

Improving the mental health outcomes of Nottingham's LGBT populations: a rapid evidence assessment

Authors:

**Joanna Semlyen with Katherine Johnson,
Rebecca Barnes, Clare Gunby and Tammy
Ayres**

December 2018



University of Brighton

Centre for Transforming
Sexuality and Gender

1. Table of Contents

1. TABLE OF CONTENTS.....	2
2. EXECUTIVE SUMMARY	4
3. AIMS	4
4. INTRODUCTION.....	5
4.1 IDENTITY CATEGORIES AND THE TERMINOLOGY USED IN THIS REPORT	5
4.2 PREVALENCE OF LGBT PEOPLE IN THE UK POPULATION	6
4.3 PREVALENCE OF LGBT PEOPLE IN THE NOTTINGHAM POPULATION	7
5. METHOD.....	7
5.1 INCLUSION/EXCLUSION CRITERIA	7
5.2 DEFINITIONS OF SAMPLING METHODS AND STRENGTH OF EVIDENCE IN LGBT RESEARCH.....	8
6. FINDINGS.....	9
6.1 LGBT MENTAL HEALTH DISPARITIES	9
6.1.1 LGB MENTAL HEALTH – ASSESSING THE EVIDENCE.....	9
6.1.2 MENTAL HEALTH DISPARITIES FOR LGB PEOPLE	10
6.1.3 MENTAL HEALTH DISPARITIES FOR TRANS PEOPLE.....	11
6.1.4 GENDER IDENTITY SERVICES AND MENTAL HEALTH	12
6.2 MENTAL HEALTH SERVICE USE: ACCESS AND EXPERIENCE.....	12
6.2.1 MENTAL HEALTH SERVICE EXPERIENCE	12
6.2.2 EVIDENCE FROM THE NOTTINGHAM CONTEXT	13
6.2.3 BARRIERS TO SEEKING CARE FOR LGBT PEOPLE.....	14
6.3 RISK AND PROTECTIVE FACTORS FOR MENTAL HEALTH AMONGST LGBT PEOPLE.....	15
6.3.1 RISK FACTORS TO LGBT PEOPLE’S MENTAL HEALTH	15
6.3.2 PROTECTIVE FACTORS FOR LGBT PEOPLE’S MENTAL HEALTH	16
6.4 EVIDENCE OF EFFECTIVE MENTAL HEALTH INTERVENTIONS FOR LGBT PEOPLE	17
6.4.1 PSYCHOLOGICAL INTERVENTIONS.....	17
6.4.2 SCHOOL-BASED INTERVENTIONS	17
6.4.3 LGBT AFFIRMATIVE THERAPY.....	18
6.4.4 LGBT-SPECIFIC MENTAL HEALTH SERVICES	18
6.4.5 COMMUNITY-BASED SERVICES	19
6.5 ALTERNATIVE MODELS OF MENTAL HEALTH SERVICE DELIVERY TO LGBT PEOPLE	19
6.5.1 THE POTENTIAL FOR ONLINE SUPPORT SERVICES.....	19
6.5.2 THE POTENTIAL OF LGBT THIRD-SECTOR PROVISION	20
TABLE 1: EXAMPLES OF UK LGBT-LED SERVICES.....	20

7. KEY GAPS IN THE EVIDENCE AND DIRECTIONS FOR FUTURE RESEARCH	21
REFERENCES.....	23
APPENDIX A: SEARCH STRATEGY	32
APPENDIX B: TABLE OF PSYCHOLOGICAL INTERVENTIONS FOR LGBT PEOPLE.....	33

2. Executive summary

A rapid evidence assessment reviewed available literature on lesbian, gay, bisexual and transgender (LGBT) mental health in the United Kingdom. An initial search generated 1190 articles and reports, which were subsequently reduced to 40 studies published within the last 10 years. Research consistently shows that LGBT people experience poorer mental health than the rest of the population. The importance of providing services to address these mental health disparities cannot be overstated, but there is a need for greater understanding of how these services can be delivered in a way that is both sensitive to and appropriate for LGBT populations. This review identified examples of good practice in service delivery that offer LGBT specific interventions and provide LGBT support and advice. The report identified significant gaps in evidence about existing service provision nationally and locally, and gaps in knowledge about what quality interventions might be delivered for LGBT people in a UK setting. Further research is also needed to understand the specific issues for trans and non-binary people's mental health and the development of culturally appropriate models of care for LGBT people in general.

3. Aims

The rapid evidence assessment aimed to gather and synthesise existing evidence to inform the commissioning of primary care and community mental health services to improve the mental health outcomes of LGBT people.

The rapid evidence assessment addresses four distinct areas:

1. Rates, predictors of and protective factors for mental health outcomes for LGBT people in the UK.
2. Evidence of existing models of health service delivery (primary care, community health) that have shown to be effective in supporting LGBT mental health/reducing mental health inequalities (prevention, early diagnosis, self-care).
3. Evidence of effective mental health interventions for LGBT people.
4. Evidence of models of 'good practice' for reducing barriers to access, developing cultural competence, improving early diagnosis, supporting self-care.

4. Introduction

LGBT people continue to face significant threat and discrimination. They manifest greater prevalence of poor mental health, health risk behaviours and psychological distress, while structural inequalities mean that psychological threat and minority stress are common experiences for LGBT people (Meyer 2003). There is a compelling international evidence base, and an emerging one from the UK, for mental health disparities within LGBT populations, but limited evidence on best practice in treatment. This rapid evidence assessment provides a summary of existing research on mental health outcomes for LGBT people, a review of models of mental health care and evidence of effective interventions for LGBT people, a summary of examples of good practice and a review of knowledge gaps and priorities for future research.

4.1 Identity categories and the terminology used in this report

LGBT is an acronym that describes the lesbian, gay, bisexual and transgender population(s). Often this acronym can be written in the variant style *LGBTQ* with the addition of the letter Q for queer-identified, or *LGBT+* where + indicates the inclusion of other diverse gender and sexual identities. Q is sometimes also used to denote *questioning*, especially in studies of young people. In some epidemiological studies the term *LGBO* is used where O refers to a category 'other' than LGB or heterosexual. The term *LGB* refers to lesbian, gay or bisexual identified individuals and is used in studies that focus on sexuality, rather than gender identity, but the intersection with gender remains important to distinguish between gay men and gay women, bisexual men and bisexual women. It is worth noting that research about LGB identities may also include trans-identified people as some LGB people also identify as trans. Transgender, now often referred to as *trans*, is a broad term for a diverse range of gender identities. These might include transsexual, genderqueer, non-binary, gender-variant, third sex, androgynous, drag king/queen, transvestite, cross-dresser, and/or people who are undergoing, or have undergone, hormone treatment and/or surgery to modify their body to fit with their gender identity (Lenihan, Kainth et al. 2015). Although LGB can be used to refer to lesbians, gay men and bisexual men and women, some LGB people may also identify as cisgender, where cisgender refers to having a gender identity that aligns with the one assigned to them at birth.

For the purposes of this report, when reporting on research findings from existing studies, the terminology used by the researchers will be adopted to ensure validity in the types of claims that are being made (e.g. not ascribing findings to trans people if they are not indicated within the research findings). For the overarching narrative and report recommendations the acronym LGBT will be used, whilst recognising that individuals who identify with this acronym might have more wide-ranging gender and sexual identities.

4.2 Prevalence of LGBT people in the UK population

There is no accurate measure of the number of LGBT people living in the UK, thus any data presented on prevalence is based on estimates. It is difficult to be confident in the accuracy of these estimates and there are a number of issues to be aware of including potential impact on LGBT wellbeing when trying to assess prevalence. Attempts to capture prevalence involve LGBT people self-identifying and may lead to fears about being 'outed' or anxiety regarding possible poor treatment, care or even harm (Aspinall 2009). For some trans people who identify as male or female (rather than non-binary), it can feel unnecessarily intrusive to be defined in terms of their previous gender history.

Recent modelled estimates suggest that LGB people form 2.5–11.5% of the UK population (Geary, Tanton et al. 2018) depending on how the question is asked (e.g. attraction, behaviour, identity). In representative national health surveys, approximately 3% select a sexual orientation identity other than heterosexual (Semlyen, King et al. 2016). In the 2009/10 English General Practice Patient Survey (GPPS) (Ipsos-MORI 2012) with 2,169,718 respondents, approximately 2.2% responded as gay or bisexual male and 1.1% as lesbian or bisexual. Somewhat smaller percentages were found by the Office for National Statistics' analysis of the Integrated Household Survey where of those who replied, 1% identified as lesbian or gay and 0.5% as bisexual (Joloza, Evans et al. 2010). Figures can be higher when sexual identity is measured by behaviour or attraction (Johnson, Mercer et al. 2001). For example, an analysis of the National Survey of Sexual Attitudes and Lifestyles (Natsal-3), found 2.6% responded as 'men who have sex with men' (MSM) (Mercer, Prah et al. 2016).

A report from the Equalities Commission found that 5.7% of their online survey respondents identified as lesbian, gay or bisexual (LGB) (Ellison and Gunstone 2009). This figure may reflect the open sampling mechanisms used in the study (anonymous and online may reach a wider population) but may equally reflect increased confidence in self-identifying in an anonymous online survey method.

There is scant data about the prevalence of the UK trans population to be drawn from national surveys, but the UK Government estimate that there are approximately 200,000-500,000 trans people currently living in the UK (Government Equalities Office 2018a).

The recent introduction of the NHS Sexual Orientation Monitoring Standard (NHS England Equality and Health Inequalities Unit 2017) may lead to improvements in the accuracy of prevalence rates and understanding of associated health needs of LGB people, hopefully promoting increased familiarity and comfort with asking and answering questions about sexual orientation in health settings, although this will depend on how it is administered. In contrast, there are a number of specific sensitivities in recording a person's status as trans when it is not medically necessary to the health situation.

4.3 Prevalence of LGBT people in the Nottingham population

A recent modelled estimate of the LGBT population by Public Health England suggests that 1.97% of East Midlands population is LGBT (Kampen, Lee et al. 2017). Nottingham is a city in the East Midlands with a registeredⁱ population in April 2018 of 379,277. Therefore, the number of LGBT people accessing services commissioned by Nottingham CCG is likely to be somewhere between 7500 and 43,616 depending on how the question is asked (Geary et al 2018). Clearly, this very wide range is problematic when it comes to planning, budgeting for and commissioning health services. Therefore, the improved collection, consistency, accuracy and completion of sexual orientation and gender identity demographic data is an urgent priority.

5. Method

Using a search strategy based around terms for mental health and LGBT and the UK (See Appendix A), a comprehensive and systematic search was carried out in a range of databases (Scopus, AMED - The Allied and Complementary Medicine Database, Academic Search Complete, CINAHL Complete, MEDLINE Complete, PsycARTICLES, PsycINFO, ERIC). At the initial stage both peer-reviewed and greyⁱⁱ literature were included, reflecting the large proportion of grey literature that forms the evidence for LGBT mental health, and the limited evidence available in peer-reviewed journals. This search strategy generated 1190 potential publications. By removing papers not relevant at abstract and title search, removing duplicates and papers published prior to 2008, these were reduced to 40 studies: 12 qualitative, 27 quantitative and 1 mixed methods.

5.1 Inclusion/exclusion criteria

The review scope included lesbian, gay, bisexual and trans (LGBT) populations broadly defined so as to capture any available data on individuals who identify with non-binary gender identities and other non-heterosexual identities. Where possible, data on intersectionality within LGBT populations was included with particular reference to age and race and ethnicity. Some research discussed in the findings may include people who are trans and identify as heterosexual. Research with intersex people was not actively included but some intersex individuals may inform some of the datasets that capture a breadth of sexual and gender diversity.

ⁱ The number of people registered with a General Practice in Nottingham City Clinical Commissioning Group.

ⁱⁱ Grey literature refers to research that has been published in non-commercial and non-peer reviewed form and can include government and non-government reports, policy documents and conference proceedings. It can also include unpublished research such as doctoral and Masters theses.

Research evidence on mental health needs and mental health disparities has been drawn from the UK population. Where there are key gaps this evidence has been supplemented with international evidence. Key reports from grey literature sources that offer additional insights beyond the included peer-reviewed evidence have been cited. The findings also reference evidence on substance misuse from key studies published in the last ten years, although this was not systematically searched for.

Evidence is drawn from the last 10 years reflecting a decade of rapid legal, structural and social change. This captures the emerging growth in available evidence and ensures a contemporary focus to the review. It also marks a ten year point since the first systematic review of lesbian, gay, bisexual mental health was published (King, Semlyen et al. 2008).

For completeness, leading publications are highlighted that offer their own comprehensive evidence reviews published in the last 10 years, including one by the Equality and Human Rights Commission (EHRC) in 2008 (Mitchell, Howarth et al. 2009) and the more recent review by the National Institute of Economic and Social Research (NIESR) (Hudson-Sharp and Metcalf, 2016). In addition, the Women and Equalities Committee (2016) published a report on trans equality and the Government responded in the same year (Government Equalities Office 2016).

Although based on methodologically self-selected samples, a number of UK survey studies are given specific mention (Stonewall 2008, Guasp 2012, Youth Chances 2014, McDermott and Roen 2016), in addition to the LGBT Public Health Outcomes Framework document (Williams, Varney et al. 2014).

5.2 Definitions of sampling methods and strength of evidence in LGBT research

The following definitions are intended to assist with the reader's understanding of the research evidence that follows:

- **Population surveys** or **representative data** use **random sampling** and provide reliable, accurate and valid estimates where findings are generalisable to the population.
- **Cross-sectional surveys** are surveys of a particular population at one time point. They enable relationships between data to be concluded but cannot provide detail on causation nor on changes over time.
- **Clinical samples** include those in touch with a particular service (e.g. Gender Identity service or Mental Health service) and are not representative of that population as a whole.
- **Matched samples** is a technique to increase similarity between the two samples being compared (a test sample and a control sample) and can go help to increase the reliability of the findings by reducing the influence of confounding variables.

- Other sampling methods such as **self-selecting questionnaires** are subject to bias. For example, it is easy to over-sample those able to take part, or interested in taking part, which means that findings have to be interpreted cautiously. Examples are: **convenience or opportunity sampling** where study samples that have been selected in settings or events (e.g. clubs, pubs or at LGBT Pride) or are **self-selected samples**, for instance responding to online surveys about mental health can attract a higher number of respondents with mental health issues than there might be in a representative sample.

6. Findings

6.1 LGBT mental health disparities

This section is divided into LGB and trans mental health, reflecting the nature of the evidence available. However, it is worth noting that studies that include data on LGB mental health may include trans people and studies on trans mental health may include LGB individuals.

6.1.1 LGB mental health – assessing the evidence

The first systematic review of LGB mental health in the UK assessed all existing evidence that reported sexual orientation. Using a meta-analysis of 25 studies identified as including a comparison group and using representative data, it demonstrated higher risk of clinical mental health concerns, suicidality and substance misuse amongst LGB people (King, Semlyen et al. 2008). Since 2008 there have been a number of studies further demonstrating mental health disparities in the UK. These all showed poorer mental health in LGB people than in heterosexual people.

From the evidence review, the majority of studies with data on LGB mental health in a UK setting used convenience/opportunity samples (Colledge, Hickson et al. 2015, Hickson, Davey et al. 2017, Rimes, Shivakumar et al. 2018), clinical samples (Rimes, Broadbent et al. 2018) or samples specific to a geographic region, [*Avon*, (Pesola, Shelton et al. 2014, Jones, Robinson et al. 2017, Calzo, Austin et al. 2018), *West of Scotland* (Young, Riordan et al. 2011), *Northern Ireland* (McNamee, Lloyd et al. 2008, Schubotz and O'Hara 2011) and *London* (Woodhead, Gazard et al. 2016)]. As these are drawn from differing contexts they offer limited generalisability beyond the survey sample.

Small numbers of LGB respondents in national surveys result in low statistical power, rendering comparison difficult (Semlyen 2017). The papers included have used several different ways to increase sample size to allow for comparative analyses, either by grouping the LGB category into 'non-heterosexual' thus creating a binary variable (LGBO) and losing within-LGB specificity (Chakraborty, McManus et al. 2011,

Woodhead, Gazard et al. 2016), or by using sexual behaviour as the sexual orientation variable such as that measured by the National Survey of Sexual Attitudes and Lifestyles (Natsal) (Mercer, Prah et al. 2016). A larger sample size allows comparisons between lesbian, gay and bisexual participants and heterosexual counterparts. These studies are important as they provide sound evidence of significant disparities between LGB people's mental health, in comparison to heterosexual men and women of similar age and background.

6.1.2 Mental health disparities for LGB people

Evidence drawn from studies with a comparative group, shows poorer mental health amongst LGB people (McNamee, Lloyd et al. 2008, Chakraborty, McManus et al. 2011, Semlyen, King et al. 2016, Woodhead, Gazard et al. 2016) and higher rates of low well-being (Semlyen, King et al. 2016, Woodhead, Gazard et al. 2016), substance misuse (Hagger-Johnson, Taibjee et al. 2013, Pesola, Shelton et al. 2014, Mercer, Prah et al. 2016, Woodhead, Gazard et al. 2016), eating disorders (Calzo, Austin et al. 2018), anxiety (Jones, Robinson et al. 2017) and self-reported longstanding psychological or emotional problems (Elliott, Kanouse et al. 2015) than heterosexual people. One Scottish longitudinal study using a schools-based sample demonstrated a link between same-sex sexual behaviour and self-harm in young people (Young, Riordan et al. 2011).

In a recent study using pooled data from 12 UK national health surveys with a sample size of 94,818, Semlyen et al (2016) provide analysis of a population-based, representative sample of lesbian, gay, bisexual and other-identified participants with 'common mental disorder'. Common mental disorder (CMD) is defined by the National Institute for Health and Clinical Excellence (2011) and is a technical classification for six common mental health diagnoses. These include Mixed Anxiety and Depression, Generalised Anxiety Disorder, Depression, Phobias, Obsessive Compulsive Disorder, and Panic Disorder. CMD was found to be twice as high for lesbian, bisexual, gay and 'other'-identified respondents in a representative sample, and even higher rates were found amongst both younger people and those aged 55 and over (Semlyen, King et al. 2016).

Evidence also shows increased alcohol misuse amongst LGB people (Hagger-Johnson, Taibjee et al. 2013, Mercer, Prah et al. 2016). From a representative sample, young LGB people (age 18/19) were twice as likely to use alcohol hazardously than heterosexuals (Hagger-Johnson, Taibjee et al. 2013). Stonewall's convenience sample survey of 1,050 heterosexual and 1,036 lesbian, gay and bisexual people aged over 55 found older LGB people are more likely to drink alcohol than heterosexual respondents. Nearly a quarter of gay and bisexual participants reported drinking alcohol every day (23%) compared to 14% of heterosexual respondents (Guasp 2010).

Evidence also shows that smoking is higher amongst LGB people (Hagger-Johnson, Taibjee et al. 2013, Shahab, Brown et al. 2017) than amongst heterosexual people. These findings are demonstrated across the lifespan. In the UK, younger lesbians and

gay men are more likely to smoke than heterosexual youth (aged 18/19) (Hagger-Johnson, Taibjee et al. 2013) and older LGB people smoke more than older heterosexual survey respondents (Guasp 2010). There is also extensive international evidence of smoking disparities across the lifespan (Gamarel, Kahler et al. 2016, Gamarel, Mereish et al. 2016, Johnson, Holder-Hayes et al. 2016, Jannat-Khah, Dill et al. 2017). Further, in their study of men who have sex with men, Mercer, Prah et al. (2016) found that respondents were 3.5 times as likely as the men who have sex exclusively with women to report recreational drug use in the year previous to the study.

There is very little research looking directly at bisexual mental health (Barker 2015), but it is worth considering the mental health disparities for bisexual men and women within LGB populations. From a self-selected sample of lesbian and bisexual women, Colledge, Hickson et al. (2015) found that bisexual women reported poorer mental health than lesbian respondents. A recent representative population study has found that levels of poorer mental health are higher for bisexual men and women (Semlyen, King et al. 2016). Pompili, Lester et al. (2014) conducted a systematic review specifically to examine the risk of suicidal behavior among bisexual people; they concluded that bisexual people had an increased risk for suicide attempts relative to both heterosexual and gay and lesbian people.

6.1.3 Mental health disparities for trans people

There has been a dearth of data on trans mental health and although there has been a very recent increase of research in this area, no population studies exist and no nationally representative health surveys collect gender identity beyond binary female/male categories.

Studies found during this evidence review demonstrate high rates of mental health issues in trans and non-binary populations; however, most studies use clinical samples drawn from those attending gender identity services (GIS) (Claes, Bouman et al. 2015, Arcelus, Claes et al. 2016, Jones, Haycraft et al. 2018, Thorne, Witcomb et al. 2018), some with a matched control design (Davey, Bouman et al. 2014, Witcomb, Bouman et al. 2015, Bouman, Davey et al. 2016, Davey, Arcelus et al. 2016, Bouman, Claes et al. 2017, Witcomb, Bouman et al. 2018). Some other studies have used convenience or opportunity samples (McDermott, Hughes et al. 2017, Rimes, Goodship et al. 2017, Timmins, Rimes et al. 2017).

Research using clinical samples with matched controls demonstrate higher levels of self-harm (Davey, Arcelus et al. 2016), eating disorders (Witcomb, Bouman et al. 2015) and depression and anxiety (Bouman, Claes et al. 2017, Witcomb, Bouman et al. 2018) in the trans respondents than the matched controls. From the recent UK study Youth Chances which used a self-selected convenience sample of 7126 16-25 year olds, it was found that trans and non-binary youth reported poorer mental health than cisgender respondents (Rimes, Goodship et al. 2017). Studies looking at non-binary identity show higher rates of depression and anxiety to those trans

people who identify with binary (male/female) gender categories (Thorne, Witcomb et al. 2018).

6.1.4 Gender Identity Services and mental health

Long waiting times in first referral to Gender Identity Clinics adversely affect the mental health of trans people (Hudson-Sharp and Metcalf 2016). Using a matched control group of trans people currently accessing gender identity services, Witcomb, Bouman et al. (2018) found a four-fold increase of depression was seen in a trans clinical sample waiting for Gender Identity Services (GIS). Suicidality (ideation and attempts) has been shown to be particularly high in trans people (McNeil, Bailey et al. 2012) and can be reduced by timely access to gender identity services (for those seeking treatment) (Bailey, Ellis et al. 2014). However, longitudinal studies are needed to confirm the benefit to mental health over the longer-term.

Focusing on the local area, figures for difficulties in accessing GIS in the preceding 12 months in the East Midlands are comparable to the national figures (68%) (Government Equalities Office 2018). Ratings for the services, once accessed are higher for the East Midlands (63%) than the national average (53%). Of 2519 children referred to the Gender Identity Development Service (GIDS) in 2017/18, 153 were referred from the East Midlands (Gender Identity Development Service 2018).

6.2 Mental health service use: access and experience

Evidence shows that LGB people seek to and/or access mental health services more frequently than heterosexuals (King, Semlyen et al. 2007, Chakraborty, McManus et al. 2011). Data collected in 2007 from a representative survey found that people identifying as non-heterosexual were 1.5 times as likely to seek mental health care from their GP than heterosexuals (Chakraborty, McManus et al. 2011). From the review evidence we know that men who have sex with men reported higher treatment use for depression (Mercer, Prah et al. 2016) and that LGB people have poorer mental health treatment outcomes (Rimes, Broadbent et al. 2018)

6.2.1 Mental health service experience

Little is known about engagement with mental health services amongst LGBT people as most studies omit data on sexual orientation or gender identity. Typically, they fail to record it in the first place (Heck, Mirabito et al. 2017). However, community samples and qualitative research tells us that LGBT people often are not successful in getting the help they need (Guasp and Taylor 2012, Rivers, Gonzalez et al. 2018). Some report lack of LGB sensitivity in service delivery (McNair and Bush 2016) and for those who do access treatment, many report low satisfaction with treatment (Guasp and Taylor 2012).

Poor mental health service experience was more commonly reported by the LGB respondents in the 2009/10 General Practice Patient Survey (Elliott, Kanouse et al. 2015) and in the Adult Psychiatric Morbidity Survey (Chakraborty, McManus et al. 2011). Qualitative data shows us that LGBT people's negative experiences are widely experienced and deeply felt (McDermott, Roen et al. 2008, Scourfield, Roen et al. 2008, Ellis, Bailey et al. 2015, Applegarth and Nuttall 2016, Rivers, Gonzalez et al. 2018). Study participants report homophobia and transphobia, fears of disclosing sexual or gender identity to health care professionals (Applegarth and Nuttall 2016), and worries about the relationship between identity disclosure and service quality (Richards 2010, Ussher, Baker et al. 2016). Others report stereotyping and heteronormative assumptions by staff (Rivers, Gonzalez et al. 2018). Regarding their experiences of mental health services, qualitative research found that for trans people therapy "remains a fearful encounter, often associated with medical intervention" (Applegarth and Nuttall 2016 p1).

The recent UK Government LGBT survey has provided a much larger data set and offers useful new insights. Mental health services were accessed by 24% of the 108,000 respondents (Government Equalities Office 2018). Whilst not offering comparative data, and reflecting a self-selecting sample, this is a large proportion of survey respondents. A further 8% made unsuccessful attempts to access services. Almost three quarters of these found access difficult, with half reporting that they had to wait too long. This survey also showed that treatment for mental health conditions is accessed more frequently by people who identify with sexual orientations that are less common (such as pansexual-identified people) and that pansexual and queer identified people found accessing mental health services more difficult, in particular experiencing a long waiting time (Government Equalities Office 2018). In addition, trans non-heterosexual respondents found accessing mental health services more difficult than trans heterosexual respondents (Government Equalities Office 2018).

Notably, the Government LGBT survey also found more positive ratings of mental health services, once accessed, with 14% of those who accessed mental health services in the previous 12 months rating them as 'completely positive' and a further 43% as 'mainly positive'. However, approximately one in five reported completely or mainly negative experiences, with this proportion increasing for trans people of all sexual orientations and bisexual, pansexual and queer women (Government Equalities Office 2018).

6.2.2 Evidence from the Nottingham context

In 2015, a report by the University of Nottingham was unable to demonstrate Improving Access to Psychological Therapies (IAPT) service use by sexuality of service user (Murphy and Godbehere 2015). The recent IAPT data from Nottingham City Health Equity Audit demonstrates that even when sexual orientation identity data is included in demographic detail, it is not consistently or systematically collected by providers (Johns 2017). A review of current primary care and community mental health services currently commissioned by Nottingham City Clinical Commissioning

Group found no mention of LGBT in any of the listed resources' websites or literature. Mainstream services that are offered to LGB people in the UK with data available on sexual orientation and outcome from intervention are available in the IAPT service. A recent analysis of available data on IAPT use by LGB people in London found poorer recovery rates than for heterosexual people (Rimes, Broadbent et al. 2018).

6.2.3 Barriers to seeking care for LGBT people

Barriers to accessing health care exacerbate levels of mental health needs (King, Semlyen et al. 2007). LGBT people may delay or avoid seeking help for depression and anxiety or substance misuse, leading to possible increased risk of further and more severe mental health problems (King, Semlyen et al. 2007). Research shows that health care professionals have very limited knowledge about LGBT health (Kitts 2010, Obedin-Maliver, Goldsmith et al. 2011, Guasp and Taylor 2012). LGBT people are not often asked about their sexuality or gender identity resulting in a lack of appropriate treatment and referral (Kitts 2010). Non-disclosure may be because of previous poor experience, or a fear of mistreatment. Evidence shows non-disclosure is higher in Black, Asian and Minority Ethnic LGBT people (Petroll and Mosack 2011). It is likely that inappropriate language and lack of understanding about sensitive care could have a deleterious effect. Creating a safe environment for disclosure and gaining appropriate support based on that disclosure can lead to improved doctor-patient communication and connection and treatment satisfaction (Corrigan and Matthews 2003).

A study in Ireland showed that LGBT people prefer not to disclose to health care professionals (McCann and Sharek 2014). Similarly, Ellis, Bailey et al. (2015) found that trans people do not disclose mental ill-health for fear it will prevent them accessing Gender Identity Services. However, disclosure is important because barriers to disclosure link with poorer mental health (Cochran and Mays 1988, Austin 2013, Durso and Meyer 2013, Cahill and Makadon 2014, Seelman, Colón-Díaz et al. 2017) and being 'out' is linked to reduced anxiety and increased use of primary health care services by LGB people (Whitehead, Shaver et al. 2016).

In a recent qualitative study that examined equity of access to psychological therapies in Nottingham, some LGBT participants reported that they were fearful about being identified within IAPT services and so did not self-refer (Murphy and Godbehere 2015).

The participants in Richards' (2010) study in Leeds felt similarly:

"If it's sort of like an anonymous part on a survey where it's just saying, you know, 'what's your sexuality?', you tick, I don't have a problem with monitoring purposes. But again it, it comes down to if somebody's gonna know that and interact with you and the level of risk that you feel about saying something about it." (Female participant aged 25-34)

Other minority stress mechanisms involving negative experiences of 'coming out' and homophobic bullying have been associated with increased odds of suicidal thoughts and attempts (Nodin, Peel et al. 2015). Finally, evidence suggests that for some LGBT people this results in them simply not engaging with mainstream services. For example, a quarter of the respondents in the Queer Futures youth survey had not sought help for their self-harm behaviour/suicidality (McDermott, Hughes et al. 2016). Knowledge of others' poor experiences and fear of discrimination can act as barriers to help-seeking for LGBT people. This is further evidenced by Stonewall's (2014) survey of healthcare experiences, where 18% of LGBT respondents reported anticipating negative experiences in advance of seeking help from mental health services.

Although no comparative studies about mental health services experience for LGBT and cisgender, heterosexual people exist, we know from studies looking at cancer care experience that LGB inequality is evident (Hulbert-Williams, Plumpton et al. 2017), and that lesbians were less likely to have seen a GP in the 3 months prior to the study (Urwin and Whittaker 2016). We know that under-utilisation of primary care services is linked to poorer mental health and this has been shown to be the case for lesbian and bisexual women (Whitehead, Shaver et al. 2016) and in the trans population (Seelman, Colón-Díaz et al. 2017).

6.3 Risk and protective factors for mental health amongst LGBT people

6.3.1 Risk factors to LGBT people's mental health

Evidence for the causal pathways to poorer mental health is lacking but links between mental health and health behaviour (Pesola, Shelton et al. 2014) and evidence of the impact of discrimination on poorer mental health (Chakraborty, McManus et al. 2011, Woodhead, Gazard et al. 2016) indicate that likely links lie with social determinants and structural inequalities. LGBT mental health is impacted by structural inequalities experienced across a wide range of contexts including education (school and university), home and family, and health services (primary and secondary care). Data from an international context using cross-sectional data demonstrate clear links between discrimination and levels of self-harm and suicidality in a younger sample (Almeida, Johnson et al. 2009).

There is strong evidence that increases in LGBT people's poor mental health are linked to experiences of discrimination and victimisation. Meyer's minority stress theory, extended for gender diverse groups (Testa, Habarth, Peta, Balsam and Bockting, 2015), proposes that there is a link between mental health and stress that is linked to minority status (Meyer, 2003). It is therefore important that we understand the specific and different factors that increase the risk of poor mental health in LGBT people.

The area where most research has been done has focused on suicidality (including suicide ideation or suicide attempts) in LGBT people. For example, McDermott et al's (2017) mixed-methods study used interviews and online convenience sampling to explore determinants of LGBT suicidality, suggesting a broad range of factors increase risk of suicide for young LGBT respondents. Experience of discrimination and/or not being able to talk about feelings showed a strong association.

Discrimination involves different stressors for trans people (Testa et al 2015), some of which may be specific to their trans identity, such as difficulties accessing legal recognition documents, accessing gender appropriate medical care, or being unsafe in gendered spaces. Suicidality has formed a major part of recent research in trans mental health (McNeil, Bailey et al. 2012, Bailey, Ellis et al. 2014, Ellis, Bailey et al. 2015, McNeil, Ellis et al. 2017). In their review, McNeil, Ellis et al. (2017) outline associated risk factors for trans suicidality including higher levels of gender incongruence, levels of poor mental health and levels of hospitalisation.

6.3.2 Protective factors for LGBT people's mental health

The importance of strengths-based interventions and the development of resilience are key to LGBT mental health promotion (Gahagan and Colpitts 2017, McNeil, Ellis et al. 2017). Social support is also important (Seil, Desai et al. 2014, McDermott, Hughes et al. 2016, McDermott and Roen 2016, Ussher, Baker et al. 2016, McDermott, Hughes et al. 2017), as is family support and attitude (D'Augelli, Hershberger et al. 1998, Rivers, Gonzalez et al. 2018).

Evidence indicates that the highest risk time for suicidal ideation and suicide attempts is when LGB individuals "come out" to their families (Igartua, Gill et al. 2009) and that LGBT youth anticipate negative responses (D'Augelli, Hershberger et al. 1998). Family rejection can lead to LGBT young people finding themselves homeless (Cull, Platzer et al. 2006). When parents support LGBT youth this improves self-esteem in young adulthood and is linked to improved overall health (Ryan, Russell et al. 2010). Positive parent-child connectedness is linked to fewer unmet needs (Williams and Chapman 2012) and lower drug use (Padilla, Crisp et al. 2010).

Research also shows the importance of protecting young people through mentoring and fostering (e.g. The Albert Kennedy Trust) as well as the role of inclusive anti-bullying policies (Hatzenbuehler and Keyes 2013). The research also demonstrates that developing resilience within mental health support is crucial for future health protection (Nodin, Peel et al. 2015, Rivers, Gonzalez et al. 2018).

6.4 Evidence of effective mental health interventions for LGBT people

6.4.1 Psychological interventions

The majority of psychological interventions with LGBT service users are Cognitive Behavioural Therapy (CBT) or counselling based with very few studies being carried out in a UK context. A table of all available evidence on interventions with outcome data available for LGBT people is listed in Appendix B. The table comprises almost entirely non-UK material, reflecting the lack of LGBT mental health interventions in the UK.

There are a number of traditional face-to-face CBT programmes that have been modified to be LGBT-affirmative; some LGB youth facing (Pachankis, Hatzenbuehler et al. 2015, Craig and Austin 2016), some trans facing (Austin and Craig 2015, Austin, Craig et al. 2018). Other face-to-face interventions include a Compassion Focused Therapy (CFT) programme for LGB youth in Australia (Pepping, Lyons et al. 2017).

Recent innovations in computer science and digital media have raised interest in the use of online interventions to support mental health. In one such example, researchers in New Zealand developed a computer-generated game to deliver CBT (cCBT) for use with LGB youth. Based on recommendations from Queer Futures, researchers in the UK have carried out a feasibility study to look at adapting this for UK use but findings indicate that it requires updating to be culturally relevant to the UK population (Iacovides, Samra et al. 2017)

6.4.2 School-based interventions

A growing body of evidence is demonstrating mental health benefits of gay-straight alliances (GSA) within school settings (Lee 2002). Gay-straight alliances (GSA) can be defined as a youth-led, or a school or community based group that provides a safe, welcoming, and affirming physical and emotional space for LGBT+ young people, often based around a peer mentoring or buddy system model. USA research has shown reduction in drug and illicit alcohol use, reduction in suicidality and improved psychological wellbeing as a result of GSA within a school environment (Heck, Flentje et al. 2013). Supportive and inclusive policies within the school structure similarly improve psychological wellbeing, perceived safety (Ioverno, Belser et al. 2016) and reduce homophobic victimisation for LGBT people (Marx and Kettrey 2016). Interventions developed around GSA principle would create opportunities for LGBT youth to develop a sense of being part of a larger community and increase opportunities for accessing resources and developing a sense of belonging. Health benefits of GSAs were unexpectedly found for heterosexual students too, such as decreased suicidality amongst heterosexual boys (Porta, Singer et al. 2017).

6.4.3 LGBT affirmative therapy

A systematic review in 2007 demonstrated a number of difficulties experienced by LGBT people with therapeutic provision at that time including: concerns about safety, therapy/ists making heterosexual (heteronormative) assumptions and misattribution of problem to LGBT identity (King, Semlyen et al. 2007). Furthermore, LGBT individuals in the review demonstrated concerns about therapists' knowledge of LGBT lives and a preference for a LGBT therapist (King, Semlyen et al. 2007). Evidence shows that some health care professionals conflate LGBT identity with their mental health condition, such that for some LGBT people with schizophrenia their identity is seen as a symptom (Drinkwater and Semlyen 2012, Ellis, Bailey et al. 2015).

In a recent narrative review by O'Shaughnessy and Spier (2018), a number of key factors for successful therapy outcomes for LGBT service users were identified. These include a person-centered approach with overt LGBT affirmation, good therapist fluency regarding integration of sexual identity into the process and strong skills for working with LGBT people to facilitate processes such as coming out.

As found elsewhere, this study also found that the sexual orientation and/or gender identity of the therapist was important to the LGBT person receiving treatment (O'Shaughnessy and Spier 2018). The same sentiment is echoed in recent research findings about access to IAPT services in Nottingham (Murphy and Godbehere 2015), where third-sector providers reported that:

the overwhelming preference – and we have, in an ad lib way, researched this – that LGB and TG groups want to see LGB and TG people as their counsellors. They do not want well-meaning heterosexual people as their counsellors.

6.4.4 LGBT-specific mental health services

There is a strong belief within LGBT communities that LGBT specific services are needed because existing mainstream services are heteronormative and homophobic (Ash and Mackereth 2013). In a health needs assessment in the North East of England, Ash and Mackereth (2013 p26) found that resources other than those referred to as 'straight resources' were considered as being so 'inadequate in providing help, advice and support, that [LGBT people] do not seek [them]'. There was also a strong feeling that any services that were set up to be LGBT facing should consult with LGBT people and have workers recruited from LGBT communities (Ash and Mackereth 2013).

The majority of studies point to LGBT specific resources as a necessary outcome, certainly while so little LGBT knowledge and so much negative attitude is present in existing mainstream services (Robertson, Pote et al. 2015, Rivers, Gonzalez et al. 2018). The recent Government LGBT Survey (Government Equalities Office 2018)

included qualitative data that further revealed the impact of the limitations of mainstream mental health services. As one lesbian respondent said:

I was once on a waiting list for CBT for a year, only to find the resulting therapy completely unhelpful and my therapist ill equipped to talk about sexuality.

As a consequence, they then sought LGBT-specific services but had access difficulties:

I have explored options with specialised LGBT services and local free counselling, but similarly the waiting lists have been too long to be helpful, resulting in a failed suicide attempt and severe worsening of my conditions. The support services aren't just difficult to access – it seems a lot of the time that they simply don't exist. (Government Equalities Office 2018)

6.4.5 Community-based services

We know that alcohol misuse amongst LGB people is partially explained by increased levels of depression in this group (Pesola, Shelton et al. 2014). Therefore, it is important that safe spaces with a community focus are available especially for younger LGBT people navigating emerging identities (Johnson, Faulkner et al. 2007). The impact of discrimination and in some cases social isolation demonstrates the importance of fostering connectedness for LGBT people and this need for community. These services can allow LGBT people to connect with other LGBT people in an affirming environment, facilitating the social connections and everyday friendships that many cisgender, heterosexual people take for granted (Johnson, Faulkner et al. 2007).

6.5 Alternative models of mental health service delivery to LGBT people

Given the challenges outlined above for LGBT people seeking and receiving mental health services, there is an argument for considering alternative models of service delivery to LGBT people.

6.5.1 The potential for online support services

Services delivered through online platforms have the potential to increase engagement, particularly amongst the most vulnerable, as they allow anonymity in disclosure and a sense of safety (McDermott and Roen, 2012). Research examining LGBT youth narratives has found the internet to be a useful medium for accessing immediate and authentic material (McDermott and Roen 2012). The recent UK

Government LGBT Survey (Government Equalities Office, 2018) similarly found that the internet is an important resource for connecting people and for letting them know they are not alone; indeed, for many it is the first place where help is sought for both issues with identity and mental health (McDermott, Hughes and Rawlings, 2016).

For example, one teenage, bisexual participant in the National LGBT Survey states:

Without social media, I would have no idea about any LGBT identities or issues, as the lack of awareness in our education system is shocking. As a child, I was desperately worried that I was broken because I liked both boys and girls and had no idea that bisexuality existed, and since I found the term online I’ve been much better.

6.5.2 The potential of LGBT third-sector provision

The UK Government LGBT survey highlighted that respondents found LGBT-specific charities particularly helpful when seeking support. LGBT organisations and charities were viewed as the most helpful when handling the most serious incidents experienced by respondents in a number of areas. For example, 77% of those who reported an incident in education to an LGBT organisation or charity said that they had found them very or somewhat helpful (Government Equalities Office 2018).

Being part of an LGBT-led service can also create opportunities for connectedness. LGBT people report voluntary sources as “*crucial resources that helped them recover from their experiences within the mental health system, in an environment that was positive about LGBT lives and helped them make crucial connections with other LGBT people*” (Johnson, Faulkner et al. 2007, n.p.).

The table below lists examples of services that provide mental health support that are UK-based and LGBT-led. None of these have been formally evaluated. This is not an exhaustive list but offers examples of LGBT specific services that are available and may provide culturally relevant support models to address mental health needs and improve mental health outcomes for LGBT people.

Table 1: Examples of UK LGBT-led services

Mind Out, Brighton	A mental health service for LGBT people which provides advice, information, advocacy, peer support groups, mentoring and wellbeing events.
Opening Doors London	A service led by Age UK Camden providing a range of services and activities for Lesbian, Gay, Bisexual and Transgender (LGBT) people over 50 in London. Includes some mental health input
Outcome	A LGBT mental health service run through Mind in Islington, offering psychotherapy, counselling, art therapy,

	alternative therapies and activities
Pink Therapy	Pink Therapy has a directory listing qualified therapists throughout the UK who work with the LGBT community from a positive stance
Antidote	The UK's only LGBT-run and targeted drug and alcohol support service
Pride in Practice	A service that offers GP surgeries support to become LGB-friendly and inclusive. The project is run by the LGBT Foundation
LGBT Youth Scotland	Scottish LGBT organisation offering mental health support for youth aged up to 25.
Allsorts charity	Youth groups for LGBT people in several East Sussex locations

It is essential that any new services or interventions are designed and delivered in line with best practice guidance for providing mental healthcare to LGBT people. These are available from the British Psychological Society (British Psychological Society 2012) and the American Psychological Association (American Psychological Association 2012), whilst third-sector organisation MIND have also produced a useful best practice guide (MIND, 2016).

7. Key gaps in the evidence and directions for future research

Knowledge about the mental health disparities for LGBT people is well-established. However, there are still a number of key gaps in knowledge which need to be addressed in order to enhance the decision-making of commissioners and the development of inclusive practice by service providers and individual health practitioners. The principal gaps which this review has identified are outlined below.

- There is a lack of evidence and understanding about causal pathways that might help reduce mental health inequalities for LGBT people. In addition to case studies and qualitative work to inform the development of interventions, large-scale, robust quantitative research is required to evaluate the causal mechanisms and efficacy of proposed interventions (Anderson, 2006).
- LGBT people are a diverse group with a range of identities, lived experiences, mental health disparities and unmet needs. Further research is needed to examine the differing needs of L G B and T, with emphasis on less common identities such as pansexual, trans and non-binary. Simultaneously, it is vital to better understand the intersections between LGBT identities and other aspects of identity such as age, ethnicity and socio-economic status, given the dearth of such more nuanced UK-based research.

- With no accurate prevalence data available, researching LGBT populations necessitates the adoption of non-representative sampling techniques or the collapsing of specific sexual and gender identities into a wider LGBT or non-heterosexual sample. Improving methods for recording LGBT identities are required, both in national surveys and within primary care and mental health services. Particularly in the case of the latter, achieving this successfully and sensitively requires healthcare services to create conditions where LGBT people feel safe to disclose their identities. The availability of more comprehensive and accurate data would help to disaggregate findings across intersectional aspects of sexual and gender identities, including minority ethnic groups and disabled people, where there is a lack of evidence and understanding. This is crucial if access to mental health services is to be improved for those who may be most marginalised within LGBT populations.
- Relatedly, given that the NHS Sexual Orientation Monitoring Standard has only recently been introduced, qualitative and quantitative data about its implementation, to include the experiences of health practitioners and feedback from patients, is essential to ensure that the Standard is implemented in a sensitive and effective manner.
- In order to enhance culturally competent provision of mental healthcare to LGBT people, the training needs of health practitioners need to be better understood, with this knowledge being used to develop more comprehensive and up-to-date training resources.
- Little is known about appropriate interventions for LGBT people and their success. This review has identified promising examples of third sector involvement in delivering mental health services, as well as the use of online support and other uses of new technologies. These approaches need further exploration to assess the potential for replicating such initiatives in the Nottingham City context.
- New interventions need to be subject to robust evaluation, as well as careful consideration as to the appropriateness of replicating any intervention in a different social, cultural and/or geographical context.

References

- Almeida, J., R. Johnson, H. Corliss, B. Molnar and D. Azrael (2009). "Emotional distress among LGBT youth: the influence of perceived discrimination based on sexual orientation." Journal of Youth and Adolescence **38**(7): 1001-1014.
- American Psychological Association (2012). "Guidelines for psychological practice with lesbian, gay, and bisexual clients." The American Psychologist **67**(1): 10.
- Anderson, R. (2008). "New MRC guidance on evaluating complex interventions". BMJ: British Medical Journal (Online), 337.
- Applegarth, G. and J. Nuttall (2016). "The lived experience of transgender people of talking therapies." International Journal of Transgenderism **17**(2): 66-72.
- Arcelus, J., L. Claes, G. L. Witcomb, E. Marshall and W. P. Bouman (2016). "Risk Factors for Non-Suicidal Self-Injury Among Trans Youth." J Sex Med **13**(3): 402-412.
- Ash, M. and C. Mackereth (2013). "Assessing the mental health and wellbeing of the lesbian, gay, bisexual and transgender population." Community Practitioner **86**(3): 24.
- Aspinall, P. J. (2009). Estimating the size and composition of the lesbian, gay and bisexual population in Britain. Research Report 37, London: Equality and Human Rights Commission.
- Austin, A. and S. L. Craig (2015). "Transgender affirmative cognitive behavioral therapy: Clinical considerations and applications." Professional Psychology: Research and Practice **46**(1): 21-29.
- Austin, A., S. L. Craig and S. A. D'Souza (2018). "An AFFIRMative cognitive behavioral intervention for transgender youth: Preliminary effectiveness." Professional Psychology: Research and Practice **49**(1): 1-8.
- Austin, E. L. (2013). "Sexual orientation disclosure to health care providers among urban and non-urban southern lesbians." Women & health **53**(1): 41-55.
- Bailey, L., S. J. Ellis and J. McNeil (2014). "Suicide risk in the UK trans population and the role of gender transition in decreasing suicidal ideation and suicide attempt." Mental Health Review Journal **19**(4): 209-220.
- Barker, M. J. (2015). "Depression and/or oppression? Bisexuality and mental health." Journal of Bisexuality **15**(3): 369-384.
- Bouman, W. P., L. Claes, N. Brewin, J. R. Crawford, N. Millet, F. Fernandez-Aranda and J. Arcelus (2017). "Transgender and anxiety: A comparative study between transgender people and the general population." International Journal of Transgenderism **18**(1): 16-26.
- Bouman, W. P., A. Davey, C. Meyer, G. L. Witcomb and J. Arcelus (2016). "Predictors of psychological well-being among treatment seeking transgender individuals." Sexual and Relationship Therapy **31**(3): 359-375.
- British Psychological Society (2012). Guidelines and literature review for psychologists working therapeutically with sexual and gender minority clients. London: BPS.
- Cahill, S. and H. Makadon (2014). "Sexual Orientation and Gender Identity Data Collection in Clinical Settings and in Electronic Health Records: A Key to Ending LGBT Health Disparities." LGBT Health **1**(1): 34-41.

Calzo, J. P., S. B. Austin and N. Micali (2018). "Sexual orientation disparities in eating disorder symptoms among adolescent boys and girls in the UK." European Child & Adolescent Psychiatry: 1-8.

Chakraborty, A., S. McManus, T. Brugha, P. Bebbington and M. King (2011). "Mental health of the non-heterosexual population of England." British Journal of Psychiatry **198**(2): 143-148.

Claes, L., W. P. Bouman, G. Witcomb, M. Thurston, F. Fernandez-Aranda and J. Arcelus (2015). "Non-suicidal self-injury in trans people: associations with psychological symptoms, victimization, interpersonal functioning, and perceived social support." J Sex Med **12**(1): 168-179.

Cochran, S. D. and V. M. Mays (1988). "Disclosure of sexual preference to physicians by black lesbian and bisexual women." Western Journal of Medicine **149**(5): 616.

Colledge, L., F. Hickson, D. Reid and P. Weatherburn (2015). "Poorer mental health in UK bisexual women than lesbians: evidence from the UK 2007 Stonewall Women's Health Survey." Journal of Public Health **37**(3): 427.

Corrigan, P. and A. Matthews (2003). "Stigma and disclosure: Implications for coming out of the closet." Journal of mental health **12**(3): 235-248.

Craig, S. L. and A. Austin (2016). "The AFFIRM open pilot feasibility study: A brief affirmative cognitive behavioral coping skills group intervention for sexual and gender minority youth." Children and Youth Services Review **64**: 136-144.

Craig, S. L., A. Austin and L. B. McInroy (2014). "School-based groups to support multiethnic sexual minority youth resiliency: Preliminary effectiveness." Child and adolescent social work journal **31**(1): 87-106.

Craig, S. L., L. McInroy, A. Austin, M. Smith and B. Engle (2012). "Promoting self-efficacy and self-esteem for multiethnic sexual minority youth: An evidence-informed intervention." Journal of Social Service Research **38**(5): 688-698.

Cull, M., H. Platzer and S. Balloch (2006). "Out on my own: Understanding the experiences and needs of homeless lesbian, gay, bisexual and transgender youth." Brighton & Hove, England: Health and Social Policy Research Centre, University of Brighton.

D'Augelli, A. R., S. L. Hershberger and N. W. Pilkington (1998). "Lesbian, gay, and bisexual youth and their families: disclosure of sexual orientation and its consequences." American Journal of Orthopsychiatry **68**(3): 361.

Davey, A., J. Arcelus, C. Meyer and W. P. Bouman (2016). "Self-injury among trans individuals and matched controls: prevalence and associated factors." Health & social care in the community **24**(4): 485-494.

Davey, A., W. P. Bouman, J. Arcelus and C. Meyer (2014). "Social support and psychological well-being in gender dysphoria: A comparison of patients with matched controls." The journal of sexual medicine **11**(12): 2976-2985.

Diamond, G. M., G. S. Diamond, S. Levy, C. Closs, T. Ladipo and L. Siqueland (2013). "Attachment-based family therapy for suicidal lesbian, gay, and bisexual adolescents: A treatment development study and open trial with preliminary findings." Psychology of Sexual Orientation and Gender Diversity **1**(S): 91-100.

Drinkwater, D. and J. Semlyen (2012). Why sexuality and gender identity matter: A discourse analysis of LGBT mental health services user's talk of recovery. Qualitative Methods in Mental Health. University of Nottingham.

Durso, L. and I. Meyer (2013). "Patterns and Predictors of Disclosure of Sexual Orientation to Healthcare Providers among Lesbians, Gay Men, and Bisexuals." Sexuality Research & Social Policy **10**(1): 35-42.

Elliott, M. N., D. E. Kanouse, Q. Burkhart, G. A. Abel, G. Lyratzopoulos, M. K. Beckett, M. A. Schuster and M. Roland (2015). "Sexual minorities in England have poorer health and worse health care experiences: a national survey." Journal of general internal medicine **30**(1): 9-16.

Ellis, S. J., L. Bailey and J. McNeil (2015). "Trans people's experiences of mental health and gender identity services: A UK study." Journal of Gay & Lesbian Mental Health **19**(1): 4-20.

Ellison, G. and B. Gunstone (2009). Sexual orientation explored: A study of identity, attraction, behaviour and attitudes in 2009. Manchester: Equality and Human Rights Commission.

Formby, E. (2012). Solidarity but not similarity? LGBT communities in the twenty-first century. Sheffield, Sheffield Hallam University.

Formby, E. (2017). Exploring Lgbt Spaces and Communities: Contrasting Identities, Belongings and Wellbeing, Abingdon: Taylor & Francis.

Gahagan, J. and E. Colpitts (2017). "Understanding and Measuring LGBTQ Pathways to Health: A Scoping Review of Strengths-Based Health Promotion Approaches in LGBTQ Health Research." Journal of Homosexuality **64**(1): 95-121.

Gamarel, K. E., C. W. Kahler, J. H. Lee, S. L. Reisner, E. H. Mereish, A. K. Matthews and D. Operario (2016). "Sexual orientation disparities in smoking vary by sex and household smoking among US adults: Findings from the 2003-2012 National Health and Nutrition Examination Surveys." Prev Med **82**: 1-6.

Gamarel, K. E., E. H. Mereish, D. Manning, M. Iwamoto, D. Operario and T. Nemoto (2016). "Minority Stress, Smoking Patterns, and Cessation Attempts: Findings From a Community-Sample of Transgender Women in the San Francisco Bay Area." Nicotine Tob Res **18**(3): 306-313.

Geary, R. S., C. Tanton, B. Erens, S. Clifton, P. Prah, K. Wellings, K. R. Mitchell, J. Datta, K. Gravningen, E. Fuller, A. M. Johnson, P. Sonnenberg and C. H. Mercer (2018). "Sexual identity, attraction and behaviour in Britain: The implications of using different dimensions of sexual orientation to estimate the size of sexual minority populations and inform public health interventions." PLoS One **13**(1): e0189607.

Gender Identity Development Service (2018). "GIDS: Referral figures for 2017-18." from <http://gids.nhs.uk/number-referrals>.

Government Equalities Office (2016). Government Response to the Women and Equalities Committee Report on Transgender Equality. London: Government Equalities Office.

Government Equalities Office (2018a). Factsheet: Trans people in the UK. London: Government Equalities Office.

Government Equalities Office (2018). National LGBT Survey: Research Report. London: Government Equalities Office.

Grafsky, E. L., A. Letcher, N. Slesnick and J. M. Serovich (2011). "Comparison of treatment response among GLB and non-GLB street-living youth." Children and Youth Services Review **33**(5): 569-574.

Guasp, A. (2010). Lesbian, gay & bisexual people in later life. London: Stonewall.

Guasp, A. (2012). Gay and bisexual men's health survey. London: Stonewall.

Guasp, A. and J. Taylor (2012). Experiences of healthcare: Stonewall health briefing. London: Stonewall.

Hagger-Johnson, G., R. Taibjee, J. Semlyen, I. Fitchie, J. Fish, C. Meads and J. Varney (2013). "Sexual orientation identity in relation to smoking history and alcohol use at age 18/19: cross-sectional associations from the Longitudinal Study of Young People in England (LSYPE)." BMJ Open **3**(8).

Hatzenbuehler, M. L. and K. M. Keyes (2013). "Inclusive anti-bullying policies and reduced risk of suicide attempts in lesbian and gay youth." Journal of Adolescent Health **53**(1): S21-S26.

Heck, N. C., A. Flentje and B. N. Cochran (2013). "Offsetting Risks: High School Gay-straight Alliances and Lesbian, Gay, Bisexual, and Transgender (lgbt) Youth." Psychology of Sexual Orientation and Gender Diversity **1**(20130800): 81-90.

Heck, N. C., L. A. Mirabito, K. LeMaire, N. A. Livingston and A. Flentje (2017). "Omitted data in randomized controlled trials for anxiety and depression: A systematic review of the inclusion of sexual orientation and gender identity." Journal of consulting and clinical psychology **85**(1): 72.

Hickson, F., C. Davey, D. Reid, P. Weatherburn and A. Bourne (2017). "Mental health inequalities among gay and bisexual men in England, Scotland and Wales: a large community-based cross-sectional survey." J Public Health (Oxf) **39**(3): 645.

House of Commons Women Equalities Committee (2016). Transgender Equality: First Report of Session 2015–16, The Stationery Office Limited London, England.

Hudson-Sharp, N. and H. Metcalf (2016). "Inequality among lesbian, gay bisexual and transgender groups in the UK: a review of evidence." National Institute for Economic and Social Research. London: NIESR.

Hulbert-Williams, N. J., C. O. Plumpton, P. Flowers, R. McHugh, R. D. Neal, J. Semlyen and L. Storey (2017). "The cancer care experiences of gay, lesbian and bisexual patients: A secondary analysis of data from the UK Cancer Patient Experience Survey." Eur J Cancer Care **26**(4).

Iacovides, I., R. Samra, M. Lucassen and L. Wallace (2017). "Game-based Cognitive Behavioural Therapy (CBT) for Sexual Minority Youth: Rainbow SPARX in the UK?" Amsterdam: CHI PLAY.

Igartua, K. J., K. Gill and R. Montoro (2009). "Internalized homophobia: A factor in depression, anxiety, and suicide in the gay and lesbian population." Canadian Journal of Community Mental Health **22**(2): 15-30.

Ioverno, S., A. B. Belser, R. Baiocco, A. H. Grossman and S. T. Russell (2016). "The protective role of gay-straight alliances for lesbian, gay, bisexual, and questioning students: A prospective analysis." Psychology of sexual orientation and gender diversity **3**(4): 397.

Ipsos-MORI (2012). "Technical annex for the GP patient survey 2011–12." London: Ipsos MORI.

Jannat-Khah, D. P., L. J. Dill, S. A. Reynolds and M. A. Joseph (2017). "Stress, Socializing, and Other Motivations for Smoking Among the Lesbian, Gay, Bisexual, Transgender, and Queer Community in New York City." American Journal of Health Promotion **32**(5):1178-1186.

Johns, D. (2017). Nottingham City CCG Health Equity Audit: IAPT. Nottingham: NHS Nottingham City CCG.

Johnson, A., C. Mercer, B. Erens, A. Copas, S. McManus, K. Wellings, K. Fenton, C. Korovessis, W. Macdowall, K. Nanchahal, S. Purdon and J. Field (2001). "Sexual behaviour in Britain: partnerships, practices, and HIV risk behaviours." The Lancet **358**(9296): 1835-1842.

Johnson, K., P. Faulkner, H. Jones and E. Welsh (2007). Understanding Suicidal Distress and Promoting Survival in Lesbian, Gay, Bisexual and Transgender (LGBT) Communities. Brighton: University of Brighton.

Johnson, S. E., E. Holder-Hayes, G. K. Tessman, B. A. King, T. Alexander and X. Zhao (2016). "Tobacco Product Use Among Sexual Minority Adults: Findings From the 2012-2013 National Adult Tobacco Survey." Am J Prev Med **50**(4): e91-e100.

Joloza, T., J. Evans, R. O'Brien and A. Potter-Collins (2010). Measuring sexual identity: an evaluation report. Newport: Office for National Statistics.

Jones, A., E. Robinson, O. Oginni, Q. Rahman and K. A. Rimes (2017). "Anxiety disorders, gender nonconformity, bullying and self-esteem in sexual minority adolescents: prospective birth cohort study." Journal of Child Psychology and Psychiatry **58**(11): 1201-1209.

Jones, B. A., E. Haycraft, W. P. Bouman, N. Brewin, L. Claes and J. Arcelus (2018). "Risk Factors for Eating Disorder Psychopathology within the Treatment Seeking Transgender Population: The Role of Cross-Sex Hormone Treatment." European Eating Disorders Review **26**(2): 120-128.

Kampen, S. C., W. Lee, M. Fornasiero and K. Husk (2017). "The proportion of the population of England that self-identifies as lesbian, gay or bisexual: producing modelled estimates based on national social surveys." BMC research notes **10**(1): 594.

King, M., J. Semlyen, H. Killaspy, I. Nazareth and D. Osborn (2007). "A systematic review of research on counselling and psychotherapy for lesbian, gay, bisexual & transgender people." British Association for Counselling and Psychotherapy.

King, M., J. Semlyen, S. S. Tai, H. Killaspy, D. Osborn, D. Popelyuk and I. Nazareth (2008). "A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people." BMC Psychiatry **8**: 70.

King, M., J. Semlyen, S. S. Tai, H. Killaspy, D. Osborn, D. Popelyuk and I. Nazareth (2008). "A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people." BMC Psychiatry **8**(1): 70.

Kitts, R. L. (2010). "Barriers to optimal care between physicians and lesbian, gay, bisexual, transgender, and questioning adolescent patients." Journal of Homosexuality **57**(6): 730-747.

Lee, C. (2002). "The impact of belonging to a high school gay/straight alliance." The high school journal **85**(3): 13-26.

Lenihan, P., T. Kainth and R. Dundas (2015). "Trans sexualities". In C. Richards and M.J. Barker (eds) The Palgrave Handbook of the Psychology of Sexuality and Gender. Basingstoke, UK, Palgrave Macmillan: 129-146.

Lucassen, M. F. G., S. Hatcher, T. M. Fleming, K. Stasiak, M. J. Shepherd and S. N. Merry (2015). "A qualitative study of sexual minority young people's experiences of computerised therapy for depression." Australasian Psychiatry **23**(3): 268-273.

Lucassen, M.F.G., S. N. Merry, S. Hatcher and C.M.A. Frampton (2015). "Rainbow SPARX: A novel approach to addressing depression in sexual minority youth." Cognitive and Behavioral Practice **22**(2): 203-216.

Marx, R. A. and H. H. Kettrey (2016). "Gay-straight alliances are associated with lower levels of school-based victimization of LGBTQ+ youth: A systematic review and meta-analysis." Journal of youth and adolescence **45**(7): 1269-1282.

McCann, E. and D. Sharek (2014). "Survey of lesbian, gay, bisexual, and transgender people's experiences of mental health services in Ireland." International journal of mental health nursing **23**(2): 118-127.

McDermott, E., E. Hughes and V. Rawlings (2016). "Queer Futures: Understanding Lesbian, Gay, Bisexual and Trans (LGBT) Adolescents' Suicide, self-Harm, and Help-Seeking Behaviour." Lancaster: Lancaster University.

McDermott, E., E. Hughes and V. Rawlings (2017). "The social determinants of lesbian, gay, bisexual and transgender youth suicidality in England: a mixed methods study." J Public Health **40**(3): 244-251.

McDermott, E. and K. Roen (2012). "Youth on the virtual edge: researching marginalized sexualities and genders online." Qual Health Res **22**(4): 560-570.

McDermott, E. and K. Roen (2016). Queer youth, suicide and self-harm: troubled subjects, troubling norms, Basingstoke: Palgrave.

McDermott, E., K. Roen and J. Scourfield (2008). "Avoiding shame: young LGBT people, homophobia and self-destructive behaviours." Cult Health Sex **10**(8): 815-829.

McNair, R. P. and R. Bush (2016). "Mental health help seeking patterns and associations among Australian same sex attracted women, trans and gender diverse people: a survey-based study." BMC psychiatry **16**(1): 209.

McNamee, H., K. Lloyd and D. Schubotz (2008). "Same sex attraction, homophobic bullying and mental health of young people in Northern Ireland." Journal of Youth Studies **11**(1): 33-46.

McNeil, J., L. Bailey, S. Ellis, J. Morton and M. Regan (2012). Trans mental health and emotional wellbeing study. Edinburgh: Scottish Transgender Alliance.

McNeil, J., S. J. Ellis and F. J. R. Eccles (2017). "Suicide in trans populations: A systematic review of prevalence and correlates." Psychology of Sexual Orientation and Gender Diversity **4**(3): 341-353.

Mercer, C. H., P. Prah, N. Field, C. Tanton, W. Macdowall, S. Clifton, G. Hughes, A. Nardone, K. Wellings and A. M. Johnson (2016). "The health and well-being of men who have sex with men (MSM) in Britain: Evidence from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3)." BMC Public Health **16**(1): 525.

Meyer, I. (2003). "Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence." Psychological Bulletin **129**(5): 674-697.

MIND (2016). Lesbian, gay, bisexual, trans and queer good practice guide: Guidance for service providers on how to provide LGBTQ-affirmative practices. London: MIND.

Mitchell, M., C. Howarth, M. Kotecha and C. Creegan (2009). Sexual orientation research review 2008. Manchester: Equality and Human Rights Commission.

Murphy, D. and N. Godbehere (2015). Improving the equity of access to psychological therapies: A study of factors affecting equity of access to primary care psychological therapies. Nottingham: University of Nottingham.

National Institute for Health and Clinical Excellence (2011). Common Mental Disorders: Full Guideline. London, NICE.

NHS England Equality and Health Inequalities Unit (2017). Sexual Orientation Monitoring Standard: Full Specification. London: NHS England.

Nodin, N., E. Peel, A. Tyler and I. Rivers (2015). The RaRE Research Report: LGB&T mental health—risk and resilience explored. London: PACE.

O'Shaughnessy, T. and Z. Speir (2018). "The state of LGBQ affirmative therapy clinical research: A mixed-methods systematic synthesis." Psychology of Sexual Orientation and Gender Diversity **5**(1): 82.

Obedin-Maliver, J., E. S. Goldsmith, L. Stewart, W. White, E. Tran, S. Brenman, M. Wells, D. M. Fetterman, G. Garcia and M. R. Lunn (2011). "Lesbian, Gay, Bisexual and Transgender-Related Content in Undergraduate Medical Education." Journal of the American Medical Association **306**(9): 971-977.

Pachankis, J. E., M. L. Hatzenbuehler, H. J. Rendina, S. A. Safren and J. T. Parsons (2015). "LGB-affirmative cognitive-behavioral therapy for young adult gay and bisexual men: A randomized controlled trial of a transdiagnostic minority stress approach." Journal of consulting and clinical psychology **83**(5): 875.

Padilla, Y. C., C. Crisp and D. L. Rew (2010). "Parental acceptance and illegal drug use among gay, lesbian, and bisexual adolescents: Results from a national survey." Social Work **55**(3): 265-275.

Pepping, C., A. Lyons, R. McNair, J. N. Kirby, N. Petrocchi and P. Gilbert (2017). "A tailored compassion-focused therapy program for sexual minority young adults with depressive symptomatology: Study protocol for a randomized controlled trial." BMC Psychology **5**.

Pesola, F., K. H. Shelton and M. B. van den Bree (2014). "Sexual orientation and alcohol problem use among UK adolescents: an indirect link through depressed mood." Addiction **109**(7): 1072-1080.

Petroll, A. E. and K. E. Mosack (2011). "Physician Awareness of Sexual Orientation and Preventive Health Recommendations to Men Who Have Sex With Men." Sexually Transmitted Diseases **38**(1): 63-67.

Pompili, M., D. Lester, A. Forte, M. E. Seretti, D. Erbutto, D. A. Lamis, M. Amore and P. Girardi (2014). "Bisexuality and suicide: a systematic review of the current literature." J Sex Med **11**(8): 1903-1913.

Porta, C. M., E. Singer, C. J. Mehus, A. L. Gower, E. Saewyc, W. Fredkove and M. E. Eisenberg (2017). "LGBTQ youth's views on gay-straight alliances: Building community, providing gateways, and representing safety and support." Journal of School Health **87**(7): 489-497.

Richards, A. (2010). "Closing the Gap - Service needs and prohibitions to access: The LGB community, self-harm, suicidal ideation and suicide."

Rimes, K. A., M. Broadbent, R. Holden, Q. Rahman, D. Hambrook, S. L. Hatch and J. Wingrove (2018). "Comparison of Treatment Outcomes Between Lesbian, Gay, Bisexual and Heterosexual Individuals Receiving a Primary Care Psychological Intervention." Behavioural and cognitive psychotherapy **46**(3): 332-349.

Rimes, K. A., N. Goodship, G. Ussher, D. Baker and E. West (2017). "Non-binary and binary transgender youth: Comparison of mental health, self-harm, suicidality, substance use and victimization experiences." International Journal of Transgenderism: 1-11.

Rimes, K. A., S. Shivakumar, G. Ussher, D. Baker, Q. Rahman and E. West (2018). "Psychosocial Factors Associated With Suicide Attempts, Ideation, and Future Risk in Lesbian, Gay, and Bisexual Youth." Crisis.

Rivers, I., C. Gonzalez, N. Nodin, E. Peel, A. Tyler (2018). "LGBT people and suicidality in youth: a qualitative study of perceptions of risk and protective circumstances." Social Science and Medicine **212**: 1-8.

Robertson, J., H. Pote, A. Byrne, F. Frasquilho (2015). "The experiences of lesbian and gay adults on acute mental health wards: Intimate relationship needs and recovery." Journal of Gay & Lesbian Mental Health **19**(3): 261-284.

Ryan, C., S. T. Russell, D. Huebner, R. Diaz and J. Sanchez (2010). "Family acceptance in adolescence and the health of LGBT young adults." Journal of Child and Adolescent Psychiatric Nursing **23**(4): 205-213.

Schubotz, D. and M. O'Hara (2011). "A shared future? Exclusion, stigmatization, and mental health of same-sex-attracted young people in Northern Ireland." Youth & Society **43**(2): 488-508.

Scourfield, J., K. Roen, L. McDermott (2008). "Lesbian, gay, bisexual and transgender young people's experiences of distress: resilience, ambivalence and self-destructive behaviour." Health and Social Care in the Community **16**(3): 329-336.

Seelman, K. L., M. J. Colón-Díaz, R. H. LeCroix, M. Xavier-Brier and L. Kattari (2017). "Transgender Noninclusive Healthcare and Delaying Care Because of Fear: Connections to General Health and Mental Health Among Transgender Adults." Transgender health **2**(1): 17-28.

Seil, K. S., M. M. Desai and M. V. Smith (2014). "Sexual orientation, adult connectedness, substance use, and mental health outcomes among adolescents: Findings from the 2009 New York City Youth Risk Behavior survey." American Journal of Public Health **104**(10): 1950-1956.

Semlyen, J. (2017). "Recording Sexual Orientation in the UK: Pooling Data for Statistical Power." American Journal of Public Health **107**(8): 1215-1217.

Semlyen, J., M. King, J. Varney and G. Hagger-Johnson (2016). "Sexual orientation and symptoms of common mental disorder or low wellbeing: combined meta-analysis of 12 UK population health surveys." BMC Psychiatry **16**(1): 67.

Shahab, L., J. Brown, G. Hagger-Johnson, S. Michie, J. Semlyen, R. West and C. Meads (2017). "Sexual orientation identity and tobacco and hazardous alcohol use: findings from a cross-sectional English population survey." BMJ open **7**(10): e015058.

Stonewall (2008). Prescription for change. London: Stonewall.

Stonewall (2014). Your Services Your Say: LGBT people's experiences of public services in Scotland. Edinburgh: Stonewall Scotland.

Testa, R. J., J. Habarth, J. Peta, K. Balsam and W. Bockting (2015). "Development of the Gender Minority Stress and Resilience Measure." Psychology of Sexual Orientation and Gender Diversity **2**(1): 65-77.

Thorne, N., G. L. Witcomb, T. Nieder, E. Nixon, A. Yip and J. Arcelus (2018). "A comparison of mental health symptomatology and levels of social support in young treatment seeking transgender individuals who identify as binary and non-binary." International Journal of Transgenderism: 1-10.

Timmins, L., K. A. Rimes and Q. Rahman (2017). "Minority stressors and psychological distress in transgender individuals." Psychology of Sexual Orientation and Gender Diversity **4**(3): 328.

Urwin, S. and W. Whittaker (2016). "Inequalities in family practitioner use by sexual orientation: evidence from the English General Practice Patient Survey." BMJ Open **6**(5): e011633.

Ussher, G., D. Baker, M. Delacour, C. Dye, T. Furlong, P. Scott and E. West (2016). Youth chances: integrated report. London: METRO.

Whitehead, J., J. Shaver and R. Stephenson (2016). "Outness, stigma, and primary health care utilization among rural LGBT populations." PLoS ONE **11**(1).

Williams, H., Varney, J., Taylor, J., Fish, J., Durr, P., Elan-Cane, C. (2014). The LGBT Public Health Outcomes Framework Companion Document. London, Public Health England.

Williams, K. A. and M. V. Chapman (2012). "Unmet health and mental health need among adolescents: The roles of sexual minority status and child-parent connectedness." American Journal of Orthopsychiatry **82**(4): 473-481.

Witcomb, G. L., W. P. Bouman, N. Brewin, C. Richards, F. Fernandez-Aranda and J. Arcelus (2015). "Body image dissatisfaction and eating-related psychopathology in trans individuals: A matched control study." European Eating Disorders Review **23**(4): 287-293.

Witcomb, G. L., W. P. Bouman, L. Claes, N. Brewin, J. R. Crawford and J. Arcelus (2018). "Levels of depression in transgender people and its predictors: Results of a large matched control study with transgender people accessing clinical services." Journal of affective disorders **235**: 308-315.

Woodhead, C., B. Gazard, M. Hotopf, Q. Rahman, K. Rimes and S. Hatch (2016). "Mental health among UK inner city non-heterosexuals: the role of risk factors, protective factors and place." Epidemiology and psychiatric sciences **25**(5): 450-461.

Young, R., V. Riordan and C. Stark (2011). "Perinatal and psychosocial circumstances associated with risk of attempted suicide, non-suicidal self-injury and psychiatric service use. A longitudinal study of young people." BMC public health **11**(1): 875.

Youth Chances (2014). Youth Chances Summary of First Findings: The Experiences of LGBTQ Young People in England. London: METRO.

Appendix A: Search strategy

Included material: Published papers, books, book chapters, grey literature
Excluded: dissertations, conference presentations and abstracts

29/07/2018 (((((((((((suicid*) OR "eating disorder") OR "mental health") OR "common mental disorder") OR depression) OR anxiety) AND (((((((((((((gay) OR lesbian) OR bisexual) OR transgender) OR same-sex) OR homosex*) OR sexual orient*)) OR Transexual) OR Transsexual) OR non-binary) OR GNC))) NOT HIV AND (UNITED AND KINGDOM)	AMED, Academic Search Complete, CINAHL Complete, MEDLINE Complete, PsycARTICLES, PsycINFO
Additional searches including (OR "mental") (AND ENGLAND/WALES/SCOTLAND/NI/GREAT AND BRITIAN etc)	
Google Scholar (Limited to 2008-2018)	allintitle: a combination of terms from this list: services treatment intervention mental bisexual lesbian gay bisexual trans LGB LGBT nonconforming non binary UK England NI Wales Scotland GB
University of East Anglia (UEA) Library keyword search	a combination of terms from this list: services treatment intervention mental bisexual lesbian gay bisexual trans LGB LGBT nonconforming non binary UK England NI Wales Scotland GB
Google search	
Hand search	Key journals Reference lists – included papers Authors own records Grey literature Websites that include LGBT mental health resources e.g. LGBT foundation, GIRES

Appendix B: Table of psychological interventions for LGBT people

LGBT specific				
<i>CBT – Individual/group</i>				
Author, country	Intervention	Aim	Population, sample size (where stated)	Outcome (where available)
(Craig and Austin 2016) Canada/USA	AFFIRM Group cognitive behaviour therapy-based intervention	To decrease depression, develop coping skills, and modify cognitive appraisals while also affirming their identities and increasing support	Sexual minority youth (N = 30)	
(Austin and Craig 2015, Austin, Craig et al. 2018) Canada/USA	TA-CBT Transgender-affirming adaptation of a cognitive behaviour therapy intervention for use with transgender individuals suffering from depression, anxiety, and/or suicidality	Psychoeducation, modifying problematic thinking styles, enhancing social support, and preventing suicidality	Trans	
(Pachankis, Hatzenbuehler et al. 2015) USA	ESTEEM (Effective Skills to Empower Effective Men) Adaptation of a cognitive behavioural therapy-based intervention for use with gay and bisexual men suffering from depression and/or anxiety and co-occurring health risks including alcohol misuse and unsafe sexual	Reducing minority stress, reducing symptoms of anxiety and depression, promoting safe sexual practices, reducing alcohol consumption.	Gay and bisexual young men (N=63)	Significant decreases in depressive symptomology, problematic alcohol use and sexual compulsivity and significant increases in engagement in safe sexual practices amongst those who had received the intervention

	behaviours. 10 one-to-one sessions with homework tasks.			compared to those allocated to the waiting list.
(Pepping, Lyons et al. 2017) Australia	Compassion-focused therapy program for sexual minority young adults	Reducing depression	Sexual minority youth	
(Craig, Austin et al. 2014) Canada/USA	ASSET Based on minority stress theory, is the first queer (e.g., sexual and gender minorities) youth affirmative group counselling intervention delivered at a school	Promoting resilience against health problems by increasing proactive coping, social connectedness, and self-esteem	Black and Minority Ethnic Sexual Minority Youth (N = 261) predominantly Hispanic, Black, and White/Hispanic.	Post-intervention, all groups experienced increases in proactive coping and self-esteem; however, they did not report significant increases in social connectedness
(Craig, McInroy et al. 2012) Canada/USA	Strengths First strength-based case management prevention intervention, which incorporates individualised care plans to assist with life difficulties	Increase self-efficacy and self-esteem to address low identity confidence, internalised homophobia, and negative health outcomes	Black and Minority Ethnic Sexual Minority Youth (N = 162) presenting with a specific problem (e.g., bullying) to be addressed in their care plan.	At post-test, all groups, regardless of gender, sexual orientation, or race/ethnicity, displayed significant increases in both self-esteem and self-efficacy
(Grafsky, Letcher et al. 2011) USA	CRA Community reinforcement approach comprising 12 therapy sessions and four HIV education and skills practice sessions. CRA participants also	Reducing drug use and mental health symptomology. Concurrently building rapport, instilling hope, developing treatment plans, improving social and problem-solving skills, making decisions,	Homeless sexual minority youth (N=52)	Significant decreases in drug use and mental health symptoms post-intervention. In addition, SMY improved more

	received social and recreational counselling, an analysis of drug-using behaviour, and training in drug-refusal and relapse prevention	and finding jobs		than heterosexual participants on mental health variables (e.g., internalising and depressive symptoms) and two drug use variables
(Lucassen, Hatcher et al. 2015, Lucassen, Merry et al. 2015) New Zealand	<p>Computerised cognitive-behavioural therapy (cCBT) (game-based)</p> <p>Rainbow SPARX (smart, positive, active, realistic, x-factor thoughts)</p> <p>focuses on learning CBT strategies: relaxation, behavioural activation, problem solving, social skills training, and thought restructuring, while also encouraging hope</p>	Reduce depression	Sexual minority youth (N = 21)	Post-intervention, RSPARX was considered appealing and most reported they would recommend it to other SMY. Multiple measures of depression significantly decreased from pre- to post-intervention, and these changes held at 3-month follow-up. There were also significant improvements in anxiety and hopelessness at post-test
(Iacovides, Samra et al. 2017) UK	Rainbow SPARX	Feasibility study	LGBT (N = 21)	Recommendations for change for use in UK sample -include social interaction

Family based approaches				
(Diamond et al., 2012; Diamond, Diamond et al. 2013), Israel	ABFT Attachment-based family therapy (ABFT) attempts to create a sense of safety and trust in the parent–child relationship by involving the parent in the therapeutic process	Reduce depression and suicidality. Improve parent-child relationships, Support parents to process emotions such as disappointment, pain, anger, and fear that were associated with their child’s orientation	Sexual minority youth and family (N=10)	At pre-treatment, 6 weeks, and 12 weeks, self-reported levels of depressive symptomatology, suicidal ideation, and maternal attachment-anxiety were assessed. Post-treatment, depressive symptomatology and suicidal ideation significantly decreased. In addition, maternal-attachment anxiety and avoidance decreased for a specific part of the sample that had necessary data available

For any queries or further information about the “Improving the mental health outcomes of Nottingham's LGBT populations” research project, commissioned by NHS Nottingham City Clinical Commissioning Group, please contact the Principal Investigator:

Dr Rebecca Barnes

Address: Department of Criminology, University of Leicester, 154 Upper New Walk, Leicester, LE1 7QA.

Email: rb358@le.ac.uk