in this, or related, areas. The aim was not to undertake a systematic literature review, but to identify key research themes across a broad range of literature that would help locate and contextualize this project.

Within UKCGE's aforementioned bibliography, four studies are included in the section on sexuality, with no studies addressing specifically trans-, and non-binary identities within doctoral education. Each of the four studies cited, however, only address sexuality briefly. Lovitt's work, which explores the varied reasons doctoral researchers leave academia, contains a single paragraph on sexuality that suggests discrimination based on sexual orientation may be connected to non-completion (Lovitt, 2001). Ostrove, Stewart and Curtin's article on social class and doctoral study (2011) is similarly brief in terms of its discussion of sexuality. Although the authors stress the importance of identity and a sense of belonging to doctoral study, they do not go into any detail on how this may impact on LGBTQ+ researchers. Wakeling's (2010) report on widening participation initiatives for UK undergraduate and postgraduate degrees highlights the lack of research in this area, drawing attention to the few all-encompassing studies of LGBTQ+ students on campus (discussed in more detail below). Finally, the work of Goody and de Vries (2002) focuses on discrimination in the workplace and how this can be addressed through inclusion and diversity initiatives. The article, though, does not give focus to how these initiatives might relate to doctoral researchers and doctoral study and so does not give us a picture of the experiences, challenges, needs and wants of the LGBTQ+ doctoral population.

Other recent studies identified as relevant in our exploration of LGBTQ+ experiences of doctoral education include: Ings (2015) study of queer postgraduate students in the visual arts, Maritz and Prinsloo (2015) study of queer academic identities in postgraduate education, and Ahmed's (2012) and Smith's (2015) extensive texts on diversity work in Higher Education. Ings (2015) research highlights the challenges researchers face when their work inextricably connects to their LGBTQ+ identity and how this can generate feelings of vulnerability, exoticization, and difference. For Maritz and Prinsloo (2015), notions of identity also feed into the process of becoming an academic. For the authors, the 'normative map of being and becoming an academic does not adequately provide for the nomadic/alternative/queer identities', which led them at points in their journey to feel isolated and marginalized (p. 697).

Although the focus of both Ahmed's (2012) and Smith's (2015) work is not LGBTQ+ experiences of doctoral education, their work is important here as it provides an interpretive and theoretical framework for diversity work within Higher Education. For both, an understanding of issues that face particular groups and of intersectionality is needed to ensure that diversity work leads to structures, systems and spaces that are inclusive for all. For Smith, this requires a consideration of local and global contexts, with a focus specifically on climate and intergroup relations, access and success, education and scholarship, and institutional viability and vitality (2015, p. 72). This study addresses all four of these areas through a focus on the doctoral journey and supervisory relationship, professional working relationships, institutional research environments, and understandings of the intersection between identity and doctoral work. For Ahmed (2012), diversity work is a phenomenological practice in that it produces knowledge not only about institutions, but also of those institutions, knowledge that is situated and contextual and that surfaces tensions between policy and practice, and between individual and institution. This study draws on a phenomenological methodology (described below) to ensure a diversity of voices are presented and that differences and tensions are not inadvertently smoothed over or concealed, but openly discussed. As such, it is important to acknowledge that while this study predominantly focuses on the analysis of responses to the questionnaire, it is

also shaped by the lived experiences of Fenby-Hulse as an LGBTQ+ researcher, and our shared experiences and practitioner experience of doctoral education and diversity work that is undertaken in our roles as research and researcher development managers within the UK.

Building on the work of the above scholars, this study complements and extends their work by providing a comprehensive insight into the experiences of LGBTQ+ doctoral researchers from across the UK and from broad range of disciplines. By focusing solely on the experiences of LGBTQ+ doctoral researchers, this study offers much needed nuance on the varied experiences of LGBTQ+ doctoral researchers in the UK. The recommendations stemming from this study, though, are not solely of benefit to those who identify as LGBTQ+ as they encourage the development of research cultures and environments that are open and inclusive for all.

EXPERIENCES OF THE WIDER LGBTQ+ STUDENT POPULATION

Although studies focusing on the LGBTQ+ doctoral population are lacking, there are some studies of the wider LGBTQ+ student population that offer a frame of reference for considering the experiences of LGBTQ+ doctoral researchers. Three significant pieces of work in this area are: Ellis' (2009) study of harassment and discrimination of LGBT undergraduate students' in the UK; the Equality Challenge Unit's (2009) report on the experiences of LGBT staff and students in Higher Education; and Mckendry and Lawrence's (2017) TransEdu Scotland report on the experience of trans and gender diverse applicants, students and staff in Scotland's colleges and universities.

The main finding of Ellis' research is that homophobia remains a problem at UK universities. She states that 'although extreme acts (e.g. actual physical violence) are relatively uncommon, verbal harassment and anti-LGBT sentiments are prevalent' with most harassment stemming from other students (2009, p. 735). The 2009 Equality Challenge Unit report echoes much of the findings of Ellis, although offers some additional detail. For instance, the report draws attention to the fact that two-thirds of lesbian, gay and bisexual (LGB) students are not out to their tutors or lecturers, as they fear discrimination. The report also finds that trans- students encountered higher levels of negative treatment than LGB students. Overall, the report highlights how 'banal forms of negative treatment' can lead to stress, loss of confidence, and self-exclusion (2009, p. 2). The National Union of Student report (2014) on LGBT students' experience in higher education and the Higher Education Academy and Higher Education Policy Institute's Student Academic Experience Survey (Neves & Hillman, 2017) suggest problems persist. The HEA report highlights 'a striking difference in wellbeing levels between students who classify themselves as straight, compared to those who classify themselves as Lesbian, Gay, Bisexual, Asexual or Other' (2017, p. 46). Mckendry and Lawrence's (2017) report is the first to examine in detail experiences of trans- and gender diverse students and staff. The report focuses on Scottish Higher Education Institutions and provides a level of analysis not found in other reports and studies on the student experience of trans- and gender diverse students. The report highlights the barriers to learning these students (and staff) face, with many feeling unsafe and unwelcome on campus and experiencing ignorance and hostility from peers and colleagues. The report also highlights the high withdrawal rate and the significant proportion of trans- and gender diverse students and staff that feel unable and unsupported to raise issues and talk about the challenges they face.

As well as these overarching reports, a number of studies that also have focused on specific issues and intersections that can be experienced by LGBTQ+ students. Falconer and Taylor (2017), for instance, highlights the importance of considering intersections between queer and religious identities, arguing that university study acts as a transitional experience that provides opportunities for students to reflect on and rethink identity and intersections between identities. Cech and Waidzunas's (2011) work on the experiences of LGB undergraduate engineers is also of interest as it highlights how some education environments can be implicitly heteronormative and lead to the exclusion and silencing of LGB students, creating a 'chilly' working atmosphere. Poynter and Washington's (2005) work on intersectionality and multiple identities is also useful in thinking about campus communities as

complex and the importance of allowing and enabling students 'to "name" themselves and their identities' and to not ask them to choose one identity over another (p. 47).

IDENTITY AND DOCTORAL STUDY

While the above articles and reports do not offer a detailed exploration of the experiences of LGBTQ+ doctoral researchers, they suggest a comprehensive study would be worthwhile in order to understand the intersection between doctoral study, sexual orientation and gender identity. Indeed, numerous scholars of doctoral education and supervision have argued that doctoral study and identity are interlinked (McAlpine & Amundsen, 2009; O'Meara, Griffin, Kuvaeva, Nyunt, & Robinson, 2017). As Wisker (2012) argues in her handbook on good supervision: 'Homosexual, lesbian or heterosexual subject positions might affect research topics, theorizing strategies and interpersonal behaviors' (p. 318). Understanding the experiences of LGBTQ+ doctoral researchers, therefore, can inform approaches to, and understandings of, research supervision. For Lee (2012), the supervisory relationship a key component of doctoral education (alongside emancipation, critical thinking, enculturation, and project-based support). As she states, for supervision to be truly effective an 'emotionally-intelligent relationship' between supervisor and student is needed' (2012, p. 13). Supervisory 'fit' (Pyhältö, Vekkaila, & Keskinen, 2015) and the role the supervisor plays in developing a researcher's agency (McAlpine & Amundsen, 2009) and independence (Baker and Pifer, 2011) are all understood as important to an effective supervisory relationship and in enhancing student satisfaction, resilience, and in ensuring completions.

However, as Lee (2012) acknowledges, there is also 'an overarching tension between the professional and the personal which surfaces particularly in the academic's role as a supervisor or advisor' (p. 13). This is something that is, perhaps, exacerbated by the private and complex nature of doctoral supervision (Johnson, Lee, & Green, 2000), which is often centered on a one-to-one or two-to-one relationship between supervisor(s) and student. As such, it is important, as Rogers-Shaw and Carr-Chellman (2018) have shown, that an ethics of care forms part of the pedagogy of doctoral supervision to ensure a meaningful relationship that supports academic learning. The danger of turbulent, toxic, and tense supervisory relationships is that the student (and the project) suffers. As has been shown, poor social support networks, poor supervisory relationships, and a lack of a sense of belonging can all lead to emotional exhaustion, burn-out, and ultimately non-completion (Devine & Hunter, 2016; O'Meara et al., 2017; Peltonen, Vekkaila, Rautio, Haverinen, and Pyhältö, 2017)

This study fills a gap in current understandings of doctoral education by documenting and analyzing the experiences of LGBTQ+ doctoral researchers to address the question of whether current approaches to doctoral education are inclusive and offer supportive working environments for LGBTQ+ researchers. As the doctoral population increases and diversifies, it is important, as Hopwood and Paulson (2012) argue, that students' bodies are taken seriously. As they state: 'doctoral practices are often conceived as disembodied and yet, at the same time, implicitly assume a certain kind of (white, male) body' (p. 670). This article presents the diverse experiences of the LGBTQ+ doctoral population in the UK to encourage reflection on the working environments and cultures in which doctoral study takes place and to identify areas where change, support, and/or development are needed.

METHODOLOGY

Doctoral students who self-identified as Lesbian, Gay, Bisexual, Transgender, and/or Queer+ (i.e. consider themselves outside traditional heterosexual or gender identities) at selected UK Higher Education institutions were invited to complete an online questionnaire. The institutions were selected to ensure a diversity of environment based on size of doctoral community, age of institution (particularly concerning whether institutions pre-dated the large-scale change in UK higher education in 1992), and geographical location (in terms of region and urban/rural campuses). The questionnaire was not promoted beyond those institutions that granted permission. However, participants from

other institutions who had heard of the questionnaire through their networks and had chosen to respond have been included in the analysis. In institutions where formal cooperation was obtained, it was asked that the questionnaire be promoted as widely as possible; there was no attempt to select individual or groups of participants from within those institutions. The questionnaire was housed on the Bristol Online Surveys platform and was open for eight weeks from mid-January 2017. Administrators and academic leads with responsibility for postgraduate research degrees in 42 institutions were contacted to secure permission and assistance in reaching out to their students. To guarantee anonymity for participants, no question was marked as mandatory and identifying details were not requested. All responses below have been anonymized.

The response was higher than anticipated, with 224 doctoral researchers from at least 47 institutions (six participants declined to provide their institutional affiliation) completing the questionnaire. 82 percent of respondents were studying full-time, 11 percent part-time, with the remainder choosing not to answer. 25 percent were aged 25 or under; 42 percent were between 26 and 30; 16 percent were between 31 and 35; 8 percent between 36 and 40; 4 percent between 41 and 45; 2 percent between 46 and 50; 3 percent between 51 and 55; one participant was between 56 and 60, and one declined to say.

The questionnaire explored how respondents felt their sexual orientation and/or gender identity connected to and impacted on their personal and professional life as a doctoral candidate. Participation was entirely voluntary. From the outset it was decided that a quantitative approach to analyzing the responses would be inappropriate as the aim was to capture the diversity of experiences and, where possible, to understand nuance, intersectionality, and differences in perspective. As such, when asking questions concerned with the doctoral researchers' sexual orientation/expression and/or gender identity/expression, pre-selected categories were not used and have not been used post-hoc for the purposes of correlation. Accordingly, in order to allow respondents to accurately convey their gender identity and sexual orientation or expression and for us to capture the diversity of respondents, free-text responses were requested for the following questions:

- Please describe your gender identity and/or expression
- Please describe your sexual orientation and/or expression
- What other factors do you consider important to your identity (this may include ethnicity, nationality, sex, religion, disability, familial roles and responsibilities, subculture identities, group membership, and professional roles, etc.?)

While some respondents chose to use traditional categorizations, the free-text response allowed others to provide much needed nuance:

"I usually describe my gender identity as gender fluid, meaning that my feelings of gender identity are not static. I usually feel as a man or as some kind of other gender not male nor female but comprising elements of both, and more rarely I feel as a woman. **These feelings change day by day, and are affected by a number of circumstances** including clothing, environment, what I'm doing, etc." (emphasis ours)

Age was the only personal identifier where predefined categories were used.

For the rest of the questionnaire, a mixture of open questions and fixed-alternative questions (accompanied by secondary free text 'further comments' were used (see the appendix). While the main focus of this study is on individual experiences, fixed-alternative questioning acted as a guide for respondents in thinking through their experiences and provided context for the analysis of responses; in essence they acted as markers or 'flags in the ground' by which to analyze and interpret responses. Fixed-alternative questions included: the number of supervisors on the supervisory team; the groups of people aware of the respondent's sexual orientation/expression and/or gender identity/expression; the types of harassment or aggression experienced; and the extent to which respondents felt their institution provided an inclusive environment. While the use of statistics to summarize

responses is appropriate in certain contexts to give an overview and to identify trends, the focus of this study was on individual experience and diversity. As Smith, Flowers, and Larkin (2009) state, 'the founding principal of phenomenological inquiry is that experience should be examined in the way that it occurs, and in its own terms' (p. 12). So, for instance, while it could be presented in positive terms that only 1.3 percent of our respondents stated that their primary supervisor is not LGBTQ+ friendly (see Figure 1), this would erase the experiences of the three people within this sample that were currently experiencing difficulties.
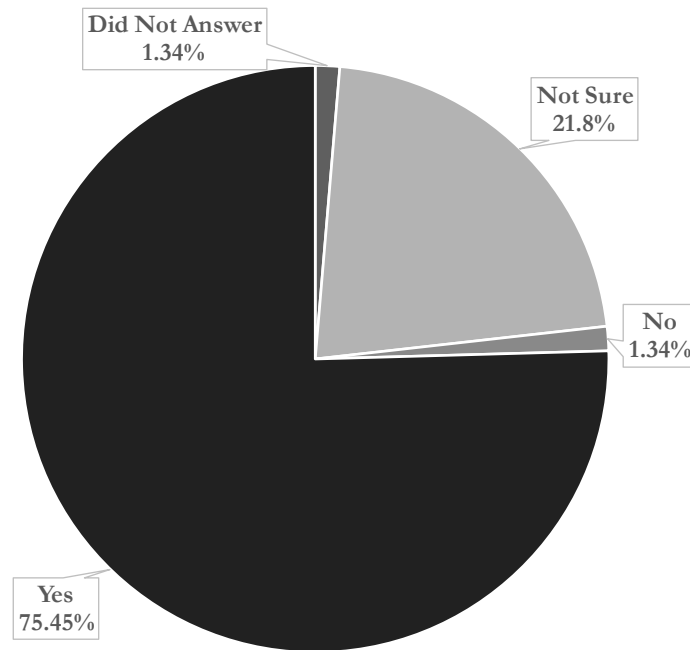
Figure 1: Do you consider your primary supervisor(s) to be LGBTQ+ friendly?

It has been shown that those who identify as LGBTQ+ often choose to relocate to large cities that have established LGBTQ+ communities as well as a range of LGBTQ+ support and amenities on offer (Ellis, 2007). It was important when designing this study (and when analyzing the data) to note that it was likely a significant number of responses would be received from larger universities and those based in cities with more LGBTQ+ facilities and representation. To avoid a focus solely on the experiences of the majority, this study provides contextual nuance by ensuring the experiences of those respondents that study at small rural universities, those that are representative of LGBTQ+ subcultures, those that providing intersectional perspectives, and those that offer unique or conflicting perspectives and experiences are documented. Indeed, in building inclusive environments, it is important that the diversity of experiences be recognized so that spaces are developed that work for all.

An interpretative phenomenological approach (Cerbone, 2014; Smith et al., 2009; Van Manen, 2016; Watson, 2001) was, thus, undertaken to focus on the different ways in which doctoral researchers experienced their environment, institution, supervision, colleagues and academia more widely. As Ahmed (2006) has argued, phenomenology can provide a particularly powerful approach to understand queer perspectives and the experiences of those that identify as LGBTQ+. The use of free-text responses through the questionnaire was essential to this and to examining how people perceive, understand, and define their identity and their experiences of doctoral supervision. This approach

enabled us to investigate the extent to which institutions provide an inclusive environment for all doctoral researchers, as there is no objective truth beyond the experiences of those students.

Analysis was approached in four stages. Firstly, anticipatory themes were identified from the existing literature on LGBTQ+ experiences of higher education, as discussed above. These were not to be tested, but to support contextualization of the data. The literature review was iterative and continued during data collection in response to the data. Secondly, the responses were studied; each response considered within the context of the respondent's submission to enable the researchers to better understand that individual's experience. Responses were read by both authors, each making notes on key objects of concern. Thirdly, one researcher used NVIVO software to code free-text responses and establish common themes, noting recurrence (although not letting this drive the study for the reason stated above). The results were then passed to the second researcher who checked their validity by comparison with notes from the first-stage reading of the responses and the themes present in the existing literature. Finally, once agreement was reached between the researchers, commonalities across themes were identified to produce five broad themes.

FINDINGS AND DISCUSSION

Findings and discussion are here presented together so that the responses and emerging themes can be discussed in reference to, and contextualized within, the extant literature. This allows for a deeper interpretative engagement with the experiences expressed by the respondents. Throughout, a diversity of views are presented that focus on both the positive and negative experiences of doctoral study. Whilst it is important to explore in detail the challenges people face so that institutional and sectoral improvements can be made, it is also important to note that many respondents have no issue with many aspects of their education and that the difficulties they did encounter were not always linked, or solely linked, to their sexual orientation or gender identity. For example, when asked if there had been occasions at their academic institution (other than with their supervisory team) where they had felt uncomfortable or felt that they had to conceal their sexual orientation/expression and/or gender identity/expression, 63 percent of respondents answered in the negative (Figure 2). Similarly, 72 percent of respondents felt their department offered an inclusive environment (Figure 3).
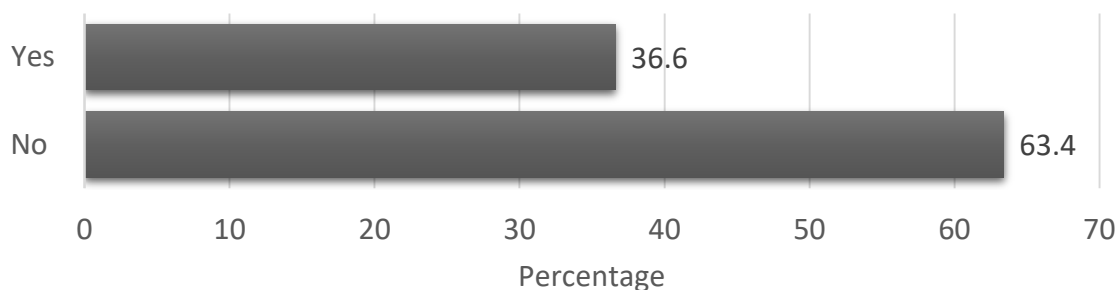
Figure 2: Are there any other situations at your academic institution [other than with your supervisory team] in which you have felt uncomfortable or felt that you had to conceal your sexual orientation / expression, and/or your gender identity / expression?
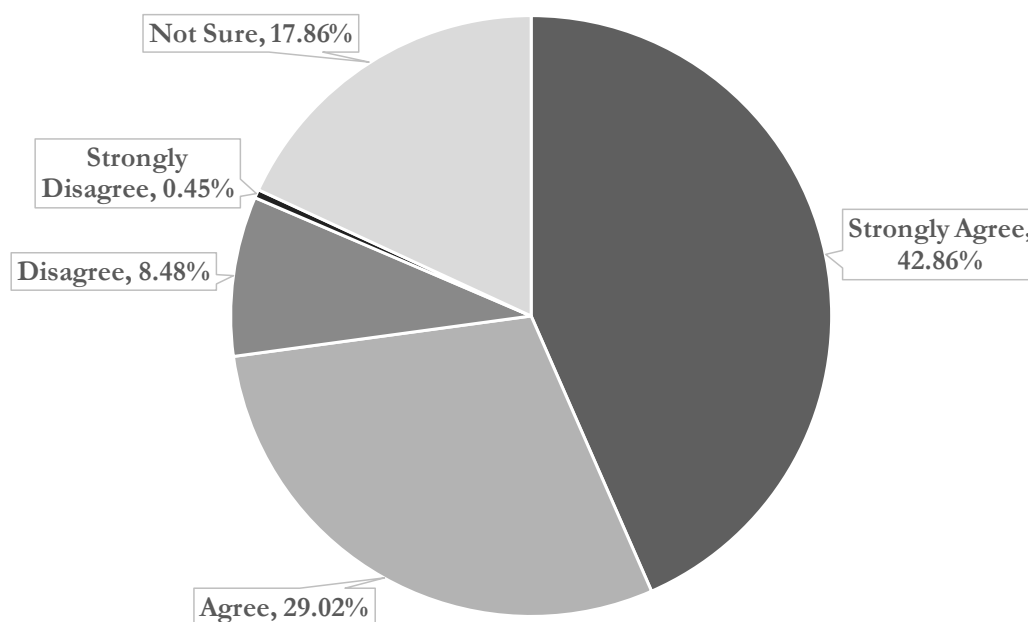
Figure 3: To what extent would you agree that your department offers an inclusive environment for LGBTQ+ researchers?

For one respondent, the desirability of conducting this study at all was called into question:

"We don't need another study that say XX% of XXXX group reported people once said nasty things to them, with no control for context it does nothing positive and allows idiots to pressure institutions into taking stances on issues that could well be non-existent and would be better left as irrelevant to the university's function. Please stop this unnecessary intrusion into the personal lives of everyone who isn't straight."

This comment echoes the work of Jagessar and Msibi (2015) that argues that same-sex University students should not be perceived simply as powerless or victims, the picture often being much more complex. This study seeks to acknowledge this complexity, whilst also acknowledging the importance as Msibi and Jagessar also argue, of challenging patriarchy and heteronormativity in Higher Education to ensure institutions function as inclusive and diverse spaces. This study is sensitive to the diversity of experiences and documents this complexity in the discussion below.

EMERGING THEMES

For the most part, the themes emerged in different ways and from different perspectives, across the questionnaire and not from single questions or sections. However, to help structure the discussion for the reader, some of the key questions that link to theme under discussed are articulated at the outset. A full list of questions can be found in the appendix.

Environments and exclusion

In response to questions on experiences, perception and institutional support, many respondents reported that they felt they worked within environments where heteronormative, cisnormative and binary-gender assumptions (that is that all people are heterosexual and clearly identify with their physical gender of their birth) were the norm. Questions included:

- Thinking specifically about your sexual orientation/expression and/or gender identity/expression, do you feel included in all aspects university/college life?
- Do you feel there are any opportunities open to researchers that you would be/have been reluctant to take up because of concerns about discrimination connected to your sexual orientation/expression and/or your gender identity/expression?
- To what extent would you agree that the following offer an inclusive environment for LGBTQ+ researchers?
- Do you feel your sexual orientation/expression and/or your gender identity/expression will have an effect on your future career?

The individual cultural environment of departments, research units or institutions were frequently mentioned as crucial to how comfortable a student was in their role. Such perceptions of how inclusive the working culture varied between institutions and departments or other academic units. As stated above, most respondents agreed that their department offered an inclusive environment for LGBTQ+ researchers (Figure 3) and 82 percent said the same of their institution. Several respondents were keen to praise their institution, department or supervisory team for enabling a welcoming environment:

"Yes, sometimes it's complicated being out. I'm lucky to be in the psychology department and in a very LGBT* friendly campus."

"I have found PhD study to be better than the work place in most respects (accepting colleagues, support available)."

"It's easy for me to say that because I am cis-gender, but I do think that the staff in my department are quite clued up. We have transgender undergraduate students and they are treated equally and with respect (as far as I am aware). My sexual orientation is my own business but it's certainly not something I feel the need to be secretive about any more than I would in a work place. Again though, that's easy for me to say because I'm not 'visible'."

For others, an inclusive and open culture was perceived to be lacking (leading in some cases to ageist assumptions):

"Within the physical sciences there is a definite heterosexual male culture, and many holding positions of power are also older and may be less tolerant of LGBTQ+ identities."

"The mainstream is patriarchal and heterosexist, it reproduces itself and gives opportunities only to those within the norm (white gay/straight men or "powerful" middle-class white lesbians and heterosexual women, although these are a minority)."

Issues were also raised about when, in the course of a working day, aspects of people's personal lives were brought into conversation. For some respondents, this was an uncomfortable experience and representative of a broader culture of hetero- or cis-normativity:

"I have noticed colleagues being asked how their respective partners are by my supervisors, but I have never had such questions. This might be for other reasons, but it's hard to be sure."

"In the communal staff/PhD kitchen area there is often weekend/social talk that can reflect 'lad' culture at times, making me feel more inclined not to bring up any issues of my own private life."

For some respondents the question of their working environment and culture and how that affected their experience of study was more than a feeling of not being part of the dominant culture. Some reported an environment which permitted, or turned a blind eye, to more aggressive or isolating behavior:

"I'm in a very macho male-dominate faculty (a STEM one), so it feels awkward when my co-PhDers make sexuality comments. When I did mention my sexuality, I had one male colleague "invite" me to

have a threesomes with their partner, which was disgustingly inappropriate and has hindered me from socializing with them until he completed his course."

"I would feel uncomfortable telling certain senior members of staff about my sexuality if the subject was to ever arise - this is due to the general culture of the school which is not very accepting and at times actively misogynistic."

Others reported how the culture and environment in which they worked led to feelings of exclusion, with some feeling isolated or outside of every-day departmental life. Several respondents felt that any isolation that came with the nature of PhD research was increased because of issues related to sexual orientation or gender identity:

"I also think that, because PhD study is inherently isolated, identifying as queer is to risk exacerbating that social exclusion"

"I think some cis LGBQ students are likely to feel like they don't fit in with the rest of their cohort which might exacerbate feelings of loneliness and isolation which most PhD students deal with anyway."

Some respondents also felt that the isolation associated with doctoral student connected to wider social activities, such as LGBTQ+ related networks:

"LGBTQ+ staff have a support group and undergraduates have the LGBTQ+ club on campus but I feel like it's hard for people my age & at this stage in our career to participate in either."

Intersectional identities could also further feelings of exclusion and isolation, with respondents feeling sometimes as if across and between different networks, groups, and societies; a tension played out in some cases structurally, leading to what Formby (2017) has called a 'hierarchy of inclusive spaces':

"I am a member of our women's network and I feel as if they compartmentalize LGBTQ+ issues as being something to discuss in the appropriate staff society whereas I'd like to see the women's network discuss it amongst a broad cross section of women not just those who identify as LGBTQ+"

"Even the LGBT safe space was in the same corridor as the ecumenical religious space"

Feelings of being excluded from campus-based activities, events, and groups was particularly prevalent in responses from students who reported issues related to their gender identity. This brought in issues of the use of pronouns for administration and/or spoken introductions, the lack of gender-neutral bathrooms and exclusion from gender-based initiatives:

"A 'female-only' reading group was set up. It was then amended to 'female and non-binary only'. I was uncomfortable at the thought of identifying myself as publicly non-binary, so did not attend."

"I wonder why there are so many "women in STEM" events - it's cool if they were just called that but actually actively open to all people who are oppressed based on their gender and hence trans inclusive."

"It is…fairly common that the university provides support for female identifying students and staff. Whilst this is helpful, the space created is often highly hetero-normative with discussions centering around childcare, pesky husbands etc. This can be alienating in a space which is aiming to be safe."

"Some services, like Careers, are quite traditional and binary."

"When playing sport: the organization of spaces and activities tends to be binary."

The issue of a welcoming or unwelcoming culture being dependent on the attitudes and behavior of senior staff was recurrent. This was coupled with a reticence by the doctoral researchers to challenge the views or behavior of more senior staff due to the imbalance of power and potential perceived impact on their PhD or future job prospects:

"I know more than one senior academic, who may be on a hiring committee in my future career, who have gone on homophobic rants in front of me. Thus, if they somehow found out my sexuality, they might be less inclined to hire me."

"[there was] a very "laddish" attitude of casual sexism and homophobia in some conferences which I did not challenge as [I] was very junior (I feel more confident now and think I would challenge)

"[There is] trans ignorance [among] senior academic staff"

The issue of an inclusive culture, for respondents, extends beyond the department or research division. For doctoral researchers, this may be the first time in their career that they are expected to operate academically outside their institution:

"Around most older/traditional academics at conferences….it feels hard enough being a young working class woman…even harder talking about feminist issues. Talking about my sexuality is scary - especially when bi women are so fetishized and older male academics can be creeps at the best of times."

"When meeting new people especially at conferences and meetings, there is an instant assumption that I am straight and find conversations about relationships brought up by others to be slightly awkward. You're never really sure how someone is going to react and therefore it can feel intimidating."

"I haven't been to any conferences since coming out because I'm afraid of being half-recognized by people who don't know me v well or maybe don't know I'm out and have changed my name etc. On twitter I avoid getting involved in academic discussions or critiquing things related to my field, where I might have been happier to before, as I feel like I will be taken less seriously."

Suggestions of feeling side-lined from the culture of the academic workplace extended to issues of exclusion in a variety of contexts. Isolation is known to be a concern linked to doctoral study more generally and includes feelings of being disconnected from the main (undergraduate) student body and not yet accepted within staff circles, as seen in the above extracts (Chiang, 2003). Isolation is also a theme highlighted in the aforementioned surveys and questionnaires that addresses the wider LGBTQ+ student population (ECU, 2009; Ellis, 2009). For Epstein and Johnson (1994), feelings of isolation and exclusion are a result of failure to recognize difference and the positing of an 'unambiguously heterosexual world' (p. 198). It has been shown that feelings of isolation and exclusion within a work environment, whether perceived or real, have potential implications for the wellbeing (Gates, 2011; Irwin, 2007; Lloen & Parini, 2017; Mule et al., 2009) and productivity (Badgett, Durso, Kastani, & Mallory, 2013; Credit Suisse, 2016; Guasp, & Balfour, 2008) of those that identify as LGBTQ+. Within Higher Education, Pyhältö, Vekkaila, and Keskinen (2015) have shown, more generally, that a lack of social support can lead to disengagement during doctoral study; Sanchez et al. (2015) has shown that LGBT inclusion within the academic health community can lead to better personal and professional development; and Wickens, and Sandlin (2010) have shown how hostile, heteronormative environments within Higher Education institutions can lead to a culture of fear and, as a result, the erasure of LGBT voices and experiences. For Cech and Waidzunas (2011), whose research focused on LGB student engineers, if LGB experiences are marginalized, 'the unmarked category heterosexuality is legitimated and imbued with power', silencing the voices of LGB students.

The above responses suggest that the combination, in particular, of a doctoral and an LGBTQ+ identity can lead not only feelings of isolation and exclusion, but also a lack of voice and representation within academic spaces.

Micro-aggressions, assumptions, and harassment

Within the broader themes of culture and exclusion, a specific issue that arose was that of hetero- and cisnormative assumptions. Questions that generated responses on this theme included:

- To what extent do you agree that your sexual orientation/expression and/or your gender identity/expression status should be recognized and understood by colleagues?
- Are there any other situations at your academic institution [other than with your supervisory team] in which you have felt uncomfortable or felt that you had to conceal your sexual orientation/expression and/or your gender identity/expression?
- Have you ever experienced any of the following within your institution because of your sexual orientation/expression and/or your gender identity/expression: negative comments, verbal abuse, threatening behavior, physical abuse, stereotyping, homophobic jokes, other marginalizing behaviours, micro-aggressions?

Whilst responses varies, most common were comments regarding the persistent assumption of sexuality or gender:

"In situations where it is assumed I am straight, and I have to correct this - I don't mind much but it's a bit tedious, and reinforces me feeling 'other'".

"I am assumed to be a gender I am not - it is exhausting to correct people and I am worried for my academic relationships if I do".

"Stop assuming that everyone is straight, thus forcing people to have to choose whether to 'come out' every time they meet someone new".

"People assuming I'm straight/will behave in a certain way and get surprised/offended when I don't".

For some respondents, there was a clear division between their personal and professional lives. As will be shown below when discussing supervisory relations, responses were received that questioned the relevance of, particularly, a student's sexual orientation to their academic work. However, others saw the environment they worked in as one that contained social elements as well; where conversations would naturally include aspects of people's personal lives. Here is where hetero- and cisnormative assumptions proved problematic:

"I have been in meetings with students and staff from other faculties… and in professional development courses where I felt like it was assumed that everyone in the room was heterosexual because of how the conversation was going and it made me feel uncomfortable and like I shouldn't mention my partner."

"One older colleague saw my wedding ring and asked me if I was married. When I replied in the affirmative, she asked me what my husband does for a living. I didn't pull her up on it, because although I didn't expect her to have any issues with my sexuality, I didn't want to make her feel awkward for making innocent assumptions."

"People assume I'm straight a lot of the time. A visiting professor asked about my boyfriend, I didn't feel the need to correct her. It happens often and it can be awkward if you correct the person especially if you don't know them well or it wouldn't make any difference for them to know/not know."

Issues of assumptions were not limited to hetero- and cis-normativity. Some respondents also felt that when attention was paid to the needs of LGBTQ+ students, there was a tendency towards generalizations, reducing the person to that aspect of their identity, and of not taking into account how identifying as LGBTQ+ intersects with others parts of their identity:

"[Do not] assume LGB are a single homogenous group. Questioning students require different support [to] lesbian and gays for example."

"Stop assuming that every (LGBTQ+) person who attends university has far-left political views and be more inclusive of other sides of the debate."

"LGBTQ+ =/= GGGGG"

"Stop stereotyping LGBTQ+ people when it comes to social activities etc."

"I wish the casual assumptions about what it means to be bisexual could be challenged more by the student body. I overhear a lot of nasty jokes and I'm often the recipient of a lot of indelicate proposals from my fellow students if they find out."

This also extended to research-related assumptions. Because of their sexual and/or gender identity, some respondents felt it was assumed that they would want to take their research in a particular direction:

"There is also the fact that identifying strongly and publicly with the LGBTQ community means that people tend to assume that's where your research will be directed, and you are assigned to that particular camp regardless of your intentions."

"PhD candidates are at risk of having their research over-determined by their sexual identity. For example, a postcolonial scholar, such as myself, risks having their research condensed into a commentary on queer issues."

The above could all be described as microaggressions. Nadal (2013) argues that micro-aggressions take many forms. In his taxonomy of micro-aggressions that an LGBTQ+ person can face, he includes: the use of heterosexist or transphobic terminology; the endorsement of heteronormative or gender normative culture and behaviors; the assumption of a universal LGBT experience; exoticization; discomfort and disapproval of the LGBT experience; denial of heterosexism or transphobia; assumption of sexual behavior or pathology; and denial of individual heterosexism (p. 44-45). As well taking a variety of different forms, microaggressions are also often unconscious, implicit, and/or cultural. As such, they can be difficult to identify and articulate. This, as Nadal states, can put an emotional burden on the affected person, who may be unsure or unclear as how to respond and may experience feelings such as fear, discomfort, anger, frustration, sadness, embarrassment, and shame. A variety of these emotions are presented in the responses, providing insight into, and evidence of, the emotional process and labor that, for some of our respondents, form part of the daily experience of being an LGBTQ+ doctoral researcher.

As part of the questionnaire, respondents were asked whether they had ever experienced any type of aggression or microaggression within their institution because of their sexual orientation/expression and/or gender identity/expression. Just under half of the respondents (111) reported that they had not (Figure 4). Of those that had experienced aggression, the most common was stereotyping (reported by 67 people), followed by homophobic jokes (58), 'other marginalizing behaviors and/or micro-aggressions' (33) and negative comments (28).

Ten respondents said they had experiences verbal abuse, four reported threatening behavior and one had experience physical abuse. When asked if they were aware of other LGBTQ+ researchers at their university/college who have suffered from homophobic or transphobic discrimination or abuse within the institution, 72 percent answered 'no', ten percent 'yes' and 18 per cent 'not sure'.

These insights, though, need to be treated with caution. As Nadal notes, micro-aggressions are not easy to determine or describe and are often embedded within institutions, cultures, and society. As such, these more subtle forms of discrimination affect people in different ways and may not be readily apparent at the time to those that experience them and an accepted (or unseen) part of the world in which they live.
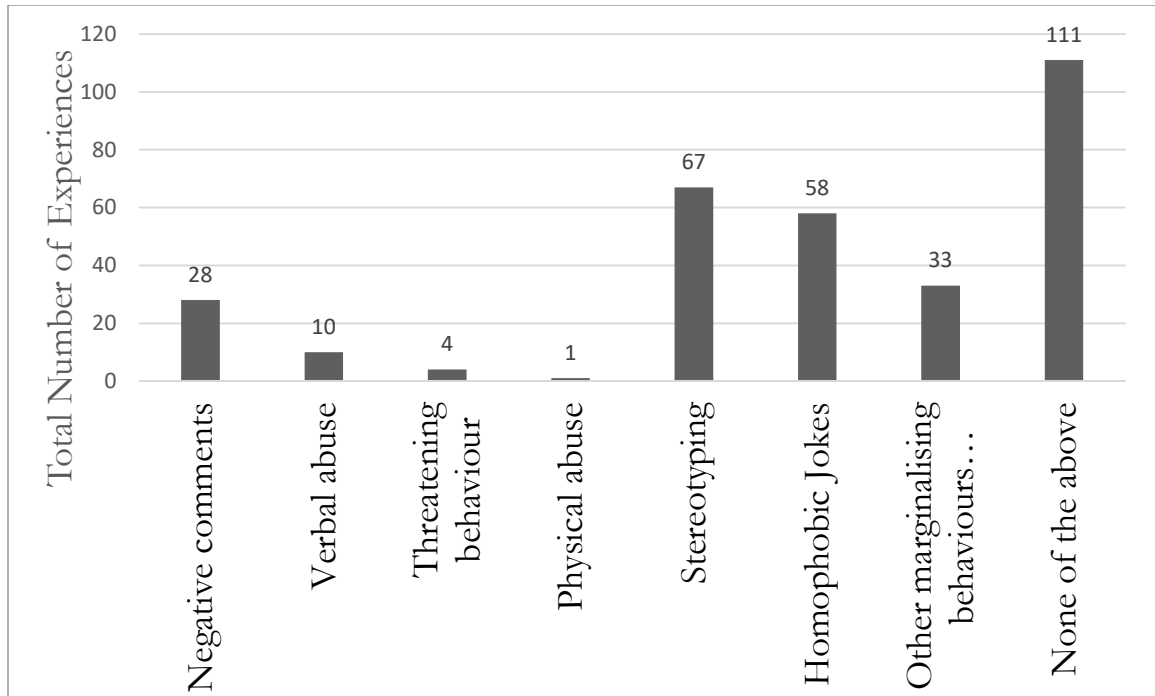
Figure 4: Have you ever experienced any of the following within your institution because of your sexual orientation / expression, and/or your gender identity / expression?

Supervisory relations

One of the key aspects which makes doctoral study unique (and thus makes this cohort worthy of separate investigation) is the central place of the supervisor or supervisory team in the development of both the research project and the researcher. The importance of the supervisory relationship to student success both in the short and longer term has been much discussed (Baker & Pifer, 2011; Lee, 2008; Wisker, 2012). It is also clear that doctoral supervisors frequently see themselves playing a much wider role than simply an advisor on an academic research project; often encompassing the development of a wider professional relationship between supervisor and student (Lee, 2008; Wisker, Robinson, & Shacham, 2007), while recognizing that this not the case with all supervisors. Accordingly, if students experienced issues in their doctoral studies because of their sexual orientation/expression and/or gender identity/expression it is reasonable to expect that the student's supervisor(s) may play a part in either the problem or its resolution. To explore this dynamic, the below questions were posed:

- Is your supervisory team aware of your sexual orientation/expression and/or your gender identity/expression?
- Do you consider your primary supervisor(s) to be LGBTQ+ friendly?
- Do you think it is important and/or relevant for your supervisory team to be aware of your sexual orientation/expression and/or your gender identity/expression?
- Do you feel your sexual orientation/expression and/or your gender identity/expression affects your relationship with your supervisor/supervisory team?

The most common supervisory arrangement was for there to be a first and second supervisor (experienced by 53 percent of respondents), followed by a larger supervisory team (13 percent), a single supervisor (13 percent) or two joint supervisors (11 percent). Ten percent reported an alternative arrangement.

Respondents were asked if their supervisory team was aware of their sexual orientation/expression and/or gender identity/expression. 33 percent said they were; 14 percent said some but not all of their supervisory team were; 23 percent said their supervisory team were not aware; and 30 percent were not sure (Figure 5a). The extent to which it is desirable or necessary for a supervisor(s) to be aware of a student's sexual orientation/expression and/or gender identity/expression divided our respondents (Figure 5b).
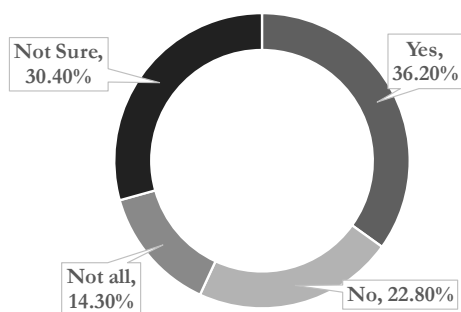
Figure 5(a): Is your supervisory team aware of your sexual orientation / expression, and/or your gender identity / expression?
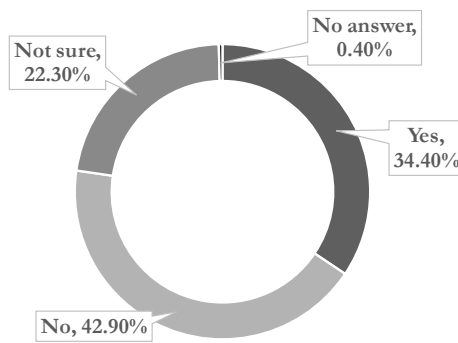
Figure 5(b): Do you think it is important and/or relevant for your supervisory team to be aware of your sexual orientation / expression, and/or your gender identity / expression?

For a number of our respondents the way they viewed their supervisor(s) role was purely functional and, as such, saw no reason why they would need or want to ensure their supervisor(s) was aware of their sexual orientation/expression and/or gender identity/expression:

"It does not affect the professional relationship between my supervisors and I. Frankly it is also none of their business."

"Why on earth would they care or need to know? I'm not planning on [sleeping with] either of them."

For others, it had importance:

"I think it makes a big difference whether or not an LGBTQ+ student feels like they can be open both to their supervisor(s) and to other PhD students. Not feeling accepted (or hiding part of their identity out of fear of not being accepted) can have a very negative impact on interpersonal relationships, and thus cause/exacerbate mental health issues."

"I should have told my supervisor much earlier."

"There are still a number of legal/social/cultural forms of discrimination that LGBTQ+ undergo so I feel that it's important that supervisors be knowledgeable and aware of these concerns as they ultimately may hinder the work of the researcher as well as their psychological/mental health."

When asked if they felt their sexual orientation/expression and/or gender identity/expression affected the relationship they had their supervisory team, 74 percent of respondents said it didn't, 14 percent thought it did, with 12 percent unsure. For those who knew their supervisor(s) was aware of their sexual orientation or gender identity, many reported it as a positive aspect of their supervisory relations.

"I feel at ease with my supervisors - particularly with my first supervisor - and conversations have taken place about, for example, my husband or my wedding. I feel it's important not to feel pressured into telling, but I also believe is beneficial to let it flow naturally. After all, that's being oneself."

"I have a close relationship with my supervisor, who is very committed to ensuring her students' emotional and mental well-being as well as their academic well-being. I feel it is important for her to be aware of my sexuality as this may impact my mental health and the way that people within a professional environment treat me. This affects my relationship as it means she offers me support in a different way to students who do not identify as LGBTQIA and can be aware of any issues which may arise. In the past, when issues have arisen, she has been extremely supportive."

"My relationship with my supervisor has not changed since she became aware of my orientation. She is wonderfully supportive and we have on occasion chatted about it but I do not feel as though our relationship is affected."

Of those who responded that one or more of their supervisory team were not aware of their sexual orientation and/or gender identity, 38 percent of those indicated that they had felt unable to make them aware; although the request for an explanation of why they felt unable revealed that some of those respondents felt no need to make their supervisor(s) aware, rather than unable to. There were, though, a number of respondents who genuinely felt that they were unable to reveal their sexual orientation/expression and/or gender identity/expression to at least one of their supervisory team. The dominant theme that emerged from these responses was one of fear or uncertainty regarding the reaction this would engender.

"I'm in a male dominated field, so I worry it would impact my academic employment chances."

"I have no reason to think that they are trans-, or homophobic, but especially with regards to gender identity, it is such a controversial and divisive issue in society that I don't currently feel comfortable discussing this with them for fear that it will jeopardize our working relationship."

"I'm sure they would probably have no issue with it but… there's a bit of a weird stigma around bisexuality and I wouldn't want them to view me any differently."

"I know that my supervisor is quite Protestant and I've heard that he think being gay is a sin."

"Both my supervisors are lovely people, however the anxiety of wondering if their opinion of me would change if they found out the truth makes me uncomfortable engaging with them socially."

There were some comments from respondents who felt their sexuality was irrelevant to their supervisory relations which suggested they assumed that by asking the question "Is your supervisory team aware of your sexual orientation/expression and/or your gender identity/expression?" that it was intimated that a student should be 'out' to their supervisory team. This was not the intention. Given the pivotal nature of the supervisor in a doctoral student's journey, it was felt that an exploration of whether students felt they *could* be open about their sexual orientation or gender identity (as subsequent questions sought to establish) and what the impact of that would be on their subsequent experiences was important given previous research on LGBTQ+ identities within educational and workplace contexts (Colgan & McKearney, 2012; Kosciw, Palmer, & Kull, 2015; LaSala, Jenkins, Wheeler, & Fredriksen-Goldsen, 2008; Wickens & Sandlin, 2010).

Internationalization

By far the most common concern raised by participants was the potential difficulties in operating in a work environment where international mobility is fast becoming the norm. This was raised, in particular, in responses to the below questions:

- Are there any issues which you think LGBTQ+ students might encounter during doctoral study?

- Are there any other situations at your academic institution (other than with your supervisory team) in which you have felt uncomfortable or felt that you had to conceal your sexual orientation/expression and/or your gender identity/expression?
- Do you feel there are any opportunities open to researchers that you would be/have been reluctant to take up because of concerns about discrimination connected to your sexual orientation/expression and/or your gender identity/expression?
- What, if anything, would you like your institution to do to improve the experience of LGBTQ+ doctoral research students?

Internationally-based field work, conferences, collaborations and post-doctoral employment are an expected part of many doctoral researcher's work and future career. When these opportunities arise in countries that are culturally or legally hostile towards those that identify as LGBTQ+, serious issues arise:

"…occasionally work has become available in countries where homosexuality is illegal, and naturally I do not apply as I put my safety over research."

"I'm more restricted in terms of where I can move to for post-doctoral work. I won't move to a country where I can't live freely and openly with my partner without risk of discrimination."

"I work in a very international field. The policies of some countries, within which we have collaborators, towards LGBTQ+ rights would prevent me from moving there for work."

"….we send students on attachment to observatories and experiments in other countries where they may (and sometimes do) experience LGBTQ+-based discrimination."

"My fieldwork took me to [country] and [country] where being homosexual is illegal, and concealing my sexuality was very necessary there."

Such concerns and experiences are directly linked to the issues outlines above. In a binary-gender environment where researchers are assumed to be heterosexual and cis-gendered unless corrected, where LGBTQ+ role models are largely invisible and a student may feel unable to address issues related to their sexual orientation/expression and/or gender identity/expression with their supervisory team, the question of cultural or legal attitudes in countries where students are encouraged to visit appear to remain unasked.

The international nature of academic life is also mentioned in the context of working in their own institution with colleagues or students from areas of the world with a reputation for cultural hostility towards LGBTQ+:

"In one instance a friend (not LGBTQ+) was working in a group on an undergraduate project where a supervisor from a LGBTQ+ [hostile] country made a negative remark in regards to a poster advertising an LGBTQ+ lecture… I felt neither myself nor my friend could challenge this as the supervisor was responsible for his project mark."

"I teach a lot of international students, several of whom are quite religious. As such I do not discuss my personal life at all with students unless it becomes absolutely necessary, whereas heterosexual staff regularly refer to their children/partners etc. which helps students to see them as a multifaceted human rather than as a one-sided individual."

There is relatively little research that explores the impact of globalization on LGBTQ+ identities, education, and work. The results of this questionnaire show there is an increasing need, not only for research in this area, but support and development from institutions, funders, and relevant government bodies in negotiating international work and the expectations of researcher mobility.

Trans- and non-binary researchers

It would be inappropriate to separate out entirely the difficulties reported by students who identify as trans or non-binary; not only would that make assumptions about those students' sexual orientation and/or identity but would also intimate that the previous themes were somehow only applicable to cis-gendered respondents. However, it is important to recognize that, emerging from the questionnaire, there were experiences that were specific to trans- and non-binary students. Often these related to the reaction of students and staff within their institution, which ranged from a perceived awkwardness:

"I am trans, my supervisors are not trans…and as such they sometimes say the wrong thing or are a bit awkward about my situation. I can tell they want to talk to me about it or ask about it but they are worried they are going to say the wrong thing. They are not great at using my gender neutral pronoun."

to a lack of respect and aggression on behalf of the supervisor:

"[My, now former, supervisor] ignored my coming-out email, refused to use my correct pronouns, described one of my speech mannerisms as "a female thing" and referred to "people who aspire to be men" with a pointed look at me."

Other concerns of transgendered respondents included institutional processes and systems that were felt to be exclusionary and caused feelings of being "othered":

"For trans students, there are a lot of social and administrative issues associated with transitioning during a PhD: updating personal details in multiple directories can be exhausting and time-consuming, and there is the potential to be outed if any of those directories are missed. There are also issues associated with communicating a new name/pronouns to an entire department, some members of which might not know the student very well but will still need the information. This also applies to external contacts made at conferences. All of this takes up a lot of time, energy and thinking space, which detracts from the PhD. Medical appointments can have a similar effect, and many universities'/funders' policies on sick leave will not be set up to accommodate medical transition."

"[I] wasn't sure if the support services would be trans inclusive [and so did not use them]."

"Some of the standard binary assumptions. I had to get my ID card altered. When I first applied there were no non-binary titles to choose from and a binary gender tick box. In the Doctoral College induction, the dean gave a speech and named each school and asked the students to raise their hands if they were in that school. As she named the school she began to count the students with raised hands and make comments about the gender division. She commented how great it was that there were an equal number of women to men when she called out [faculty]. I was dreading her getting to [faculty] in case I was publicly misgendered."

These observations mirror some of the findings of the report by McKendry and Lawrence (2017) that examined the experience of trans and gender diverse applicants, students and staff in Scotland's colleges and universities. While connections in terms of experience can be made with the general student and staff trans and non-binary populations, there is the potential that issues may be exacerbated for doctoral researchers given their positioning in between the undergraduate and the institutional research community.

Visibility

The final theme recurred throughout the responses to the questionnaire, but in particular to the below questions:

- Are there any other situations outside of your academic institution [but within academia] in which you have felt uncomfortable or felt that you had to conceal your sexual orientation/expression and/or your gender identity/expression?

- Do you feel your sexual orientation/expression and/or your gender identity/expression will have an effect on your future career?
- What, if anything, would you like your institution to do to improve the experience of LGBTQ+ doctoral research students?

For some respondents, a lack of visible LGBTQ+ role models within either their discipline or institution contributed to a perception of academia as lacking when it came to diversity and inclusion:

"I want to see successful professors who identified himself/herself. I want to listen to their experience. I want to listen to successful professors who are LGBTs. I want an inspiration."

"Visibility is key. More needs to be done to support doctoral students coming out - if they want to. This can best be done by improving the visibility of other LGBTQ+ role models in doctoral study and in academia more generally."

"I wish I knew who the other queers are. Especially among faculty. I know it's a personal matter, but it would make me feel so much better to know there are queer academics in my white-cis-male field."

The importance of female role models or mentors in breaking down masculine norms and assumptions in the workplace and encouraging women to pursue careers in traditionally male-dominated fields has been long established (Bizzari, 1995). That such principles related to LGBTQ+ career progression was raised by several respondents. One of the suggestions here was that without visible LGBTQ+ role models, a message was being sent to LGBTQ+ doctoral researchers that to progress with your career meant fitting into established institutional and cultural norms:

"I am only aware of one other LGBTQ+ person in my department and it is not something we have ever discussed in the workplace. As such, there is a complete absence of any LGBTQ+ role models for our students, thus perpetuating the notion that to be successful we should blend in."

It has been shown that increased LGBTQ+ visibility through role model and mentoring programs can positively impact on the professional development of LGBTQ+ individuals as well as on their health and wellbeing (Bird, Kuhns, & Garofalo, 2012; Colgan, 2012; McAllister, Ahmedani, Harold, & Cramer, 2009; Renn, 2010; Schneider & Dimito, 2010). When respondents were asked if there were LGBTQ+ role models at their institution who they were able to contact and would feel comfortable speaking with about any issues or experiences pertaining to their sexual orientation/expression and/or your gender identity/expression, equal numbers of respondents (60) said that there were and that there were not. For the majority, though, the response was that they were not sure if there were any, suggesting visibility is a key determinant here. Only 18 respondents confirmed that they had made contact with a person in their institution who they saw as a role model in this way.

CONCLUSION

This study sought to better understand the experience of LGBTQ+ doctoral researchers and to determine whether any reported challenges were unique to this group. In relation to the first of these, while many LGBTQ+ doctoral students felt they were studying in a supportive institution, the study highlighted a diverse range of inclusivity issues as well as direct instances of homophobic and/or transphobic behavior (experienced by just over half of our respondents). For many of the respondents, the challenges they faced were not simply a result of overt or explicit aggression towards them, but rather by a feeling of exclusion from a dominant heteronormative or cis-normative culture within their institution or local research environment. Repeatedly, the study revealed feelings of frustration at having to actively and repeatedly make the decision to challenge such assumptions and to educate others. This was exacerbated for transgendered students by a culture or administrative processes that were reportedly unprepared to accommodate anyone whose gender identity was not the same as written on their birth certificate.

The tension between understandings of the personal and the professional within academic life recurred throughout the responses. For some the dividing line between their sexual orientation ('personal life') and their doctoral studies ('professional life') was clear and they believed their sexual orientation or gender identity was irrelevant to their academic life. However, when respondents did report challenges, feelings of exclusion or outright prejudice this was often a result of a blurring or tension between the personal and the professional that they were not able to control or manage; including issues such as everyday conversations which touched on life outside work and international travel. This was, perhaps, even more keenly felt by the trans- respondents who had faced issues ranging from pronoun use and gendered facilities/systems to direct experiences of transphobia. Clearly delineating between the personal and the professional is a privilege that only some within the academy are able to enact. It is clear that senior staff play an important role in either enabling or challenging cultures of exclusion. The position of the doctoral researcher within the academic hierarchy can make it difficult for those affected to challenge discriminatory behavior and macroaggressions from colleagues, supervisors, and the institution.

For most of our respondents, their sexual orientation or gender identity had little or no impact on their relationship with their supervisor, and a few reported it having a positive influence. For others, however, there still was a concern that revealing their identity or orientation to their supervisor(s) could have a negative consequences on their experience or future career and, as such, found themselves unable to act or speak freely about different aspects of their lives.

The difficulties inherent in being a LGBTQ+ doctoral researcher in an international academic environment was a regular theme. Recurrent were worries of having to present at conferences or conduct field work in areas of the world where homosexuality is illegal or discrimination is perceived as being commonplace.

As far as the second aim of this study – whether any of these challenges are unique to this cohort – is concerned, it must be recognized that few, if any, of these issues are exclusive to doctoral study. However, the position of the PhD student as the most junior member of a department, often at the start of their career and heavily dependent on a supervisor or supervisory team puts the individual in a vulnerable position that can lead to them feeling powerless when excluded by the dominant culture. In that context, with the acknowledgment of the positive experience of many of respondents, it is important to continue to develop an understanding not only of the challenges that face those who identify as LGBTQ+, but also an understanding of what these diverse voices bring to research and the academy.

STRENGTHS AND LIMITATIONS

Given doctoral researchers (and in particular certain subsets of this community) can be considered hard-to-reach populations, it cannot be stated with confidence that the experiences presented here are representative and not experienced to a greater or lesser extent within the wider population. Throughout we have avoided statistical analysis and a focus on trends to instead focus on contrast, diversity and experience. Nevertheless, it needs to be noted that this study focuses solely on UK experiences and those who were willing and able to complete a lengthy online questionnaire. While the use of an anonymous online questionnaire enabled those who may have felt uncomfortable with attending interviews or focus groups to participate, this approach will no doubt have excluded some and also meant it was not possible for the research team to clarify answers or explore them in more depth.

This study, though, provides a deep insight into the experiences of doctoral researchers who identify as LGBTQ+ and is strengthened by the high and diverse response rate. Through an interpretative phenomenological analysis, contextualized within the wider literature, it has been possible not only to identify emergent themes that occurred across the responses, but to also highlight particularities and

moments of polarization, conflict and tension, all of which are important when considering diversity initiatives to support doctoral study.

RECOMMENDATIONS

A number of recommendations can be made as a result of this study. There is certainly a need for a critical examination of the systems and spaces in which doctoral education takes place and the implementation of systems and spaces that are inclusive. There is a need for all those involved in doctoral education (whether students, peers, supervisors, or professional and support staff) to have an understanding of 1) legal obligations pertaining to equality; 2) the diverse experiences of LGBTQ+ researchers and what diversity brings to the research endeavor; and 3) the effect micro-aggressions can have on those that identify as LGBTQ+ and how this type of behavior or act can be better addressed. There is also a particularly strong need to think about the transnational research environments in which doctoral researchers work and how this can impact on networking, career development, and research opportunities (drawing on resources such as Stonewall's (2017) *Safe Travels: Global Mobility for LGBT Staff*). Finally, there is a need for better visibility, better representation, and better mentoring. LGBTQ+ role models can provide guidance and support and show pathways for becoming a successful and international LGBTQ+ researcher. For smaller institutions and disciplines this may be more difficult, so this is a pressing need for the establishment of regional and national networks and mentoring programs to ensure that no matter what or where a person studies there is access to a robust support network.

This study offers a 'campus climate' study (Renn, 2010), providing a much-needed insight into the experiences of doctoral researchers in the UK in 2017. The study also provides an evidence base for future research on the relationship between doctoral education and diversity. Indeed, there is potential scope for future studies to focus specifically on issues of intersectionality, disciplinary differences, health and wellbeing, representation, voice, and agency, as well as productivity, attainment, and career development of LGBTQ+ doctoral researchers. There is also scope for similar studies to focus on other protected characteristics to obtain a fuller understanding of the diverse experiences of doctoral researchers and to determine what could constitute inclusive doctoral education. Indeed, as the demographic of the doctoral researcher population diversifies, it is increasingly important that our approach to doctoral education and the systems and processes that underpin doctoral education are adapted to meet the needs of that diverse population. Approaches, systems and processes that exclude or marginalize particular groups, could indirectly impact on the shape of the research workforce both within and outside of Higher Education. As such, this study is not only timely, but important in terms of diversity of future doctoral populations as well as the jobs these researchers go on to.

REFERENCES

Ahmed, S. (2006). *Queer phenomenology: Orientations, objects, others*. Durham and London: Duke University Press.

Ahmed, S. (2012). *On being included: Racism and diversity in institutional life*. Durham and London: Duke University Press. https://doi.org/10.1215/9780822395324

Badgett. M. V. Lee, Durso, L. E., Kastani, A., & Mallory, C. (2013). *The business impact of LGBT-supportive workplace policies*. The Williams Institute: UCLA School of Law. Retrieved from https://williamsinstitute.law.ucla.edu/research/discrimination/business-impact-of-lgbt-policies-may-2013/

Baker, V. L., & Pifer, M. J. (2011). The role of relationships in the transition from doctoral student to independent scholar. *Studies in Continuing Education, 33*(1), 5-17. https://doi.org/10.1080/0158037X.2010.515569

Bird, J. D. P., Kuhns, L., & Garofalo, R. (2012). The impact of role models on health outcomes for lesbian, gay, bisexual, and transgender youth. *Journal of Adolescent Health, 50*(4), 353-357. https://doi.org/10.1016/j.jadohealth.2011.08.006

Bizzari, J. C. (1995). Women: Role models, mentors, and careers. *Educational Horizons*, *73*(3), 145-152. Retrieved from http://www.jstor.org/stable/42925933

Cech, E. A., & Waidzunas, T. J. (2011). Navigating the heteronormativity of engineering: The experiences of lesbian, gay, and bisexual students. *Engineering Studies*, *3*(1), 1-24. https://doi.org/10.1080/19378629.2010.545065

Cerbone, D. R. (2014). *Understanding phenomenology*. Durham, UK: Acumen Publishing. https://doi.org/10.1017/UPO9781844653737

Chiang, K-H. (Iris). (2003). Learning experiences of doctoral students in UK universities. *International Journal of Sociology and Social Policy*, *23*(1/2), 4-32. https://doi.org/10.1108/01443330310790444

Colgan, F., & McKearney, A. (2012). Visibility and voice in organizations. *Equality, Diversity and Inclusion: An International Journal*, *31*(4), 359-378. https://doi.org/10.1108/02610151211223049

Credit Suisse. (2016). LGBT: The value of diversity. *Environmental, Social, and Governance (ESG) Research*. Retrieved from: https://plus.credit-suisse.com/rpc4/ravDocView?docid=NPGWa1AF-WElY95

Devine, K., & Hunter, K. (2016). Doctoral students' emotional exhaustion and intentions to leave academia. *International Journal of Doctoral Studies, 11*, 35-61. https://doi.org/10.28945/3396

Ellis, S. J. (2007). Community in the 21st century: Issues arising from a study of British lesbians and gay men. *Journal of Gay & Lesbian Psychotherapy*, *11*(1-2), 111-126. https://doi.org/10.1300/J236v11n01_08

Ellis, S. J. (2009). Diversity and inclusivity at university: A survey of the experiences of lesbian, gay, bisexual and trans- (LGBT) students in the UK. *Higher Education*, *57*(6), 723-739. https://doi.org/10.1007/s10734-008-9172-y

Epstein, D., & Johnson, R. (1994). On the straight and the narrow: The heterosexual presumption, homophobias and schools. In D. Epstein (Ed), *Challenging lesbian and gay inequalities in education* (pp. 197-230). Buckingham: Open University Press.

Equality Challenge Unit. (2009). *The experience of lesbian, gay, bisexual and trans staff and students in higher education: Research report 2009*. Retrieved from https://www.ecu.ac.uk/publications/lgbt-staff-and-students-in-he/

Falconer E. & Taylor Y. (2017). Negotiating queer and religious identities in higher education: Queering 'progression' in the 'university experience'. *British Journal of Sociology of Education*, *38*(6), 782-797. https://doi.org/10.1080/01425692.2016.1182008

Formby, E. (2017). How should we 'care' for LGBT+ students within higher education? *Pastoral Care in Education*, *35*(3), 203-220. https://doi.org/10.1080/02643944.2017.1363811

Gates, T. G. (2011). Why employment discrimination matters: Well-being and the queer employee. *Journal of Workplace Rights*, *16*(1), 107-128. https://doi.org/10.2190/WR.16.1.g

Goody, A., & de Vries, J. (2002). Straight talk about queer issues. In A. Goody, J. Herrington, & M. Northcote (Eds.), *Proceedings of the 2002 Annual International Conference of the Higher Education Research and Development Society of Australasia* (pp. 274-281). Perth: Higher Education Research and Development Society of Australasia. Retrieved from http://www.jendevries.com/publications-full/2014/8/3/straight-talk-about-queer-issues

Guasp, A., & Balfour J. (2008). *Peak performance: Gay people and productivity*. Stonewall. Retrieved from https://www.stonewall.org.uk/sites/default/files/Peak_Performance__2008_.pdf

Hopwood, N., & Paulson, J. (2012). Bodies in narratives of doctoral students' learning and experience. *Studies in Higher Education*, *37*(6), 667-681. https://doi.org/10.1080/03075079.2010.537320

Ings, W. (2015). Performing prodigals and dissident acolytes: Supporting queer postgraduates in the visual arts. *Higher Education Research & Development*, *34*(4), 735-749. https://doi.org/10.1080/07294360.2015.1051003

Irwin, L. (2007). Homophobia and heterosexism: Implications for nursing and nursing practice. *Australian Journal of Advanced Nursing*, *25*(1), 70-76. Retrieved from www.ajan.com.au/vol25/vol25.1-10.pdf

Jagessar, V., & Msibi, T. (2015). "It's not that bad": Homophobia in the residences of a university in KwaZulu-Natal, Durban, South Africa. *Agenda*, *29*(1), 63-73. https://doi.org/10.1080/10130950.2015.1022984

Johnson, L., Lee, A., & Green, A. (2000). The PhD and the autonomous self: Gender, rationality and postgraduate pedagogy. *Studies in Higher Education*, *25*(2), 135-147. https://doi.org/10.1080/713696141

Kosciw, J., Palmer, N., & Kull, R. (2015). Reflecting resiliency: Openness about sexual orientation and/or gender identity and its relationship to well-being and educational outcomes for LGBT students. *American Journal of Community Psychology, 55*(1), 167-178. https://doi.org /10.1007/s10464-014-9642-6/

LaSala, M. C., Jenkins, D. A., Wheeler, D. P., & Fredriksen-Goldsen, K. I. (2008). LGBT faculty, research, and researchers: Risks and rewards. *Journal of Gay & Lesbian Social Services*, *20*(3), 253-267. https://doi.org/10.1080/10538720802235351

Lee, A. (2008). How are doctoral students supervised? Concepts of doctoral research supervision. *Studies in Higher Education*, *33*(3), 267-281. https://doi.org/10.1080/03075070802049202

Lee, A. (2012). *Successful research supervision: Advising students doing research*. Taylor and Francis. Kindle Edition. https://doi.org/10.4324/9780203816844

Lloren, A., & Parini, L. (2017). How LGBT-supportive workplace policies shape the experience of lesbian, gay men, and bisexual employees. *Sexuality Research and Social Policy*, *14*(3), 289-299. https://doi.org/10.1007/s13178-016-0253-x

Lovitts, B. E. (2002). *Leaving the Ivory Tower: The causes and consequences of departure from doctoral study*. Lanham, US: Rowman & Littlefield Publishers.

Maritz, J., & Prinsloo, P. (2015). 'Queering' and querying academic identities in postgraduate education. *Higher Education Research & Development*, *34*(4), 695-708. https://doi.org/10.1080/07294360.2015.1051007

McAllister, C. A., Ahmedani, B. K., Harold, R. D., & Cramer, E. P. (2009). Targeted mentoring: Evaluation of a program. *Journal of Social Work Education*, *45*(1), 89-104. https://doi.org/10.5175/JSWE.2009.200700107

McAlpine, L., & Amundsen, C. (2009). Identity and agency: Pleasures and collegiality among the challenges of the doctoral journey. *Studies in Continuing Education*, *31*(2), 109-125. https://doi.org/10.1080/01580370902927378

Mckendry, S., & Lawrence, M. (2017). TransEdu Scotland: Researching the experience of trans-, and gender diverse applicants, students and staff in Scotland's colleges and universities. *TransEdu Research*. Retrieved from https://www.trans.ac.uk/Research/tabid/6347/Default.aspx

Mulé, N. J., Ross, L. E., Deeprose, B., Jackson, B. E., Daley, A., Travers, A., & Moore, D. (2009). Promoting LGBT health and wellbeing through inclusive policy development. *International Journal for Equity in Health, 8*(1), 1-11. https://doi.org/10.1186/1475-9276-8-18

Nadal, K. (2013). *That's so gay! Microaggressions and the lesbian, gay, bisexual, and transgender community*. Washington: American Psychological Association. https://doi.org/10.1037/14093-000

National Union of Students (NUS). (2015). Education beyond the straight and narrow: LGBT students' experience in higher education. *NUS Connect*. Retrieved from https://www.nusconnect.org.uk/resources/education-beyond-the-straight-and-narrow-lgbt-students-experiences-in-higher-education

Neves, J., & Hillman, N. (2017). *2017 student academic experience survey*. Higher Education Policy Institute (HEPI). York, UK: Higher Education Academy. Retrieved from https://www.hepi.ac.uk/2017/06/07/2017-student-academic-experience-survey/

O'Meara, K., Griffin, K. A., Kuvaeva, A., Nyunt, G., & Robinson, T. (2017). Sense of belonging and its contributing factors in graduate education. *International Journal of Doctoral Studies*, *12*, 251-279. https://doi.org/10.28945/3903

Ostrove, J. M., Stewart, A. J., & Curtin, N. L. (2011). Social class and belonging: Implications for graduate students' career aspirations. *The Journal of Higher Education*, *82*(6), 748-774. https://doi.org/10.1080/00221546.2011.11777226

Peltonen, J., Vekkaila, J., Rautio, P., Haverinen, K., & Pyhältö, K. (2017). Doctoral students' social support profiles and their relationship to burnout, drop-out intentions, and time to candidacy. *International Journal of Doctoral Studies*, *12*, 157-173. https://doi.org/10.28945/3792

Poynter, K. J, & Washington, J. (2005). Multiple identities: Creating community on campus for LGBT students. *New Directions for Student Services*. Special Issue: Gender Identity and Sexual Orientation: Research, Policy, and Personal, *2005*(111), 41-47. https://doi.org/10.1002/ss.172

Pyhältö, K., Vekkaila, J., & Keskinen, J. (2015). Fit matters in the supervisory relationship: Doctoral students and supervisors perceptions about the supervisory activities. *Innovations in Education and Teaching International*, *52*(1), 4-16. https://doi.org/10.1080/14703297.2014.981836

Renn, K. A. (2010). LGBT and queer research in higher education: The state and status of the field. *Educational Researcher, 39*(4), 132-141. https://doi.org/10.3102/0013189X10362579

Rogers-Shaw, C., & Carr-Chellman, D. (2018). Developing care and socio-emotional learning in first year doctoral students: Building capacity for success. *International Journal of Doctoral Studies*, *13*, 233-253. https://doi.org/10.28945/4064

Sánchez, N. F., Rankin, S., Callahan, E., Ng, H., Holaday, L., McIntosh, K., Poll-Hunter, N., & Sánchez, J. P. (2015). LGBT trainee and health professional perspectives on academic careers—Facilitators and challenges. *LGBT Health*, *2*(4), 346-356. https://doi.org/10.1089/lgbt.2015.0024

Schneider, M. S., & Dimito, A., (2010). Factors influencing the career and academic choices of lesbian, gay, bisexual, and transgender people. *Journal of Homosexuality*, *57*(10), 1355-1369. https://doi.org/10.1080/00918369.2010.517080

Smith, D. G. (2015). *Diversity's promise for higher education: Making it work*. Baltimore: John Hopkins University Press.

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. London: Sage.

Stonewall. (2017). *Safe travels: Global mobility for LGBT staff*. London: Stonewall. Retrieved from: https://www.stonewall.org.uk/resources/safe-travels-global-mobility-lgbt-staff

Taylor, S. (2018). The research supervisor's bibliography. *Research Supervisor Network*. Lichfield, UK: UK Council for Graduation Education. Retrieved from http://www.ukcge.ac.uk/media/Download.aspx?MediaId=1763

Van Manen, M. (2016). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. London: Routledge. https://doi.org/10.4324/9781315422657

Wakeling, P., & Kyriacou, C. (2010). Widening participation from undergraduate to postgraduate research degrees: A research synthesis. *2009 - 2010 NCCPE-ESRC Research Synthesis*. York: National Coordinating Centre for Public Engagement, and Economic and Social Research Council. Retrieved from https://pure.york.ac.uk/portal/en/projects/2009--2010-nccpeesrc-research-synthesis-14985-widening-participation-from-undergraduate-to-postgraduate-research-degrees-with-paul-wakeling-pi(35970b9e-0d78-46a6-bf7e-01fe9b796c00).html

Watson, J. S. (2001) Making sense of the stories of experience: Methodology for research and teaching. *Journal of Education for Library and Information Science*, *42*(2), 137-148. https://doi.org/10.2307/40324026

Wickens, C. M., & Sandlin, J. A. (2010). Homophobia and heterosexism in a college of education: A culture of fear, a culture of silence. *International Journal of Qualitative Studies in Education*, *23*(6), 651-670. https://doi.org/10.1080/09518390903551035

Wisker, G., Robinson, G., & Shacham, M. (2007). Postgraduate research success: Communities of practice involving cohorts, guardian supervisors and online communities. *Innovations in Education and Teaching International*, *44*(3), 301-320. https://doi.org/10.1080/14703290701486720

Wisker, G. (2012). *The good supervisor: Supervising postgraduate and undergraduate research for doctoral theses and dissertations* (2nd ed.). Palgrave Macmillan. Kindle Edition.

APPENDIX. QUESTIONNAIRE STRUCTURE

1. Please describe your gender identity and/or expression.
2. Please describe your sexual orientation and/or expression.
3. What other factors do you consider important to your identity (this may include ethnicity, nationality, sex, religion, disability, familial roles and responsibilities, subculture identities, group memberships, and professional roles, etc.)?
4. How old are you?
5. At which institution are you registered for your doctoral degree?
6. Please describe your degree and mode of study (e.g. type of doctorate, subject area, part time/full time/distance etc.)?
7. Do you have one doctoral supervisor, first and second supervisors, two joint supervisors, a larger supervisory team, or other?
   a. If other, please specify
8. Is your supervisory team aware of your sexual orientation/expression and/or your gender identity/expression?
   a. If "not all" or "not sure" - please explain:
   b. If "yes" - how did you raise it with them?
   c. If "no" - have you felt unable to make them aware?
      i. If you have felt unable to make them aware, why do you think this is?
9. Do you consider your primary supervisor(s) to be LGBTQ+ friendly?
10. Are there any issues which you think LGBTQ+ students might encounter during doctoral study?
    a. If so, do you think your primary supervisor(s) is aware of these issues?
11. Do you think it is important and/or relevant for your supervisory team to be aware of your sexual orientation/expression and/or your gender identity/expression?
12. Do you feel your sexual orientation/expression and/or your gender identity/expression affects your relationship with your supervisor/supervisory team?
    a. Please explain:
13. Are any of the following aware of your sexual orientation/expression and/or gender identity/expression?
    a. Academic faculty (other than supervisors)
    b. Other doctoral researchers
    c. (If applicable) undergraduates you teach
    d. Other institutional staff
    e. Colleagues outside of the University
    f. Friends
    g. Family
14. To what extent do you agree that your sexual orientation/expression and/or your gender identity/expression status should be recognized and understood by colleagues?
15. Are there any other situations at your academic institution [other than with your supervisory team] in which you have felt uncomfortable or felt that you had to conceal your sexual orientation/expression and/or your gender identity/expression?
    a. If "yes" - with whom and why?
16. Are there any other situations outside of your academic institution [but within academia] in which you have felt uncomfortable or felt that you had to conceal your sexual orientation/expression and/or your gender identity/expression?
    a. If "yes" - with whom and why?
17. Thinking specifically about your sexual orientation/expression and/or gender identity/expression, do you feel included in all aspects university/college life?
    a. If "no" - please explain:
18. Have you ever experienced any of the following within your institution because of your sexual orientation/expression and/or your gender identity/expression?

      a.   Negative comments
      b.   Verbal abuse
      c.   Threatening behavior
      d.   Physical abuse
      e.   Stereotyping
      f.   Homophobic Jokes
      g.   Other marginalizing behaviours
      h.   and/or microaggressions
      i.   None of the above
            i.   If other, please specify

19. Are you aware of other LGBTQ+ researchers at your university/college who have suffered from homophobic/transphobic discrimination or abuse within the institution?

20. Do you feel there are any opportunities open to researchers that you would be/have been reluctant to take up because of concerns about discrimination connected to your sexual orientation/expression and/or your gender identity/expression?
    a.   If "yes" - please explain:

21. Do you feel your sexual orientation/expression and/or your gender identity/expression will have an effect on your future career?
    a.   Please explain:

22. To what extent would you agree that the following offer an inclusive environment for LGBTQ+ researchers?
    a.   Your department
    b.   Your institution
    c.   (Where applicable) Your Doctoral Training Centre or equivalent?
        i.   Comments

23. Are you aware of any support networks appropriate for LGBTQ+ Doctoral Research Students at your institution?
    a.   If "yes" - what are they?
    b.   If "yes" - have you accessed these networks?
        i.   If "some" - which ones?
        ii.   If "no" - why not?

24. Do doctoral research students at your institution have access to other institutional support services?

25. Have you ever felt unwilling to use your institution's support services because of your sexual orientation/expression and/or your gender identity/expression?
    a.   If "yes" - please explain:

26. Does your institution have a specific a specific policy of non-discrimination towards LGBTQ+ staff and students

27. Are there LGBTQ+ role models at your institution that you are able to contact and that you would feel comfortable speaking with about any issues or experiences you have pertaining to your sexual orientation/expression and/or your gender identity/expression?
    a.   If "yes" - have you made contact with them?

28. What, if anything, would you like your institution to do to improve the experience of LGBTQ+ doctoral research students?
    a.   What would you like them to stop doing?
    b.   What would you like them to start doing?
    c.   What would you like them to continue doing?

29. What, if anything, would you like your institution to do to improve the career development of LGBTQ+ doctoral research students?
    a.   What would like them to stop doing?
    b.   What would like them to start doing?
    c.   What would like them to continue doing?

30. To what extent is your sexual orientation/expression and/or your gender identity/expression an important or integral part of your personal/social identity?
31. To what extent is your sexual orientation/expression and/or your gender identity/expression an important or integral part of your professional identity?
32. To what extent do you think your identity as a doctoral researcher and/or research practice is informed or affected by your sexual orientation/expression and/or your gender identity/expression?
33. As a doctoral researcher, to what extent do you feel you are your authentic self? Where 0 = Not at all and 10 = Completely.
34. Have you any other comments or issues you would like to discuss that have not been covered in this survey?

BIOGRAPHIES

Ross English, PhD, is Manager of the Doctoral College at the University of Brighton, UK, which is responsible for all aspects of postgraduate research degrees. He was previously University Lead for Doctoral Student Development at King's College London and has worked for Vitae, the UK national researcher development organization.

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