# Understanding self-harm, suicidal ideation and behaviours amongst transgender and non-binary people

A thesis submitted to the University of Manchester for the degree of Doctor of Clinical Psychology in the Faculty of Biology, Medicine and Health

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## Contents

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| Paper 1 | 8,634 |
| Paper 2 | 10,030 |
| Paper 3 | 6,120 |
| **Total** | **24,784** |

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# **Thesis Abstract**

This thesis consists of three separate papers: 1) a systematic literature review, 2) an empirical study, and 3) a critical and reflective review of the research process.

The systematic review (Paper 1) has been prepared for submission to *The Journal of Affective Disorders.* The paper presents a narrative systematic review of the literature that reported quantitative analyses on associations between one or more minority stress factor and suicidal ideation and/or behaviours amongst Transgender and Gender Non-Conforming (TGNC) adults. Twenty-eight studies were included, with an overall number of participants totalling 101,378. Findings presented in a narrative synthesis highlighted positive associations between external and internal minority stressors and suicidal ideation and behaviour. Community resilience was negatively associated with suicidal outcomes but did not consistently buffer the effects of minority stress. Dysfunctional individual coping was associated with a greater likelihood of suicide attempts. In light of these findings, individual and systemic clinical implications and recommendations for future research are outlined.

The empirical study (Paper 2) has been prepared for submission to *The Journal of Gay and Lesbian Mental Health*. The paper is a qualitative study that seeks to gain a greater understanding of self-harm urges and behaviour amongst non-binary young adults and what helped them to manage these urges. The impact of Covid-19 on participants experiences was also explored. Eleven participants were recruited to take part in the study. Data were collected and analysed in line with a constructivist grounded theory approach. This method allowed for the emergence of a theoretical framework, which consisted of seven categories: (1) Growing up feeling outside of the binary, (2) The pain of living in a cisnormative world, (3) Family discord, (4) Self-harm, (5) Suicidal ideation, (6) What helps, and (7) Life in Covid-19. Findings offer clinical implications and highlight a need for increased awareness, understanding and acceptance of non-binary identities.

Paper 3 offers a critical and reflective appraisal of the entire research process. Strengths and limitations of the systematic review and empirical study are discussed, as well as theoretical and clinical implications of the work. Personal and professional reflections on the process of conducing the thesis are also discussed.

## **Declaration**

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning

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## Acknowledgements

Firstly, I would like to thank the eleven individuals who gave up their time to participate in my empirical study. Their strength and inspiring stories served as a motivator throughout this process.

I would like to thank my supervisors, Dr James Lea and Dr Daniel Pratt for their guidance throughout the research process. Thank you for sharing your expertise and for all of the support you have given me over the past three years. It has been a joy to work with you both and I feel thankful to have had such supportive supervisors.

Thank you to my friend and fellow trainee, Hayley Montgomery, for taking the time to be my independent screener and quality assessor, and to all of the 2018 cohort of ClinPsyD trainees who have provided me with constant support, validation and friendship. I couldn't think of a better group of people to have shared this journey with. It has been a privilege to be alongside them in the ups and downs over the past three years.

Lastly, I would like to thank my family and friends for always believing in me, for being my biggest supporters and for their constant love, support and understanding.

## Paper 1

# The Relationship Between Minority Stress Factors and Suicidal Ideation and Behaviours Amongst Transgender and Gender Non-Conforming Adults: A Systematic Review

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The following paper has been prepared for submission to Journal of Affective Disorders. (See appendix 1 for contributor guidelines).

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## Abstract

**Background:** The impact of Minority Stress (MS) upon suicidal ideation and behaviours amongst Transgender and Gender Non-Conforming (TGNC) adults is not sufficiently understood, hence our intervention efforts on an individual and societal level are limited. This review aimed to evaluate recent literature that reports on the association between MS and suicidal ideation and behaviours amongst TGNC adults.

**Methods:** PsycINFO, Web of Science, MEDLINE, CINAHL and EMBASE were systematically searched for relevant articles. Peer reviewed and grey literature were considered. Included papers reported quantitative analyses on associations between MS factors and suicidal ideation and behaviours amongst TGNC adults. The quality of papers was assessed.

**Results:** Twenty-eight papers were identified as eligible. Findings suggested positive associations between external and internal minority stressors and suicidal ideation and behaviour. Dysfunctional individual coping was associated with a greater likelihood of suicide attempts. Community resilience was negatively associated with suicidal outcomes, but did not consistently buffer the effects of minority stress.

**Limitations:** Overall quality of included papers was 'poor'. All papers were cross-sectional by design, therefore causality cannot be inferred. Many papers measured variables using non-standardised measures undermining the reliability and validity of reported results.

**Conclusions:** Findings offer support to the application of MS theory to the understanding of suicidal ideation and behaviour amongst TGNC. Future research should use standardised measures and longitudinal designs to better support the investigation of directionality and causality. More research is needed to understand the complex interactions between minority stress factors and the role of resilience in this population.

**Key Words:** Transgender, Gender Non-Conforming, Suicide, Minority Stress, Systematic Review

# Introduction

## Gender Diversity and Suicidality

The term *cisgender* means having a gender identity that normatively relates to Sex Assigned At Birth (SAAB), in a social context in which the normative assumption is that: penis = male = boy/man; and vagina = female = girl/woman. The term *transgender* or *trans* is an umbrella term for anyone whose SAAB and gender identity do not correspond in the expected or traditional manner. Binary transgender identities refer to people who have transitioned (or are transitioning) from living as one gender to the other (e.g., transman, transwoman). *Gender non-conforming* is a term that refers to individuals whose gender identity or expression is not confined within the gender binary of *male/man* or *female/woman*. It often refers to individuals with non-binary gender identities (e.g., genderqueer, gender-neutral, genderfluid) (Richards et al., 2016). The term *Transgender and Gender Non-Conforming* (TGNC) is used in academic literature to refer to people who self-identify as binary transgender, or as being gender non-binary (American Psychological Association, 2015), therefore, this term will be used for the purpose of this review.

TGNC populations experience elevated levels of distress and mental health difficulties, such as low mood, anxiety and interpersonal trauma, compared to their cisgendered peers (Reisner et al., 2016; Valentine & Shipherd, 2018; British Psychological Society, 2019). TGNC individuals have also been found to exhibit higher rates of suicidal ideation and behaviours than their cisgendered peers (Adams et al., 2017; Marshall., 2015; McNeil at al., 2017). *Suicidal ideation* refers to suicidal thoughts, including considering or planning to end one's life. *Suicidal behaviour* includes active behaviour undertaken with the intention of ending life, which would include suicide attempts or deaths from suicide.

Adams et al. (2017) synthesised results from 42 studies investigating suicidal ideation and behaviour amongst TGNC adults and found that on average, 51% had experienced suicidal ideation and 11% had attempted suicide in the past 12 months. These figures were 14 times higher than for the general public for suicidal ideation, and 22 times higher for suicide attempts (Adams et al., 2017). Thus, highlighting the prevalence of suicidal ideation and behaviour amongst TGNC people, and the need for an understanding of factors that mediate suicidal thoughts and attempts in order to inform psychological intervention. Valentine and Shipherd (2018) suggested that these negative mental health outcomes could be explained in the context of Minority Stress (MS).

## TGNC and Minority Stress Theory (MST)

Meyer (1995; 2003; 2015) and Meyer et al. (2021) propose that adults from Lesbian, Gay, Bisexual (LGB) and TGNC minority groups experience unique social and relational stressors not experienced by their socially dominant cisgendered and heterosexual peers. The specific stressors come as a result of their minority status, creating adverse health outcomes, including increased mental health difficulties and suicide. Recent research focussed on TGNC individuals suggests that MST represents the leading model in explaining health disparities amongst adult TGNC populations (Institute of Medicine, 2011; Hendricks & Testa, 2012; Meyer, 2015; Testa et al., 2015; BPS, 2019; Meyer et al., 2020). Meyer (1995, 2003, 2015) describe MS processes in relation to external (distal), internal (proximal) and resilience factors:

### *External (Distal) Processes*

External (distal) processes create psychological stress as a result of prejudice events related to a person's minority status, which refer to any negative treatment from others or organisations that threaten safety or security (Meyer, 1995, 2003, 2015). TGNC people experience external prejudice in the form of gender-related discrimination, violence and victimisation (Testa et al., 2015). In both the UK and USA, alarming rates of gender-based hate crime, violence and discrimination have been found within the workplace, healthcare, and housing (James et al., 2016; Bachmann & Gooch, 2018). A further unique external stressor experienced by the TGNC community is referred to as non-affirmation, whereby a person's gender identity is ignored or they are misgendered (Testa et al., 2015). The Gender Affirmation Framework (GAF) hypothesises that TGNC people are at a higher risk of experiencing adverse health outcomes, if they have unmet gender affirmation needs (Sevelius & Sevelius, 2013).

### *Internal (Proximal) Processes*

Internal (proximal) processes are created as a result of the interaction between the TGNC individual living in a society that promotes being heterosexual and cisgender as the normative or preferred sexuality (heteronormative) and gender identity (cisnormative). The world may be experienced as unsafe and stigmatising, whereby people are hypervigilant to prejudice and harm to maintain safety and to protect oneself. These experiences create internal psychological stress, distress and discomfort. People with TGNC identities may attempt to conceal their gender identity so as to be perceived as cisgender (referred to as 'passing') to maintain safety in the world, though this invariably creates internal stress and distress (Meyer, 2003; Meyer, 2015; Testa et al., 2015; Hendricks & Testa, 2012). Finally, individuals may internalise negative social attitudes, shame and disgust from the external world, leading to the experience of internalised transphobia. These internalised attitudes lead to a pernicious internal distress, whereby the person devalues and feels shame about oneself (Meyer, 2003; Testa et al., 2015).

### *Protective Factors*

The impact of these minority stressors can be lessened by individual resilience (personal qualities and personality characteristics) and community resilience (affirming/accepting social environments and social support) (Meyer, 2003; 2015). Whilst one's minority status may come with minority stressors, it also brings about the opportunity to affiliate and belong with other minority group members and gain valuable social support from alike others. Group affiliation and belonging allows minoritised individuals to evaluate themselves in relation to similar others as opposed to members of the dominant group, thus bringing about validation and a more positive self-evaluation (Meyer, 2003; Thoits, 1985; Schmitt et al., 2006).

## **TGNC, MST and Suicidal Ideation and Behaviour**

Marshall et al. (2016) reported on correlates of suicidal ideation and behaviours whilst systematically reviewing the literature on prevalence rates in TGNC people. Lack of social support and mental health diagnoses were highlighted as risk factors for suicidal ideation and behaviours. McNeil et al. (2017) similarly found that mental health diagnoses, and negative interpersonal experiences (e.g. discrimination) correlated with elevated rates of suicidal ideation and behaviours in the TGNC population. Both systematic reviews found inconsistent associations between demographic factors (such as gender identity, education, SAAB or sexuality) and suicidal ideation and behaviours across studies. However, neither papers reviewed correlates of suicide in a systematic fashion.

More recently, Wolford-Clevenger et al. (2018) offered to address this limitation and completed a systematic review of the literature published from 1st January 1991 to 31st July 2017 examining the correlates of suicide amongst a TGNC population.  The review was guided by the ideation-to-action theory, which suggests that suicidal ideation, suicide attempts and death by suicide, all have distinct causal pathways (Klonsky & May, 2014). Wolford-Clevenger et al. (2018) investigated factors that separated TGNC individuals who attempted or died from suicide, from those who thought about suicide alone. Their review offered some support to the application of ideation-to-action theory within this population highlighting sources of psychological pain, social connectedness and capacity/capability for suicide. Wolford-Clevender et al. (2018) found consistent positive associations between internal and external MS factors with suicidal ideation and behaviours and recognised these as sources of psychological pain. Negative associations between social support and suicidal ideation and behaviours were also reported. These findings suggest that increased internal and external MS may be associated with higher levels of suicidal ideation and behaviour, and that social support may be protective against suicidal ideation and behaviours amongst TGNC individuals. However, the quality of studies included in their review was poor overall and the review failed to include a detailed table of results or description of statistical analysis performed within included studies.

The results from the above systematic reviews highlight MS processes as consistent and significant in the understanding of suicide amongst TGNC individuals. Previous research also supports a need for future research to examine the impact of MS on suicidality amongst TGNC populations (Adams et al, 2017). Previous reviews outline associations between certain MS factors and suicidal outcomes, however no review has applied MS theory to the understanding and analysis of results. Furthermore, no review has considered resilience as understood within MS theory (Meyer, 2003; 2015). MS theory is the leading theory in the understanding of distress in the LGBTQI+ community. Therefore, further investigation is needed to understand how MS relates to suicidal ideation and behaviour amongst TGNC individuals. This review seeks to address this.

In recent years, TGNC people's visibility has increased within mainstream media and more attention is focused on difficulties faced by TGNC people (Lovelock, 2017; Miles, 2018; Berberick, 2018). A recent content analysis of the literature on TGNC people showed a continuous increase in the psychological research being conducted, with a request for further research on suicide amongst TGNC people (Moradi et al. (2016). Consequently, since Wolford-Clevenger et al.'s (2018) review, a surge of research focused on correlates of suicidal ideation and behaviours amongst TGNC individuals has taken place; thus highlighting the need for an updated review of the literature conducted in recent years.

Furthermore, an updated review would allow for a focus on resilience factors from an MS perspective, something that was missing from Wolford-Clevenger et al.'s (2018) review.

### Aim

Building upon findings from the previous systematic reviews (Marshall et al., 2015; McNeil et al., 2017; Wolford-Clevenger., 2018), the current narrative systematic review conducted an in-depth investigation of suicidal ideation and behaviour amongst TGCN people through the lens of MST (Meyers, 2003; 2015; Hendricks & Testa, 2012). The review will focus on papers of TGNC adults, which aligns with the current MST evidence base (Meyer, 2003; Hendricks & Testa, 2012).

## Method

A systematic review method was employed in accordance with the Centre for Reviews and Dissemination (CRD, 2009) and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocols (PRISMA-P; Appendix 2) (Moher et al. 2009). A protocol was created and registered with PROSPERO (CRD42021175198, 25th January 2021) to ensure methodological clarity (Gough & Elbourne, 2002). Data were extracted by the first author (HG) and results were synthesised to create a meaningful narrative to summarise findings (Popay et al. 2006).

### Search strategy

A systematic search of PsycINFO, Web of Science, MEDLINE, CINAHL and EMBASE was conducted. Grey literature of unpublished theses were searched for using the British Library website. The date range specified for searches was between 1st August 2017 and 5th April 2021, ensuring inclusion of all papers published after Woldford-Clevenger et al.'s (2018) review.

Search terms used to identify relevant papers comprised: agender OR female-to-male OR male-to-female OR gender divers* OR gender non-conform* OR genderqueer OR non-binary OR gender dysphor* OR transfeminine OR transgender OR transmasculine OR transsexual OR genderfluid OR two-spirit AND suicid*.

Search results were added to an EndNote database (Clarivate Analytics, 2020). Once duplicates had been removed, titles and abstracts of articles were screened. The search strategy also included a backwards citation search of reference lists of included articles**.**

## Eligibility Criteria for Papers

Inclusion and exclusion criteria were developed to select relevant studies for the systematic review.

*Inclusion:*

1) Published in English language,
2) Peer reviewed publications and unpublished dissertations and theses,
3) Include a sample of adults (18+ years) who self-identified as transgender or any gender non-conforming identity (TGNC). This included those with binary transgender identities (e.g. trans, transman or transwoman) and non-binary gender identities (e.g. genderqueer, gender neutral, genderfluid, trans),
4) Include a sample of participants who had experience of suicidal ideation and/or behaviours at any time in their lifetime,
5) Include a measure (validated or bespoke) of suicidal ideation and/or behaviours.
6) Quantitative studies (that provide formal statistical analysis or descriptive statistics),
7) Mixed method studies (that have conducted formal statistical analysis or descriptive statistics for the quantitative aspect),
8) Investigate the association between suicidal ideation and/or behaviours and other study variables reflective of one or more MS processes according to MST (i.e. prejudice events and conditions, expectation of prejudice, mis-affirmation/misgendering, concealment of identity, internalised stigma and transphobia, community resilience and/or internal resilience).

*Exclusion:*

1) Focussed only on cisgender participants,
2) Included mixed groups of gender identity or included TGNC within Lesbian, Gay, Bisexual, Trans, Queer, Intersex (LGBTQI+) samples, and did not report outcomes separately,
3) Included mixed groups of age range in which results from participants over 18 years within the study could not be extracted,

4) Employed a solely qualitative methodology; case studies, review papers, or theoretical papers.

### Search Selection and Process

Titles and abstracts were reviewed by the first author (HG) in order to identify potentially relevant papers. Full texts of identified papers were then screened for eligibility against the inclusion criteria by HG. See Figure 1 for details of the study selection process.

A random sample of 25% of the identified papers were independently screened for inclusion by a peer at both title and abstract, and full text screening. Cohen's kappa scores were calculated to determine agreement between screeners, with scores of ($\kappa$=0.75) at title and abstract screening and ($\kappa$=0.89) at full text screening, indicating strong agreement at both stages of screening. Any discrepancies were reviewed and resolved through discussion between assessors and the research team.

Data was extracted from the full text papers by HG and transferred to a data extraction spreadsheet. Extracted data included: design, sample characteristics, study measures, variables and relevant statistics that reflect the relationship between suicidal outcomes and one or more MS variable. The MST framework was applied to the organisation of data and a narrative synthesis was conducted.

In order to use MST as a framing device, factors associated with suicidal outcomes in each included paper were categorised into one of three forms of minority stress (external minority stress factors, internal minority stress factors and resilience factors), as described by Meyer (2003; 2015) and Hendricks and Testa (2012). Framing results in this way allowed for exploration of the evidence relating to each specific form of minority stress and it's association with suicidal outcomes amongst TGNC adults.

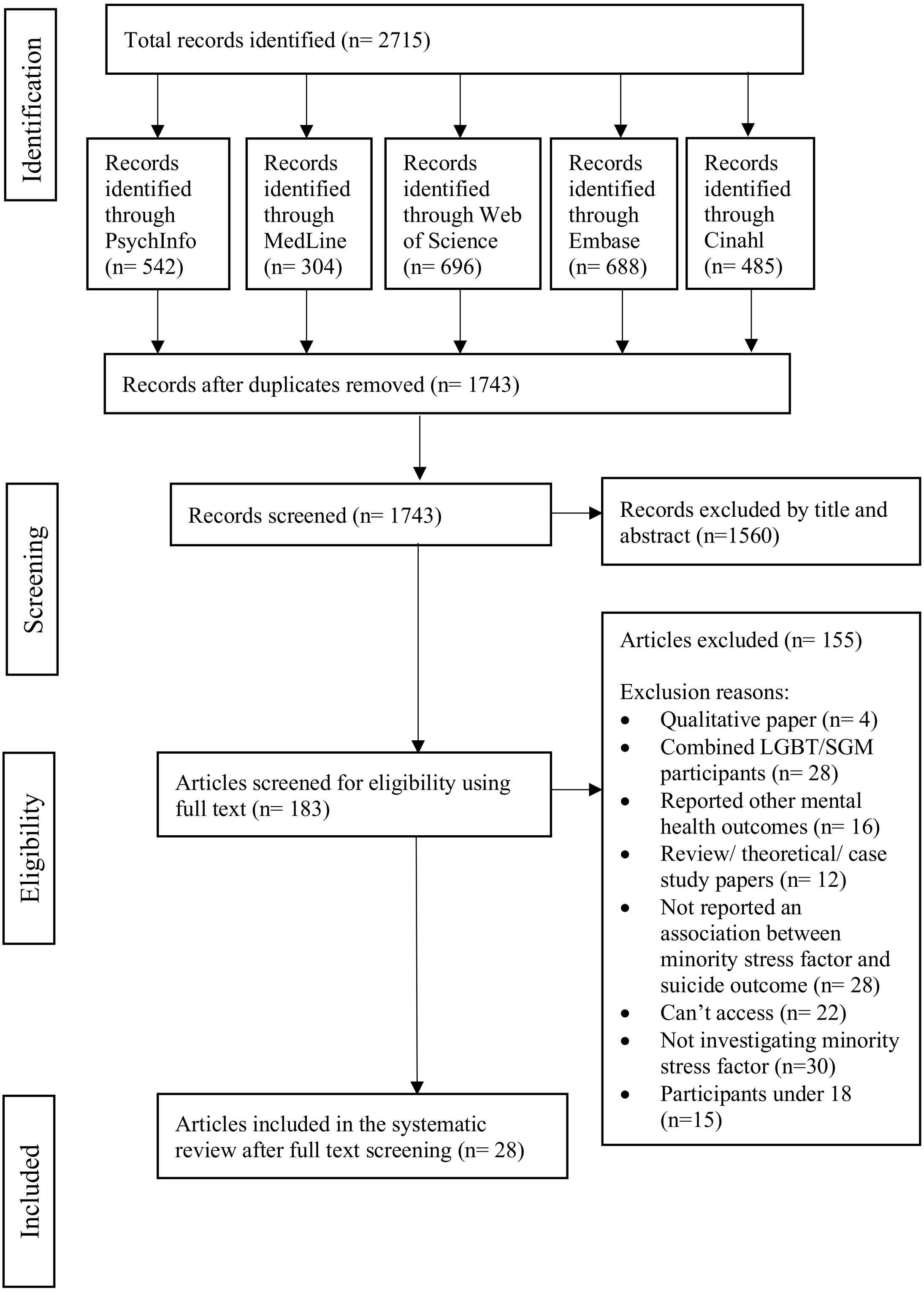

*Figure 1: PRISMA flow diagram – illustrates the selection process of studies included and excluded at each stage.*

### *Quality assessment*

The National Institutes of Health's Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies (NIH, 2014) was used to assess the quality of studies included in the review (appendix 3). As all studies included in the review were either cross-sectional or cohort studies, this tool was selected due to its ability to provide thorough assessment of the internal validity of cross-sectional and cohort studies (Ma et al., 2020). Furthermore, this tool was used in the previous review (Wolford-Clevenger et al., 2018), thus allowing for a comparison of the quality of studies included in both reviews.

The tool was used in line with NIH (2014) guidance. Reviewers indicated yes, no, not reported or not applicable on each of the 12 items. Items included assessment of factors such as: clarity of research question, study population, sample size justification, the measurement of exposure, etc. Reviewers determined each study's quality as poor (0), fair (1) or good (2). Numerical values were assigned in order to compute an average score indicating quality of all included papers, with 0–0.5 = poor quality, 1–1.5 = fair quality, and 2 = good quality (see table 2).

Quality assessment of studies was completed independently by HG. An independent peer also assessed 25% of papers. Cohen's Kappa was calculated to determine agreement between assessors and yielded a score of ($\kappa$=0.83), indicating strong agreement. Any discrepancies were resolved by discussion between assessors and the research team and all final ratings were agreed upon.

## **Results**

### **Study and Participant Characteristics**

Systematic searches identified a total of 28 studies with an overall number of participants totalling (n = 101,378; k = 28). Twenty-six studies were peer reviewed publications, two were unpublished theses (Sapareto, 2018; Hingston, 2019). Twenty-seven studies were cross sectional in design and one study was longitudinal (Rabasco & Anover, 2021). See table 1 for study characteristics and findings.

Twenty-five studies were completed in the USA, one in Pakistan (Shah et al., 2018), one in Australia (Zwickl et al., 2021), and one across Australia and New Zealand (Treharne et al., 2020). Sample sizes ranged from n=29 to n=23,541 with participant ages ranging from 18 to 75 years. Participants exhibited a wide range of gender identities across the TGNC spectrum. The majority of studies included binary and non-binary TGNC participants (k=20), some studies included binary transgender participants only (k=6), one study included transgender women only (Kota et al., 2020) and one study did not report the specific gender identities of participants, only that they were transgender (Shah et al., 2018).

In most studies (k=23), the majority of participants were identified as White. Of the remaining studies: one study reported 84% participants identified as Black/African American (Kota et al., 2020); one study reported 62.3% participants identified as belonging to a combined category of ‘White, Middle Eastern or North African’ (Scheim et al., 2020); and one study recruited a population of participants who identified solely as Asian American (Becerra et al., 2021). Two studies did not report the ethnicity of participants (Zwickl et al., 2021; Treharne et al., 2020).

Participants from 27 studies were recruited from non-clinical populations via convenience sampling methods. Some recruited participants to complete an online survey (k=10), others used secondary data from past surveys (k=15). Two studies collected data via face-to-face structured interviews (Shah et al., 2018; Kota et al., 2020). Three studies recruited specialist populations: participants from two studies were military veterans (Carter et al., 2019; Tucker et al., 2019) and participants from one study had been in prison (Drakeford et al., 2018). Whilst the inclusion of these studies allowed for comprehensiveness, it should be recognised that results from these studies may be unique to their specialist cohorts of participants and not generalisable TGNC adults that do not belong to these cohorts. One study recruited participants from a clinical population during intake for clinical services and collected data from intake paperwork (Edwards et al., 2019).

Table 1. *Study Characteristics and Findings*

| Reference & Country | Design | Sample characteristics | Measure of suicidal ideation and/or behaviour | Minority stress factors | Main findings | Quality assessment |
|---|---|---|---|---|---|---|
| Rabasco and Andover (2021)<br>USA | Longitudinal online surveys | Total: 180<br>Age: Mean = 26.08 (SD=6.90), Range = 18-55<br>Gender identity: Transwoman = 55%, Transman = 18.3%, Gender non-conforming = 5%, Genderqueer = 5%, Other = 16.7%<br>Ethnicity: American Indian or Alaska Native = 1.1%, Asian = 7.2%, Native Hawaiian or Other Pacific Islander = 0.6%, Black or African American = 2.8%, White or Caucasian = 76.7%, Multiracial = 6.1%, Other = 5.7% | **Overall score for suicidal ideation, behaviours and plans:** measured by The Beck Scale for Suicide Ideation (BSI; Beck & Steer, 1991) **–** measured at baseline and at 30 days follow up | **Discrimination, victimisation, community connectedness and pride:** measured by The Gender Minority Stress and Resilience Measure (GMSR; Testa et al., 2015) **–** measured at baseline and at 30 days follow up | Victimisation ($\beta=0.14$, $T=2.28$, $p<0.05$) and discrimination ($\beta=0.13$, $T=2.23$, $p<0.05$) significantly positively predicted BSI scores. No significant relationships between community connectedness or pride and BSI scores.<br>Longitudinal analysis lower levels of discrimination and victimisation associated with a decrease BSI score from baseline to follow up. Increased community connectedness during follow-up period associated with a decrease in BSI score. Pride did not moderate change in BSI score | Good |
| Brennen et al. (2017)<br>USA | Cross-sectional online survey | Total: 83<br>Age: Range= 19 -70.<br>Gender identity: Transwoman or MTF = 40%, Transman or FTM = 29%, Other gender non-conforming identity = 31%<br>Ethnicity: White = 84.3%, Multiracial = 8.4% Hispanic = 7.2% | **Lifetime suicidal ideation**: Measured by a yes/no answer to "Have you ever seriously considered suicide?"<br>**Lifetime suicide attempts**: Measured by a yes/no answer to "Have you ever attempted suicide?" | **Distal stress, proximal stress** and **resilience factors**: Measured by The Gender Minority Stress and Resilience Measure (GMSR; Testa et al., 2015) | No significant associations between GMSR measures and suicidal ideation.<br>Distal stress was a predictor for suicide attempts ($OR=1.140$, $p<0.01$). Resilience factors approached significance in associations with suicide attempts ($OR=0.934$, $p<0.10$). Proximal stress not significant predictor of suicide outcomes. | Fair |

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| Carter et al. (2019)<br>USA | Cross-sectional online survey | Total: 298 veterans<br>Age: Mean = 48 years old (SD = 15.23)<br>Gender identity: Transgender women = 87%, Transgender men = 13%<br>Ethnicity: Caucasian = 90%, Asian = 2%, Black = 2% American Indian/Alaska Native = 2%, Mixed race = 6%, Hispanic = 4%. | **Past two-week suicidal ideation:** Measured by item 9 from the Patient Health Questionnaire 9 (PHQ-9) | **Past year gender-based discrimination**: Measured by the Discrimination and Harassment subscale of the Daily Hetero-sexist Experiences Questionnaire (DHEQ; Balsam et al., 2013)<br>**Friend, family transgender and veteran social support:** Measured by subscales on (and adapted from) The Multidimensional Scale of Perceived Social Support (Zimet et al., 1988)<br>**Social connection (with LGBT people, with veterans):** Measured by answers on 7-point Likert scale to ‘‘What portion of your social time is spent with lesbian, gay, bisexual, or transgender (LGBT) individuals?’’ and ‘‘What portion of your social time is spent with Veterans?’’ | Significant but weak relationships between suicide ideation and family support (r=-0.18, p<0.01), friend support (r=-0.23, p<0.01), transgender friends support (r=-0.15, p<0.05), veteran friends support (r=-0.15, p<0.05) and discrimination (r=0.25, p<0.001). Neither family nor friend support moderated the effect of discrimination on suicidal ideation. Social support from transgender friends (B=0.09, SE=0.03, p<0.01), social connection with LGBT people (B=0.08, SE-0.04, p<0.05) and with veterans (B=0.10, SE=0.05, p<0.05) all significantly moderated the effect of discrimination on suicidal ideation. | Fair |
| Cogan et al. (2020)<br>USA | Cross-sectional online survey | Total: 155<br>Age: Mean = 29.86 (SD = 12.05), Range 18–67.<br>Gender identity: 20 unique gender identities within the sample. The largest portion identified as non-binary (25.2%). (75% were AFAB)<br>Ethnicity: White = 61.9%, African American or Black = 5.2%, Asian = 4.5%, Alaskan/Native American = 1.3%, Hispanic = 7.1%, | **Composite score**: Measured by Suicide Behaviours Questionnaire - Revised (SBQ-R; Osman et al., 2001). | **Proximal stress:** Measured by Gender Minority Stress and Resilience Measure (GMSR; Testa et al., 2015).<br>**Sexual violence:** Measured by item 8 on the Life Events Checklist for DSM-5 (LEC-5; Weathers et al., 2013). | Proximal stress significantly predicted suicide behaviour (b = 1.00, t [152] = 3.49, p < 0.001, CI (95%) = 0.44–1.57). Relationship between sexual violence and suicide risk partially explained by proximal stressors (b = 0.43, SE = 0.14, CI (95%) = 0.19–0.72). | Fair |

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|---|---|---|---|---|---|---|
|  |  | Biracial = 11%, Multiracial = 3.2%, Unknown = 1.3% |  |  |  |  |
| Cogan et al. (2020b)<br>USA | Cross-sectional online survey | Total: 155<br>Age: Mean = 29.86 (SD = 12.05), Range 18–67.<br>Gender identity: 20 unique gender identities within the sample. The largest portion identified as non-binary (25.2%). (AFAB = 75%)<br>Ethnicity: White = 61.9%, African American or Black = 5.2%, Asian = 4.5%, Alaskan/Native American = 1.3%, Hispanic = 7.1%, Biracial = 11%, Multiracial = 3.2%, Unknown = 1.3% | **Composite score**: Measured by Suicide Behaviours Questionnaire - Revised (SBQ-R; Osman et al., 2001). | **Total stressors (distal and proximal) and community resilience:** Measured by Gender Minority Stress and Resilience Measure (GMSR; Testa et al., 2015).<br>**Trauma exposure:** Measured by the Life Events Checklist for DSM-5 (LEC-5; Weathers et al., 2013). | Total stressors significantly predicted suicide behaviour (b=0.47, p < 0.001). Community resilience not associated with suicide behaviour nor moderator of relationship between total stressors or trauma exposure and suicide risk. | Fair |
| Edwards et al. (2019)<br>USA | Cross-sectional clinical intake data | Total: 106 therapy clients<br>Age: Mean =29.17 (SD=10.57), Range = 18-65<br>Gender identity: Female = 40.6%, Male = 32.1%, Questioning their gender identity = 7.5%, Genderqueer = 2.8%, Non-binary/ genderfluid = 1.9%, Neutrois = 0.9%, Trans = 0.9%, Intersex = 0.9%, Didn’t provide gender identity = 13<br>Ethnicity: White = 77.4%, Biracial/Multicultural = 9.4%, Latino/Hispanic = 5.7%, African American or Black = 2.8%, Native American/Native Alaskan = 1.9%, Asian American = 0.9% | **Composite score**: Measured by Suicide Behaviours Questionnaire – Revised (SBQ-R; Osman et al., 2001). | **Relational support**: Measured by the Perceived Social Support from Family (PSS-Fa) and Friends (PSS-Fr) measure (Procidano & Heller, 1983)<br>**Emotional stability:** measured using the emotional stability subscale of the Suicide Resiliency Inventory—25, (Osman et al., 2004) | No relationship found between relational support and suicide risk. Emotional stability significantly negatively associated with suicide risk (b = -2.22; p = .000). Relational support reduced suicide risk by first increasing emotional stability (b = 1.57; 95% CI = 2.60, 0.53). | Fair |

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| Freese et al. (2018)<br>USA | Cross-sectional online survey | Total: 316<br>Age: Mean = 32.5, *SD* = 12.5), Range = 18 to 73<br>Gender identity: Female = 7.6%, Male=24.4%, Genderqueer = 13.3%,, Transfemale = 7.9%, Transmale = 35.8%, Transexual = 1.9%, Other = 9.2%<br>Ethnicity: White/European = 75.9%, Asian/Asian American = 2.5%, Biracial/Multiracial = 9.5%, Black/African American = 4.1%, Latino/Hispanic = 5.7%, Native American/American Indian = 0.3%, Other = 1.9% | **Suicide attempts before and since gender affirmation/ transition:** Measured by a yes/no answer to "before you started/ since you started gender affirmation/ transition did you ever attempt to kill yourself" | **Profiles of coping with gender-related stress**: measured by the Brief COPE (Carver, 1997) | Participants with a pattern of 'high functional, high dysfunctional' coping had significantly higher levels of suicidality than those with a pattern of 'high functional, low dysfunctional' coping prior to transition (AOR = 2.87; 95% CI [1.24, 4.15]) and since beginning transition (AOR = 3.41; 95% CI [1.31, 8.88]). As well as those with a pattern of 'low functional, low dysfunctional' coping prior to transition (AOR = 2.61; 95% CI [1.36, 5.00]) and since beginning transition (AOR = 2.83; 95% CI [1.06, 7.58]). | Fair |
| Hingston (2019)<br>USA | Cross Sectional online survey | Total: 96<br>Age: Mean = 20.34, Range = 18-25)<br>Gender identity: Transman = 70.8%, Transwoman = 6.3%, Agender = 6.3%, Genderqueer = 4.2%, Genderfluid = 3.1%, Gender non-conforming = 1%, Other = 8.3%<br>Ethnicity: White/Caucasian = 87.5%, Latino/Hispanic = 5.2%, African America/Black = 5.2%, Native American = 3.1%, Asian/Pacific Islander = 3.1%, Biracial = 3.2%, Multiracial = 5.2% | **Suicidal ideation and attempts:** measured using scales used within the 2015 State and Local Youth Risk Behaviour Survey (YRBS) conducted by the Centres for Disease Control (CDC, 2014) | **Perceived parental support:** measured by the Perceived Parental Rejection Scale (PPRS; Willoughby et al., 2006) | A significant negative relationship was found between parental support and suicidal ideation ($r$ = -.209; $p$ = .04) as well as suicide attempts ($r$ = -.303; $p$ = .003) | Fair |

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| Rabasco and Andover (2020)<br>USA | Cross Sectional online survey | Total: 133<br>Age: Mean = 26.44 (SD = 6.68)<br>Gender identity: Transgender woman = 53.4%, Transgender man = 19.5%, Gender nonconforming = 6%, Genderqueer = 6.8%, Other = 14.3%<br>Ethnicity: American Indian or Alaska Native = 1.5%, Asian = 9%, Native Hawaiian or other Pacific Islander = 0.8%, Black or African American = 3.8%, White or Caucasian = 73.7%, Multiracial = 7.5%, Other = 3.8% | **Suicide attempts:** measured by The Beck Scale for Suicide Ideation (BSI; Beck & Steer, 1991). With follow-up question to ask participants how many lifetime suicide attempts they had made. | **Victimisation & Discrimination:** measured by the victimisation and discrimination subscales on The Gender Minority Stress and Resilience Measure (GMSR; Testa et al., 2015)<br>**Gender Identity State Policy Score:** derived from the Transgender Law Centre's national equality map for participants' states of residence | Victimisation ($\beta$=0.32, T=3.60, p<0.001) and discrimination ($\beta$=0.26, T=3.10, p<0.01) significantly positively predicted number of suicide attempts. Increased victimisation ($\beta$=-0.51, T=5.20, p<0.001) and discrimination ($\beta$=-0.66, T=5.72, p<0.001) was associated with number of suicide attempts when state policy score was low. | Fair |
| Sapareto (2018)<br>USA | Cross-sectional online survey | Total: 29<br>Age: Mean = 40.1 (SD = 15.64), Range = 18-75<br>Gender identity: Transgender male = 58.62%, Transgender female = 41.38%<br>Ethnicity: Black, African or African American = 10.34%, Latino or Hispanic = 3.45%, White, Caucasian or European American = 89.66% | **Composite score**: Measured by Suicide Behaviours Questionnaire – Revised (SBQ-R; Osman et al., 2001). | **Internalised transphobia:** measured by The Transgender Internalised Transphobia Scale (Szymanski and Chung, 2001)<br>**Perceived stigma**: measured by The Stigmatisation Scale (Harvey, 2001)<br>**Discrimination/Violence/Verbal Abuse:** measured by Prejudice Events Questionnaire which involved the following 'Yes/No' questions: In the past year, have you been discriminated against in any way because of your gender identity? In the past year, have you been physically attacked because of your gender identity? In the past year, have you been verbally harassed or verbally | Discrimination/violence/verbal abuse not significantly associated with suicide scores. Internalised transphobia negatively predicted suicide scores ($\beta$ = -0.39, B = -1.34, t = -2.28, p = .032). Perceived stigma positively predicted suicide scores ($\beta$ = 0.47, B = 2.02, t = 2.45, p = .022). | Fair |

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|  |  |  |  | abused because of your gender identity? |  |  |
| Staples et al. (2018)<br>USA | Cross-sectional online survey | Total: 237<br>Age: Mean = 28 (SD = 6.90).<br>Gender identity: Participants rated ‘maleness’ and ‘femaleness’ on a scale (0-1). Average Maleness = 5.54 (3.35), Average Femaleness = 4.20 (3.38), Scored 0 on Maleness scale = 8.9%, Scored 10 on Maleness scale = 11.8, Scored 0 on Femaleness scale = 13.9%, Scored 10 on Femaleness scale = 8.0%, Scored 0 on both scales = 2.1%, Scored 10 on both scales = 0.8%<br>Ethnicity: White = 73.7%, Multiracial or Mixed Race = 16.5%, Hispanic or Latino = 4.7%, Asian or Pacific Islander = 2.5%, Black/African American = 1.3%, Other = 0.8%, American Indian or Alaska Native = 0.4% | **Overall score for suicidal ideation, behaviours and plans:** measured by The Beck Scale for Suicide Ideation (BSI; Beck et al., 1979) | **Distal trans stress:** measured by the Harassment and Discrimination subscale and the Victimization subscale from The Daily Heterosexist Experiences Questionnaire (DHEQ; Balsam, Beadnell, & Molina, 2013) and The Experience of Transgender Discrimination scale (ETD; Poteat, 2012)<br>**Internalized trans-negativity**: measured by The Transgender Identity Scale (TGIS; Bockting et al., 2020) | Distal trans stress (r=0.37, p<0.001) and internalised trans-negativity (r=0.27, p<0.01) significantly positively associated with suicide score. Internalised trans-negativity was found to significantly mediate the relationship between distal trans stress and suicide score (β = .07; 95% CI = .02, .13).<br>. | Fair |
| Tucker et al. (2019)<br>USA | Cross-sectional online survey | Total: 201 veterans<br>Age: 18+ years<br>Gender identity: MTF gender identity = 87.1%, FTM gender identity = 12.9%<br>Ethnicity: White = 89.6%, Asian = 1.5%, Black or African American = 1.5%, American Indian/ Alaska | **Past year suicidal ideation:** measured by item 2 of the Suicidal Behaviours Questionnaire Revised (SBQ-R; Osman et al., 2001).<br>**Suicidal ideation experienced over the last 2 weeks:** assessed via question 9 of the Patient Health | **External minority stress:** measured by Daily Heterosexist Experiences Questionnaire (DHEQ; Balsam, Beadnell, & Molina, 2013)<br>**Internal Minority Stress:** measured by Transgender Identity Scale–Shame Subscale | Internal minority stress significantly mediated the relationship between external minority stress and increased past year (B = .1126, 95% BC CI [0.0369, 0.2326]) and past two week (B = .0473, 95% BC CI [0.0072, 0.1171]) suicidal ideation. Internal military minority stress | Fair |

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| | | Native = 2%, Mixed Race = 5.5% | Questionnaire (PHQ-9; Kroenke et al. 2001) | (TIS; Bockting et al., unpublished data, January 2010)<br>**Military External Minority Stress:** measured by an 8-item measure adapted from a measure of military punishment and investigation of sexual minority status in veterans (Cochran et al., 2013)<br>**Military Internal Minority Stress:** measured by 8-item adapted from a measure of concealment and anxiety related to sexual minority status during military service in veterans (Cochran et al., 2013). | mediated the relationship between external minority stress and increased past year (B = .0885, 95% BC CI [0.0142, 0.2143]) but not past two-week suicidal ideation. | 🟧 |
| Becerra et al. (2021)<br><br>USA | Cross-sectional online survey | Total: 1369<br>Age: 18+ years<br>Gender identity: Transmen, Transwomen and Other. (Percentages of each identity were not reported)<br>Ethnicity: Asian Americans = 100% | **Suicidal thoughts:** measured by asking "At any time in the past 12 months did you seriously think about trying to kill yourself?" and "At any time in your life, have you seriously thought about trying to kill yourself?" Yes/No<br>**Suicide attempts:** measured by asking "During the past 12 months, did you try to kill yourself? or At any time in your life, did you try to kill yourself?" | **Harassment/abuse related to bathroom use:** measured by asking "In the past year, did anyone tell or ask you if you were using the wrong bathroom? In the past year, did anyone stop you from entering or deny you access to a bathroom?" and "In the past year, were you verbally harassed, physically attacked, or experience unwanted sexual contact when accessing or while using a bathroom?" Yes/No | Harassment/abuse related to bathroom use was significantly associated with increased odds of suicide attempts (AOR=1.81, CI=1.41-2.31, p<.001). No significant associations were found with suicidal thoughts. | Poor |
| Christian et al. (2018)<br><br>USA | Cross-sectional online survey | Total: 406<br>Age: 18+ years<br>Gender identity: Transman = 23.2%, Transwoman = 29.2%, Transgender = 4.4%, Man = 4.9%, Woman 14.0%, | **Past year suicidal ideation**: Measured by a yes/no answer to asking participants if they had had serious thoughts of suicide in part year. | **TGNC inclusive healthcare:** Measured by a yes/no response on the Colorado Transgender Health Survey which asked if respondents felt the healthcare provider they see most regularly | Individuals without TGNC inclusive healthcare providers more likely to have suicidal thoughts (47.2% versus 29.0%), and to have made a suicide attempt in the past year (15.5% versus 7.4%). | Poor |

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| | | Agender = 1.2%, Genderqueer/fluid = 17.2%, Other = 5.7%, Not reported = 0.2%<br>Ethnicity: White = 79.6%, Black = 0.7%, Hispanic = 6.9%, Other race or multiple races = 10.3%, not reported = 2.5% | **Past year suicide attempt:** Measured by a yes/no answer to asking participants if they had made a suicide attempt in past year.<br>(Specific wording not reported) | provides transgender inclusive health care.<br>(Specific wording not reported) | | |
| Drakeford (2018)<br>USA | Cross-sectional online survey | Total: 1,007 (all of which had been to prison)<br>Age: 18+ years<br>Gender identity: MTF = 62.89%, FTM = 17.91%, Other gender non-conforming identity = 19.2%<br>Ethnicity: White = 69.81%, Non-white = 30.19% | **Lifetime suicide attempts**: Measured by a yes/no answer to asking participants whether they had ever attempted suicide.<br>(Specific wording not reported) | **Victimisation whilst incarcerated:** Participants were asked about their experiences of harassment, physical assaults, sexual assaults, denial of hormones, and denial of regular medical care. Measured as 2 binary variables (1=did experience) for experiencing victimisation from staff and victimisation from other inmates.<br>**Access to trans inclusive healthcare in prison:** Measured by binary variable (1=multiple services offered) that indicates the level of transgender-related medical care in the correctional systems policy within the participant’s state of residence. Based on results of Brown & McDuffie (2009) | Long-term incarceration with high levels of inclusive medical care associated with significantly decreased odds of attempting suicide (OR=0.279, p<0.05). Significant association between victimisation from fellow inmates (OR=1.417, p<0.05) and victimisation from staff (OR=1.476, p<0.05) | Poor |
| Hughto et al. (2020)<br>USA | Cross-sectional online survey | Total: 228<br>Age: Mean = 33 (SD =13.0),<br>Gender identity: Transmasculine spectrum = 81.3%, Transfeminine spectrum = 18.7% | **Suicidal ideation before and since gender affirmation/ transition:**<br>Measured by a yes/no answer to “Before you started/ since you started the gender | **Transgender related discrimination:** measured by a measure that was developed for and utilised with transgender samples in in previous research (Rood et al., 2015, 2016). | Significantly greater odds of experiencing suicidal ideation (AOR = 3.86; 95% CI = 2.67–5.57; p < .001) ; and attempting suicide (AOR = 5.52; 95% CI = 3.45–8.84; p < .001) prior to gender | Poor |

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| | | Ethnicity: White = 75.3%, Non-white/ not listed = 24.7% | affirmation/ transition process, did you ever seriously consider killing yourself?"<br>**Suicide attempts before and since gender affirmation/ transition:** "Before you started/ since you started the gender affirmation/ transition process, did you ever attempt to kill yourself?" | **Gender affirmation:** measured by two yes/no questions that asked: whether participants had participated in hormone therapy in the past 6 months or longer; or gender-affirming medical procedures including gender-affirming surgeries (e.g., breast or chest surgery, vaginoplasty, phalloplasty) or other medical procedures, such as silicone injections.<br>(Specific wording not reported) | affirmation compared to post-gender affirmation. Analysis models controlled for education, transgender-related discrimination and years since affirming one's gender. | |
| Kattari et al. (2019)<br><br>USA | Cross-sectional online survey | Total: 20,672<br>Age: Mean = 31.54 (SD=13.38).<br>Gender: Transwoman = 35.54%, Transman = 30.44%, AFAB non-binary = 27.66, AMAB non-binary = 6.37%<br>Ethnicity: White = 63.44%, Latino/Hispanic = 16.4%, Black = 12.64%, Asian/Pacific Islander = 5.09%, Biracial/Multiracial = 2.43% | **Past year suicidal ideation**: Measured by a yes/no answer to asking participants whether they have had suicidal thoughts in the past 12 months (Specific wording not reported) | **Positive healthcare experiences:** Two dependent variables which included: being treated with respect (measured by answering yes or no to "a doctor knew I was trans and treated me with respect"); and having to teach healthcare professional about trans people (measured by answering yes or no to "[I] had to teach a doctor or healthcare professional about trans people.") | Suicidal thoughts associated with significantly lower odds of reporting being treated with respect within a healthcare setting (OR=0.88; $p < 0.05$) and significantly greater odds of needing to teach about trans people (OR=1.33; $p < 0.001$). | Poor |
| Klein et al. (2018)<br><br>USA | Cross-sectional online survey | Total: 5,981<br>Age: Mean = 36.69 (SD = 13.11), Range = 18 to 98.<br>Gender identity: Binary transgender= 76%, Non-binary gender identity = 24% (AMAB = 58.8%).<br>Ethnicity: Non-Hispanic White = 77.8%, Non-Hispanic Black = 4.9%, Hispanic = | **Lifetime suicide attempts:** Measured by a yes/no answer to asking participants whether they had ever attempted suicide.<br>(Specific wording not reported) | **Discrimination**: measured by asking participants whether they had experienced mistreatment due to their being TGNC in any of the following settings: retail store; hotel or restaurant; bus, train, or taxi; airport or airport staff/TSA; doctor's office or hospital; emergency room; rape crisis centre; domestic violence shelter program; mental health | Discrimination significantly associated with higher odds of having attempted suicide (AOR=1.60; 95% CI = 1.40-1.83; $p<.001$). Discrimination in a social service setting was associated with higher odds of suicide attempts compared to general discrimination (AOR=2.45; 95% CI = 2.05-2.93; $p<.001$) and no discrimination | Poor |

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| | | 7.2%, Multiracial/Other = 10.1% | | clinic; drug treatment program; ambulance or EMT; government agency/official; police officer, judge, or court official; and legal services clinic. Response options: included "denied equal treatment or service," "verbally harassed or disrespected," "physically attacked or assaulted," "not applicable I have not tried to access this," "not applicable, I do not present as transgender here," or "not applicable I did not experience these negative outcomes." Participants were coded for having experienced discrimination in a social service setting (1), outside of a social service (2) setting and not at all (3). | (AOR=3.31; 95% CI=2.69-4.08; p<.001). | |
| Kota et al. (2020)<br>USA | Cross-sectional online survey | Total: 92<br>Age: Mean = 35 (IQR=11), Range = 18-65)<br>Gender identity: Transgender woman = 100%<br>Ethnicity: African American/Black = 84%, Caucasian/White = 11%, Others = 5% | **Suicidal ideation:** Measured by combining two items, (1) "In the past 12 months, have you considered attempting suicide?" Yes/No; and (2) "I have thought about suicide because of my gender status," responses provided on a 5-point Likert scale that was then dichotomised by collapsing the responses of 4 (agree) and 5 (strongly agree) as "Yes" and all other responses as "No." | **Perceived stigma:** Measured by four items from the original 'Internalised Homophobia' scale developed for gay individuals (Ross & Rosser, 1995) adapted for transgender women.<br>**Partner support:** Measured via a survey however study doesn't report specifically how this was measured or any wording used.<br>**Psychosocial impact of gender minority status**: measured using three items from a 4-item subscale of the Transgender Adaptation and Integration | Partner support associated with significantly lower odds of suicidal ideation (AOR=0.34; 95% CI = 0.13–0.90; p<0.05). Psychosocial impact of gender minority stress mediated the relationship between perceived stigma and suicidal ideation (B=0.46, SE = 0.26, 95% CI: 0.12, 1.11). | Poor |

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|  |  |  |  | Measure, developed by Sjoberg et al. (2006) |  |  |
| Lelutiu-Weinberger et al. (2020)<br>USA | Cross-sectional online survey | Total: 17,188<br>Age = 18+ years<br>Gender identity: Transgender woman = 54%, Transgender man = 46%<br>Ethnicity: Black/African American = 3%, Latino/Hispanic = 5%, White = 83%, Other = 9% | **Suicidal ideation:** Measured by asking participants if they had experienced suicidal ideation in the past 12 months, Yes/No.<br>(Specific wording not reported) | **Affirmation:** Made up of structural-level affirmation (legal documentation measured by 6 items regarding preferred name and gender on a variety of legal ID allowing for participants to be coded as 2 – affirmed, 1 – partially affirmed and 0 – not affirmed); institution-level affirmation (medical affirmation measured by 8 items related to hormone and surgical treatment that allowed participants to be coded as 2 – affirmed, 1 – partially affirmed and 0 – not affirmed); and interpersonal-level affirmation (familial affirmation measured by a composite of 8 questions relating to different types of support received from family).<br>**Discrimination:** Measured by asking participants if they had experienced 1) denial of equitable treatment, 2) verbal harassment, and 3) physical attack targeting trans identity in the past year; Yes/No. | Affirmation associated with significantly lower odds of suicidal ideation (β=-0.22, S.E.=0.02, p<.001). Discrimination associated with higher odds of suicidal ideation (β=-0.32, S.E.=0.01, p<.001). Significant interaction affect highlighting positive association between discrimination and suicidal ideation is weaker at higher levels of affirmation (*b*=-0.10, S.E.=0.04, p<.01. | Poor |
| Romanelli and Lindsey (2019)<br>USA | Cross-sectional online survey | Total: 23,541<br>Age: Mean = 31.2 (SD =13.3)<br>Gender identity: Transwoman = 32%, Transman = 30.3%, | **Past year suicidal thoughts:** Measured with a Yes/No response.<br>(Specific question or wording not reported) | **Experiences in healthcare settings (discrimination and/or provider lacking trans competence):** Measured by 10 items based on those from the | Past year suicidal thoughts associated with had greater odds of belonging to class 1 (experiencing discrimination and poor trans competence) compared to class 2 | Poor |

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| | | AFAB non- binary = 28.3%, AMAB non-binary = 6.4%<br>Ethnicity: White = 82.1%, Biracial = 5.5%, Hispanic/Latinx = 5.1%, Black/African American = 1.2%, Asian/Pacific Islander = 2.8%, Alaskan Native/Native American = 1.2%, Middle Eastern/North African = 0.5% | | National Transgender Discrimination Survey (Grant et al. 2011) but expanded on to provide further detail. Responses were formed into a 3-class model, (1) overt discrimination and providers with limited trans competence, (2) did not experience healthcare discrimination or report issues related to providers' trans competence, (3) did not experience discrimination but had providers with low trans competence. | (no discrimination and no issues with trans competence) (OR=2.02; 95% CI=1.58-2.58; p<.001) and compared to class 3 (no discrimination but poor trans competence) (OR=1.6; 96% CI=1.22-2.08; p<.001). Suicidal thoughts associated with greater odds of belonging to class 2 compared to class 2 (OR=1.21; 95% CI=1.11-1.44; p<.001). | 🟥 |
| Romanelli et al. (2018)<br>USA | Cross-sectional online survey | Total: 4,190<br>Age: Mean = 37.9 (SD = 13.1)<br>Gender identity: MTF transgender = 61.7%, FTM transgender = 38.3%.<br>Ethnicity: White = 75.1%, Non-White = 24.3% | **History of suicide attempts:** measured by asking the question, "Have you ever attempted suicide?", Yes/No | **Service denial**: measured by asking "Based on being transgender, please check whether you have experienced denied equal treatment or service in these public spaces." (1) doctor's office or hospital; (2) the ER; and (3) the MH clinic.<br>**Service discrimination:** measured by asking "Based on being transgender, please check whether you have experienced being verbally harassed or disrespected in these public spaces." (1) doctor's office or hospital; (2) the ER; and (3) the MH clinic.<br>**Treatment receipt:** measured by asking "Because of disrespect or discrimination from doctors or other health | Increased service denial (β = 0.044, 95% CI [0.013, 0.075], p = 0.006, being denied employment opportunities (β = 0.043, 95% CI [0.009, 0.077], p = 0.012), and using substances to cope (β = 0.154, 95% CI [0.121, 0.188], p≤0.001) positively associated with attempted suicide. Service discrimination not associated with attempted suicide. Perceived social support negatively associated with attempted suicide (β = − 0.054, 95% CI [− 0.068, − 0.040], p ≤ 0.001). Using substances to cope significantly mediated the relationship between service denial and suicide attempts. However, no statistics were reported. | Poor |

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| | | | | care providers": (1) I have postponed or not tried to get needed medical care; and (2) I have postponed or not tried to get check-ups or preventive medical care.<br>**Substance use to cope:** measured by 1 item – "I drink or misuse drugs to cope with the mistreatment I face or faced as a transgender person."<br>**Perceived emotional social support:** measured by 4 items to reflect participants perception that family and friends provided emotional social support (i.e., acceptance) surrounding their gender identity. (Specific wording not reported) | | |
| Scheim et al. (2020)<br><br>USA | Cross-sectional online survey | Total: 22,286<br>Age: Mean = 30.9 (SE=0.1)<br>Gender identity: Transwoman 33.6%, Transman 33.1%, AFAB non-binary 25.5%, AMAB 5.8%<br>Ethnicity: White, Middle Eastern or North African = 62.3%, Lanix or Hispanic = 16.7%, Black or African American = 13%, Biracial, Multiracial or Not listed = 2.3%, Asian or Pacific Islander = 5%, Alaska Native or American = 0.7% | **Suicidal ideation:** measured by asking "At any time in the past 12 months did you seriously think about trying to kill yourself?", Yes/No.<br>**Suicidal planning:** measured by asking those who answered yes to ideation "Did you make any plans to kill yourself?", Yes/No.<br>**Suicide attempt:** measured by asking those who said yes to planning: "Did you try to kill yourself?" in the same time period, Yes/No | **Having gender concordant IDs:** measured by asking "Thinking about how your name [gender] is listed on all of your IDs and records that list your name, such as your birth certificate, driver's license, passport, etc. Which of the statements below is most true?" Respondents could indicate that all, some, or none "of my IDs and records list the name [gender] I prefer". This created 3 variables (all, some or none gender concordant IDs) | Those with ID concordant with preferred name and gender identity had lower prevalence of suicidal ideation (ARP=0.78; 95% CI = 0.72-0.85) and suicidal planning (APR=0.75; 95% CI = 0.64-0.87) than those who had no concordant IDs. | Poor |

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| Schweizer and Mowen (2020)<br>USA | Cross-sectional online survey | Total: 350<br>Age: 18+ years<br>Gender identity: Transwoman = 65.4%, Transman = 34.6%<br>Ethnicity: Non-white transwomen = 40.6%, Non-white transmen = 33.9% | **Combined suicidal ideation and attempts:** measured by combing responses to two items ‘have you ever thought about killing yourself?’ and ‘have you ever tried to kill yourself?’ | **Discrimination:** measured by five questions each scored as–1 - 1) “Have you ever been denied enrolment in a health insurance plan because of your transgender status?” 2) “Have you ever experienced discrimination by a doctor or other healthcare provider due to your transgender status or gender expression?” 3) “Have you ever been denied a job you applied for due to your transgender status and/or gender expression?” 4) “Have you ever been fired from a job due to your employer’s reaction to your transgender status and/or gender expression?” and 5) “Have you ever lost housing or a housing opportunity due to your transgender status and/or gender expression?” | Discrimination was significantly associated with higher odds of combined suicidal ideation and attempts (OR=1.473, RSE=0.219, p<0.05) | Poor |
| Seelman et al. (2017)<br>USA | Cross-sectional online survey | Total: 417<br>Age: Mean and mode age category = 25 – 34<br>Gender identity: Transgender women = 30.3%, Transgender man = 24.9%, Genderqueer/genderfluid = 18.3%, Women = 15%, Men = 5.6%, Transgender = 4.6%, Agender/no gender = 1.3%<br>Ethnicity: White = 88.4%, Multiracial = 8.8%, Other = 2.9%, Hispanic = 6.7% | **Past year suicidal thoughts:** Measured with a Yes/No response.<br>**Past year suicidal attempt:** measured with a Yes/No response.<br>(Specific questions or wording not reported) | **Non-inclusive healthcare:** measured by asking participant’s primary healthcare provider provides transgender-inclusive healthcare. If no, participants were asked to indicate why not by checking one or more of the following: (a) not enough knowledge on transgender-related healthcare needs; (b) not comfortable with patients who identify as trans-gender; (c) does not address my | Having a non-inclusive primary health care provider not associated with higher odds of past year suicidal ideation or attempts. Delaying medical care due to fear of discrimination significantly associated with higher odds of suicidal ideation (OR=2.93; 95% CI = 1.71–5.02; p<.001) and suicide attempts (OR=3.81; 95% CI = 1.78-8.15; p<.001) | Poor |

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| | | | | transgender-specific healthcare needs, only other medical needs; (d) office policies and forms are not transgender inclusive; I office does not provide a welcoming environment for transgender patients; and (f) other (specify). A score of 1 was attributed to each checked item and summed. Higher scores reflected less inclusive care.<br>**Delaying medical care due to fear of discrimination**: measured by answering Yes/No to whether participants had ever delayed getting medical care in the past 12 months because of fear of discrimination. (Specific wording not reported) | | |
| Shah et al. (2018)<br>Pakistan | Cross-sectional data collected via interview | Total: 189<br>Age: Mean = 29 (SD = 7.88)<br>Gender identity: Specific identities not reported<br>Ethnicity: Not reported | **Suicidal ideation and attempts:** defined in three was - suicidal ideation only (thought about suicide but never attempted), suicidal ideation total (actively considered suicide including those who have attempted suicide) and suicidal behaviour (those who had attempted suicide but no longer experience suicidal thoughts). (Specific questions and wording not reported). | **Discrimination based victimisation**: measured by asking participants if they had ever been physically/verbally attacked "(like jeered, grabbed, punched, stabbed, hit by a rock etc)". If yes, participants were asked whether gender identity was the primary reason for these attacks. Scored with a binary measure to reflect whether or not someone had experienced discrimination-based victimisation.<br>**Institutional discrimination:** measured by asking whether a participant had experienced being fired/denied from the job, | No associations were found between discrimination-based victimisation and any suicidal outcomes. Institutional discrimination associated with higher odds of suicidal ideation total (AOR = 6.202; 95% CI = 1.583-24.297); p=.009) but neither other suicidal outcome. Lack of family and community support significantly associated with suicidal ideation (total) (AOR = 4.992; 95% CI = 2.078-11.994; p<.001) and suicidal ideation only (AOR = 2.956; 95% CI = 1.117-7.298; p=0.028). | Poor |

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| | | | | lost and denied housing, discrimination at the hospital, school and denied enrolment in insurance schemes etc., Yes/No.<br>**Family and community support:** study reports this information was gathered through close ended questionnaires however specific questions and wording are not reported. | | |
| Treharne et al. (2020)<br>Australia & New Zealand | Cross-sectional online survey | Total: 700<br>Age: Mean = 29.64 (SD = 11.82), Range = 18-74<br>Gender identity: 56% of sample were transgender. Agender = 5.7%, Female = 42%, Male = 22.4%, Non-binary = 29.9%. Results reported reflect transgender participants only.<br>Ethnicity: Not reported | **Past month suicidal ideation:** measured by The Suicidal ideation Attributions Scale (SIDAS; Van Spiker et al., 2014)<br>**Life time suicidal ideation:** measured by asking “Have you ever thought about ending your life?” Yes/No<br>**Past year suicide attempts:** Measured by asking “How many times have you attempted suicide in the last year?”<br>**Lifetime suicide attempts:** measured by asking “How many times have you attempted suicide in total over your lifetime?” | **Perceived social support:** measured by Multi-Dimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988)<br>**Discrimination:** measured by the Everyday Discrimination Scale (EDS; Lewis et al., 2012) | Discrimination significantly positively associated with higher odds of lifetime suicide attempt (OR=1.10, p<0.001) but neither suicidal ideation outcome or recent suicide attempts.<br>Perceived social support significantly associated with lower odds of recent suicidal ideation (OR=0.71, p=0.007) and lower odds of lifetime suicide attempts (OR=0.73, p=0.003) but not lifetime suicidal ideation or recent suicidal attempts. | Poor |
| Zwickl et al. (2021)<br>Australia | Cross-sectional online survey | Total: 928<br>Age: Median = 28, (IQR = 23-39)<br>Gender identity: Transman = 26%, Transwoamn = 22%, Non-binary = 14%, Female = | **Life-time suicide attempts:** measured by asking “Have you ever attempted suicide?” Yes/No | **Access to trans support groups:** measured by asking participants if they were a member of any trans support groups, including social media. | Institutional discrimination (AOR=1.59, CI=1.14-2.22, p=0.007) and physical assault (AOR=2.00, CI=1.37-2.93, p=0.0004) were both significantly positively associated with higher | Poor |

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|---|---|---|---|---|---|---|
| | | 15%, Male = 10%, Genderqueer = 4%, Agender = 2%, Genderfluid = 2%, Gender neutral = 1%, Other = 3%<br>Ethnicity: No reported | | Yes/No/Unsure (Specific wording not reported)<br>**Institutional discrimination:** measured by asking "Because of your trans status have you ever experienced any of the following (select all that apply)?" with options of "Discrimination from employment (i.e. lost a job or overlooked for a job)", "Discrimination from housing (i.e. denied a rental application)", "Discrimination from accessing healthcare", "Discrimination from government services (i.e. Centrelink)", "Physical assault", "Verbal abuse", "Domestic violence", and "None"<br>**Physical assault:** measured by asking participants whether they had ever experienced physical assault because of their trans status. Yes/No (Specific wording not reported) | odds of suicide attempts. No significant association was found between access to trans support group and suicide attempts. | 🟥 |

## Quality Assessment

Quality ratings of papers included in the review by Wolford-Clevenger et al. (2018) found that 56% of studies were of poor quality, 29% were of fair quality and 15% of good quality. They calculated that the average quality of studies on a scale of 0-2 was 0.67. In comparison, the current review found that 57% of studies were of poor quality, 39% were of fair quality and 4% were of good quality. The average quality of studies was 0.46. A comparison of these figures indicates that the overall quality of studies included in the current review were of poorer methodological quality compared to past research.

The cross-sectional nature of the studies was the most common area of weakness amongst studies, as this meant that causality between MS factors and suicide outcomes could not be inferred. Furthermore, two items on the quality assessment tool, regarding blinding of assessors and follow-up dropout rate, were only applicable to the one longitudinal study included in the review, so were therefore excluded from the assessment. The majority of studies did not report how many participants were recruited in comparison to the total number of eligible persons who met criteria (k=27). Sample size justifications were also not reported by the majority of studies (k=26). Another area of weakness, amongst studies that rated as 'poor', was the lack of use of validated measures for both MS factors and suicide outcomes.

Table 2. Quality Ratings Table

| Author | Research Question | Study Population | Rate of eligible persons | Same population and eligibility criteria | Sample size justification | Exposure prior to outcome | Sufficient time-frame | Levels of exposure | Exposure measures | Repeated exposure | Outcome measures | Statistical analysis | Overall Rating |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rabasco & Andover (2021) | Yes | Yes | Not reported | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Good |
| Brennen et al. (2017) | Yes | Yes | Not reported | Yes | No | No | No | Yes | Yes | No | No | Yes | Fair |
| Carter et al. (2019) | Yes | Yes | Not reported | Yes | No | No | No | Yes | Yes | No | Yes | Yes | Fair |
| Cogan et al. (2020) | Yes | Yes | No | Yes | No | No | No | Yes | Yes | No | Yes | Yes | Fair |
| Cogan et al. (2020b) | Yes | Yes | Not reported | Yes | No | No | No | Yes | Yes | No | Yes | Yes | Fair |
| Edwards et al. (2019) | Yes | Yes | Not reported | Yes | No | No | No | Yes | Yes | No | Yes | No | Fair |
| Freese et al. (2018) | Yes | Yes | Not reported | Yes | No | No | No | Yes | Yes | No | No | Yes | Fair |
| Sapareto (2018) | Yes | Yes | Not reported | Yes | Yes | No | No | Yes | Yes | No | Yes | Yes | Fair |
| Staples et al. (2018) | Yes | Yes | Not reported | Yes | No | No | No | Yes | Yes | No | Yes | Yes | Fair |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tucker et al. (2019) | Yes | Yes | Not reported | Yes | No | No | No | Yes | Yes | No | Yes | Yes | Fair |
| Hingston (2019) | Yes | Yes | Not reported | Yes | Yes | No | No | Yes | Yes | No | Yes | No | Fair |
| Rabasco & Andover (2020) | Yes | Yes | Not reported | Yes | No | No | No | Yes | Yes | No | Yes | Yes | Fair |
| Christian et al. (2018) | No | Yes | Not reported | Yes | No | No | No | No | No | No | No | No | Poor |
| Drakeford (2018) | Yes | Yes | Yes | Yes | No | No | No | No | No | No | No | No | Poor |
| Hughto et al. (2020) | Yes | Yes | Not reported | Yes | No | No | No | Yes | No | No | No | Yes | Poor |
| Kattari et al. (2019) | Yes | Yes | Not reported | Yes | No | No | No | Yes | No | No | No | No | Poor |
| Klein et al. (2018) | Yes | Yes | Not reported | Yes | No | No | No | Yes | No | No | No | No | Poor |
| Kota et al. (2020) | Yes | Yes | Not reported | Yes | No | No | No | No | No | No | No | No | Poor |
| Lelutiu-Weinberger et al. (2020) | Yes | Yes | Not reported | Yes | No | No | No | No | No | No | No | Yes | Poor |
| Romanelli & Lindsey (2019) | Yes | Yes | Not reported | Yes | No | No | No | Yes | No | No | No | Yes | Poor |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Romanelli et al. (2018) | Yes | Yes | Not reported | Yes | No | No | No | No | No | No | No | Yes | Poor |
| Scheim et al. (2020) | Yes | Yes | Not reported | Yes | No | No | No | Yes | No | No | No | Yes | Poor |
| Seelman et al. (2017) | Yes | Yes | Not reported | Yes | No | No | No | No | No | No | No | Yes | Poor |
| Shah et al. (2018) | Yes | No | Not reported | Yes | Yes | No | No | No | No | No | No | No | Poor |
| Treharne et al. (2020) | Yes | Yes | Not reported | Yes | No | No | No | Yes | Yes | No | No | No | Poor |
| Zwickl et al. (2021) | Yes | Yes | Not reported | Yes | No | No | No | No | No | No | No | No | Poor |
| Becerra et al. (2021) | Yes | No | Not reported | Yes | No | No | No | No | No | No | No | No | Poor |
| Schweizer & Mowen (2020) | Yes | Yes | Not reported | Yes | No | No | No | No | No | No | No | Yes | Poor |

### Suicide Outcomes

Seven studies included composite measures, resulting in an overall, combined score assessing suicidal ideation, behaviour and suicide risk. The Suicidal Behaviours Questionnaire Revised (SBQ-R; Osman et al., 2001), used by four studies (Cogan et al., 2020; Cogan et al., 2020b; Edwards et al., 2019; Sapareto, 2018), provides an overall score indicating suicide risk and comprises four items regarding suicidal ideation, past attempts and likelihood of future attempts. The Beck Scale for Suicide Ideation (BSI; Beck et al., 1979; Beck & Steer, 1991), a 21-item-measure of severity of suicide ideation, was used by two studies (Staples et al., 2018; Rabasco & Andover 2021). One study operationalised the measurement of suicidal outcomes as 'suicidality' which was calculated by combining two dichotomous measures: lifetime suicidal thoughts, and lifetime suicide attempts (Schweizer & Mowen, 2020) .

Six studies measured suicide attempts only. Four of these measured history of suicide attempts without a standardised measure, indicating presence or absence of attempting suicide with yes/no questions (Drakeford, 2018; Klein et al., 2018; Romanelli et al., 2018; Zwickl et al., 2021). One study measured suicide attempts by asking participants two yes/no questions to ascertain if they had attempted suicide before, and since beginning gender affirmation/transition (Freese et al., 2018). Another study used the Beck Scale for Suicide Ideation (BSI; Beck & Steer, 1991) alongside a follow up question to measure number of suicide attempts (Rabasco & Andover, 2020)

Suicidal ideation alone was measured by six studies. Four of these studies measured past year suicidal ideation by indicating presence or absence of past year suicidal ideation with yes/no questions (Kattari, 2019; Kota et al., 2020; Lelutiu-Weinberger et al., 2020; Romanelli & Lindsey, 2019). Carter et al. (2019) and Tucker et al. (2019) used item 9 ("Thoughts that you would be better off dead, or of hurting yourself in some way?") from the Patient Health Questionnaire (PHQ-9; Kroenke et al. 2001) to measure suicidal ideation over the last two weeks. Tucker et al. (2019) measured past year suicidal ideation using item 2 ("How often have you thought about killing yourself in the past year?") of the Suicidal Behaviours Questionnaire Revised (SBQ-R; Osman et al., 2001).

Nine studies measured both suicidal ideation and attempts, using separate assessments. Five of these studies measured suicide ideation and attempts dichotomously but with varying time frames (Brennen et al., 2017; Christian et al., 2018; Seelman et al., 2017; Becerra et al., 2021; Hughto et al., 2020). For the other four studies, Scheim et al. (2020) measured past year suicidal ideation, suicide planning and suicide attempt dichotomously. Hingston (2019) measured ideation and attempts using scales from the 2015 state and local youth risk behaviour survey (Centers for Disease Control; CDC, 2014). Treharne et al. (2020) measured past month ideation using The Suicidal Ideation Attributions Scale (SIDAS; Van Spiker et al., 2014) and measured life-time ideation, past year attempts and lifetime attempts dichotomously. Shah et al. (2018) operationalised the measurement of suicide outcomes in three ways: suicidal ideation alone (thought about suicide but never attempted), suicidal ideation total (actively considered suicide including those who attempted) and suicidal behaviour (had attempted suicide but do not think about it anymore).

## External (Distal) Minority Stress

Three studies measured overall external MS and all attracted a quality rating of 'fair'. Tucker et al. (2019) found external MS and military-specific external MS were significantly, positively associated with past year and past two-week suicidal ideation, however there was no significant direct associations between external MS and suicidal ideation found by Brennen et al. (2017). External MS was found to be a significant predictor of suicide attempts (Brennen et al., 2017), although Sapareto (2018) failed to find a significant association between prejudice events and a composite suicide score on the SBQ-R.

### *Discrimination*

Associations between suicidal outcomes and discrimination were reported by ten studies. Six studies had quality ratings of 'poor', three studies had quality ratings of 'fair' (Carter et al., 2019; Staples et al., 2019; Rabasco & Andover, 2020), and one study had a quality rating of 'good' (Rabasco & Andover, 2021). Forms of discrimination measured included: *non-specific discrimination, discrimination in a social service setting, institutional discrimination, service denial, being denied employment opportunities and service discrimination.* Details of how these concepts were measured can be found in table 1.

Non-specific discrimination was positively associated with suicidal ideation in two studies (Carter et al., 2019; Lelutiu-Weinberger et al., 2020), with two others finding no significant association between suicidal ideation and non-specific discrimination (Treharne et al., 2020), or institutional discrimination (Shah et al., 2018). Service denial, being denied employment opportunities (Romanelli et al., 2018), non-specific discrimination (Rabasco & Andover, 2020; Treharne et al., 2020; Kline et al., 2018), institutional discrimination (Zwickl et al., 2020) and discrimination in a social service setting (Klein et al., 2018) were all positively associated with suicide attempts. A stronger association between discrimination and suicide attempts was found when state policy scored low in its protectiveness of TGNC people (Rabasco & Andover, 2020). Furthermore, discrimination in a social service setting was associated with significantly higher odds of suicide attempts than non-specific discrimination (Klein et al., 2018). However, another study found no significant association between institutional discrimination and suicide attempts (Shah et al., 2018). This difference in results may be reflective of a cultural difference because Shah et al (2018) took place in Pakistan, whereas Zwickl et al. (2020), who found a positive association between suicide attempts and instituational discrimination, took place in Australia. Service discrimination (Romanelli et al., 2018) was also not significantly associated with suicide attempts.

A positive association was found between non-specific discrimination and SBQ-R scores (Staples et al., 2018), combined ideation and attempts (Schweizer & Mowen, 2020) and BSI scores (Rabasco & Andover, 2021), as well as between institutional discrimination and participants who had experienced both suicidal ideation and attempts (Shah et al., 2018). Rabasco and Andover (2021) also found that lower levels of discrimination was associated with decreased BSI scores after 1 month follow-up, thus suggesting that experiencing lower levels of discrimination was associated with decreased suicidal ideation.

### *Victimisation, Violence and Verbal Abuse*

Seven studies reported on victimisation, violence and verbal abuse. Four studies received a rating of ‘poor,’, two had a rating of ‘fair’ (Staples et al., 2018; Rabasco & Andover, 2020), and one received a rating of ‘good’ (Rabasco & Andover, 2021). Forms of victimisation measured included: *non-specific victimisation, harassment and abuse related to bathroom use and physical assault.* Details can be found in table 1.

Staples et al. (2018) found a significant positive association between victimisation and suicidal ideation, whereas Shah et al. (2018) found no association between victimisation and any suicidal outcomes. Given that Staples et al. (2018) was rated ‘fair’ whilst Shah et al. (2018) was rated ‘poor’, perhaps greater reliability and validity may be attributed to findings from Staples et al. (2018) due to their use of validated measures. Harassment and abuse related to bathroom use was not associated with suicidal ideation (Becerra et al., 2021).

Victimisation (Rabasco & Andover, 2020), harassment and abuse related to bathroom use (Becerra et al., 2021), physical assault (Zwickl et al,.2020) and victimisation from both fellow inmates and staff whilst incarcerated (Drakeford et al., 2018) were associated with suicide attempts. A stronger association between victimisation and suicide attempts was found when state policy scored low in its protectiveness of TGNC people (Rabasco & Andover, 2020).

Low levels of victimisation was associated with decreased suicide ideation scores on the BSI at 30-day follow up (Rabasco & Andover, 2021), thus suggesting that experiencing lower levels of victimisation was associated with lower levels of suicidal ideation.

### *Affirmation*

Three studies that reported on the association between affirmation and suicidal outcomes had a quality rating of ‘poor’, so results should be interpreted with caution.

Participants were 3.86 times more likely to experience suicidal ideation and 5.52 times more likely to attempt suicide prior to starting their gender affirmation/transition compared to afterwards (Hughto et al., 2020). Furthermore, participants who had all of their ID documents concurrent with their preferred name and gender identity had a significantly lower prevalence rate of suicidal ideation and suicidal planning (Sheim et al., 2020).

Gender affirmation (including concordant ID, affirming medical interventions, and being affirmed by family) significantly mediated the relationship between discrimination and suicidal ideation. Positive association between suicidal ideation and discrimination was weaker at high levels of affirmation (Lelutiu-Weinberger et al., 2020).

### *Non-inclusive Healthcare Experiences*

All studies that reported on non-inclusive or discriminatory experiences when accessing healthcare had a quality rating of ‘poor’. Results should therefore be taken with caution. Healthcare experiences were investigated differently in all studies. Details can be found in table 1.

Romanelli and Lindsay (2019) measured participants’ experiences of discrimination when accessing healthcare, and experiences of having a provider who lacked the competence needed to appropriately support a TGNC person (referred to as ‘poor trans-competence’). Participants who reported experiences of both discrimination and poor trans-competence were twice as likely to experience suicidal thoughts compared to those who had experienced neither discrimination or poor trans-competence, and 1.6 times as likely compared to those who had experienced poor trans-competence but no discrimination. Participants who reported experiences of poor trans-competence, but no discrimination, were 1.2 times as likely to experience suicidal thoughts in comparison to those who had experienced neither. Similarly, Kattari et al. (2019) found that those who needed to teach their healthcare provider about TGNC people were 1.3 times as likely to experience past year suicidal ideation. Those who had been treated with respect within a healthcare setting were significantly less likely to report past year suicidal ideation.

A survey by Christian et al. (2018) found that those who did not perceive their healthcare provider as TGNC inclusive were more likely to have suicidal thoughts (47.2% versus 29.0%), and to have made a suicide attempt in the past year (15.5% versus 7.4%). Regarding access to trans-inclusive healthcare whilst in prison, participants who experienced high levels of inclusive medical care during long-term incarceration had 72% lower odds of attempting suicide than those who received non-inclusive healthcare (Drakeford et al., 2018). In contrast, Seelman et al. (2017) found no significant association between higher levels of non-inclusive healthcare and suicidal ideation or attempts.

### Internal (Proximal) Minority Stress

Seven studies reported on internal (proximal) minority stress. Internal MS factors that were reported on included*: measures for overall internal MS; perceived stigma, expectations of prejudice and behavioural responses to this; and internalised transphobia/trans-negativity.* Details can be found in table 1.

Internal MS was measured as an overall score within three studies, all of which had a quality rating of 'fair'. Internal MS was not found to predict the presence of suicidal ideation or history of suicide attempts when measured using a yes/no question (Brennen et al., 2017), but was found to significantly predict overall SBQ-R scores (Cogan et al., 2020). Tucker et al. (2019) looked at both MS and military specific MS with both forms of stress found to positively correlate with past two week and past year suicidal ideation.

Internal MS was also found to act as a mediator of the relationship between sexual violence and a composite suicide score on the SBQ-R (Cogan et al., 2020), and the relationship between external MS and suicidal ideation (Tucker et al., 2019). This suggests that sexual violence and external MS was associated with increased suicide ideation or behaviour through increased internal MS.

### *Perceived Stigma and Expectations of Prejudice*

Seelman (2017), whose quality rating was 'poor', reported on participants' behavioural responses to expectations of prejudice, (i.e., delaying medical care out of fear of discrimination), which was found to be associated with a 2.93-fold increase in the odds of suicidal ideation and 3.81-fold increase in the odds of a suicide attempt. Perceived stigma significantly predicted SBQ-R scores, suggesting that perceived stigma is associated with increased suicide risk (Sapareto, 2018). Kota et al. (2020) found that a higher level of perceived stigma was associated with suicidal ideation through increased psychosocial impact of gender MS.

### *Internalised Transphobia/Trans-negativity*

Two studies reported on the association between internalised transphobia/trans-negativity and suicide ideation severity (Staples et al., 2018) and a composite SBQ-R score (Sapareto, 2018). Both studies received quality ratings of 'fair'. Sapareto (2018) found that internalised transphobia was negatively associated with SBQ-R scores. This contradicted Staples et al.'s (2018) finding, from a much larger sample, of a significant positive association between internalised trans-negativity and suicide ideation severity. Mediation analysis found that external MS increased suicidal ideation through increased internalised trans-negativity (Staples et al., 2018).

## Resilience Factors

Eight studies reported on protective or resilience factors against MS. These included: *individual coping, social support and community resilience.* Details can be found in table 1.

### *Individual Coping*

Freese et al. (2018), who had a quality rating of 'fair', measured participants' coping styles using the Brief COPE (Carver, 1997) and categorised three distinct coping profiles based on participants' levels of functional coping (i.e. coping styles that use positive self-efficacy and social support) and dysfunctional coping (i.e. coping styles that are negatively self-directed or include substance use). Results found that participants who used high levels of both functional and dysfunctional coping styles were 3.87 times more likely to attempt suicide prior to transition, and 2.93 times more likely since starting transition, when compared to those who used high levels of functional coping styles and low levels of dysfunctional coping styles, as well as 5.52 times more likely prior to transition and 3.18 times since starting transition than those with low levels of both functional and dysfunctional coping styles. Romanelli et al. (2018), who had a quality rating of 'poor', found that the use of substances to cope was positively associated with suicide attempts, and that it significantly mediated the relationship between being denied services (on the basis of being transgender) and suicide attempts.

### *Social Support*

Nine studies reported on the association between social support (including: *perceived social support, family support, partner support, parent support, friend support and support from transgender or LGBT friends/community*) and suicide outcomes. Details can be found in table 1. Three studies received quality ratings of 'fair' (Carter et al., 2019; Edwards et al., 2019; Hingston, 2019), one study received a rating of 'good' (Rabasco & Andover, 2021). The other studies received quality ratings of 'poor'.

Partner support (Kota et al., 2019), family and friend support (Carter et al., 2019), parent support amongst young adults (18-25) (Hingston, 2019) and perceived social support (Treharne et al., 2020) were all negatively associated with suicidal ideation. Carter et al. (2019), whose participants were a cohort of transgender veterans, found that social support from LGBT friends, social support from veteran friends, time spent with LGBT people and time spent with veteran friends were all negatively associated with suicidal ideation. Another study found that relational support significantly reduced suicide risk by first increasing emotional stability (Edwards et al., 2019).

Perceived emotional support from friends and family (Romanelli et al., 2018), parental support (Hingston, 2019) and perceived social support (Treharne et al., 2020) were significantly negatively associated with suicide attempts. However, no association between access to transgender support groups and  suicide attempts was found (Zwickl et al., 2020). One study found that lack of family support was associated with a threefold increase in the odds of suicidal ideation and a fivefold increased odds of suicidal ideation and/or attempts (Shah et al., 2018).

### *Community Resilience*

Three studies reported on resilience using the Gender Minority Stress and Resilience Measure (GMSR; Testa et al., 2015). One study achieved a quality rating of ‘good’ (Rabasco & Andover, 2021), the other two studies achieved a quality rating of ‘fair’.

No significant relationship was found between resilience factors and suicidal ideation (Brennan et al., 2017) or SBQ-R score (Cogan et al., 2020b).  However, resilience factors were associated with a 7% reduction in the odds of attempting suicide (Brennan et al., 2017).

Rabasco and Andover (2021) reported on the resilience subscales (community connectedness and pride) within the GMSR separately. Cross-sectional analysis found no significant association between community connectedness and BSI scores. However, longitudinal analysis found that medium and high levels of community connectedness were associated with decreased BSI scores at 30-day follow up. Pride was not associated with BSI scores within cross sectional or longitudinal analysis.

### *Resilience Factors as Moderators for Minority Stressors and Suicide Outcomes*

Two studies performed mediation or moderation analysis to test whether resilience factors could offer protection against suicide in the face of minority stressors. Resilience factors did not moderate the relationship between external and internal MS and SBQ-R scores

(Cogan et al. (2020b). Neither family or friend support moderated the association between discrimination and suicidal ideation amongst transgender veterans (Carter et al., 2019)

However, social support from transgender friends, social connection with LGBT people, and social connection with veterans were found to significantly moderate the relationship between discrimination and suicidal ideation, but in counterintuitive ways. Discrimination was positively associated with suicidal ideation but only when these forms or social support or connection were at medium and high levels.

## Discussion

The current narrative systematic review aimed to provide an updated account of the factors associated with suicidal ideation and behaviour amongst TGNC adults by reviewing research conducted since a review by Wolford-Clevenger et al. (2018). The review specifically investigated MST factors to allow for a more in-depth and focused synthesis of recent literature. This review also looked at resilience factors through the lens of MST, which had not been done in previous reviews.

### Summary of Findings

Findings from the current review mirror and build upon findings from previous reviews (McNeil et al., 2017; Wolford-Clevenger et al., 2018) and provide further empirical support for the application of MST to the understanding of suicidal ideation and behaviours amongst TGNC adults. Results suggest that external and internal MS are associated with higher levels of suicidal ideation and behaviour and provide further support for the role of resilience factors in protecting against these suicidal outcomes. Results need to be viewed in their context due to methodological issues. The need for further use of longitudinal designs and standardised measures in future research is paramount.

The review presents novel findings in light of previous reviews. It provides further insight into the understanding of resilience and how it may protect against suicide, results suggest it does not effectively buffer the effects of MS on suicidal outcomes. This review also offers a novel understanding of individual coping in the context of MST. MST suggests that positive and adaptive individual coping can act as a resilience factor against MS, whilst results from this review found that negative individual coping can also be understood as a risk factor. The review also offers novel results that highlight the interactions between forms of MS.

### *External Minority Stress*

MST suggests that external prejudice events create distress within the TGNC individual which can therefore cause adverse health outcomes (Meyer 2003; Hendricks & Testa, 2012). Overall, results from this review provide evidence for the extension of the above to include suicide ideation and attempts, with significant positive associations reported between all investigated forms of external MS and suicidal ideation and attempts (Tucker et al., 2019; Lelutiu-Weinberger et al., 2020; Romanelli & Lindsay, 2019; Kattari et al., 2019; Staples et al., 2019; Brennan et al., 2017; Klein et al., 2018; Treharne et al., 2020; Rabasco & Andover, 2020; Zwickl et al., 2021; Drakeford et al., 2019; Becerra et al., 2021). Furthermore, one study provided evidence in support of a causal relationship between external MS and suicidal ideation with longitudinal analyses demonstrating experiences of discrimination and victimisation increased the severity of suicidal ideation reported 30 days later (Rabasco & Andover, 2021).

Experiences of non-affirmation have been identified as a specific form of MS faced by TGNC people (Testa et al., 2015). The Gender Affirmation Framework hypothesises that TGNC individuals, who have unmet gender affirmation needs, are at a higher risk of experiencing adverse health outcomes (Sevelius & Sevelius, 2013). Findings supported this hypothesis with studies that found that affirmation was associated with a reduced odds of suicidal ideation (Hughto et al., 2020; Scheim et al., 2020). One study also suggested that medical, legal and social affirmation may have helped to buffer the effects of discrimination, thus weakening the association between discrimination and suicidal thoughts (Lelutiu-Weinberger et al., 2020).

### *Internal Minority Stress*

Significant positive associations with suicidal ideation or attempts were found for overall internal MS, military-specific internal MS, internalised trans-negativity, and delaying care for fear of discrimination (Tucker et al., 2019; Seelman et al., 2017; Staples et al., 2018; Kota et al., 2020). These results support the idea that internal MS factors are associated with higher levels of suicidal ideation and behaviour (Meyer, 2003; Hendricks & Testa, 2012). However, no studies included in the review investigated the concealment of identity.

One study reported that those with higher levels of internalised trans-negativity had less severe suicide ideation (Sapareto, 2018). This finding may be characteristic of the small sample (n=29), because it has not been reported in other research on this topic. The fact that this unpublished study reports findings that contradict MST, may suggest that there is some publication bias towards studies in support of MST.

No significant association was found between overall internal MS and suicide attempts (Brennen et al., 2017). However, delaying medical care for fear of discrimination was significantly positively associated with suicide attempts (Seelman et al., 2017). This finding may suggest that the actions that TGNC people take in order to manage their expectations of prejudice are perhaps more significant in predicting suicide attempts than the internal feelings and expectations alone. However, more research would be needed to explore this hypothesis.

Mediation analysis indicated that individuals first experience external MS, which increases internal MS, which then increases the likelihood of suicidal ideation or behaviour (Tucker et al., 2019; Sapareto, 2018; Cogan et al., 2020), which is an important finding in line with MST (Meyer, 2003; Hendricks & Testa, 2012; Testa et al., 2015).

### *Resilience Factors*

Results suggested a significant role for social support in protecting against suicidal ideation. Perceived emotional and social support from friends, parents, partner and family, and overall resilience scores were significantly negatively associated with suicidal ideation and/or attempts (Kota et al., 2020; Shah et al., 2018; Hingston, 2019; Treharne et al., 2020; Carter et al., 2019 Brennan et al., 2017; Romanelli et al., 2018).

Whilst cross-sectional analysis found no significant association between pride or community connectedness and suicidal ideation (Brennan et al., 2017; Rabasco & Andover, 2021), longitudinal analysis found that community connectedness was associated with decreased severity in suicidal ideation (Rabasco & Andover, 2021). This supports MST (Meyer, 2003), in that affiliation with minority group members can serve as protective against adverse health outcomes (e.g., suicidal ideation), but also highlights the need for longitudinal analysis in order to capture the positive impact of community connectedness.

Access to transgender support groups was not associated with suicide attempts (Zwickl et al, 2021). Whilst this study achieved a quality rating of ‘poor’ and results should be interpreted with caution, it may suggest that access alone is not enough to protect against suicide attempts. Perhaps, it is the quality of connections and perceived level of support that is more important in understanding the role of social support in protecting against suicide attempts. Further research would be needed in order to investigate this hypothesis.

MST also suggests that a person’s personal resilience and coping styles can be used to buffer the effects of MS and prevent subsequent adverse health outcomes (Meyer, 2003; Meyer, 2015). Two studies added specificity to this assertion by highlighting the reverse effect when TGNC adults’ ways of coping ultimately made things worse. Using dysfunctional coping mechanisms to manage the distress caused by MS was associated with increased odds of attempting suicide (Romanelli et al., 2018; Freese et al., 2018), which highlights the need for a focus on individual coping as a possible risk factor as a well as a protective factor. Interestingly, one study found that relational support significantly reduced suicide risk by first increasing emotional stability (Edwards et al., 2019). This offers an insight into how community resilience can positively impact upon individual coping, which then in turn helps to protect against suicide risk.

The review found that resilience factors did not mediate the association between MS and suicidal ideation and attempts in a way to protect against the impact of MS (Cogan et al. 2020b; Carter et al., 2019). These findings indicate that whilst social support and connection may broadly protect against suicidal ideation, they do not mitigate the effects of discrimination for TGNC adults.

### Limitations

Quality assessment highlighted a number of weaknesses that were consistent across all but one study in relation to their cross-sectional design, meaning that assumptions cannot be made about causality or the direction of effect between study variables. In terms of suicide outcomes, some studies used the SBQ-R which provides overall scores encompassing suicidal ideation, behaviour and future risk. Whilst the use of this standardised measure might provide more reliable and valid results, the composite score of both suicidal ideation and attempts prevents investigation of the differences in causal pathways to suicidal ideation and to suicide attempts. This distinction is critical as the majority of individuals who experience suicidal ideation do not go on to attempt suicide (Klonsky & May, 2014), thus highlighting the need to assess suicidal ideation and attempts separately in order to understand how much of a part MS plays in influencing whether or not a person acts upon their suicidal thoughts.

There were also limitations of the systematic review itself. Firstly, the vast majority of studies (n=25) were conducted in the USA. Therefore, findings of the review cannot be generalised outside of this geographical area and culture. Furthermore, all but three studies had a population of majority white participants. Results can therefore not be generalised to TGNC people of colour (POC) as their experience is likely to be unique as a result of intersectional identities from two minority groups.

Certain potential biases were also introduced as a result of the inclusion and exclusion criteria. The review excluded studies that were not written in English, which may have resulted in a lack of cultural variety in the results and the vast majority of findings may only be generalisable to Western society, in particular the USA. Furthermore, whilst the inclusion of unpublished theses (grey literature) may seek to reduce publication bias, it can introduce other forms of bias. For example, grey literature is less likely to have been peer reviewed, which means that it may lack the level of validity of peer reviewed studies. The inclusion criteria also included a time restriction from which studies were published, which although it was justified, this meant that previous studies investigating the relationship between MS and suicidal outcomes amongst TGNC adults were missed from the current review. Studies excluded due to time restraints, may have added to or conflicted results and conclusions from the current review. However, this limitation was somewhat managed by referring to the findings and conclusions of previous reviews.

Studies were also included that recruited specialist cohorts of participants. Tucker et al. (2019) and Carter et al. (2019) recruited TGNC military veterans and Drakford et al. (2018) recruited TGNC adults that had been in prison. Whilst these studies added to the results, it should be considered that they are reflective of the experiences of specialist populations and therefore may not be as generalisable as results from other studies.

## Future Research

Overall, findings highlight that continued use of MST is recommended for future research. The use of standardised and validated measures of both MS and suicide outcomes is needed to improve the quality and reliability of future studies. This may also allow for future meta-analyses to investigate the relationship between MS and suicidal ideation and behaviour with sufficient statistical power.

The review highlighted a paucity of research investigating causal associations between MS factors and suicide outcomes. Further research employing a longitudinal design could seek to investigate potential causal relationships between MS and suicide outcomes amongst TGNC people. For example, using novel methodologies such as Ecological Momentary Assessment (EMA) in order to collect real-time data relating to the impact of minority stressors on suicidal ideation and behaviour could allow for causal inferences to be made within the context of people's daily lives.

As most included studies recruited a majority of white participants, further research is also needed to gain a greater understanding of the unique impact of intersecting minority identities. Meyer (2010) would suggest that TGNC people of colour are exposed to increased MS through racism, transphobia and sometimes homophobia, thus increasing their risk of experiencing adverse health outcomes. However, it is also suggested that TGNC-POC may have a greater capacity to cope with MS due to affiliation to multiple minority groups, and through past experience of having to cope in the face of racism prior to coming out as TGNC (Meyer, 2010). Finally, further research outside of the USA would also allow for greater exploration of how MS is associated with suicide outcomes across countries and cultures.

## Clinical Implications

In terms of working therapeutically with TGNC adults to reduce suicide outcomes, the review suggests a number of areas for psychological assessment and intervention. Exploring experiences of MS could help to inform suicide risk assessments and risk formulations for TGNC clients accessing mental healthcare. Furthermore, results found positive associations between non-inclusive healthcare experiences and suicide outcomes. These results highlight the need for healthcare professionals to be aware of, and sensitive to, the needs of TGNC individuals. Results also suggest that targeting internal MS may help to reduce the impact of external MS and consequently reduce suicidal outcomes. Therefore, mental healthcare professionals should be encouraged to explore feelings of shame, internalised transphobia, expectations of prejudice (and how the TGNC client manages these expectations) and work with these therapeutically.

Findings from the review also suggest the importance of exploring TGNC adults' coping strategies. If the TGNC client discloses dysfunctional coping strategies (such as substance use, or self-blaming), this too could be a target for intervention alongside the promotion of more helpful coping strategies. TGNC clients may also be directed towards sources of community connectedness, such as local TGNC support groups and supported to make meaningful relationships.

Findings from this review suggest that community resilience alone may be insufficient in helping TGNC people cope with MS, specifically the prejudice they endure within society. Results suggest that wider socio-political change is needed to alleviate and protect TGNC from minority stressors, which may in turn serve to reduce suicide outcomes. This is evident in results that highlight a stronger association between discrimination and suicidal ideation in areas where state policy scores low in relation to its protection of TGNC individuals (e.g., Rabasco & Andover, 2020). This review also highlights the protective nature of gender affirmation against suicide outcomes. Therefore, legislative policy that allows TGNC to self-identity, and be legally recognised as the gender they identify as, is needed to allow for easier access to legal gender affirmation. Furthermore, legislation that urges for greater protection of TGNC people and more TGNC inclusive practices within healthcare is needed to reduce MS.

The aforementioned legislative changes were proposed by the UK's Gender Recognition Act (2020) reform (Miles, 2018). However, the governmental rejection of the reformation of the Gender Recognition Act (2020) maintains that gender is still ratified in a medico-legal context, maintaining the complex and exhausting process people must seek gender affirmation in the UK. It could be speculated that this simply represents institutional transphobia that may increase the likelihood of people in the TGNC community experiencing suicidal ideation and behaviour by being denied the protective nature of gender affirmation. Findings from this review support the idea that these wider level changes may protect the lives of TGNC by reducing suicidal ideation and behaviours.

## Conclusions

Overall, findings suggest that external and internal minority stressors are associated with increased suicidal ideation and behaviours, with resilience factors being protective against suicidal ideation and behaviours amongst TGNC. Findings of included studies may suggest that resilience factors alone are not enough to buffer the negative impact of MS. Future longitudinal research using standardised measure is required to gain a greater understanding of the interactions between MS factors, and to provide evidence of potential causal relationships between MS factors and suicidal ideation and behaviour. The current review holds clinical power and utility due to the pragmatic individual and systemic clinical implications that could seek to minimise suicidal ideation and behaviour. The TGCN community needs: greater protection against external MS; access to therapeutic interventions that attempt to heal their internal MS and support the development of more helpful ways of coping with life in a cisnormative world; and support to create meaningful and supportive relationships so people feel connected to and a sense of belonging within the TGNC community.

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References marked with an Asterix (*) are those of the papers included in this review.

## Paper 2

# Understanding self-harm urges and behaviour amongst non-binary young adults: a grounded theory study

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The following paper has been prepared for submission to *Journal of Gay & Lesbian Mental Health*. (See appendix 4 for contributor guidelines)

Abstract word count: 98
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## Abstract

The current study aims to gain a greater understanding of self-harm amongst non-binary young adults, what helps to manage these urges, and the potential impact of Covid-19. Eleven participants were interviewed, and transcripts were analysed in accordance with grounded theory principles. A theoretical framework emerged consisting of seven categories: (1) Growing up feeling outside of the binary, (2) The pain of living in a cisnormative world, (3) Family discord, (4) Self-harm, (5) Suicidal ideation, (6) What helps, and (7) Life in Covid-19. Findings offer clinical implications and highlight a need for increased awareness, understanding and acceptance of non-binary identities.

**Key words:** Non-binary, Self-harm, Transgender, Qualitative, Grounded Theory

## Introduction

### Non-binary gender identities

Individuals who have a gender that normatively relates to Sex Assigned At Birth (SAAB), in a social context in which the normative assumption is that: penis = male = boy/man; and vagina = female = girl/woman, are often referred to with the term *cisgender*. The term *transgender* is used as an umbrella term for individuals whose SAAB and gender identity do not correspond in the traditional manner. People who have transitioned (or are transitioning) from living as one gender to the other (e.g., transman, transwoman) are referred to as having binary transgender identities (American Psychological Association, 2015). The term *non-binary* is used as an umbrella term to refer to individuals whose gender identity or expression does not fit within the gender binary of *male/man* or *female/woman* (Thorne et al., Yip et al., 2019). A variety of terms have emerged to refer to individuals with non-binary gender identities, such as: trans, gender non-conforming, genderfluid, genderqueer and gender neutral, etc. (Richards et al., 2016). Some non-binary people prefer to use gender neutral pronouns; for example, they/them rather than he/him or she/her (Richards et al., 2016). Transgender and Gender Non-Conforming (TGNC) is a term used in academic literature to refer to trans and non-binary individuals (American Psychological Association, 2015); therefore this term is used for the purpose of this study.

A UK survey indicated that 52% of 14,320 transgender respondents identified with a non-binary gender (Government Equalities Office, 2018). Within research, non-binary people are often unhelpfully grouped together with other TGNC people. This practice prevents exploration of the unique experiences that come with identifying outside of the binary, and results in a lack of understanding of the unique health needs of non-binary people (Liszewski et al., 2018). In fact, very little qualitative research generally has been completed to explore the experiences of non-binary individuals. Only one UK based study that utilised a qualitative method and thematic analysis investigted the experiences of non-binary individuals accessing a UK-based gender identity clinic (Taylor et al., 2019). The study found that non-binary individual experience feelings of invisibility, difficulties associated with being non-binary in a binary world, individuality, gender dysphoria, and difficulties whilst seeking gender-affirming interventions.

Non-binary identity development has been shown to be less linear, which is in line with understanding identity and gender as a social construct, as opposed to that of a more binary gender identity trajectory that may end in transition from one gender to another (Fiani, 2017). Furthermore, non-binary identities are less visible and at a greater level of conflict with societal norms, which can result in higher levels of individual and systemic discrimination. (Lefevor et al., 2019; Webb et al., 2017). Despite these factors, there remains a paucity of research that seeks to understand the experiences of non-binary people (Scandurra et al., 2019).

## Self-harm

Self-harm refers to causing physical harm to one's own body, with or without the specific intent to die (Klonsky, 2007; National Collaborating Centre for Mental Health, 2012). These behaviours can include: cutting, scratching or burning the skin, hitting oneself, or self-poisoning (Morgan et al., 2017). Self-harm is most common amongst adolescents and young adults (Fliege et al., 2009; McManus et al., 2016). Whilst people often engage in self-harm without suicidal intent, those who self-harm are unfortunately at a greater risk of accidental death and suicide than those who do not (Hawton et al., 2006; 2015). Individuals with mental health diagnoses (e.g., depression, anxiety, bipolar, schizophrenia etc.) engage in in self-harming behaviours (Haw et al., 2001; Singhal et al., 2014), which function to manage difficult experiences, e.g. to reduce emotion dysregulation (Linehan, 1993, 2015). Self-harm is not synonymous with mental health difficulties, and is frequently defined and viewed as a behavioural coping strategy (Fleige et al., 2009; Klonsky, 2007; Chapman et al., 2006). For the purpose of this study, self-harm is defined as a behavioural construct that solves a particular emotional, relational or psychological problem.

A number of theoretical frameworks have sought to offer understandings of the functions and reasons for harming oneself (Suyemoto, 1998). A commonality within many of these models is the notion that self-harm helps to regulate or escape from emotions. Chapman et al. (2006) proposed the experiential avoidance model, suggesting that self-harm is reinforced by temporary relief from overwhelming, unwanted emotional experiences. Linehan's Dialectical Behaviour Therapy (DBT: 1993, 2015) theorises self-harm to be a way to manage or reduce emotional dysregulation and distress, due to a lack of alternative skills to manage this distress. The biosocial theory explains that the emotional dysregulation and interpersonal difficulties underpinning self-harm develop as a result of difficult early experiences in the form of an invalidating environment, coupled with biological vulnerabilities (Linehan, 1993, 2015).

## Self-harm and non-binary people

There is a paucity of research into the experiences of self-harm, specific to non-binary people. To our knowledge there have been no qualitative studies investigating self-harm amongst non-binary individuals. Preliminary research has found higher rates of self-harm amongst non-binary people, compared to their cisgendered peers (Smalley et al,. 2016; Lefevor et al., 2019). This research is reflective of the broader literature, which reports that TGNC people exhibit significantly higher rates of self-harm than cisgender people (Marshall et al., 2016). A recent meta-analysis found the life-time prevalence rate of self-harm amongst TGNC individuals was 47% compared to 15% amongst heterosexual and/or cisgender individuals (Liu et al., 2019). A few studies have reported on the difference in rates of self-harm between binary transgender and non-binary people. Some suggest that non-binary people exhibit higher rates of self-harm than binary transgender people (Lefevor et al., 2019; Clark et al., 2018), whereas others report no significant differences between the two groups (Thorne, Witcomb et al., 2019; Rimes et al., 2019).

## Minority Stress Theory

The elevated rates of self-harm amongst TGNC people, including non-binary people, have been most helpfully explained through a Minority Stress Theory (MST) framework (Meyer, 2003; Hendricks & Testa, 2012). Meyer (1995, 2003, 2015) proposed that adults from Lesbian, Gay, Bisexual (LGB) and TGNC minority groups experience unique social and relational stressors that come as a result of their minority status, which can create adverse health outcomes, including increased self-harm and suicide. These stressors are not experienced by their socially dominant peers who identify as cisgendered and heterosexual. External stressors refer to any negative treatment from others or organisations that threaten safety or security, based on TGNC identities (Meyer, 1995; 2003; 2015). Internal minority stressors include expectations of experiencing discrimination from other people or systems, or internalised feelings of transphobia (e.g., seeing one’s own TGNC identity as wrong or less valuable). The negative impact of these minority stressors can be reduced by individual resilience (personal qualities and characteristics) and community resilience (affirming or accepting social environments and social support) (Meyer, 2003; 2015). This theoretical understanding aligns with results that have found discrimination and abuse to be risk factors for self-harm amongst TGNC individuals (Rimes et al., 2019), and transphobia as leading to self-hatred, fear and shame amongst LGBT youth (McDermott et al., 2015).

### Current study and context

To the authors' knowledge, no studies have explored the experiences of self-harm amongst a non-binary population using qualitative methodology. The aim of the current study was to gain an understanding of the potential relationships between self-harm and identifying as non-binary within a group of young adults, and what helped them to manage their self-harming urges and behaviours. The study took place during the Covid-19 pandemic in the UK, which had a huge impact on Lesbian, Gay, Bisexual, Transgender, Queer and Intersex (LGBTQI ) communities (LGBT Foundation, 2020). Charmaz (2014) highlights the importance of considering the social context in which data collection takes place. Therefore, participants were also asked how the social context of Covid-19 influenced the sample's experience of gender and self-harm.

## Method

### Study design

The current study employed a qualitative design and constructivist grounded theory methodology (Charmaz, 2014) to explore and understand the relationship between self-harm and having a non-binary gender identity. Using constructivist grounded theory to understand how people actively construct their knowledge and reality in relation to their gender and self harm seemed exciting, methodologically sound and clinically relevant. Furthermore, the paucity of research in this area created a unique opportunity to utilise grounded theory as an appropriate inductive methodology to discover and construct theory from systematically collected data and analysed to inform clinical practice and future research within a UK cultural context. The main aim was to use grounded theory to offer a theoretical understanding of self-harm behaviours amongst non-binary young adults, and what had been useful in managing their self harm. An epistemological lens of constructivism was employed (Charmaz, 2014), which prioritised the co-construction of meaning and relationship between researcher and participant, as well as the development of an explanatory understanding of the processes that underpin these psychological phenomena (Starks et al., 2007).

### Inclusion/exclusion criteria

Participants were included in the study if they met the following inclusion criteria: (i) aged between 18 and 30 years old; (ii) self-identified their gender as non-binary; (iii) self-reported experiences of urges or actual self-harm in their lifetime; (iv) English speaker; and (v) registered with a GP in the UK. Participants were excluded from the study if they presented with an Intellectual Disability that impacted their capacity to engage with the interview.

### Recruitment

Recruitment began in March 2020 at the start of the Covid-19 Pandemic and ended in February 2021 with the UK remaining in national lockdown. Ethical approval was granted to complete all recruitment remotely via social media and digital technology. A study specific Twitter (@shinbip) was established and used to advertise study information and contact details of the principal researcher (HG) with an established group of followers and organisations from the Lesbian, Gay, Bi, Trans, Queer, Intersex (LGBTQI+) community. Relevant organisations were also contacted via Facebook and/or e-mail and asked to share study details with their social media followers and/or individuals who access their organisation (see appendix 6). The principal researcher also attended a virtual online support group for TGNC young adults ran by a local LGBTQI+ support organisation to share information about the study.

### Procedure

Potential participants interested in the study contacted the principal researcher directly via a study specific phone number and/or e-mail. Inclusion criteria were assessed via e-mail and potential participants were provided with a participant information sheet (PIS) via e-mail (appendix 7). In total, 26 potential participants were sent participant information sheets. Of those, five did not meet inclusion criteria and ten did not maintain interest in taking part. Eleven potential participants were eligible and participated in the study. A date and time were arranged via e-mail for a semi-structured interview to take place securely via Zoom video conference platform.

Upon meeting, participants were provided with another opportunity to read through the PIS and ask questions. Participants were then guided through the consent form using Zoom's ‘share screen’ function. Written consent was obtained for participants to take part in their interview, whereby the researcher completed the electronic consent form on behalf of the participant and under their instruction (see appendix 8). Participants were then guided through completing a contact details form in the same manner (see appendix 9). This included name and email address so that participants could be contacted for member checking; and participants’ GP details and location of interview for risk management purposes. Once forms had been completed and participants were ready to begin the interview, audio recording commenced. Participants were then asked to verbally provide relevant demographic details (age, ethnicity and gender identity).

A purposive sampling approach was used to recruit people able to discuss the research area. Theoretical sufficiency (Dey, 1999), concept saturation (Saunders et al, 2018) and five dimensions of information power (Malterud et al., 2016) were used as benchmarks to determine the final sample size. Analysis of the initial interviews suggested an over presentation of White participants, therefore theoretical sampling to build the emerging theory was employed to clarify uncertainties and fill gaps in understanding. Specific organisations focussed on the intersectional identities of LGBTQI+ and people of minoritized racial backgrounds were targeted to increase interest and participation, although unfortunately this was unsuccessful.

### Interviews

A topic guide was developed, as a flexible tool, used to facilitate semi-structured interviews (see appendix 10). Each topic included a number of open-ended questions that were constructed through consideration of the aims of the study, discussion with the research team, preliminary literatures searches and input from an Experts by Experience consultation group. The topic guide was regularly reviewed and was formally updated twice in line with emerging concepts from previous interviews. Interviews lasted approximately one hour and were audio recorded using a digital voice recorder. Risk and distress protocols were adhered to (appendix 11 & 12) and participants and were fully debriefed following their interview. As the content of interviews was potentially distressing for the participants, steps were taken to create a feeling of safety and empowerment during interviews.

### Data analysis

In-line with grounded theory principles (Charmaz, 2014), data collection and analysis were conducted in parallel across a nine-month-period (July 2020 – March 2021), with data analysed using a constructivist grounded theory framework (Charmaz, 2014). As part of the research process, HG transcribed all interviews verbatim and engaged in reflective memo writing after each interview and throughout the research process. This allowed HG to immerse themselves into the data and gain insight into the participants' perceptions and understandings of the data (Corbin & Strauss, 2008).

Following data preparation, interviews were analysed using initial open coding line-by-line, which ensured that initial codes were grounded in the data, and captured meaning, differences and similarities. 'In-vivo' codes were recorded when participants verbatim phrases captured a phenomenon (see example in appendix 13). Following initial coding, levels of focused coding commenced, whereby initial codes were grouped dependent on shared features (see appendix 14). Emerging focused codes were then compared with and grouped with focused codes from other interviews to create higher level focused codes. This led to a number of focused codes that represented the data across all interviews (see appendix 15). Through a process of digitally spreading out codes and categories across multiple pages and documents, constant comparison was conducted that supported the development of theoretical categories (see appendix 16). This process allowed for the bottom-up emergence of a theory (Charmaz, 2014). See figure 1 for flow diagram to illustrate the application of grounded theory to data collection and analysis.

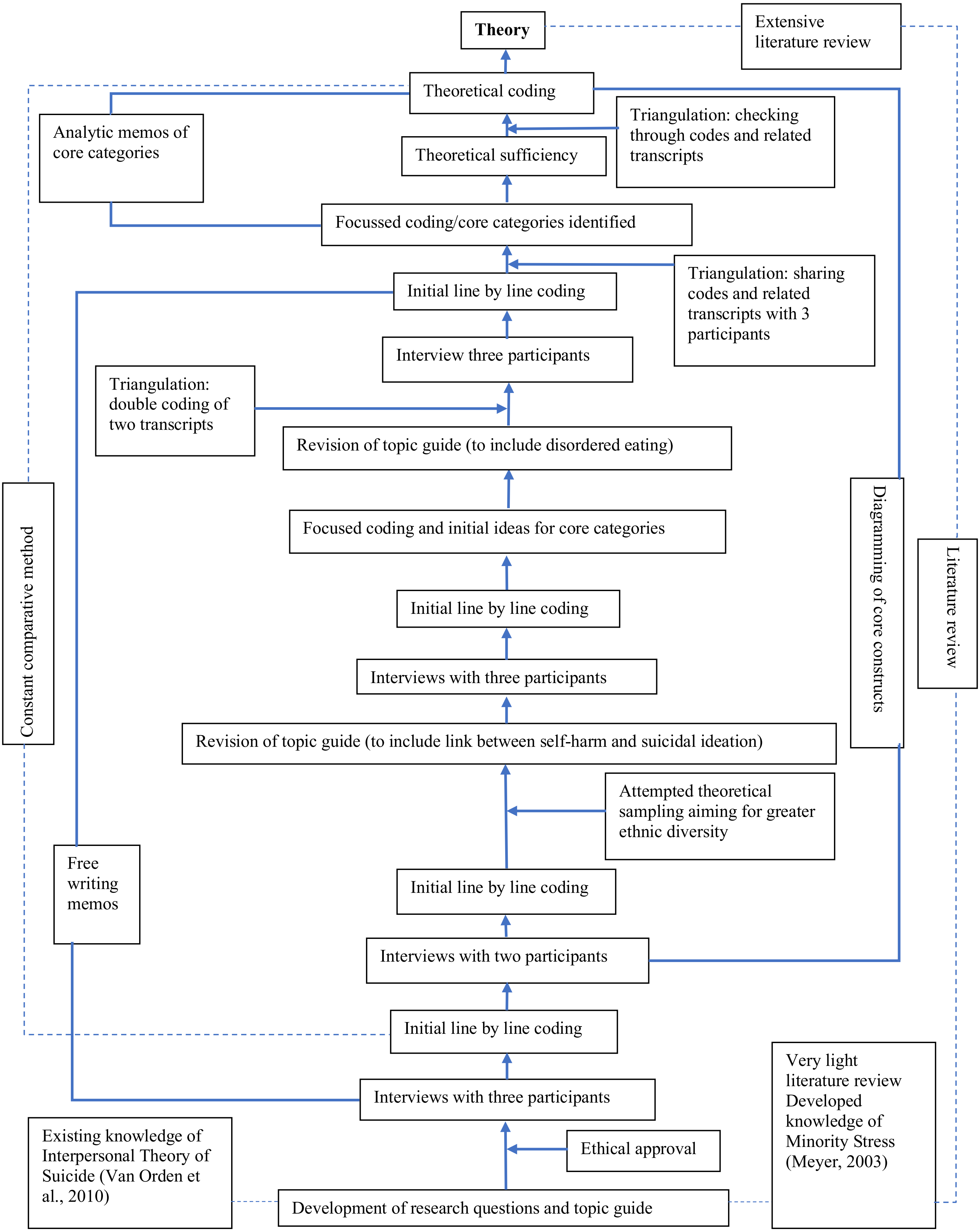

*Figure 1:* Flow chart to show application of grounded theory

## Credibility Checks

Guidelines for enhancing methodological rigor within qualitative research (Elliott et al., 1999) were followed. Member checking was performed in order to verify the completeness and trustworthiness of analytic findings (Goldblatt et al., 2011; Birt et al., 2016). Initial codes and transcripts were returned to three participants via e-mail, who were asked to check for accuracy and whether the analysis resonated with their explanations. This member checking indicated credibility as all responded that codes were in-keeping with their experience.

Ongoing discussions were had within the research team throughout the analytic process and theory development, with triangulation being employed to strengthen the credibility of findings. Analysis and supporting data were shared within the research team, which included practising Clinical Psychologists with expertise of self-harm and Gender Diversity, who supported the clarification and elaboration of the analysis. Double coding of a partial transcript was also conducted by an independent peer in order to further develop the trustworthiness of the data. To maintain transparency and trustworthiness, direct quotes are presented to support findings. Pseudonyms have been used to ensure anonymity.

## Reflexivity

A reflexive stance was adopted throughout the research process in order to remain aware of how the researchers' roles, experiences, and assumptions influenced data collection, analysis and interpretation (Charmaz, 2014). The principal researcher is a 27-year-old final year Trainee Clinical Psychologist, who identifies as a Cisgender Woman, and Ally of the LGBTQI+ Community. They have no personal or clinical experience of working with non-binary people, but have a clinical interest in working therapeutically with adolescents who self-harm, using a DBT approach (Linehan, 1993; 2015). It is important to acknowledge that these interests and experiences have informed and influenced the process of data collection, interpretation and analysis. Discussions with the research team who were familiar with the data maintained a playful critical stance. Finally, a study diary was kept to support a reflexive stance (Charmaz, 2014), and to reflect on how preconceptions, interests and experiences influenced exploration of data, interpretation and theory creation.

### Ethics

Ethical approval and research governance was obtained for the study from the University of Manchester research ethics committee in March 2020 (Ref: 2020-7842-13735). See appendix 5.

## Results

Eleven people participated, aged between 18-30 years old (median age = 25). All participants identified their gender identity as non-binary, with a variety of more specific terms being expressed: queer (n=1), genderfluid (n=1), demi-girl (n=1), transmasculine non-binary (n=1), agender or genderqueer (n=1) non-binary (n=2), queer or non-binary (n=3) and non-binary or genderqueer (n=1). All participants identified as having experience of self-harm urges and behaviours. Of the sample: two participants were currently engaging in self-harm; two participants had engaged in self-harm within the last year; and seven participants had engaged in self-harm more than one year ago. Eight participants identified as White British, one as White European, one identified as White Canadian and one as Arab. Nine participants were educated at degree level, three of these had completed or were currently undertaking postgraduate study. Two participants did not specify their education level.

Participants' narratives allowed for the development of a substantive theoretical model grounded in the data. The theory created represents an understanding of the processes that led to and maintained self-harm urges and behaviours amongst this group of non-binary people, and what helped them to manage this. Participants mostly recalled memories prior to the Covid-19 pandemic when discussing their experiences of self-harm and gender. The theory was therefore developed on these 'pre-Covid' memories and stands alone outside of the context of Covid-19. However, as the study took place during the Covid-19 pandemic, the impact of Covid-19 on participants experiences was also explored in order to take into consideration the social context in which the study took place. Whilst asking participants about the impact of Covid-19 highlighted the negative impact of the pandemic specific to non-binary individuals, it also highlighted ways in which adaptive ways of living within a pandemic could be used to support the wellbeing of non-binary individuals going forward.

Seven related conceptual categories emerged, which created a cohesive theoretical framework: (1) Growing up feeling outside of the binary; (2) The pain of living in a

Cisnormative world; (3) Family discord; (4) Self-harm; (5) Suicidal ideation; (6) What helps. Whilst the aforementioned six categories form an independent theory of self-harm amongst non-binary young adults, a seventh category (Life during Covid-19) was included in order to demonstrate the impact of Covid-19 on the theory. See figure 2.

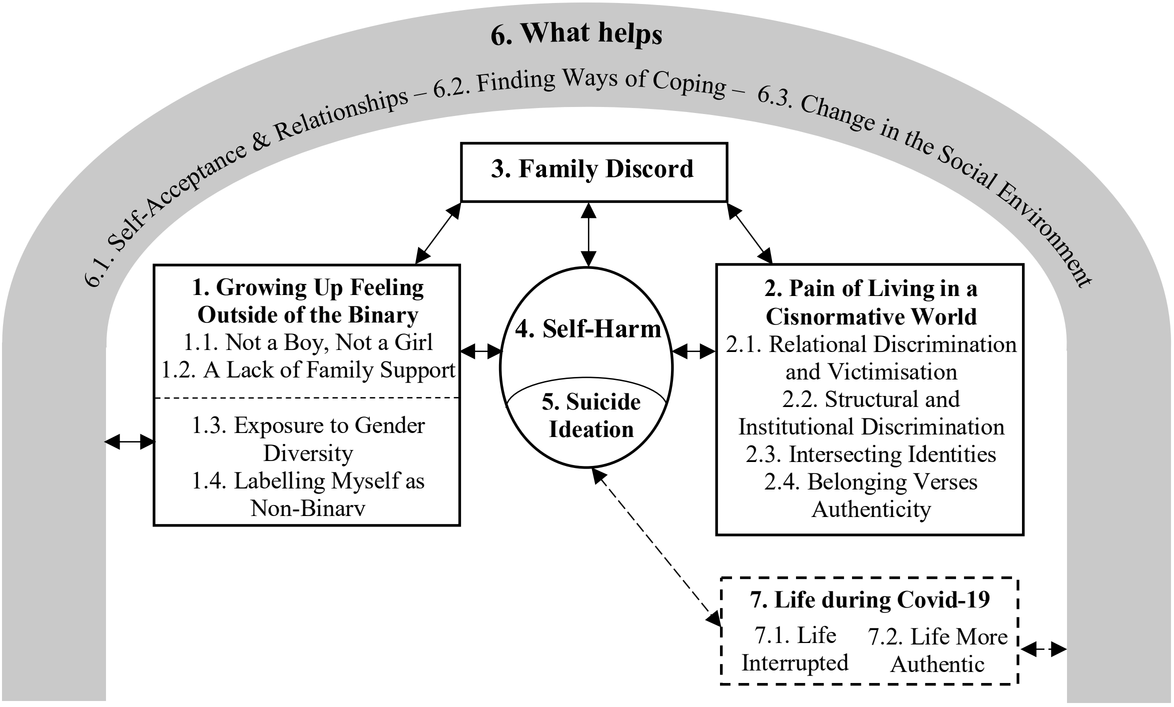

*Figure 2:* Theoretical model of self-harm amongst non-binary young adults, what helps and the impact of Covid-19

## 1. 'Growing Up Feeling Outside of the Binary'

Participants described early experiences of feeling that they were neither a boy nor a girl. This was followed by an exploration of their non-binary gender through exposure to gender diversity and labelling themselves as non-binary to themselves and others. Participants described how a lack of family support impacted this process, with specific links to their experiences of self-harm.

### 1.1 *Not a Boy and Not a Girl*

Nine participants described early experiences of not 'fitting in' with binary gender norms. Participants described an internal discomfort, but not knowing that they could feel differently due to a lack of awareness of non-binary gender identities:

*"I've tried to compare it is like... sort of a feeling like you get given a pair of shoes, like girls get one pair and boys get one pair like… I don't know, boots and trainers. And I feel like my pair of shoes, like they didn't really fit and they gave me blisters and they were uncomfortable but I could like walk around in them... and I didn't know that you could have anything else." (Frankie)*

Participants ranged in their experiences of how they felt about their physical body. Some participants, like Beck explained that that they *"don't get physical gender dysphoria."* This appeared related to their identity being genderfluid, thus feeling *"not as attached to"* their physical appearance. Four participants spoke about experiencing significant physical dysphoria around puberty as their body became more 'feminine.' This led to a dislike of or disconnection from their body:

*"As my body started to change, I started to feel like it… didn't represent who I was anymore." (Robin)*

For two participants, self-harm helped them to regain control/connection with their body:

*"In the case of how I feel about, or how I don't feel connected to my body... it was a way of serving control over that and reminding myself that it is connected." (Robin)*

Participants highlighted that feeling like neither a boy or a girl left them with a sense of discomfort, that they could not fully understand or explain. For some, puberty was a time when their body no longer felt connected to their internal sense of gender. This led to self-harm as a means of regaining control and connection over one's body.

### *1.2 A Lack of Family Support*

Seven participants spoke about feeling hurt by their families' lack of acceptance, support or effort to try and understand their gender identity. This impacted how participants explored and expressed their non-binary gender. Ash described how their parents' disapproval *"pushed me further into the closet"*. Participants also expressed that lack of family support and misgendering increased urges to self-harm:

*"So because I'm still being misgendered and* ***still*** *being birth named… well I was being birth named by my family. Like… it just… urgh... like I always go back to self-harming." (Kayden)*

The influence of family was evident throughout numerous stages of growing up feeling outside of the binary. The lack of family support or acceptance was painful and described as directly linked to participants' self-harm.

### *1.3 Exposure to Gender Diversity*

Seven participants described how being exposed to gender diversity provided understanding, acceptance and/or inspiration that allowed them to feel comfortable or confident enough to explore their gender more thoroughly. This had a positive impact on a participants sense of self and wellbeing:

*"I had some fantastic friends in high school who were very much into supporting LGBTQ+ people. And I think their acceptance and their knowledge about those things, because it wasn't something I had a lot of knowledge about before that… really helped me to... to explore that part of me." (Robin)*

Three participants spoke about being inspired, and gaining the confidence to express their gender more authentically through exposure to gender non-conforming role models in the mainstream media or on TV:

*"Outside of work I'd play around with make-up... I was inspired quite heavily by erm Ru Paul's Drag Race, erm... having the exposure of queer people that I'd never really touched in before." (Fynn)*

Exposure to gender diversity helped to provide participants with the experience of seeing others like them. This likely helped to normalise the feelings they had experienced growing up and helped them to gain confidence to express their gender more authentically, thus creating a sense of wellbeing through empowerment and validation, which reduced engagement with self-harm urges and behaviours.

### *1.4 Labelling Myself as Non-Binary*

All participants spoke about the importance of language in the communication and validation of their identity. Stumbling upon the term non-binary when reading about gender online often allowed participants to vocalise internal experiences of gender, and led them to feel relieved and validated:

*"It was nice to feel like, oh ok, so the thing I'm feeling isn't just, I'm not just like a weird girl or like a tomboy or whatever. It was nice to have the words to describe myself." (Nico)*

Participants described how their relationships with the non-binary community interlinked with their understanding and exploration of their own gender identity. Five participants described how meeting other non-binary people helped them to feel validated and euphoric:

*"When I started talking to transgender people about gender and gender presentation, I really did go through a period of what most people call gender euphoria… which is where you start to understand and accept yourself in relativism to other people." (Blair)*

Participants also spoke about 'coming out' as non-binary. Six participants described a gradual and exploratory process. Participants tended to have levels of being 'out' related to different social contexts, which highlights how the environment has influenced how comfortable people felt to express their gender authentically:

*"It's been like a process... like I'm not out to my family back home... I'm out at work, I'm out to all of my friends and most of the people I know… but my life back home is very different." (Frankie)*

The process of labelling oneself as non-binary allowed participants to understand their longstanding internal sense of gender, to feel validated and to have their gender affirmed by others. This bought about a sense of 'gender euphoria' and belonging. These positive feelings seem to have been protective against self-harm urges and behaviours in the sample.

### 2. The Pain of Living in a Cisnormative World

All participants spoke about the pain of being non-binary whilst living within a cisnormative society that assumes and institutionalises cisgender as ‘normal’ and desirable. This led to self-harm through feelings of not belonging, worthlessness and dehumanisation.

### *2.1 Relational Discrimination and victimisation*

Nine participants described direct victimisation and discrimination as a result of their non-binary gender identity.

*“I’ve been followed home before…erm.. I’ve been kicked, I’ve been spat on in day-to-day life.” (Fynn)*

*“I had some things with some colleagues at work who were like ‘well you’re a woman if you’re born a woman, you're a man if you're born a man’.” (Frankie)*

Seven participants described being picked on for their gender non-conforming traits at school. Ash described how this *“reinforced the idea that I was just a weirdo and an outsider.”* For some participants, the negativity and ridicule from others were internalised, leading to feelings of worthlessness and transphobia, and a sense that they deserved to hurt themselves or control the pain they were experiencing:

*"That feeling... feeling worthless, that you don’t deserve to be here.” (Isa)*

*“I guess it’s kind of a concentration of everything that’s going on around you like... erm... people are harming me in more abstract ways therefore I deserve to be harmed in a more concrete way.” (Piper)*

Beck described feeling dehumanised and internalising the objectification of themselves *“as being trivial”* or *“as being (the) subject of a joke or of debate”*. This led to a loss of respect for their own body and permission to self-harm:

*“I think that links to my self-harm, because when I started to lose respect for my body, and I gained so much insecurity… I took it out on my body.” (Beck)*

Overall, participants’ accounts suggested that experiences of external relational discrimination and victimisation created internalised feelings of worthlessness and transphobia, which led to self-harm due to the belief they deserved to be harmed.

### *2.2 Structural and Institutional Discrimination and Victimisation*

Participants described feeling unsupported and unheard by the government, especially in relation to the recent rejection of the reformation of the Gender Recognition Act in the UK (GRA: 2020), which would have allowed non-binary people to self-identify and allowed for more inclusive policies to protect the needs to TGNC people.

*"That was gonna help shape the NHS, that was gonna reshape government... all this kind of stuff… they were willing to put away 70% of people who participated in that… we’ll go with the 30% that oppose it? That's the problem. Trans voices aren’t heard enough.” (Fynn)*

Experiences of structural discrimination such as these, led to participants feeling saddened and fearful at the thought of living in a society that does not commonly recognise, understand or accept non-binary people:

*“It just made me feel like the world is terrible and it doesn’t want me in it.” (Nico)*

Six participants highlighted a need for an increased understanding of non-binary identities amongst mental health professionals in order to avoid iatrogenic harm and allow for access to appropriate support for their mental health and self-harm. For example, Allyn described attending A&E following an incident of self-harm and noted how, *“a psychiatric nurse told me not to cry… men don’t cry.”*

There were six participants expressed that they felt a lack of visibility and education regarding LGBTQI+ lives in school had resulted in a lack of appropriate support, coupled with a homophobic and transphobic school culture:

*“But my teachers are not educated about trans things… the pastoral support in school didn’t know anything about trans things so I just had to grin and bear it.” (Kayden)*

Participants highlighted how experiences of structural and institutional discrimination and victimisation led to feelings of sadness and hopelessness about the future which may have led to self-harm urges or behaviours. In addition, difficulties accessing appropriate support may have maintained self-harm as participants were prevented from receiving the help they needed.

### *2.3 Intersectional Identities*

Participants spoke about how their intersectional identities created unique and complex forms of oppression, which often amplified feelings that underpinned self-harm.

Two participants spoke about how being non-binary and neurodivergent served to amplify feelings of difference, leaving them feeling misunderstood:

*"It was just kind of the feeling that I'm just innately different from everyone else. And I'm never gonna be the same or feel the same or… understand the things that most people go through... and other people are never going to understand me." (Ash)*

These two participants also spoke about experiencing sensory difficulties and how they used self-harm to manage sensory overload:

*"I am autistic as well so erm… sometimes it would be a case of like sensory overwhelm." (Piper)*

In order to provide care that meets the needs of various aspects of one's identity and avoids further institutional discrimination, participants expressed a need for professionals to have an understanding of gender and neurodivergence:

*"It's weird going to a therapist that understands autism but is clueless about gender… or understands gender but is clueless about autism." (Ash)*

Isa spoke about the significant impact of being non-binary within an Islamic culture and growing up in a country that criminalises gender non-conformity:

*"The hijab, the social expectations, the fact that I need to hide myself. Er… I can't go publicly with my short hair because I will be harassed by the police. Erm… all of that… yeah all of that played in a role of me wanting to hurt myself." (Isa)*

Isa expressed that these factors were significantly associated with their self-harm, because they were expected to maintain certain social expectations in line with their SAAB and had to hide their identity in order to protect their safety and freedom. Furthermore, Isa spoke about messages from their religious upbringing amplifying the feelings about being 'wrong' that they were experiencing in relation to gender, whereby, *"that's the thing about Islam… everything is about you being wrong. You being a sinner."*

Four participants, who were living in rural, conservative areas with a lack of LGBTQI+ visibility or awareness, described high levels of distress, discrimination, non-affirmation and a lack of support. This likely increased urges to self-harm through amplifying their distress, lack of belonging and lack of connectedness with others:

*"I mean it's more that just it's not talked about and like…even if I went around looking quite gender non-conforming... people would still like 'miss and maam' me...which is frustrating" (Ash)*

Participants' intersectional identities influenced how they were able to express their non-binary identity and how it was viewed and responded to by others. Feelings of difference and not belonging were amplified, and for some, other identity factors were linked to self-harm in their own unique ways.

### *2.4 Belonging Versus Authenticity*

Participants were often left feeling like an outsider, without a sense of belonging, creating feelings of isolation and worthlessness.

*"Not only did I not belong in this place of work or in this friend group but also that I didn't belong* ***anywhere****." (Allyn)*

In order to try to mould themselves and be accepted, participants would be *"actively trying to hide parts of myself"* (Blair). This created a conflict between the need to be their authentic, validated and empowered selves, and the need to belong and feel accepted by others so as to avoid negative treatment and build relationships.

*"I'm either gonna have to hide it and be miserable or be out and face discrimination." (Nico)*

Two participants described this conflict as unique to non-binary people when compared to binary transgender people, who are able to simultaneously 'blend in' and have their gender affirmed in a cisnormative society:

*"If you were a binary trans person... there is something that you can transition to and then live your life and kind of blend in... but if you're non-binary either you choose to like pick a side... or you're going to be visibly a freak the entirety of your life." (Ash)*

### 3 Family Discord

Experiences related to being non-binary were not the only contributors that led to self-harm. All participants described longstanding difficult family relationships, and for some, these family difficulties were direct triggers for self-harm, or the 'route' to their experiences of distress and subsequent self-harm:

*"My extended family is the route of a lot of my mental health issues." (Beck)*

*"My family, fighting… cos that happens. That's quite a big trigger." (Frankie)*

Seven participants described having high expectations in relation to behaviour or academic achievements from family members. This may have contributed to participants' oscillation between perfectionism and feelings of worthlessness, which led to self-criticism or punishment when standards were not met:

*"She likes everything to be perfect and erm.. that would kind of come down to me and my sister having to behave how she wanted us to behave." (Piper)*

*"But like I remember the first time I cut was when I was 15 and it was the night before my maths GCSE." (Frankie)*

Some participants described a lack of appropriate emotional care, whilst others described actual experiences of psychological and physical abuse from parents:

*"My mum has been like emotionally manipulative and abusive to me throughout lots of my life." (Nico)*

If participants' parents were unable to meet their emotional needs as children, or model appropriate managing of emotion, participants may have lacked skills in understanding or processing their emotion. Participants may have subsequently used self-harm to manage their emotions.

*"What I had was a real lack of knowing how to… having any skills in processing my emotions." (Allyn)*

Five participants spoke about a build-up of difficulties in multiple aspects of their lives, leading to a 'breaking point', which then led to self-harm:

*"What you've got really is a huge accumulation of experiences um, both at home and at school and at work that had sort of built up and really sort of hitting against the dam wall, and then finding a breaking point." (Allyn)*

Participants demonstrated that difficulties within family relationships were important in understanding their experiences of self-harm. These may have created invalidating environments that underpinned participants' lack of skill in processing emotion and contributed to their feelings of worthlessness. Additional life stressors experienced within, or alongside, difficult family relationships were often triggers for self-harm.

## 4 **Self-harm**

Self-harm was discussed by participants as a behavioural construct that solved a particular emotional, relational or psychological problem in their life.
. Participants described the characteristics of their self-harming behaviours, including the onset, methods and how self-harm progressed over time.

### *4.1 Characteristics of self-harm*

Eight participants reported that their self-harm started early to mid-teens during adolescence, which is a time when identity starts to develop, social relationships become more significant and the onset of puberty. Participants often described 'on-off' relationships with self-harm, which may indicate that self-harm was difficult to stop, or that it was utilised as a way of coping during particularly difficult times.

*"It was starting in my early teens and sporadically on and off until today." (Robin)*

Nine participants self-harmed by cutting themselves. Participants described learning about cutting as an 'outlet' for existing difficult emotions from friends, via the internet or on television. It seems that when participants were experiencing emotional struggles and were lacking in ways to express or manage them, they saw cutting as something that could help:

*"I think something sort of clicked in my head of, oh that could be an outlet." (Piper)*

Other methods of self-harm were described, which appeared to have specific motivators or functions. Five participants restricted their diet, as a form of self-punishment or as a way of regaining control over the pain they were experiencing, or the body they felt disconnected from:

*"Restrictive eating for me was kind of like a self-harming kind of behaviour." (Ash)*

Four participants described skin-picking or scratching, sometimes unconsciously, in response to stress:

*"When I'm feeling anxious, I scratch the back of my ear." (Fynn)*

As for the severity of participants' self-harm, five participants described how this increased over time, and felt out of participants' control.

*"The severity always seems to increase, like the depth or like how much, erm… every single time, no matter the time between." (Frankie)*

Participants' accounts highlighted the importance of understanding 'how' a person self-harms to help understand 'why' they self-harm. There were commonalities in participants' relationships with self-harm overtime, in that it tended to begin in early to middle adolescence, was on and off, and got progressively more severe overtime.

### *4.2 Functions of self-harm*

Participants described various functions that self-harm served for them.

Three participants described finding the sense of belonging that they craved through having friends who also self-harmed:

*"You know I'd come out from the point of view of being an 'other' and then I have these friends that I'm gay with, I'm trans with and now I do this with." (Beck)*

All participants spoke about using self-harm as a way to manage difficult emotions. For some, self-harm was used to mirror emotional pain:

*"So it was more like creating a physical response that mirrored the mental distress I was experiencing." (Blair)*

Self-harm was also used to regain attentional control over overwhelming panic or rumination by psychologically grounding participants in reality:

*"I guess in part it was grounding, something to focus on, just the actual doing it and then the actually feeling, the pain, the aftermath." (Kayden)*

Participants spoke about feeling deserving of harm, as a result of factors both related and un-related to gender, and using self-harm to punish themselves:

*"I wanted to release that anger on myself. I wanted to hurt myself and punish myself." (Beck)*

Self-harm was also used to express an individual's distress when it was difficult to find words for what they there were feeling. There was also a sense that participants' distress would not be taken as seriously if only expressed through words:

*"I feel like it was a bit of a cry for help. Because I didn't really know what else to do because I thought that if I told people about how I was feeling, they wouldn't believe me." (Nico)*

The functions highlight how self-harm was used in response to participants' strong emotional or cognitive experiences that came as a result of difficulties both related and unrelated to gender.

## 5 Suicide Ideation

For some participants, feelings of hopelessness led to suicidal ideation, which was underpinned by fears that they would never feel accepted as non-binary within society:

*"We just didn't think there was a future in which we'd think we could exist." (Blair)*

Suicidal ideation increased the likelihood of actual self-harm or suicidal behaviours, as participants' felt a sense that *"it didn't matter because I wasn't going to be around for much longer"* (Allyn).

Blair described the two contrasting functions that self-harm served in relation to suicidal ideation. Self-harm helped them to feel like they were acting on their suicidal thoughts, to *"get a bit closer to suicide without committing it."* It was also a way to distract themself from suicidal thoughts, whereby *"a lot of the self-harm was just to get out of my head and it's much harder to think about things like suicide when you are in physical pain."*

Feelings of hopelessness about a future where they would not be accepted living an authentic non-binary life could lead to suicidal ideation. Participants also described a complex relationship between self-harm and suicidal ideation.

## 6 What Helps

A core overarching concept related to ‘what helps’ was borne out of engagement with the data. This category highlights what helped participants to reduce self-harm, in relation to all of the aforementioned contributors (previously discussed within the theory) that led to self-harm.

### *6.1 Self-acceptance and Relationships*

All participants expressed that developing self-acceptance in relation to their identity and/or building relationships with the non-binary community significantly helped reduce self-harm urges and behaviours:

*“Self-harm has become less prevalent in my life since I’ve become more aware of my own gender identity and become more comfortable with it.” (Robin)*

Authentic gender expression provided participants with the sense of empowerment and self-acceptance that helped protect against external negativity and self-harm:

*“When I started to feel more empowered by… erm expressing myself authentically, I was able to erm…I dunno kind of solidify that within myself so… it became unbreakable. Erm, so.. with that in mind.. it’s almost like putting on a superhero costume in a way.” (Fynn)*

Seven participants understood gender as a social construct, whereby gender roles are socially constructed and maintained, rather than gender as biological essentialism. Learning about gender as social construct provided a framework from which to understand and accept themselves, and to understand negative treatment from others. Understanding themselves and others in this way reduced negative feelings towards themselves and consequently reduced self-harm.

*“In the last year or two the way that I've viewed gender has changed a lot… and I've found that’s quite significantly decreased self-harming urges.” (Ash)*

*“In terms of helping me deal with external er factors, negative factors be that harassment, abuse, a psychiatric nurse telling you ‘men don’t cry’. Uh, it really helps.” (Allyn)*

Nine participants expressed the positive effect of belonging and connection with the non-binary community, creating a sense of self-acceptance and self-love:

*"If you have trans friends and you love them… then it's more difficult to hate yourself for your trans-ness." (Beck)*

The positive impact of gaining self-acceptance on reducing self-harm was evident. Participants described how this was achieved through authentic gender expression, learning about gender as a social construct and internalising the love participants had for their non-binary friends.

### *6.2 Finding ways of coping*

All participants described ways of coping that helped them to not self-harm, such as using creative methods to distract from or express their feelings. For example, gaming formed a sense of achievement and community for people, and also allowed more authentic gender expression and mastery by creating an non-binary Avatar:

*"You could kind of customise your character to look however you wanted... And erm... yeah sort of present again how I wanted to look." (Piper)*

Three participants spoke about finding ways to reconnect with and appreciate their body, which helped to reduce self-harm. Robin spoke about the positive impact of having tattoos:

*"It makes me see things that I like and think are beautiful about me even if it's a day that I don't recognise myself in the mirror or I hate what I see." (Robin)*

Blair described how kickboxing taught them to use their body for its strengths, which had a positive impact on their relationship with their body:

*"It made my gender and my body line up in a way that I'd never felt before." (Blair)*

Helpful experiences of therapy and counselling were described by five participants:

*"I'd also had CBT which really helped with my mood and my anxiety." (Frankie)*

Developing a greater sense of self-compassion and understanding of themselves and their difficulties was also helpful in reducing participants' distress and self-harm:

*"It's always there but you deal with it better…because you understand it and you listen to yourself, and you have that compassion directed inwards." (Isa)*

Participants described the various ways of coping they found helpful in reducing self-harm. For some, these helped participants to express and manage their emotions. For others, these helped towards gaining a more accepting and compassionate view of themselves.

### *6.3 A need to change the social environment*

The discrimination and victimisation that participants faced, highlighted a need for change within their social environment. Nine participants spoke about their involvement in politics, and LGBTQI+ activism:

*"I helped organise a protest… a week or two ago, um, where people gathered to voice their opinion about what the government is doing right now." (Allyn)*

Nine participants spoke about how physically moving from a non-affirming or unsafe environment to a safe and accepting place was helpful in reducing distress, self-harm and suicidal ideation. For some, this meant moving away from, or 'cutting off' non-accepting family:

*"I was self-harming a lot… but now… I feel like I'm actually, cutting them (family) off was very helpful" (Kayden)*

For other participants, moving from rural, conservative areas to more diverse cities (often to attend university) allowed them to live where they felt more accepted and allowed a greater sense of connection with the non-binary community. For Isa, leaving their home country that criminalises their identity was the 'only thing' that could help to reduce their distress and self-harm at that time:

*“At that time… no therapy or sense of community or connection helped. No art or poetry, writing, nothing. The only thing that helped was leaving.” (Isa)*

The need for change in the social environment was evident across all participants accounts. This linked to improved sense of wellbeing and in some cases a reduction in self harm urges and behaviours.

# 7 Life during Covid-19

## *7.1 Life Interrupted*

Covid-19 negatively impacted participants’ lives in ways unrelated to gender, such as unemployment, missing physical socialising, reduced access to coping strategies and overall feelings of threat and uncertainty. Four participants experienced an increase or ‘relapse’ in self-harm urges and behaviour:

*“Its been a bonkers time and things have just felt generally very unstable. There have been some relapses for me during this time because of that.” (Robin)*

Six participants expressed that Covid-19 had “*deprived the queer community of togetherness” (Beck)*, which had led to feelings of loneliness, sadness and a yearning to regain that sense of belonging. This was exacerbated for some by having to live in transphobic family homes, and subsequently leaving:

*“My family threw me out. Erm, because of erm, just how hard it was to be in lockdown with them.” (Fynn)*

Two participants expressed that they had experienced fear of weight gain during lockdown which had increased feelings of physical dysphoria in relation to being viewed as embodying one gender and curvier body shape.

*“I’ve gained weight in my chest… and it was giving me dysphoria” (Nico)*

Kayden expressed how lockdown had resulted in affirming medical interventions being put on hold, leaving them feeling stuck. This had subsequently increased their self-harm:

*"I was supposed to have another appointment…but then that got cancelled due to the lockdown." (Kayden)*

### *7.2 Life more Authentic*

Five participants spoke about how lockdown forced them to explore and express their gender identity more authentically. Online home working allowed more opportunities to express their non-binary identity and supported the coming out process comfortably, for example, naturally stating pronouns in their e-mail communication:

*"I'm using that as part of my process of slowly and subtly coming out to more people… using more gender-neutral pronouns to refer to myself." (Robin)*

Online home working also gave permission to wear more non-binary affirming clothing and reduce performing binary gender in unhelpful ways:

*"I've been able to yeah choose a lot more clothing that's comfortable for me. Again, it's sort of taken that performance aspect out of things" (Piper)*

The Covid-19 pandemic brought about a number of additional stressors for participants both related and unrelated to gender. Whilst Covid-19 did increase self-harm urges and behaviours for some, for others, living in lockdown bought about novel opportunities for more authentic gender expression and a sense of wellbeing.

## Discussion

Due to the gap in current literature, this study utilised a constructivist grounded theory approach (Charmaz, 2014) to gain a greater understanding of the processes underpinning self-harm urges and behaviours amongst non-binary young adults. The study was also interested in what helps to manage these difficulties. As the study took place during the Covid-19 pandemic, this was also explored as a social context to highlight how the pandemic had impacted the experiences of non-binary young adults. To our knowledge, the current study offers findings that serve as the start of the evidence base on this topic.

Findings demonstrated how participants' experiences whilst growing up feeling outside of the binary related to their self-harm. Puberty brought about feelings of physical dysphoria, because the body no longer represented their internal sense of gender. Some participants used self-harm to regain connection to their alienated body. This supports the inclusion of physical gender dysphoria as an internal minority stressor as suggested by Lindley and Galupo (2020). Participants also described that a lack of acceptance of their non-binary gender from family also increased self-harm urges and behaviours. This finding extends previous research that highlighted an association between low levels of family support and increased distress amongst LGBT+ individuals (McConnell et al., 2016).

Participants described the painful experiences that came from being non-binary in a cisnormative society. This is reflected in previous research that suggests non-binary people experience higher levels of discrimination as a result of being less understood or visible within society (Lefevor et al., 2019; Liszewski et al., 2018). Relational discrimination and victimisation became internalised, leaving participants feeling dehumanised, objectified worthless and deserving of punishment via self-harm. These findings extend understandings of how MST (Meyer, 2003; Hendricks & Testa, 2012) can be applied to the understanding of self-harm amongst non-binary young adults. Findings also support the psychological mediation framework of gender minority stress (Hatzenbuehler, 2009), which highlights how minority stressors translate into feelings of worthlessness, negative self-schemas and rumination. Self-harm functioned to manage, escape and/or express feelings, as well as to punish themselves; findings that are in concordance with previous research (Suyemoto, 1998; Edmondson et al., 2016).

Relational and structural discrimination left participants feeling a lack of belonging within relationships, but also within society at large. Feeling hopeless about a future in which they could not feel a sense of belonging seemed to underpin suicidal ideation. This finding is in-keeping with the concept of 'thwarted belonging' within the Interpersonal Theory of Suicide (Van Orden et al., 2010), which suggests that individuals experience suicidal ideation when they feel that their need for social belonging cannot be met or is being disallowed.

A novel finding was unearthed in the conflict between living with a need for belonging and a need to express their non-binary identity authentically.  Participants struggled to live in a way that fulfilled these potentially opposing needs simultaneously. In order to 'fit in' and be accepted within a cisnormative society, some participants hid their non-binary identity, or ‘dampened down’ their authentic gender expression. However, this meant they were prevented from having their gender affirmed, thus creating distress. This finding supports the Gender Affirmation Framework (Sevelius & Sevelius, 2013), which suggests that those with unmet gender affirmation needs are more likely to experience distress and adverse health outcomes. Some binary transgender people are able to ‘blend in’ to a cisnormative society and be perceived by others as the gender they identity as. This may allow them to be accepted and experience reduced discrimination within a cisnormative society, whilst also having their gender affirmed by others (Anderson et al., 2020). However, non-binary identities can often be expressed in a way that is more in conflict with the societal norms of identifying as either a man or a woman, than binary transgender identities (Webb et al., 2017). Participants highlighted that because of this, they felt less able to ‘blend in’ to a cisnormative society, whilst simultaneously having their gender affirmed, than binary transgender people. This may seek to explain why some studies have found higher levels of distress and self-harm amongst non-binary individuals compared to their binary transgender peers (Lefevor et al., 2019).

All participants described a link between self-harm and difficulties related to family discord separate from their experience of gender. This supports existing models of self-harm that highlight that family discord and invalidating environments can result in a lack of ability to express or manage emotion, thus leading to self-harm (Linehan, 1993, 2015; Sim et al., 2009). It could also be inferred that non-binary people experienced significant invalidation from a cisnormative society, as well as their family.

Self-acceptance and connection to the non-binary community was helpful in reducing self-harm. This aligns with MST (Meyer, 2003, 2015) and the Interpersonal Theory of Suicide (Van Orden et al., 2010), supporting the idea that that social connection and social support from one’s minority group can buffer the effects of minority stress and reduce likelihood of self-harm. Furthermore, the current study offered a novel finding related to understanding gender as a social construct, which provided participants with a framework to own their non-binary identity and reject the negativity of others. This helped towards gaining a sense of self-acceptance and validation.

Findings also supported recommendations suggesting that ways of coping such as therapy and finding alternatives to self-harm were helpful (National Institute for Health and Care

Excellence, 2011). In terms of managing self-harm related to physical gender dysphoria, participants emphasised that finding ways to appreciate or feel connected to their own bodies was effective. This may be specifically helpful for non-binary individuals whose physical dysphoria is changeable or those who do not feel that they require medical intervention in order to have their gender affirmed.

Participants highlighted a need for change in the social environment to protect them from harm and allow for greater acceptance. Many highlighted their participation in working toward these changes through involvement in activism, politics and LGBT societies. This supports existing research that highlights engagement in activism as a resilience strategy for TGNC individuals in the face of minority stress (Matsuno & Israel, 2018). Findings indicated that when participants were able to change their environment and move away from non-accepting or unsafe environments, this had an extremely positive impact on their wellbeing and reduced self-harming urges. Existing research highlights location as significant in understanding the wellbeing of TGNC individuals, because differences in political views, cultural factors and religion within a location can impact on how safe or accepting it is for TGNC individuals (Eisenberg et al., 2019; Kosciw et al., 2009). This finding builds upon the aforementioned research by highlighting the positive impact of moving away from unsafe and non-accepting environments.

Participants expressed that Covid-19 had increased their self-harm due to unemployment, missing social contact and loss of access to coping strategies. This finding mirrors research investigating the influence of Covid-19 on self-harm in the UK (Hawton et al., 2021). The negative impact of Covid-19 in relation to non-binary identity, such as lack of access to LGBTQI+ spaces, managing family conflict and an increase in wait-times for gender affirming medical intervention was also reflective of findings from LGBT Foundation (2020). Interestingly, a novel finding suggested that lockdown allowed some participants greater opportunities to explore and express their gender authentically through increased digital working and permission for more causal gender-neutral clothing. These findings may be implemented moving forward, whereby greater freedom in employee dress code and encouraging the inclusion of pronouns in e-mail signatures could support non-binary people and their wellbeing in the workplace (Mack & Vogler-Elias, 2020).

## Limitations

Due to the Covid-19 pandemic and associated restrictions, the majority of participants were recruited through social media, mainly twitter. This excluded people who may not use or have access to social media or the internet, meaning that voices from these groups remain unheard (Sy et al., 2020).

Due to a lack of time and being restricted to online recruitment due to Covid-19, theoretical sampling in relation to people from minoritized racial and ethnic groups was not possible. Attempts were made to target specific organisations; however, this was unsuccessful. This prevented further exploration and the development of theory in relation to how being non-binary intersects with being from a minoritized racial and ethnic group in relation to self-harm. Despite this, theoretical sufficiency (Dey, 1999) and concept saturation (Saunders et al, 2018; Malterud et al., 2016) were used to establish categories sufficient to generate a testable, trustworthy theory that was grounded in data.

## Clinical Implications

Findings highlighted the need for mental health professionals to have an awareness and understanding of non-binary and other intersectional identities, e.g., neurodivergent or culture, in order to reduce harm and allow for access to appropriate support. Thorough assessment of the unique functions of self-harm in non-binary people should be completed to inform meaningful intervention. For example, when self-harm is used to regain connection to the body, they could be supported to appreciate and connect with their body through alternative means (such as yoga or kickboxing) which allow them to view their bodies in a more positive and empowering way. Alternatively, if an individual is self-harming as a result of feeling worthless or deserving of punishment, findings suggest that they should be supported to gain self-acceptance and self-compassion, through authentic gender expression, connection to the non-binary community and learning about gender through a social constructionist framework (Butler, 2011).

Importantly, findings highlight that intervention must also take a systemic approach to tackle the pain of living in a cisnormative world. Participants described wider societal feelings of not belonging and fearing that they may never be understood or accepted. Therefore, the need for institutional and structural change that will protect non-binary people was evident. Participants highlighted a need for increased awareness, visibility and understanding within schools to reduce negative attitudes towards non-binary students in the early stages of the exploration of their gender identity. Findings also emphasise a need for change at wider policy level with the aim of providing non-binary people with greater opportunities for gender affirmation and to protect them against relational and structural discrimination and victimisation. The changes proposed for the UK by the Gender Recognition Act reform would have allowed non-binary people to self-identify and be legally recognised as non-binary, and called for more TGNC-inclusive and supportive practices within the NHS (Miles, 2018). Findings from the current study support the idea that political and systemic changes could be protective against self-harm amongst non-binary young adults across the world.

## Future research

Further exploration of the links between self-harm in the non-binary population is required to test the theory proposed by the current study and develop the evidence base. Future research investigating the relationship between a non-binary person's social environment and social support related to their self-harm may provide evidence that could be used to inform institutional and structural change. Furthermore, psychological interventions with the aim of reducing self-harm amongst non-binary individuals should be developed and evaluated in future research. Findings suggest that these should incorporate the development of self-acceptance, and should adapt existing self-harm interventions to be sensitive to the needs of non-binary individuals. Furthermore, conducting a similar exploration amongst non-binary people within other intersecting identities is recommended. Meyer (2010) highlights that individuals belonging to multiple minority groups and holding intersectional identities will experience complex and unique forms of minority stress, therefore it would be important to understand the experiences of these individuals to inform how best to support them.

## Conclusion

The present study demonstrates that some experiences associated with growing up outside of the binary (such as physical dysphoria and having a lack of family support) may lead to self-harm amongst non-binary individuals. However, being exposed to gender diversity and being able to label oneself as non-binary can bring about feelings of empowerment and validation that may be protective against distress and subsequent self-harm. Experiencing family discord and the pain of living in a cisnormative world can lead to feelings of worthlessness, dehumanisation, and a lack of belonging amongst non-binary young adults. These feelings can lead to self-harm and, for some, suicidal ideation. Furthermore, the current study presents self-acceptance, connection with the non-binary community and finding ways of coping as helpful in reducing self-harm amongst non-binary young adults. Findings also call for a need for increased awareness, understanding and acceptance of non-binary identities within healthcare, schools and on a wider, societal scale.

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# Paper 3

# A Critical and Reflective Review of Papers 1 and 2

Word count (excluding references): 6,120

## Introduction

In this paper, the author provides a critical and reflective review of conducting two related but distinct research projects into self-harm and suicide amongst transgender and non-binary adults. The author will discuss how methodological decisions were made and consider how the systematic review and empirical paper fit within the wider context of research and clinical practice. Strengths and limitations of the project will be outlined, as well as personal reflections throughout the research process. The impact that the Covid-19 pandemic had upon the research process will also be discussed.

### Paper 1: The Relationship Between Minority Stress Factors and Suicidal Ideation and Behaviours Amongst Transgender and Gender Non-Conforming Adults: A Systematic Review

#### *Choice of Research Question*

The subject of both systematic review and empirical paper focussed on the experiences of gender diverse populations, therefore the two papers are linked in this way. Furthermore, the subject of suicidal ideation and behaviours links to the empirical paper as suicide is a form of self-harm with intent to end life (National Collaborating Centre for Mental Health, 2012) and self-harm, without intent to end life, is a risk factor for suicide (Hawton et al., 2015). Hence, the two concepts often co-exist or are associated with one another.

In recent years, Transgender and Gender Non-Conforming (TGNC) visibility has increased within the mainstream media, with more attention focused on the difficulties faced by TGNC people (Lovelock, 2017; Miles, 2018; Berberick, 2018). Previous reviews have reported on the prevalence rates of suicidal outcomes amongst TGNC (Adams et al., 2017; Marshall et al., 2016). Whilst some correlates of suicide had been reported in discussions these had not been reviewed systematically. Reviews by McNeil et al. (2017) and Wolford-Clevenger et al. (2018), did focus on the correlates of suicide within TGNC individuals. The Wolford-Clevenger et al. (2018) review did so in a way that was guided by ideation-to-action theory. Initial searches highlighted that there had been an influx of research focused on correlates of suicidal ideation and behaviours amongst TGNC individuals since Wolford-Clevenger et al. (2018) had concluded their searches in July 2017. Thus, highlighting the need for an updated review of the literature conducted in recent years. In fact, searches with the initial review question ‘what are the risk and protective factors of suicidal ideation and behaviours amongst TGNC individuals?', harnessed 73 papers eligible for inclusion. The research team believed that the review question was too large in scope and needed to be refined in order to conduct a more focused review.

Whilst developing and considering ideas for the empirical study, the author had become familiar with Minority Stress Theory (MST; Meyer, 2003). It was recognised that some of the correlates of suicide outcomes that had been identified in previous reviews (i.e. discrimination, social support) could be understood within a minority stress framework (Marshall et al., 2016; McNeil et al., 2017). This was also evident within the Wolford-Clevenger et al. (2018) review because they had identified 'external minority stress' and 'internal minority stress' as categories by which they had organised their results. This highlighted a need for a more focused and in-depth exploration of how minority stress factors relate to suicidal ideation and behaviours amongst TGNC individuals. A review with this focus, could have the potential to offer important clinical implications on how to reduce suicidal ideation and behaviours amongst TGNC individuals and potentially save lives. Furthermore, this felt like an important and meaningful topic, especially in today's social climate in which TGNC continue to face discrimination on an individual and structural level simply for existing (Bachmann & Gooch, 2018). As the majority of testing of MST has been conducted within adult populations (Meyer, 2003; Hendricks & Testa, 2012), it felt appropriate that the current review focused on an adult population. This directed the author towards a revised systematic review question: "How are minority stress processes related to suicidal ideation and behaviours amongst TGNC adults?"

### *Systematic Search*

Once the review question had been formulated, an effective search strategy was required in order to capture the relevant articles needed to answer the review question. Due to the vast spectrum of TGNC identities, it was important to include a wide variety of terms that would lead to an inclusive sample in terms of gender identity. Due to the socially sensitive nature of the topic, it was important to use a term to refer to the target population that was both inclusive and respectful. Multiple discussions were had regarding this issue within the research team. Leaders from a local Lesbian, Gay, Bisexual, Trans, Queer, Intersex (LGBTQI+) support organisation, The Proud Trust, were also consulted in regards to the language used within the research project.

In order to be most inclusive when searching databases, the author was informed by previous reviews that had focused on TGNC populations (Marshall et al., 2016; McNeil et al., 2017; Wolford-Clevenger et al., 2018; Valentine & Shipherd, 2018) and the terms that they had used during systematic searches. Initially, the numerous terms to capture a TGNC population were combined with terms to capture suicidal ideation and behaviour. However, using terms such as ‘suicidal ideation’, ‘suicidal thoughts’, ‘suicide attempts’, ‘suicidal behaviour’ etc., was too restrictive and yielded a limited number of results. Therefore, the term ‘suicid*’ was used alongside a variety of gender identifying terms. This allowed for a sufficiently sensitive, yet specific search of the literature.

The research team agreed that minority stress factors could not be operationalised and identified through specific search terms because this would not account for the numerous ways of defining and describing minority stressors. Therefore, the decision was made to identify papers reporting on minority stress factors by hand searching retrieved titles and abstracts (or full text if unclear at title and abstract level).

Multiple databases that were relevant to mental health, psychological and sociological research were chosen to search for peer reviewed studies and grey literature. Grey literature has been highlighted as an important contribution to a systematic review because its inclusion can help to reduce publication bias and present a more balanced review of the literature (Paez, 2017). For this reason, the British Public Library website was also searched for unpublished theses.

### *Inclusion and Exclusion Criteria*

Inclusion and exclusion criteria were constructed in order to specify the types of papers that should be included to best answer the review question. The decision was made to exclude papers that employed a solely qualitative methodology and included papers were required to provide quantitative analysis on the relationship between suicidal ideation and/or behaviours and other study variables reflective of one or more minority stress factor. These decisions were made in order to offer a review of the relative strength of explanatory relationships between minority stress factors and suicide outcomes amongst TGNC adults, with the potential to conduct a meta-analysis should the eligible studies have allowed this.

The operationalisation of the complex and abstract concept of minority stress in a replicable and consistent manner, for the purpose of the inclusion criteria, bought about some difficulty. In order to do this, the author familiarised herself with minority stress literature and its application to TGNC individuals (Meyer, 2003; 2015; Testa et al., 2015; Hendricks & Testa, 2012) and a thorough and detailed description of MST for the papers' introduction was written. This was used to inform the operationalisation of minority stress factors for the inclusion criterion.[1] This offered a much clearer description of minority stress factors, and also increased the author's knowledge and subsequent confidence in screening for minority stress factors. If this review was to be replicated, it would likely be useful for the researcher to firstly familiarise themselves with MST literature (Meyer, 2003; 2015; Testa et al., 2015; Hendricks & Testa, 2012) prior to screening in order to ensure a clear understanding of the theory whilst screening.

*Screening*

Title and abstract screening enabled the selection of papers that investigated the relationship between suicidal ideation or behaviours and other variables amongst TGNC individuals. However, the majority of screening for minority stress factors was done at full-text level, because there was often not enough detail in an abstract to ascertain whether the variable being measured could be categorised as a minority stress factor or not. It could be suggested that this method led to a more subjective view on whether or not a variable within a paper could be determined as a minority stress factor. Including minority stress factors within the search terms may have reduced the time spent screening papers and led to a more objective selection of papers. However, this approach ensured that potentially relevant papers were not missed. Furthermore, the strong agreement rates between myself and an independent peer (who screened 25% of papers at title and abstract and full text level) indicated that the screening method employed allowed for consistent selection of papers investigating minority stress factors.

As well as database searches, forward searches of the reference lists of all included studies were completed. Backwards searches or exploration of prominent publishers within the research area for any additional, relevant papers were not completed due to time restraints of the project. However, a thorough search strategy aimed to ensure that no relevant papers were unintentionally missed.

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[1] Prejudice events and conditions, expectation of prejudice, mis-affirmation/misgendering, concealment of identity, internalised stigma and transphobia, community resilience and/or internal resilience

### *Quality Assessment*

Assessing the methodological quality of included papers is an important aspect of a comprehensive systematic review, as the quality of papers should be considered when analysing and interpreting results (Sanderson et al., 2007). Therefore, it was important to select a tool that would most appropriately capture the aspects of a study most relevant to its design. Selection of an appropriate tool was not a difficult task in this instance, because all but one study were cross-sectional in design, and all studies were cohort studies. Due to the ability to provide thorough assessment of the internal validity of cross-sectional and cohort studies (Ma et al., 2020), three measures were explored to assess the quality of studies in the review, the National Institutes of Health's Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies (NIH, 2014), the Joanna Briggs Institute (JBI) critical appraisal checklist for analytical cross-sectional study (Moola et al., 2017), and the Appraisal tool for Cross-Sectional Studies (AXIS tool; Downes et al., 2016). All three tools were extremely similar in the items they included to assess quality, therefore, the National Institutes of Health's Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies (NIH, 2014) was selected because this tool was also used in the Wolford-Clevenger et al. (2018) review. It was felt that using the same tool would allow for the quality of studies to be compared across the two reviews.

The assessment process highlighted a number of common limitations across studies that were reflective of their cross-sectional design (i.e. the exposure occurring before the outcome, the outcome being measured at numerous time points etc.). There were also two items that were omitted from the tool because they were only relevant to the one longitudinal study that was included in the review. Guidelines for using the tool advised against providing an overall rating by 'tallying up' the number of items that were rated as yes or no, but to consider the items as key concepts and consider the study's internal validity and risk of bias (NIH, 2014). This felt difficult and the author was concerned that quality assessment would be biased towards her own views. Alternatively, 'tallying up' items to reach a total score felt dismissive of the significance of the individual items and the information they offer about a paper's quality and risk of bias. Therefore, guidelines for the tool were followed. The strong agreement between the author's ratings and those of an independent peer increased confidence that the ratings were not as subjective as initially thought.

### *Data synthesis*

Whilst initially, the author had aimed to perform a meta-analysis of minority stress factors that were measured by five or more studies, unfortunately this was not feasible. There were certain minority stress factors (such as discrimination) that had been measured by multiple studies; however, the operationalisation and measurement of minority stress factors and suicidal outcomes varied greatly across studies. Studies ranged in how variables were measured (continuous/dichotomous), the direction of effect, and how outcomes were operationalised. When there is too much variation in results, conducting a meta-analysis is not recommended because it may result in a misleading average value for the effect (Deeks et al., 2019). Furthermore, the overall quality of studies was rated as ‘poor’. Meta-analyses are not recommended when there is a risk of bias in the included studies, because this can lead to a compounding of the errors and offer a misleading result (Deeks et al., 2019). Conducting a narrative approach allows for results to be interpreted with consideration of the papers’ quality and risk of bias (Popay et al., 2006).

Data were therefore synthesised using a narrative approach. In line with Popay et al. (2006), a narrative approach allowed for the ‘story’ of the findings to be told and MST provided a framework from which to understand the findings. This provided a helpful structure to the data synthesis which best enabled the research question to be answered. Findings were categorised under three headings in line with MST (Meyer, 2003; 2015; Testa et al., 2015): ‘External Minority Stress’, ‘Internal Minority Stress’, and ‘Resilience Factors’. Findings under these headings were then compared, discussed and conclusions were drawn through assessment of the strength of the evidence.

### *Overall Reflections*

Overall, the process of conducting a systematic review proved a valuable learning experience. It allowed the author to develop skills in the critical evaluation of research papers. Furthermore, the author gained knowledge of a socially and politically important topic, which will be taken forward into the author’s clinical work and personal life in terms of supporting and fighting for the rights of TGNC individuals. For example, by having more conversations about gender diversity and recognising areas within the author’s own clinical workplace that could be improved in terms of their inclusivity of TGNC individuals.

## Paper 2: Research Study – Understanding self-harm urges and behaviour amongst non-binary young adults: a grounded theory study

### *Designing the Study*

During the early phases of the research process a variety of qualitative methodologies were considered in relation to the appropriateness of answering the research question. Interpretative phenomenological analysis (IPA) was initially considered because this methodology aims to offer insight into how a person describes and makes sense of a phenomenon within a certain context (Sokolowski, 2000; Alase, 2017). Alternatively, the aim of grounded theory is to develop a theory that seeks to explain social processes in the environments that they take place (Glaser & Strauss, 1967). Therefore, it was thought that grounded theory would better fit with the project's aims of developing an explanatory understanding of the possible processes that underpin and lead to self-harm in a population whose identity is in conflict with the social norms of binary gender in western society (Lefevor et al., 2019; Webb et al., 2017). Therefore, grounded theory methodology was chosen as the most suited methodology to the research question.

It was agreed within the research team that a constructivist approach to grounded theory would be employed (Charmaz, 2014). This felt most appropriate as the constructivist approach prioritises the relationship between researcher and participant and the co-construction of meaning. This approach emphasises taking a reflexive stance on how one's own experiences and biases may influence data collection and analysis (Charmaz, 2014). It was felt that a constructivist approach was most in-keeping with the author's existing experiences of taking a reflexive stance as a clinician (for example, being aware of the clinician's experiences and biases that are bought into the therapy room when working therapeutically with clients). Furthermore, a constructivist approach to grounded theory does not require a 'blank slate' from which to begin data collection (Charmaz, 2014), which fit with the requirement of conducting a brief literature search prior to the onset of data collection and analysis in order to put forward a research proposal that was assessed by the University for the study's feasibility. This is in contrast to the original objectivist grounded theory, which suggests that the researcher should not undertake a literature search of the topic area prior to conducting the study in order to avoid data collection and analysis being coloured by the researchers' existing knowledge (Glaser & Strauss, 1967).

### *Gaining Ethical Approval*

TGNC populations have a history of being subject to ethically flawed research processes, such as a lack of appropriate language use, or research that pathologizes or delegitimises TGNC identities (Vincent, 2018). Therefore, it felt extremely important to conduct the research sensitively in a way that promotes a sense of safety. The author's experiences and knowledge as a clinician informed the development of risk and distress protocols.

Conducting interviews remotely also bought about complications in managing risk. Another requirement was that participants provided the address of the location so that in the event of imminent risk, the emergency services could be contacted and directed to them. Protocols were also developed that would support risk management in the event of a participant ending their zoom call.

### *Recruitment*

At the start of March 2020, the ethics panel was attended. Following on from this, whilst completing corrections to resubmit to the ethics panel, lockdowns in France and Italy had commenced as a result of Covid-19. Therefore, adaptations were included that allowed for remote research interviews to take place via video call or over the phone in the ethics panel corrections, in anticipation of the UK also going into lockdown.

When the UK went into lockdown at the end of March, all was in place for the recruiting to commence, albeit for a video-based interview, rather than the originally planned in person face-to-face interview. Whilst the original plan was to recruit from The Proud Trust via TGNC youth support groups, the group leader that the author had been liaising with, raised concerns about additional stress being placed on a group of young people whose mental health had been negatively impacted by Covid-19. A document published by the LGBT Foundation (2020; Hidden Figures: The Impact of the Covid-19 Pandemic on LGBT Communities In The UK) highlighted the difficulties the pandemic had bought about for LGBTQI+ people. For these reasons, the group leader had reservations about sharing details of the study within the virtual support groups in fear that this may put additional emotional strain on the young people in attendance. On one hand, this was understanding given the stress that the group leader was having to manage in their role, and the overall impact of Covid-19 on the LGBTQI+ community (LGBT Foundation, 2020). However, it could be argued that all group members are adults and so should be given the opportunity to make their own decisions on what is offered to them.

An ethics amendment was submitted to allow for further online advertising in the form of a study specific twitter (@shinbip) in order to reach a wider audience by following numerous LGBTQI+ and TGNC organisations and influential people and asking them to share details of the study. Recruitment took place online, sharing tweets and Facebook posts. Given emerging research highlighting the impact of the Covid-19 pandemic on LGBTQI+ populations (LGBT Foundation, 2020), it was also felt that there was an opportunity to expand the project to gather data regarding the impact of Covid-19 on self-harm amongst non-binary people. Therefore, an amendment was made to the topic guide to allow for exploration of this.

Theoretical sampling was aimed for in order to increase the information power of our sample (Dey, 1999; Malterud et al., 2016). The larger information power that a sample holds, the lower the number of participants needed. One dimension that impacts the information power of the sample relates to sample specificity (i.e. that a sample with a greater variety of experiences requires fewer participants). Theoretical sampling was aimed for by targeting specific groups. For example, as data collection progressed, it was noted that the sample was predominantly white. One participant identified their ethnicity as Arab and shared their fascinating story of being non-binary whilst living in a country where being gender non-conforming is punishable by law. The author was moved by this interview and recognised how significant a participant's culture or ethnicity could be in impacting their experiences. Therefore, in an attempt to increase interest in people participating from minoritized ethnic groups, more organisations specific to minoritized ethnic LGBTQI+ individuals were targeted. Unfortunately, this was unsuccessful. It could be that organisations had similar concerns as the Proud Trust group leader, who feared that advertising for participation in a self-harm study would feel too much on top of managing the difficulties bought about by Covid-19. However, this led to a lack of racial or ethnic diversity within the research project and prevented further exploration of the impact of belonging to marginalised identities in relation to both gender and ethnicity.

### *Conducting the Interview*

Whilst the need to change the interview format from face-to-face felt daunting initially, conducting interviews via Zoom meant that taking part was less time consuming for participants because they did not need to travel to attend. It also allowed for participants from across the UK to take part in the interview, as opposed to only participants local to Manchester. This meant that results were not specifically reflective of the social environment and culture of Manchester, which could be argued to be more tolerant and accepting of LGBTQI+ people, but of a variety of locations across the UK. Zoom has been described by researchers and participants as preferable to other interviewing mediums such as face-to-face or over the phone (Archibald et al., 2019). This was reflected in the author's own experience. Participants appeared relaxed being interviewed from their own homes and it was felt that being able to see the author in her own home helped participants see her as a 'human' rather than purely a researcher. Participants were able to have open conversations about difficult topics and despite being physically apart, the connection between participant and interviewer was felt and rapport was built. This allowed for the conversational nature of interviews, as indicated by Charmaz (2014). However, a home environment can be difficult for participants to speak freely without being overheard by family (Adler & Adler, 2002). Therefore, the author checked in with participants whether they felt comfortable to speak without being overheard before conducting interviews.

Prior to the interviews, the author attended training on conducting qualitative research interviews. As the research topic of self-harm is something the author is familiar discussing with clients in her clinical role, this training helped her to differentiate between conducting clinical interviews and conducting research interviews. During clinical interviews, a lot of time is spent using empathy, validation and providing psycho-education or psychological support to clients. Whilst empathy was used in a research setting to build rapport, the author learnt to focus on gathering data. However, there was often a pull to provide psycho-education or psychological support to participants, which was resisted. During memo-writing, the author reflected on how her experience as a clinician influenced interpretation of interview data. For example, the author found it difficult when participants expressed medicalised views of mental health that were in contrast to her own views. It was recognised that the interpretation of this information may have been different if conducted by a researcher who shared these medicalised views of mental health.

### *Analysis*

Transcribing can be viewed as the first step in qualitative data analysis as repeated listening allows the researcher to become emersed in the data (Bailey, 2008). Therefore, all transcribing tasks were completed by the author, aiding familiarisation with the data. Listening back to recordings also highlighted things not noticed when conducting the interviews and helped to inform memo-writing and consequent updates of the topic guide. It was also noticed that there were times when the author had asked a follow up question without careful consideration of what the participant had said. This observation helped to inform future interviews, in which the author was mindful of taking a step back and considering the participant's utterances before responding.

In line with Charmaz (2014) and in order to ensure that the development of codes and categories were routed in the data, a process of member checking was employed. Three participants were sent the initial codes for their interviews alongside corresponding transcript. Whilst member checking is used to support data triangulation, it has also been suggested as a helpful reflective space for participants (Candela, 2019). This was evident in the feedback that was received from participants. One of whom reported that they had come out as non-binary to more friends as a "direct result" of their reflections on their interview. In addition, a process of triangulation took place, in which the author's primary supervisor was sent a transcript and codes and offered their reflections. Discussions were also had within the research team  regarding emerging codes, categories and subsequent theory. Being able to talk through the analysis aloud helped to question, challenge and gain perspective over how different codes and categories related to one another. This process helped to solidify the analysis and move from theoretical categories to a coherent theory.

Due to Covid-19 restrictions, the research team were unable to meet together in person in order to discuss and complete the analysis. Grounded theory analysis may more typically, involve a manual 'handling' of data in the form of paper and post-it notes. During face-to-face meetings, data could then be physically moved around, grouped and organised in ways to work towards the emergence of a theory. Being unable to do this proved difficult in that the research team were restricted in how they could collaboratively work together to find meaning in the data using zoom. Upon reflection, more consideration of how this could be done virtually would have been helpful. For example, web camera angles could have been adapted so that data in written, physical form could be manipulated in view of the whole team. This may have allowed for a more collaborative approach during the focused coding stages of analysis, in which supervisors could have offered insights that may have influenced subsequent coding and analysis. Alternatively, a shared drive could have been used to hold analysis documents so that the research team could familiarise themselves with these prior to meetings. This would allow the team to attend meetings with knowledge of the data and ideas for analysis as opposed to having to take in, process and offer thoughts on the analysis within a one-hour meeting.

*Overall Reflections*

Conducting a piece of qualitative data proved to be an arduous but rewarding task. The author felt that the grounded theory methodology fit with her clinical experiences of developing diagrammatic psychological formulations and explanations to understand an individual's psychological experience. During the analysis and write-up, there was a pull to want to include lots of detail due to the rich data that participants had provided. It was difficult to decipher how much detail to include. Therefore, guidance was sought from research supervisors and it was kept in mind how the data related to the research question.

Through meeting and interviewing participants and becoming emersed into a space of 'trans twitter', the author felt that her allyship to the TGNC community strengthened. Witnessing transphobia on twitter, bought about feelings of anger. Specifically, a tweet posted from the study specific twitter advertising the study was met with an extremely offensive and transphobic response from a user who appeared to be a member of the far-right organisation, English Defence League (EDL). It felt shocking to receive this and the experience grew the author's empathic feelings towards the TGNC community. This led the author to consider how it must feel to live in a society in which other people have such strong negative feelings towards you, simply for existing. Furthermore, the author's own understanding of gender was expanded to learn about gender as a social construct and she found herself having more conversations about non-binary gender identities in her clinical role and personal life. These feelings enhanced motivation throughout the research process and there was a felt sense of duty to give justice to participants' narratives.

## Theoretical Implications of Paper 1 and Paper 2

The systematic review provided a focused exploration of how MST (Meyer, 2003; 2015; Testa et al., 2015) can be applied to the understanding of suicidal ideation and behaviours amongst TGNC adults. It builds upon previous reviews (Marshall et al., 2016; McNeil et al., 2017; Wolford-Clevenger et al., 2018) and offers novel contributions, such as the understanding of resilience factors and the role they play in protecting against suicidal outcomes amongst TGNC. The review highlighted that whilst community resilience did act as protective against suicidal ideation and behaviours, it did not buffer the effects that external and internal minority stress had on suicidal ideation and behaviours. The qualitative research also offered support to the application of MST (Meyer, 2003; 2015; Testa et al., 2015) to self-harm amongst non-binary young adults. In that, minority stressors led to self-harm and connection to the non-binary community was seen as helpful in reducing self-harm. Furthermore, results supported the psychological mediation framework of minority stress (Hatzenbuehler, 2009), in that minority stressors lead to self-harm through increased rumination and feelings of worthlessness. Both paper 1 and 2 offer support to the Gender Affirmation Framework (Sevelius & Sevelius, 2013) because results highlighted that having unmet gender affirmation needs led to self-harm and an increased likelihood of experiencing suicidal ideation.

Findings also offered support to theories of self-harm and suicide. Paper 2 highlighted how participants' lack of belonging led to feelings of hopelessness about the future and subsequent suicidal ideation. This is in-keeping with the concept of 'thwarted belonging' within the Interpersonal Theory of Suicide (Van Orden et al., 2010) which suggests that individuals experience suicidal ideation when they feel that their need for social belonging cannot be met or is being disallowed. Results also found that family discord led to self-harm amongst non-binary young adults. This supports theoretical understandings of self-harm as being a result of a lack of skill in processing emotion due to an invalidating family environment (Linehan, 1993). However, it could be suggested that participants also experienced a cisnormative society as an invalidating environment, which also contributed to self-harm.

Paper 2 also offers novel contributions to the dearth of literature into non-binary experiences, and it arguably starts this new evidence base. Findings highlight how the pain that non-binary people experience as a result of living in a cisnormative world, factors associated with growing up feeling outside of the gender binary, and family discord lead to self-harming urges and behaviours amongst participants. Findings highlight what helps in managing self-harming urges and behaviours as well as the impact of Covid-19.

## Clinical Implications of Paper 1 and Paper 2

Both papers highlight that connection to the non-binary or TGNC community can be protective against self-harm or suicidal ideation and behaviours. Therefore, TGNC clients should be supported to create meaningful connection with other TGNC individuals through TGNC support groups. Furthermore, both papers highlight individual coping as an area for clinical implication. Paper 1 indicated that the TGNC clients' individual coping styles should be assessed, and they should be supported to engage in functional coping strategies and reduce dysfunctional coping, such as substance use. Paper 2 highlighted that non-binary clients should be supported to find ways of coping (such as therapy, alternatives to self-harm, and finding ways to regain connection to their body) in order to manage self-harming urges and behaviours. Both papers highlight areas for psychological and risk assessment when working with TGNC clients. Individuals should be asked about their experiences of minority stress, support systems and ways of coping, as these may offer insights into a TGNC client's risk of harm to self.

Papers 1 and 2 also highlight the difficulties that TGNC individuals face within a cisnormative society simply for existing. Whilst individual implications may help them manage these difficulties, it could be argued that this places responsibility in the TGNC individual to have to 'cope' with mistreatment, as opposed placing responsibility with the systems that oppress TGNC individuals. Both papers represent a significant need for intervention on a wider, institutional and societal level to address this issue. Both papers highlight that the following changes could potentially be helpful in reducing self-harm, suicidal ideation and behaviours amongst TGNC adults: changes in policy that protect TGNC against discrimination, changes that allow for more TGNC-inclusive and supportive practices within the NHS, and allowing TGNC to self-identify and be legally recognised as the gender they identify as. Both papers also highlight that increased training for mental health professionals regarding TGNC identities would allow them to be better equipped to meet the needs of TGNC clients. Furthermore, increased education and visibility regarding gender diversity in schools may reduce transphobic school cultures and subsequent bullying which can lead to self-harm amongst non-binary individuals. Considering that many of these implications were proposed within the Gender Recognition Act (GRA) reform and were rejected in 2020, it feels particularly relevant to emphasise them within this research in support of the TGNC community's fight to feel supported and validated on a wider, societal level (Miles, 2018).

## Implications for Personal Practice

Conducting this research was experienced as invaluable for the author. It supported skill and knowledge development that will be taken forward into the author's clinical work throughout the rest of her career. Interviewing and building rapport with non-binary young adults, as well as learning about their experiences first-hand, has increased the author's own clinical competence when working with gender diversity. The author is passionate about actively promoting inclusivity and understanding of not only the TGNC community, but the wider LGBTQ+ community, within mental health services going forward. Furthermore, findings have highlighted the importance of activism and the need for structural change in supporting the wellbeing of minority groups such as TGNC people.

## Impact of Covid-19

The impact of the Covid-19 pandemic has been discussed throughout this critical reflective review on aspects such as recruitment and the ability to collaboratively discuss and make sense of paper 2 findings. Personally, completing a doctoral thesis during a global pandemic has also had an impact the author's experience of stress and a reduced emotional capacity. At the beginning of the pandemic, the world felt very confusing and unclear as to what this would mean for the completion of the course. The pandemic bought about its own difficulties, such as financial stressors, fear for loved one's safety and emotional wellbeing, missing social contact, and the difficulties associated with completing the doctorate remotely. Whilst there have been times when the author has felt overwhelmed by the combined stress of Covid-19 and completing the doctorate, it is felt that this new way of working bought about opportunities to reach a wider audience, in terms of location, and allowed for exploration of how Covid-19 impacted participants' experiences.

## Dissemination

The systematic review has been submitted for publication with the Journal of Affective Disorders. The empirical study has been submitted for publication with the Journal of Gay and Lesbian Mental Health. Both papers are currently under review. Furthermore, the empirical paper has been presented as part of a symposium at the recent virtual conference for the International Society for the Study of Self-Injury and will be presented at another virtual conference for the International Association of Suicide Prevention in September 2021. Results from the empirical paper will also be shared with participants, either in brief summary form or in full dependent on the participants preference. Tweets will also be shared from the study twitter account to share a lay summary of empirical study's results with the account's followers. This research has the potential to positively influence the processes of risk assessment and management of self-harm amongst transgender and non-binary individuals presenting at mental health services. Furthermore, results and recommendations have the potential to impact future research to support a greater understanding of self-harm and suicide amongst this vulnerable group.

## Concluding Comments

The aim for this research was to contribute to the evidence base by gaining a greater understanding of self-harm amongst non-binary young adults, and a greater understanding of the relationship between MST and suicidal ideation and behaviours amongst TGNC adults. It is felt that the systematic review and empirical paper have achieved these aims. Furthermore, the empirical study potentially starts the evidence base on the understanding of self-harm amongst non-binary individuals. The research also puts forward important clinical implications that are extremely relevant to the current issues being faced by TGNC individuals. The research process as a whole has been an extremely valuable learning experience that will be taken forward into the author's clinical career and personal life.

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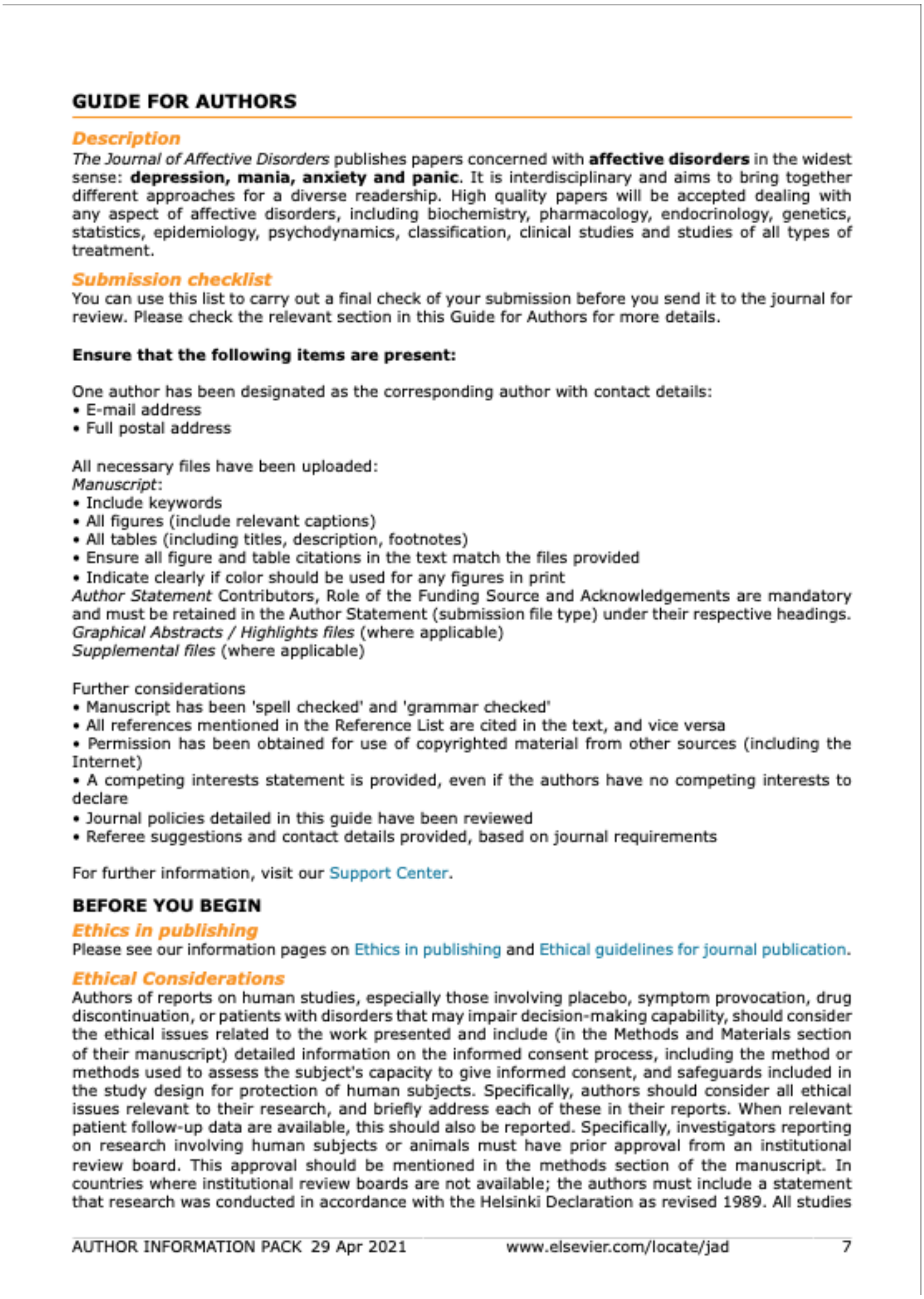
# Appendices

## Appendix 1: Contributor Guidelines for Journal of Affective Disorders



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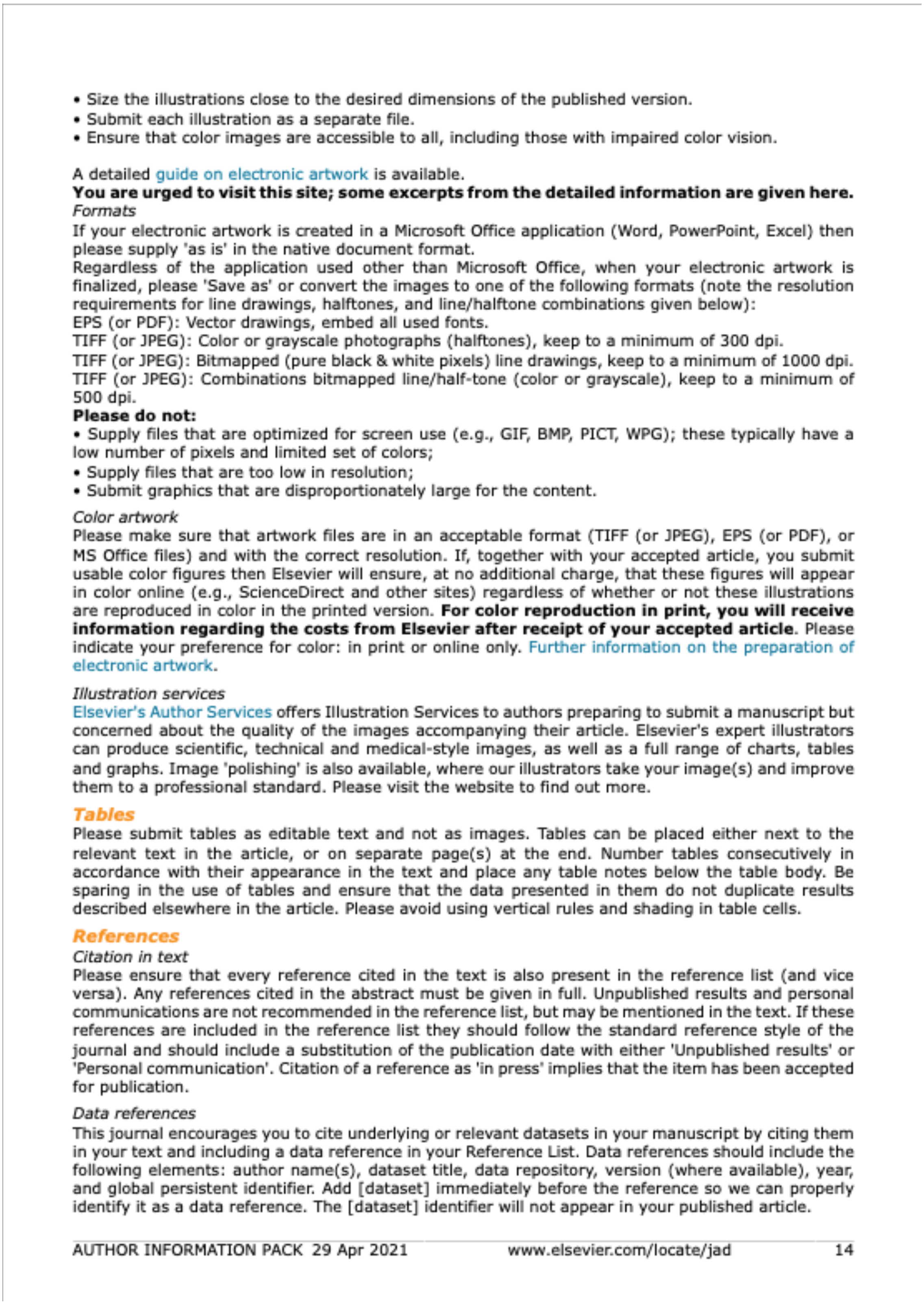

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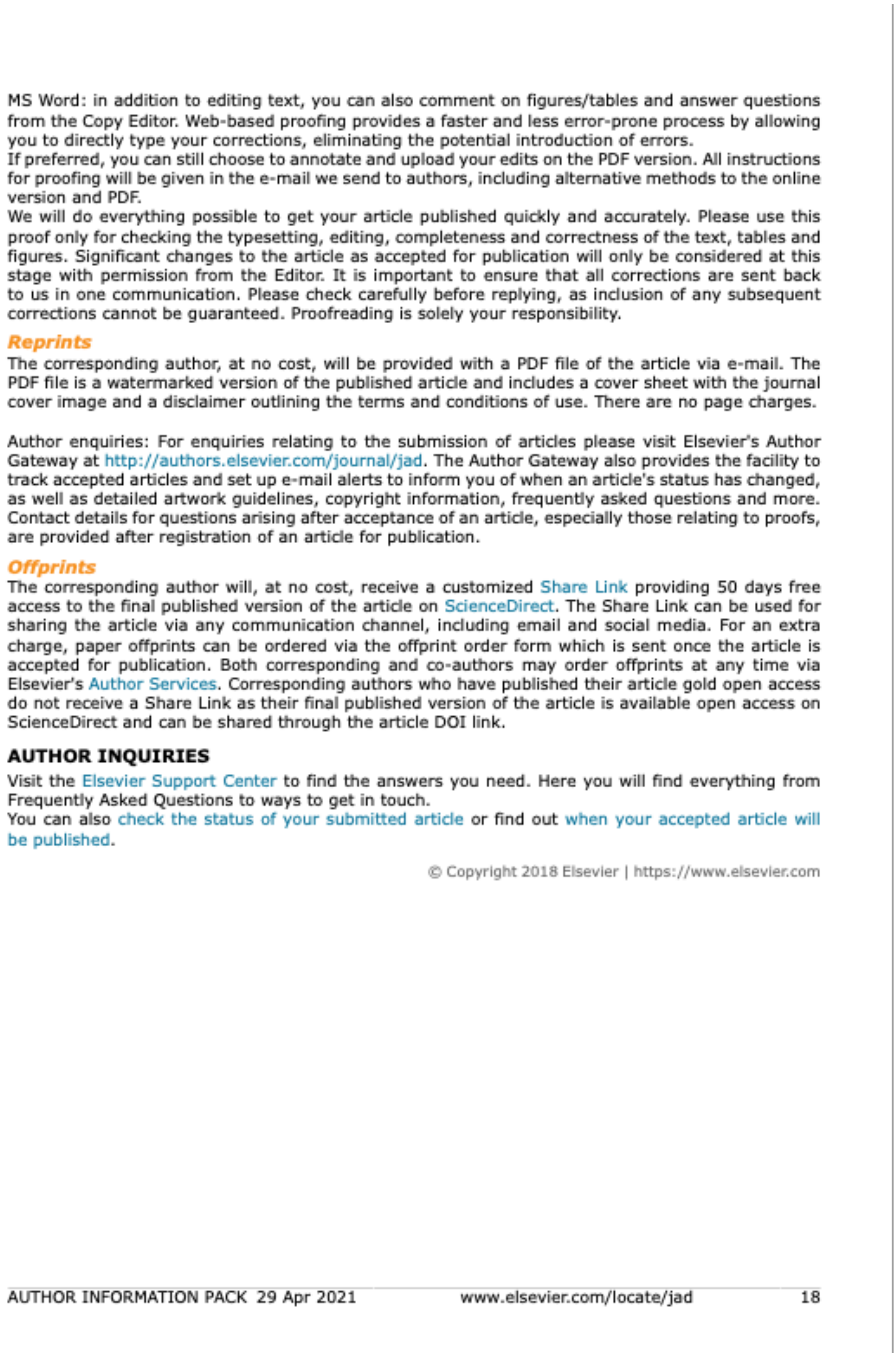

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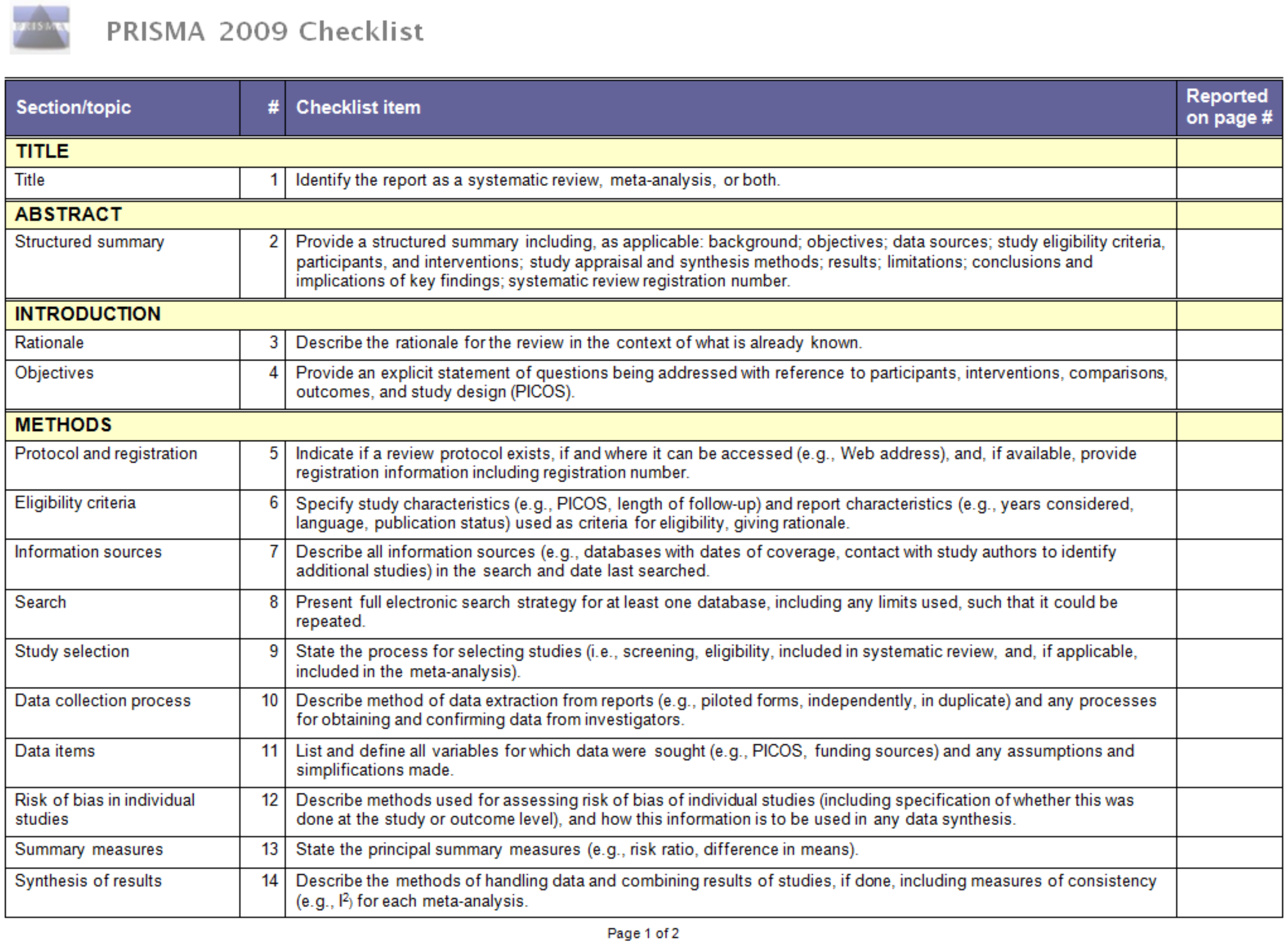


## PRISMA 2009 Checklist

| Section/topic | # | Checklist item | Reported on page # |
|---|---|---|---|
| **TITLE** | | | |
| Title | 1 | Identify the report as a systematic review, meta-analysis, or both. | |
| **ABSTRACT** | | | |
| Structured summary | 2 | Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number. | |
| **INTRODUCTION** | | | |
| Rationale | 3 | Describe the rationale for the review in the context of what is already known. | |
| Objectives | 4 | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS). | |
| **METHODS** | | | |
| Protocol and registration | 5 | Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number. | |
| Eligibility criteria | 6 | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale. | |
| Information sources | 7 | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched. | |
| Search | 8 | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. | |
| Study selection | 9 | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis). | |
| Data collection process | 10 | Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. | |
| Data items | 11 | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. | |
| Risk of bias in individual studies | 12 | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. | |
| Summary measures | 13 | State the principal summary measures (e.g., risk ratio, difference in means). | |
| Synthesis of results | 14 | Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., $I^2$) for each meta-analysis. | |

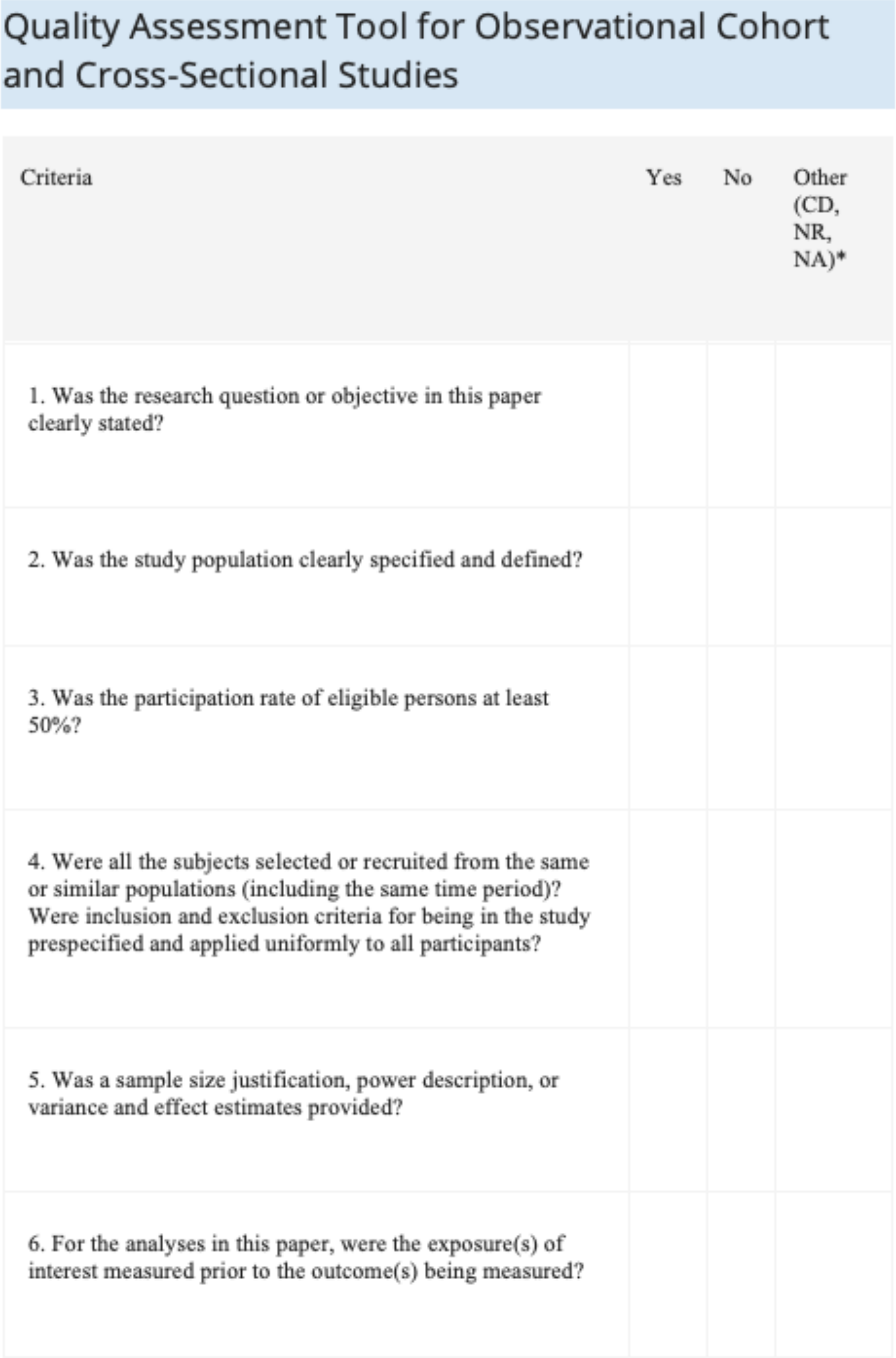
Page 1 of 2

| Section/topic | # | Checklist item | Reported on page # |
|---|---|---|---|
| Risk of bias across studies | 15 | Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). | |
| Additional analyses | 16 | Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. | |
| **RESULTS** | | | |
| Study selection | 17 | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. | |
| Study characteristics | 18 | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. | |
| Risk of bias within studies | 19 | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). | |
| Results of individual studies | 20 | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. | |
| Synthesis of results | 21 | Present results of each meta-analysis done, including confidence intervals and measures of consistency. | |
| Risk of bias across studies | 22 | Present results of any assessment of risk of bias across studies (see Item 15). | |
| Additional analysis | 23 | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). | |
| **DISCUSSION** | | | |
| Summary of evidence | 24 | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). | |
| Limitations | 25 | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). | |
| Conclusions | 26 | Provide a general interpretation of the results in the context of other evidence, and implications for future research. | |
| **FUNDING** | | | |
| Funding | 27 | Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. | |

*From:* Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit: www.prisma-statement.org.

## Appendix 3: National Institutes of Health’s Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies



### Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies

| Criteria | Yes | No | Other (CD, NR, NA)* |
|---|---|---|---|
| 1. Was the research question or objective in this paper clearly stated? | | | |
| 2. Was the study population clearly specified and defined? | | | |
| 3. Was the participation rate of eligible persons at least 50%? | | | |
| 4. Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants? | | | |
| 5. Was a sample size justification, power description, or variance and effect estimates provided? | | | |
| 6. For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured? | | | |

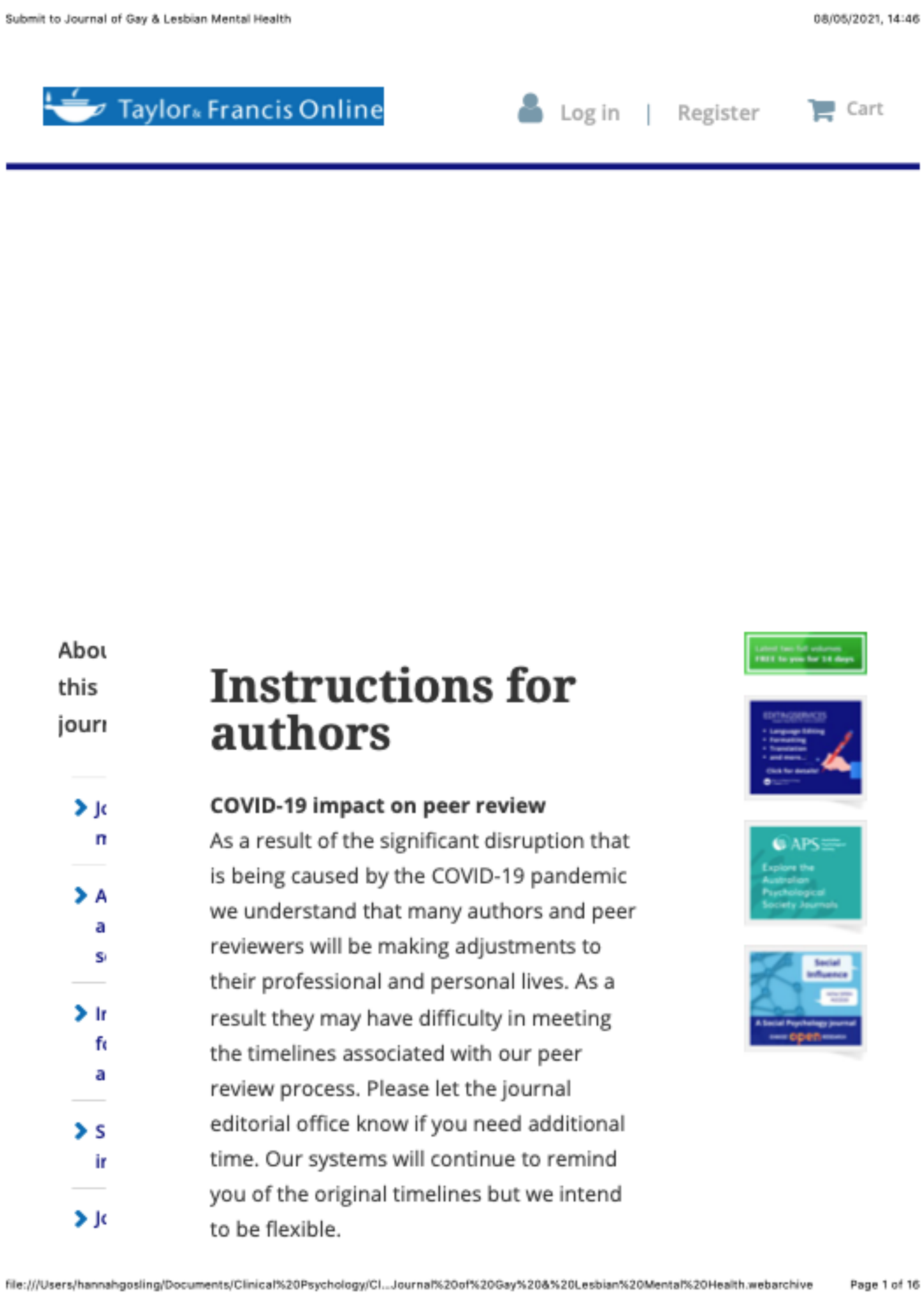
| Criteria | Yes | No | Other (CD, NR, NA)* |
|---|---|---|---|
| 7. Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed? | | | |
| 8. For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)? | | | |
| 9. Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants? | | | |
| 10. Was the exposure(s) assessed more than once over time? | | | |
| 11. Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants? | | | |
| 12. Were the outcome assessors blinded to the exposure status of participants? | | | |

| Criteria | Yes | No | Other (CD, NR, NA)* |
|---|---|---|---|
| 13. Was loss to follow-up after baseline 20% or less? | | | |
| 14. Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)? | | | |

| Quality Rating (Good, Fair, or Poor) |
|---|
| Rater #1 initials: |
| Rater #2 initials: |
| Additional Comments (If POOR, please state why): |

*CD, cannot determine; NA, not applicable; NR, not reported

# Appendix 4: Contributor Guidelines for Journal of Gay and Lesbian Mental Health



Submit to Journal of Gay & Lesbian Mental Health 08/05/2021, 14:46

## Instructions for authors

**COVID-19 impact on peer review**

As a result of the significant disruption that is being caused by the COVID-19 pandemic we understand that many authors and peer reviewers will be making adjustments to their professional and personal lives. As a result they may have difficulty in meeting the timelines associated with our peer review process. Please let the journal editorial office know if you need additional time. Our systems will continue to remind you of the original timelines but we intend to be flexible.

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Thank you for choosing to submit your paper to us. These instructions will ensure we have everything required so your paper can move through peer review, production and publication smoothly. Please take the time to read and follow them as closely as possible, as doing so will ensure your paper matches the journal's requirements.

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## Contents

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- Preparing Your Paper
    - Structure
    - Word Limits
    - Format-Free Submissions
    - Editing Services
    - Checklist
- Using Third-Party Material
- Submitting Your Paper
- Data Sharing Policy
- Publication Charges
- Copyright Options
- Complying with Funding Agencies
- My Authored Works
- Reprints

## About the Journal

*Journal of Gay & Lesbian Mental Health* is an international, peer-reviewed journal publishing high-quality, original research. Please see the journal's Aims & Scope for information about its focus and peer-review policy.

Please note that this journal only publishes manuscripts in English.

*Journal of Gay & Lesbian Mental Health* accepts the following types of article: original articles.

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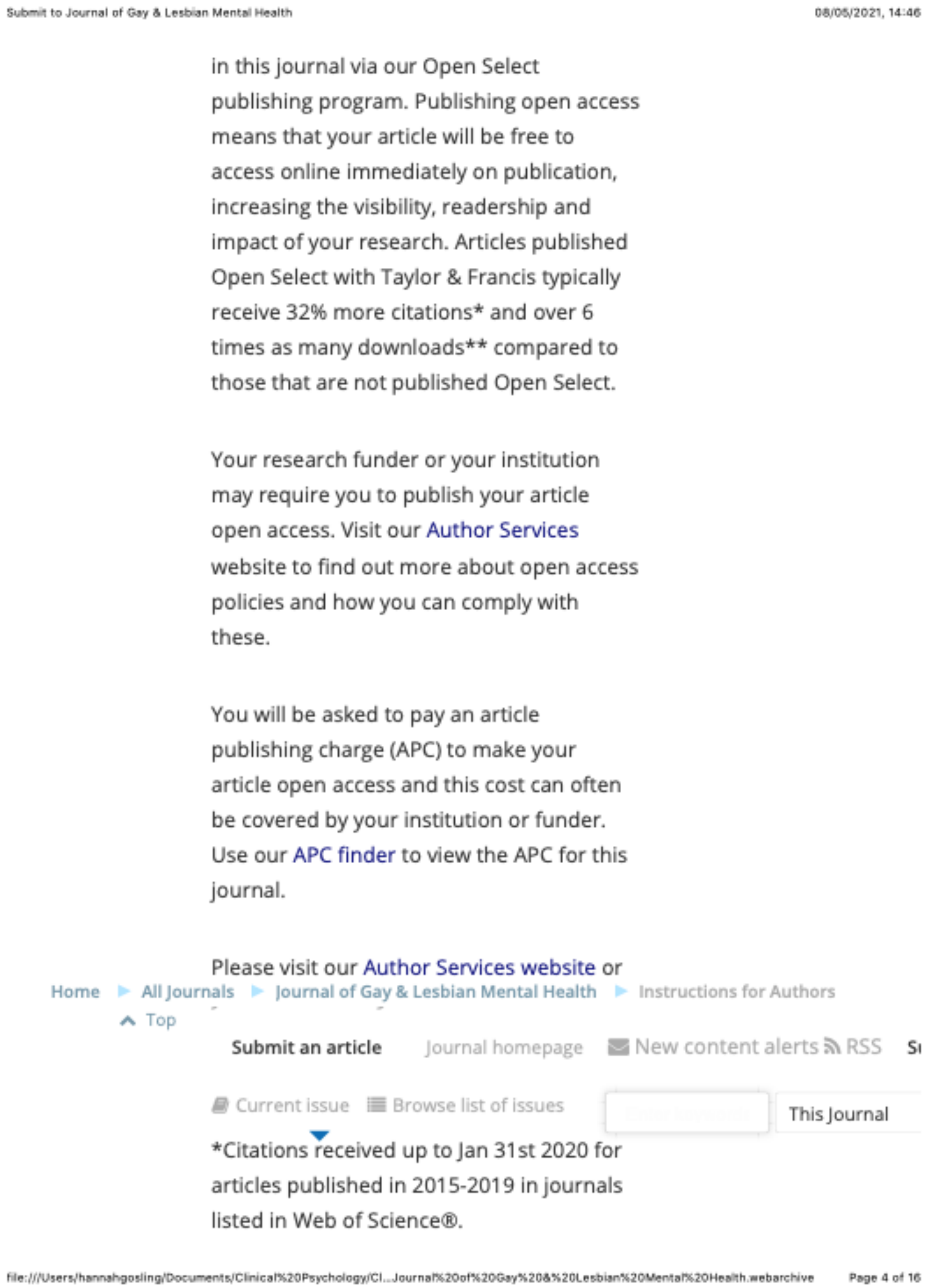
You have the option to publish open access



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Please visit our Author Services website or

*Citations received up to Jan 31st 2020 for articles published in 2015-2019 in journals listed in Web of Science®.

file:///Users/hannahgosling/Documents/Clinical%20Psychology/Cl...Journal%20of%20Gay%20&%20Lesbian%20Mental%20Health.webarchive Page 4 of 16

**Usage in 2017-2019 for articles published in 2015-2019.

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## Preparing Your Paper

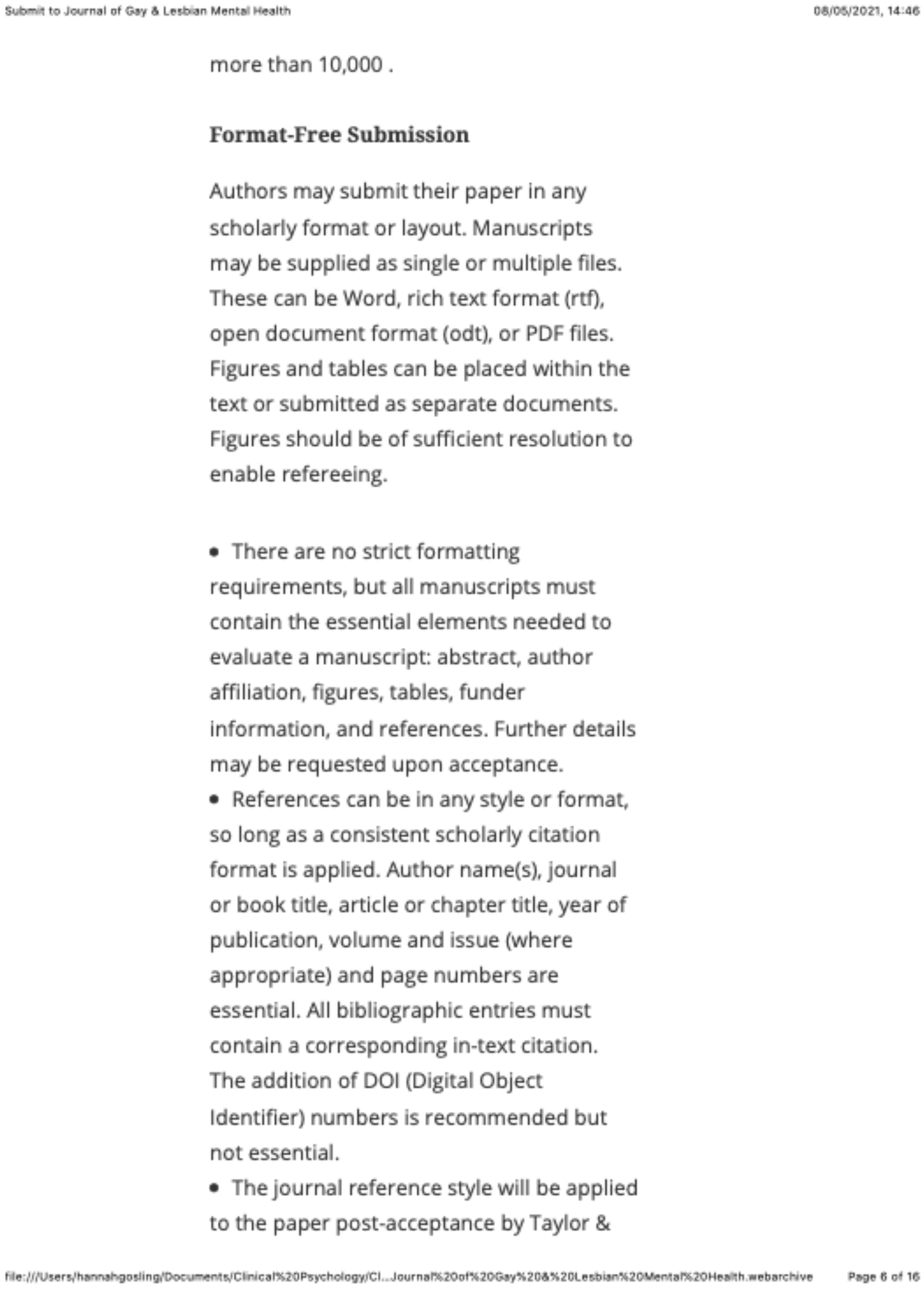
### Structure

Your paper should be compiled in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list).

### Word Limits

Please include a word count for your paper.

A typical paper for this journal should be no



more than 10,000 .

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Authors may submit their paper in any scholarly format or layout. Manuscripts may be supplied as single or multiple files. These can be Word, rich text format (rtf), open document format (odt), or PDF files. Figures and tables can be placed within the text or submitted as separate documents. Figures should be of sufficient resolution to enable refereeing.

- There are no strict formatting requirements, but all manuscripts must contain the essential elements needed to evaluate a manuscript: abstract, author affiliation, figures, tables, funder information, and references. Further details may be requested upon acceptance.
- References can be in any style or format, so long as a consistent scholarly citation format is applied. Author name(s), journal or book title, article or chapter title, year of publication, volume and issue (where appropriate) and page numbers are essential. All bibliographic entries must contain a corresponding in-text citation. The addition of DOI (Digital Object Identifier) numbers is recommended but not essential.
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### Checklist: What to Include

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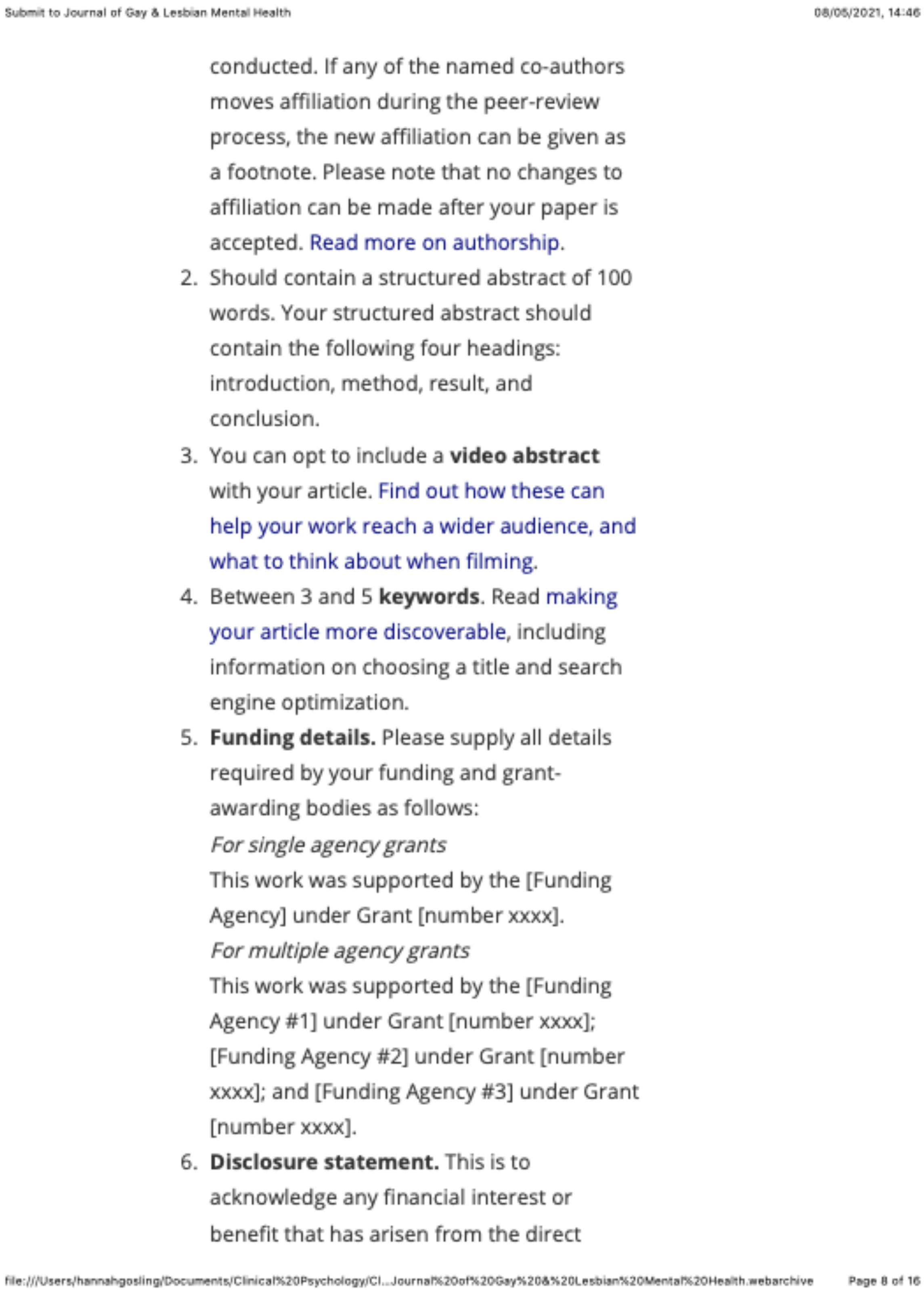
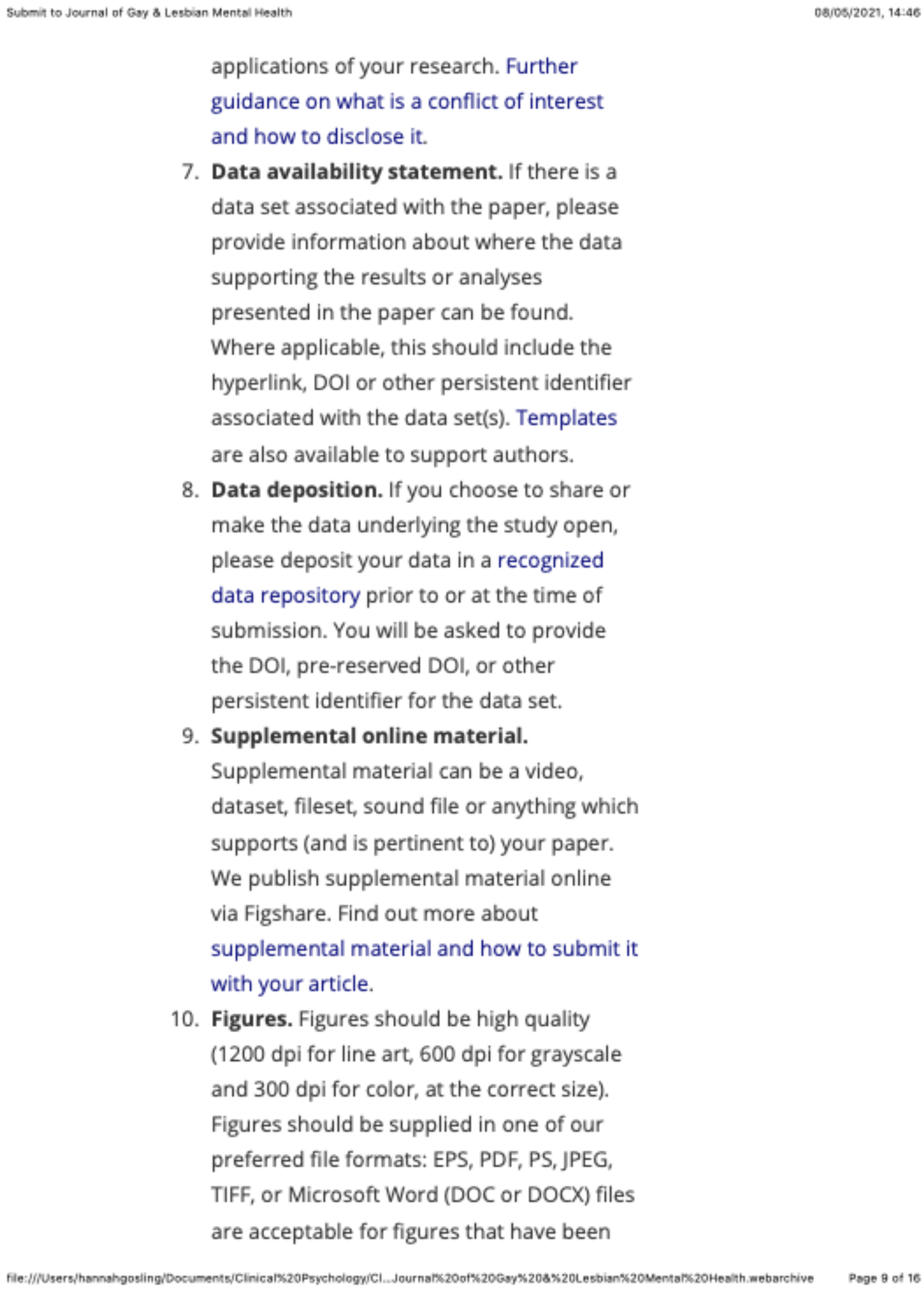


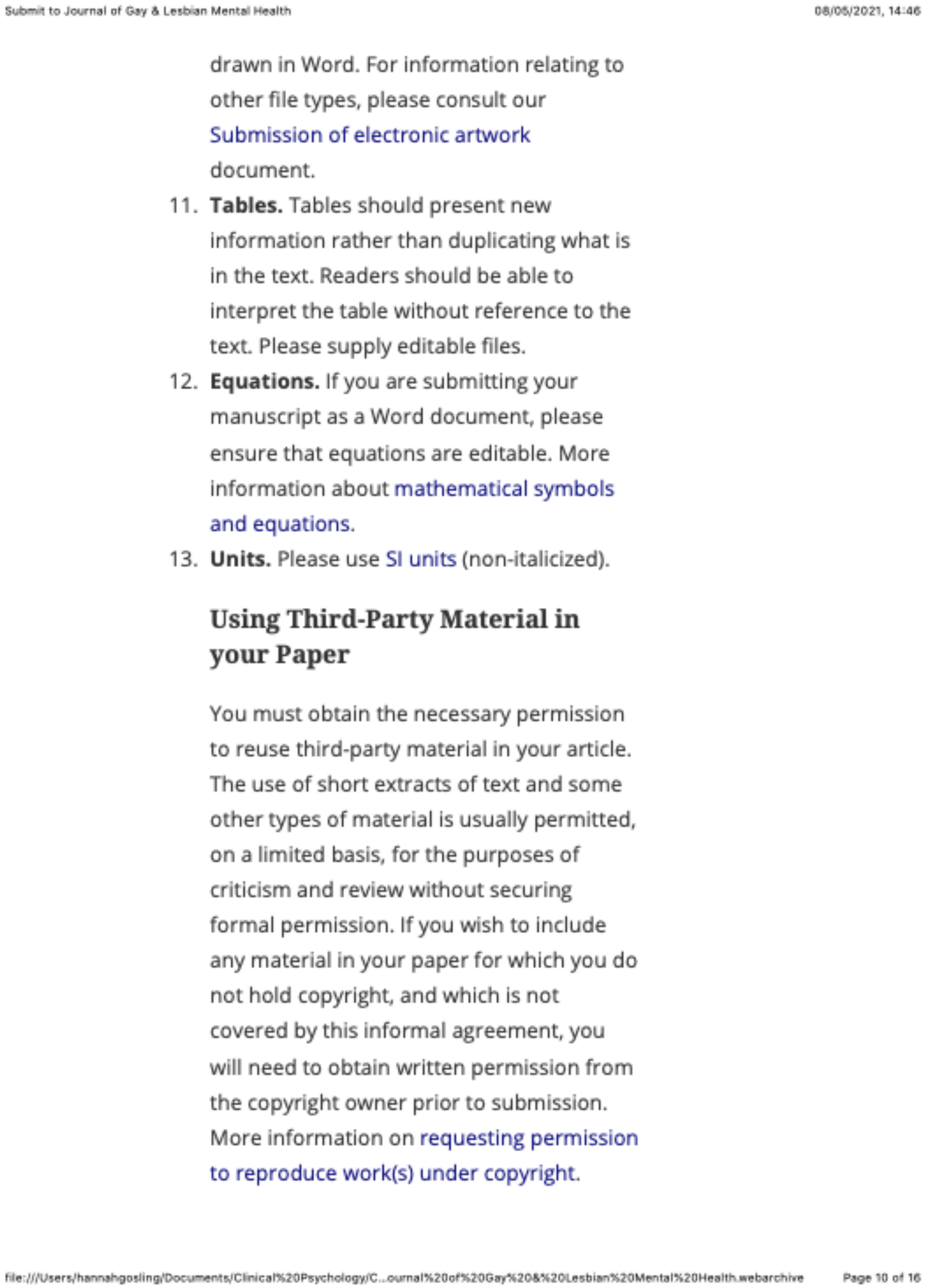
conducted. If any of the named co-authors moves affiliation during the peer-review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after your paper is accepted. Read more on authorship.

2. Should contain a structured abstract of 100 words. Your structured abstract should contain the following four headings: introduction, method, result, and conclusion.
3. You can opt to include a **video abstract** with your article. Find out how these can help your work reach a wider audience, and what to think about when filming.
4. Between 3 and 5 **keywords**. Read making your article more discoverable, including information on choosing a title and search engine optimization.
5. **Funding details.** Please supply all details required by your funding and grant-awarding bodies as follows:
   *For single agency grants*
   This work was supported by the [Funding Agency] under Grant [number xxxx].
   *For multiple agency grants*
   This work was supported by the [Funding Agency #1] under Grant [number xxxx]; [Funding Agency #2] under Grant [number xxxx]; and [Funding Agency #3] under Grant [number xxxx].
6. **Disclosure statement.** This is to acknowledge any financial interest or benefit that has arisen from the direct



applications of your research. Further guidance on what is a conflict of interest and how to disclose it.

7. **Data availability statement.** If there is a data set associated with the paper, please provide information about where the data supporting the results or analyses presented in the paper can be found. Where applicable, this should include the hyperlink, DOI or other persistent identifier associated with the data set(s). Templates are also available to support authors.
8. **Data deposition.** If you choose to share or make the data underlying the study open, please deposit your data in a recognized data repository prior to or at the time of submission. You will be asked to provide the DOI, pre-reserved DOI, or other persistent identifier for the data set.
9. **Supplemental online material.** Supplemental material can be a video, dataset, fileset, sound file or anything which supports (and is pertinent to) your paper. We publish supplemental material online via Figshare. Find out more about supplemental material and how to submit it with your article.
10. **Figures.** Figures should be high quality (1200 dpi for line art, 600 dpi for grayscale and 300 dpi for color, at the correct size). Figures should be supplied in one of our preferred file formats: EPS, PDF, PS, JPEG, TIFF, or Microsoft Word (DOC or DOCX) files are acceptable for figures that have been



drawn in Word. For information relating to other file types, please consult our Submission of electronic artwork document.

11. **Tables.** Tables should present new information rather than duplicating what is in the text. Readers should be able to interpret the table without reference to the text. Please supply editable files.
12. **Equations.** If you are submitting your manuscript as a Word document, please ensure that equations are editable. More information about mathematical symbols and equations.
13. **Units.** Please use SI units (non-italicized).

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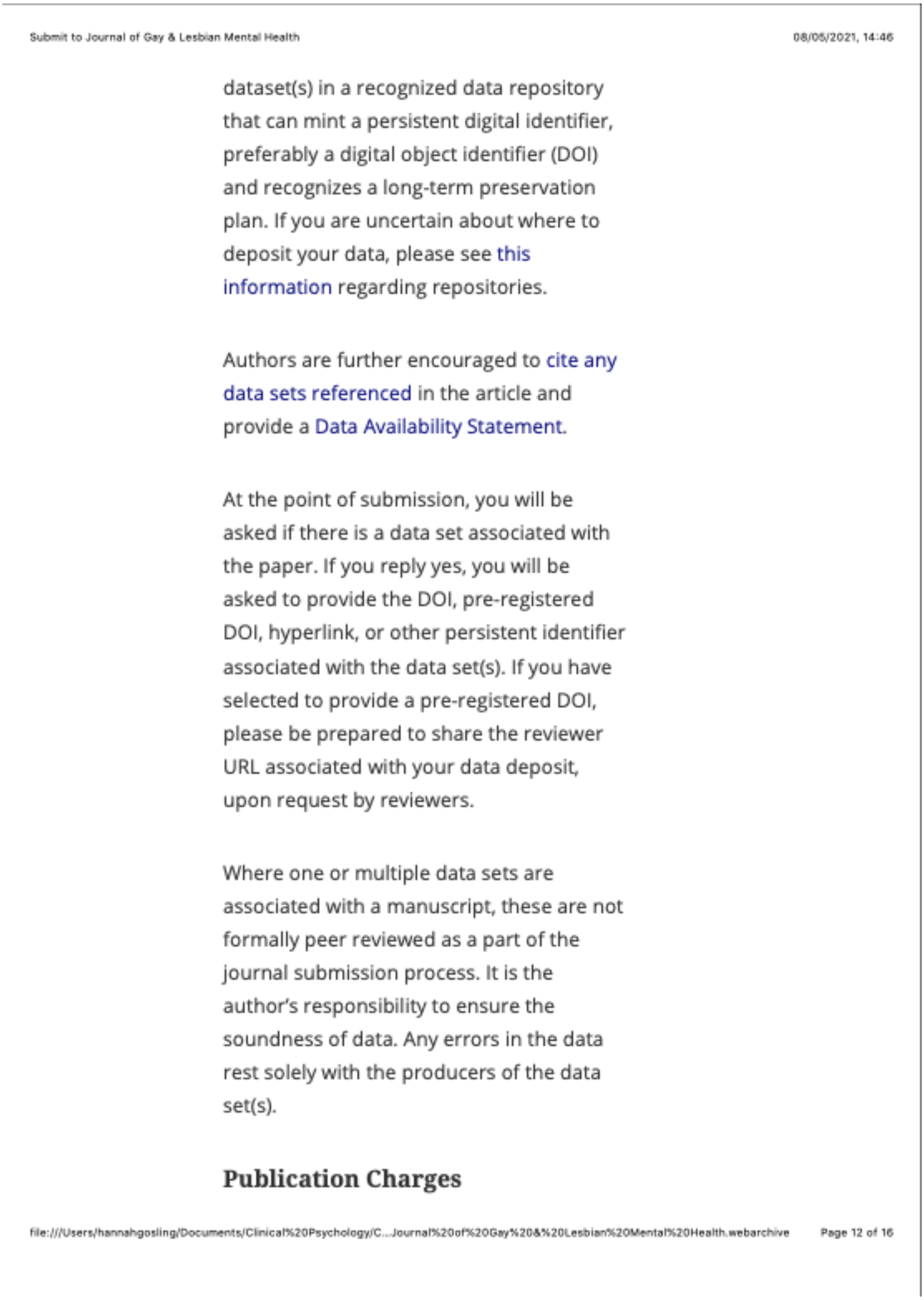

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# Appendix 5: Letter of Ethical Approval from University of Manchester Research Ethics Committee

MANCHESTER
1824
The University of Manchester

Research Governance, Ethics and Integrity
2nd Floor Christie Building
The University of Manchester
Oxford Road
Manchester
M13 9PL
Tel: 0161 275 2206/2674
*Email:* research.ethics@manchester.ac.uk

Ref: 2020-7842-13735

26/03/2020

Dear Miss Hannah Gosling,  Dr James Lea, Dr Daniel Pratt

**Study Title**: Understanding self-harm amongst young adults who identify as gender non-binary

University Research Ethics Committee 1

I write to thank you for submitting the final version of your documents for your project to the Committee on 24/03/2020 13:54 .  I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form and supporting documentation as submitted and approved by the Committee.

**COVID-19 Important Note**

If you are conducting research with a data collection methodology that involves face-to-face contact (i.e. interviews, focus groups, psychological experiments, tissue sampling, and any other research procedure requiring face-to-face contact) you must switch to data collection via Skype, telephone or an alternative digital platform.

Please note, you do not need to seek a formal amendment to your existing ethical approval to make these changes provided your consent procedures remain the same (i.e. if you are still obtaining written consent but the form is returned by post or email). If you are choosing an alternative consenting procedure, please submit a formal amendment to your ethical approval via the usual process.

If switching your data collection to digital or electronic means is not possible (i.e. human tissue studies) then you must suspend all research activity until further notice unless doing so will have critical impacts on research participants (i.e. affect their wellbeing or care).

Please also consider whether you need to submit an amendment to extend your dates of data collection, due to postponed fieldwork or other research activities. If you need to seek an extension, you must do so before the end date as listed on your approved ethics application/last approved amendment or within 3 months of this date.

Researchers who wish to continue with face-to-face data collection during this period will require specific approval from the Research Governance, Ethics and Integrity Team.  Such approval will only be given if 1) the researcher is a member of staff or PGR, 2) the research is specifically related to the Covid-19 situation and data collection has to take place at the present time, or 2) there are exceptional reasons for the continuation of face-to-face data collection (i.e. critical impacts on the wellbeing or care of research participants).

Please see https://www.staffnet.manchester.ac.uk/rbe/ethics-integrity/ethics/ for further details

Please see below for a table of the title, version numbers and dates of all the final approved documents for your project:

| Document Type | File Name | Date | Version |
|---|---|---|---|
| Additional docs | RESEARCH SUBCOMMITTEE CONFIRMATION LETTER | 17/12/2019 | 1 |
| Distress Protocol/Debrief Sheet | DEBRIEF SHEET | 17/12/2019 | 1 |
| Default | PROTOCOL after panel 2 | 16/03/2020 | 2 |
| Default | PARTICIPANT DETAILS FORM after panel | 16/03/2020 | 2 |
| Default | TOPIC GUIDE after panel | 16/03/2020 | 2 |
| Advertisement | RECRUITMENT POSTER after panel | 16/03/2020 | 2 |
| Participant Information Sheet | PIS form after review 2 | 16/03/2020 | 2 |
| Consent Form | CONSENT FORM after panel 2 | 16/03/2020 | 2 |
| Lone Worker Policy/Procedure | LONE WORKER POLICY after panel 2 | 16/03/2020 | 2 |
| Additional docs | RISK PROTOCOL after panel | 16/03/2020 | 2 |
| Additional docs | DISTRESS PROTOCOL after panel 2 | 16/03/2020 | 2 |
| Additional docs | AUTOMATED REPLY 2 | 16/03/2020 | 1 |
| Additional docs | FOLLOW UP EMAIL | 16/03/2020 | 1 |
| Additional docs | Response letter | 16/03/2020 | 1 |
| Data Management Plan | DMP after panel 2 | 18/03/2020 | 2 |

Page 1 of 2

This approval is effective for a period of five years however please note that it is only valid for the specifications of the research project as outlined in the approved documentation set. If the project continues beyond the 5 year period or if you wish to propose any changes to the methodology or any other specifics within the project, an application to seek an amendment must be submitted for review. Failure to do so could invalidate the insurance and constitute research misconduct.

You are reminded that, in accordance with University policy, any data carrying personal identifiers must be encrypted when not held on a secure university computer or kept securely as a hard copy in a location which is accessible only to those involved with the research.

**Reporting Requirements:**

You are required to report to us the following:

1. Amendments: Guidance on what constitutes an amendment
2. Amendments: How to submit an amendment in the ERM system
3. Ethics Breaches and adverse events
4. Data breaches
5. Notification of progress/end of the study

**Feedback**

It is our aim to provide a timely and efficient service that ensures transparent, professional and proportionate ethical review of research with consistent outcomes, which is supported by clear, accessible guidance and training for applicants and committees. In order to assist us with our aim, we would be grateful if you would give your view of the service that you have received from us by completing a **UREC Feedback Form**. Instructions for completing this can be found in your approval email.

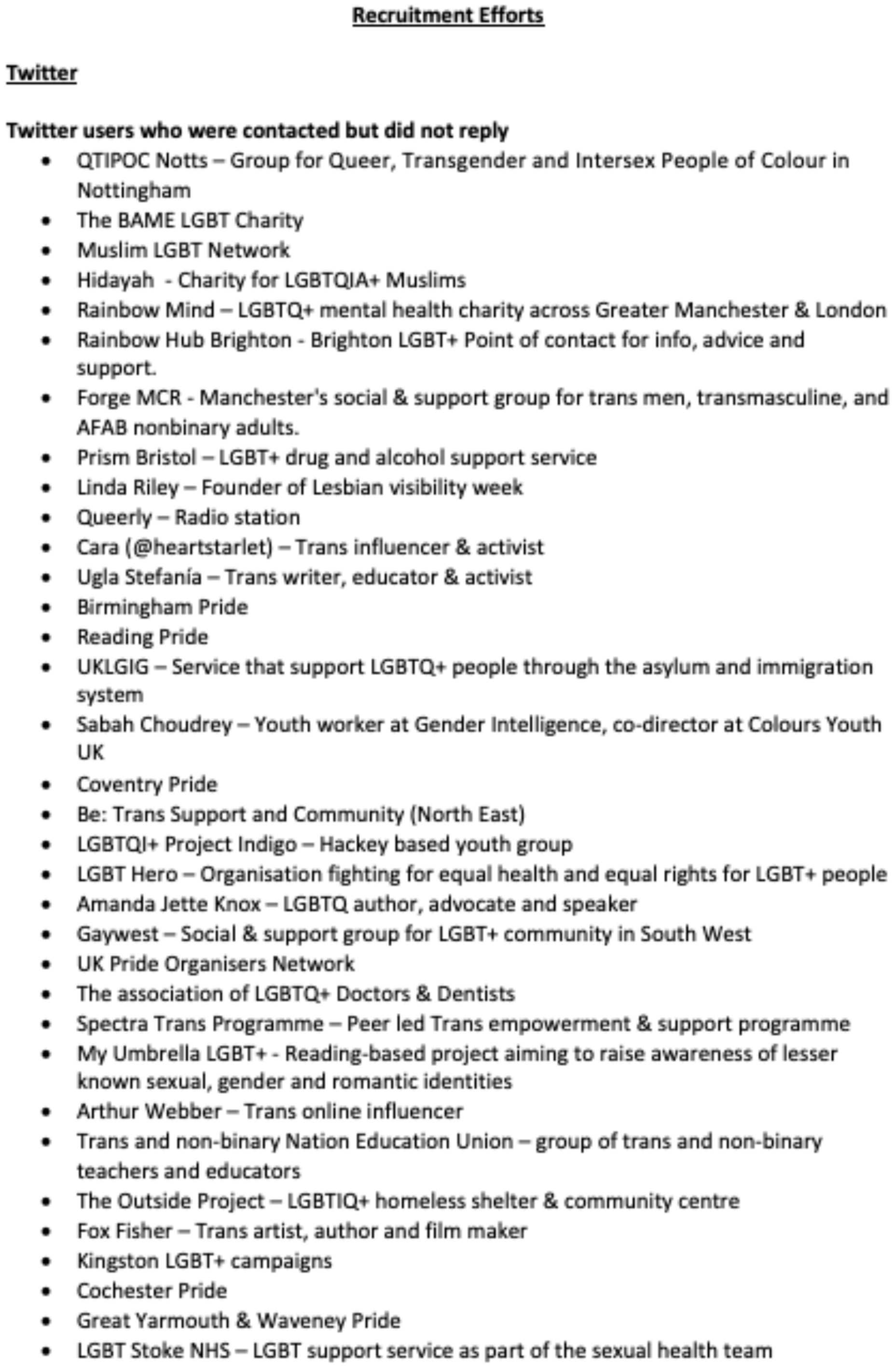
We wish you every success with the research.

Yours sincerely,

Ms Kate Hennessy

Secretary to University Research Ethics Committee 1

## Appendix 6: List of organisations that were contacted through various means for recruitment efforts



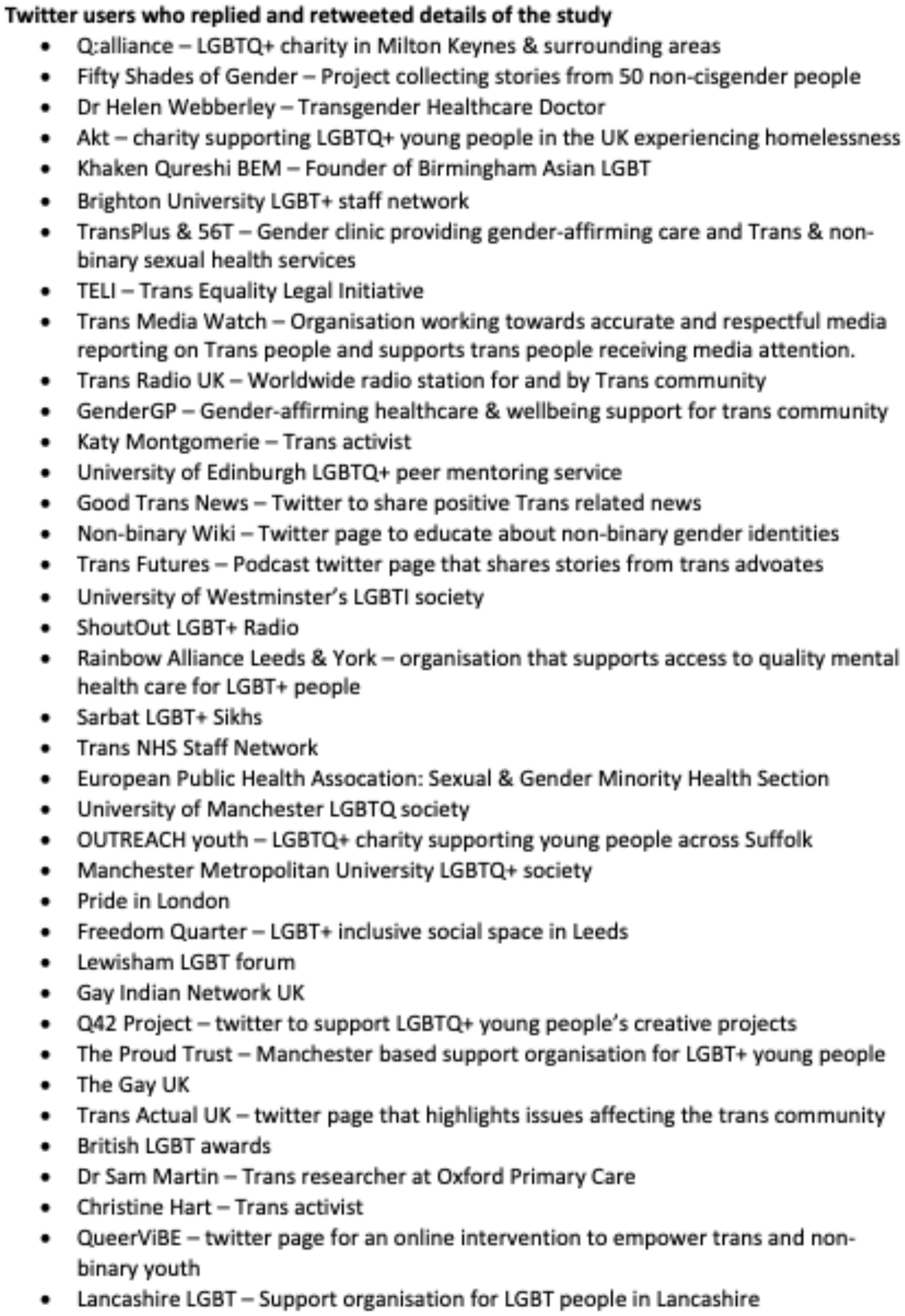
### Recruitment Efforts

#### Twitter

**Twitter users who were contacted but did not reply**

- QTIPOC Notts – Group for Queer, Transgender and Intersex People of Colour in Nottingham
- The BAME LGBT Charity
- Muslim LGBT Network
- Hidayah - Charity for LGBTQIA+ Muslims
- Rainbow Mind – LGBTQ+ mental health charity across Greater Manchester & London
- Rainbow Hub Brighton - Brighton LGBT+ Point of contact for info, advice and support.
- Forge MCR - Manchester's social & support group for trans men, transmasculine, and AFAB nonbinary adults.
- Prism Bristol – LGBT+ drug and alcohol support service
- Linda Riley – Founder of Lesbian visibility week
- Queerly – Radio station
- Cara (@heartstarlet) – Trans influencer & activist
- Ugla Stefanía – Trans writer, educator & activist
- Birmingham Pride
- Reading Pride
- UKLGIG – Service that support LGBTQ+ people through the asylum and immigration system
- Sabah Choudrey – Youth worker at Gender Intelligence, co-director at Colours Youth UK
- Coventry Pride
- Be: Trans Support and Community (North East)
- LGBTQI+ Project Indigo – Hackey based youth group
- LGBT Hero – Organisation fighting for equal health and equal rights for LGBT+ people
- Amanda Jette Knox – LGBTQ author, advocate and speaker
- Gaywest – Social & support group for LGBT+ community in South West
- UK Pride Organisers Network
- The association of LGBTQ+ Doctors & Dentists
- Spectra Trans Programme – Peer led Trans empowerment & support programme
- My Umbrella LGBT+ - Reading-based project aiming to raise awareness of lesser known sexual, gender and romantic identities
- Arthur Webber – Trans online influencer
- Trans and non-binary Nation Education Union – group of trans and non-binary teachers and educators
- The Outside Project – LGBTIQ+ homeless shelter & community centre
- Fox Fisher – Trans artist, author and film maker
- Kingston LGBT+ campaigns
- Cochester Pride
- Great Yarmouth & Waveney Pride
- LGBT Stoke NHS – LGBT support service as part of the sexual health team

- LGBTQI Nightlife London
- Bath Spa University LGBTQ+ Society
- University of Kent LGBTQ+ Society
- Trans Pride South West
- Bristol Pride
- University of Birmingham LGBTQ+ Association
- University West England LGBT+ society
- Eden Ladley – Trans advocate and activist
- Leeds Pride
- Briston Trans – Twitter to share trans and non-binary support services, news and events
- FTM London – Transmasculine & non-binary peer support group
- What the Trans – Transgender news podcast
- GYRO LGBTQ+ Youth Liverpool – support organisation for LGBTQ+ youth
- Manchester Pride
- Diversity Role Models – organisation brining LGBT+ role models into schools to share their stories
- Just Like Us – LGBT+ young people's charity
- Pink News – LGBT+ digital media publisher
- Queer Britain – LGBTQ+ charity
- National Student Pride
- Building Equality – UK-wide alliance of construction, engineering and build environment organisations driving LGBT+ inclusion
- University of Manchester LGBT+ Campaign – organisation campaigning for LGBT+ students
- Univeristy of Manchester trans campaign – organisation for trans & non-binary students
- National Union of Students Trans Students Campaigners Network
- GenderJam Northern Ireland – support and advocate service for young trans, non-binary, questioning and intersex people in Northern Ireland
- TMSA-UK – support group for trans masc, non-binary and gender variant AFAB people in the UK
- University of East London LGBT+ society
- University of Manchester QTIPOC society
- Imaan LGBTQ+ - support organisations for LGBTQ+ Muslims
- City University London LGBTQ+ society
- National Union of Students LGBT+ student campaign
- EnGender – collective of trans and non-binary writers and bloggers
- Salford Pride
- Walsall Pride
- Exmouth Pride
- Exeter Pride
- LGBT Youth Scotland – charity organisation for LGBTI young people in Scotland
- Equality Network – LGBTI equality and human rights charity



**Twitter users who replied and retweeted details of the study**

- Q:alliance – LGBTQ+ charity in Milton Keynes & surrounding areas
- Fifty Shades of Gender – Project collecting stories from 50 non-cisgender people
- Dr Helen Webberley – Transgender Healthcare Doctor
- Akt – charity supporting LGBTQ+ young people in the UK experiencing homelessness
- Khaken Qureshi BEM – Founder of Birmingham Asian LGBT
- Brighton University LGBT+ staff network
- TransPlus & 56T – Gender clinic providing gender-affirming care and Trans & non-binary sexual health services
- TELI – Trans Equality Legal Initiative
- Trans Media Watch – Organisation working towards accurate and respectful media reporting on Trans people and supports trans people receiving media attention.
- Trans Radio UK – Worldwide radio station for and by Trans community
- GenderGP – Gender-affirming healthcare & wellbeing support for trans community
- Katy Montgomerie – Trans activist
- University of Edinburgh LGBTQ+ peer mentoring service
- Good Trans News – Twitter to share positive Trans related news
- Non-binary Wiki – Twitter page to educate about non-binary gender identities
- Trans Futures – Podcast twitter page that shares stories from trans advoates
- University of Westminster's LGBTI society
- ShoutOut LGBT+ Radio
- Rainbow Alliance Leeds & York – organisation that supports access to quality mental health care for LGBT+ people
- Sarbat LGBT+ Sikhs
- Trans NHS Staff Network
- European Public Health Assocation: Sexual & Gender Minority Health Section
- University of Manchester LGBTQ society
- OUTREACH youth – LGBTQ+ charity supporting young people across Suffolk
- Manchester Metropolitan University LGBTQ+ society
- Pride in London
- Freedom Quarter – LGBT+ inclusive social space in Leeds
- Lewisham LGBT forum
- Gay Indian Network UK
- Q42 Project – twitter to support LGBTQ+ young people's creative projects
- The Proud Trust – Manchester based support organisation for LGBT+ young people
- The Gay UK
- Trans Actual UK – twitter page that highlights issues affecting the trans community
- British LGBT awards
- Dr Sam Martin – Trans researcher at Oxford Primary Care
- Christine Hart – Trans activist
- QueerViBE – twitter page for an online intervention to empower trans and non-binary youth
- Lancashire LGBT – Support organisation for LGBT people in Lancashire

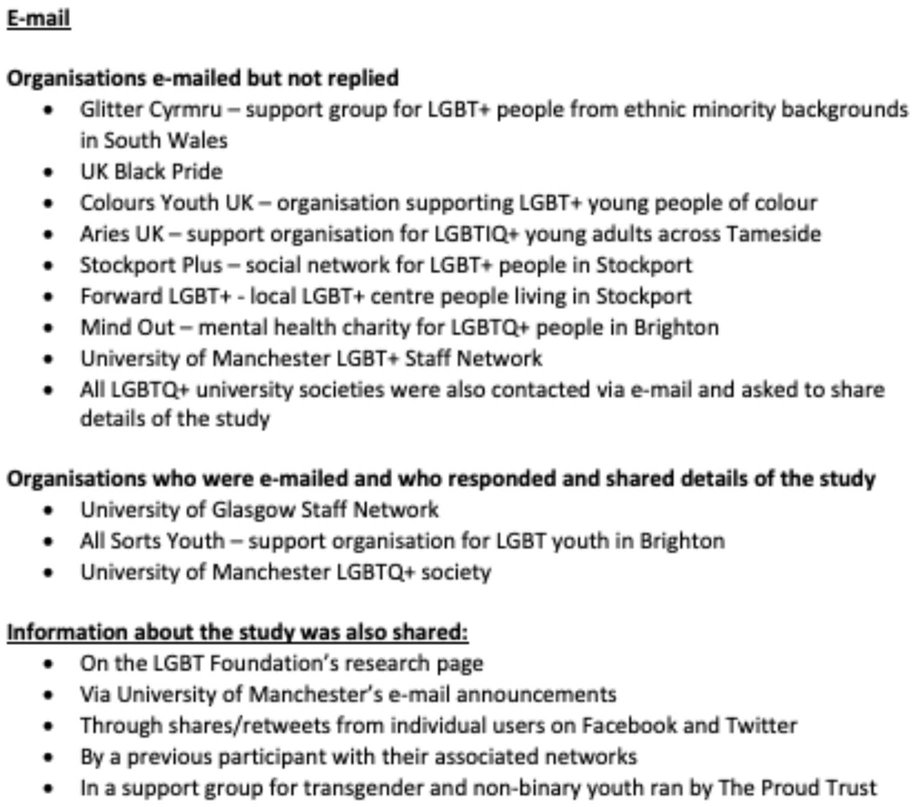
## Facebook

**Facebook pages/ groups who have been contacted but have not shared details of the study**

- LGBT Health and Wellbeing – charity promoting health, wellbeing and equality LGBT+ people in Scotland
- Mermaids – national charity supporting transgender and non-binary young people
- Derbyshire LGBT+ - support service for LGBT people in Derbyshire
- LGBT+ Sheffield – organisation aiming to bring together various LGBT communities and services in Sheffield
- LGBT Humanists – organisation advocating for humanism and LGBT rights
- Gendered intelligence - organisation supporting transgender and non-binary people
- Non-binary inclusion project – organisation campaigning for the recognition, inclusion, protection and equality of non-binary people in organisations and in law
- Non-binary Action – organisation campaigning for the rights of non-binary people and other marginalised groups
- Non-binary Leeds – support group for non-binary people in Leeds

**Facebook pages who have shared details of the study or have had details of the study posted on them**

- Rainbow Noir – Manchester based peer support and community action group for LGBTQI people of colour
- UK Black Pride – celebration for LGBTQ people of African, Asian, Caribbean, Middle Eastern and Latin American descent
- Living Beyond the Binary – Non-binary support group based in North East England
- Trans Staffordshire – support group for trans people in Staffordshire
- University of Manchester Trans Campaign
- LGBT Britain – Page for LGBT related news across Britain
- Be: Trans support & community (North East)
- TPSG – Trans peer support group in Hull
- Hidayah LGBT+ - support organisation for LGBT+ Muslims
- Queer Muslims – Facebook page for LGBTQ+ Muslims
- University of Manchester LGBTQ society
- Pink Therapy – specialist gender and sexual diversity therapy organisation
- Psychotherapy Manchester CIC – non-profit organisation offering art therapy interventions
- Lancashire LGBT - Support organisation for LGBT people in Lancashire
- LGBT social – online social community for LGBT people
- X2Y LGBT Youth – LGBT youth support group



## E-mail

### Organisations e-mailed but not replied

- Glitter Cyrmru – support group for LGBT+ people from ethnic minority backgrounds in South Wales
- UK Black Pride
- Colours Youth UK – organisation supporting LGBT+ young people of colour
- Aries UK – support organisation for LGBTIQ+ young adults across Tameside
- Stockport Plus – social network for LGBT+ people in Stockport
- Forward LGBT+ - local LGBT+ centre people living in Stockport
- Mind Out – mental health charity for LGBTQ+ people in Brighton
- University of Manchester LGBT+ Staff Network
- All LGBTQ+ university societies were also contacted via e-mail and asked to share details of the study

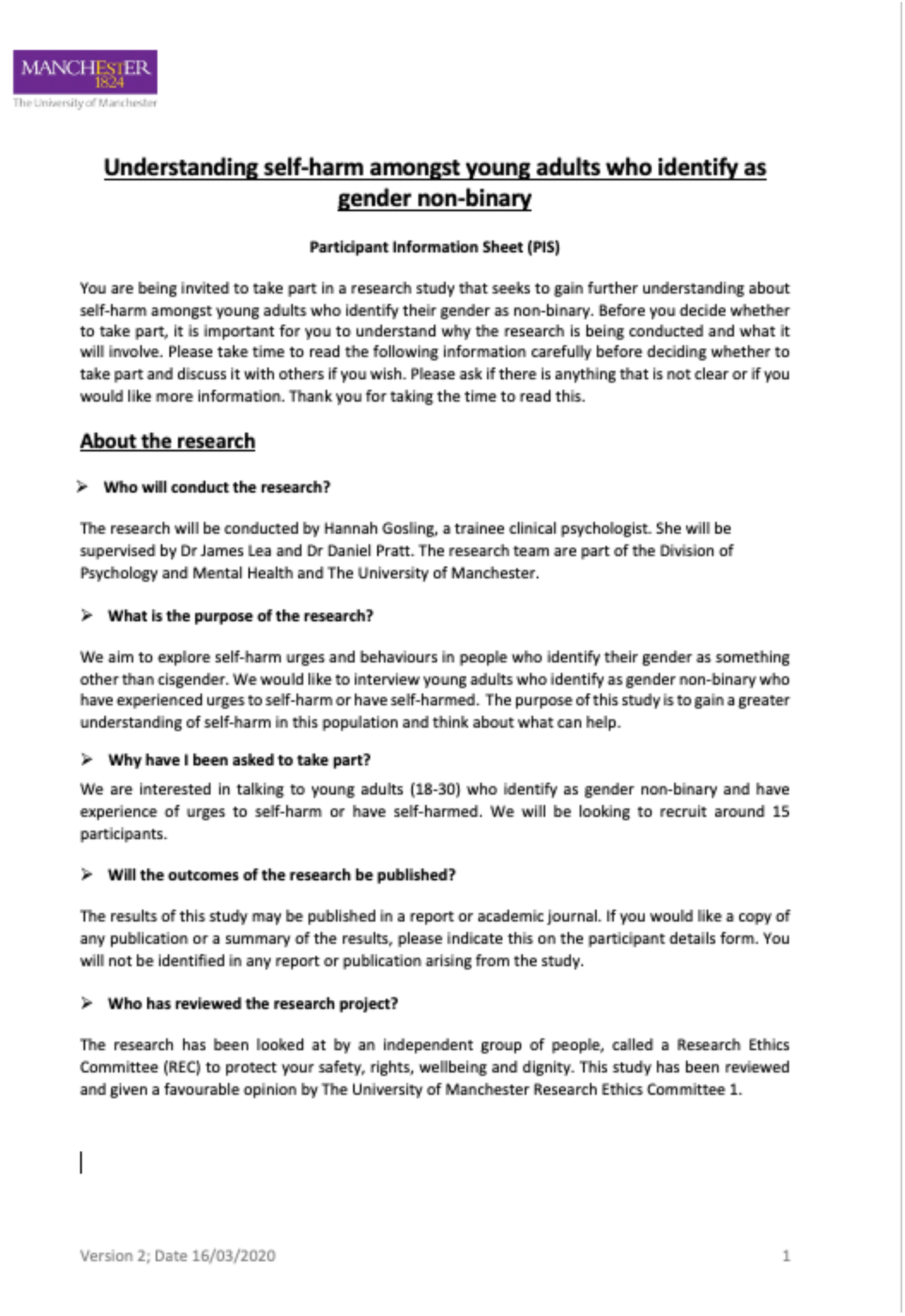
### Organisations who were e-mailed and who responded and shared details of the study

- University of Glasgow Staff Network
- All Sorts Youth – support organisation for LGBT youth in Brighton
- University of Manchester LGBTQ+ society

### Information about the study was also shared:

- On the LGBT Foundation's research page
- Via University of Manchester's e-mail announcements
- Through shares/retweets from individual users on Facebook and Twitter
- By a previous participant with their associated networks
- In a support group for transgender and non-binary youth ran by The Proud Trust

## Appendix 7: Participant information sheet



MANCHESTER
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The University of Manchester

# Understanding self-harm amongst young adults who identify as gender non-binary

**Participant Information Sheet (PIS)**

You are being invited to take part in a research study that seeks to gain further understanding about self-harm amongst young adults who identify their gender as non-binary. Before you decide whether to take part, it is important for you to understand why the research is being conducted and what it will involve. Please take time to read the following information carefully before deciding whether to take part and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Thank you for taking the time to read this.

## About the research

- **Who will conduct the research?**

The research will be conducted by Hannah Gosling, a trainee clinical psychologist. She will be supervised by Dr James Lea and Dr Daniel Pratt. The research team are part of the Division of Psychology and Mental Health and The University of Manchester.

- **What is the purpose of the research?**

We aim to explore self-harm urges and behaviours in people who identify their gender as something other than cisgender. We would like to interview young adults who identify as gender non-binary who have experienced urges to self-harm or have self-harmed. The purpose of this study is to gain a greater understanding of self-harm in this population and think about what can help.

- **Why have I been asked to take part?**

We are interested in talking to young adults (18-30) who identify as gender non-binary and have experience of urges to self-harm or have self-harmed. We will be looking to recruit around 15 participants.

- **Will the outcomes of the research be published?**

The results of this study may be published in a report or academic journal. If you would like a copy of any publication or a summary of the results, please indicate this on the participant details form. You will not be identified in any report or publication arising from the study.

- **Who has reviewed the research project?**

The research has been looked at by an independent group of people, called a Research Ethics Committee (REC) to protect your safety, rights, wellbeing and dignity. This study has been reviewed and given a favourable opinion by The University of Manchester Research Ethics Committee 1.

- **What would I be asked to do if I took part?**

If you agree to take part in the study, we will arrange a time to meet for your interview. This may be at The Proud Trust organisation or a room at The University of Manchester. Alternatively, this interview can take place over the phone or via zoom video conferencing. If your interview takes place over the phone or via zoom video conferencing, both you and the researcher will be required to be located in a private space where you will not be overheard or interrupted. Once your phone call or video conference begins, the researcher will ask you whether you are in a private space where you cannot be overheard to ensure this is the case. You will also be asked to provide the address of your location so that in the event of an imminent risk, emergency services can be directed to your location. If you do not wish to provide these details, the interview will not go ahead.

*Before the interview*

We will arrange to meet (in person, on the phone or via zoom video conferencing) for around 1 hour, 30 minutes. When we meet, we will spend some time discussing what the interview might be like. You will have time to look over the participant information sheet and discuss this with the researcher who will answer any questions you may have. You will then be given, a consent form to read through and if you decide you would like to continue with the research project, you will be asked to sign this.

Due to the nature of the study, we will be discussing sensitive and potentially upsetting issues around gender identity and self-harm. If you consent to take part in the study, we will require you to fill in a participant details form. This will include your GP's name, address and number. This is so that your GP can be contacted if you disclose information that indicates a current risk of harm to yourself. As well as your GP details, the form also asks for your own contact details and whether or not you would like to receive a summary of the results of the study.

If your interview is taking place via telephone or zoom video conferencing, you will be sent blank copies of the consent form and the participant detail's form so that you can look at these documents for yourself. The researcher will then talk through these documents with you and will complete the paper copies on your behalf.

*During the interview*

Whether your interview is taking place face-to-face, over the phone or via zoom video conferencing, your interview will be audio recorded via an encrypted device. Audio recording will begin and the researcher will start by asking you a few demographic questions (i.e. your age, your gender identity, your ethnicity). You will then be interviewed for up to one hour. You will be able to take breaks whenever you need and can end the interview at any time. During the interview, you will be asked questions and invited to discuss your thoughts, feelings and experiences in relation to gender and self-harm. You will also be asked about what has been helpful for you. You will also be able to ask the researcher any questions that you have.

*After the interview*

Following the interview, you will be fully debriefed by the researcher. There will be time to reflect on how you are feeling, ask any questions and you will be supported if you are feeling distressed. The researcher will also provide you with contact details of relevant support or crisis organisations.

Due to the emotive nature of the interview, the researcher will contact you via telephone 24 hours after the appointment to check on your wellbeing. The researcher will provide further signposting to helpful resources if necessary. If the researcher is not able to contact you, they will continue to make at least two attempts to call you for the following 24 hours before sending an e-mail with a reminder of information about potential sources of support should you feel distressed as a result of taking part in the study.

You may be contacted during the analysis phase of the study to give your opinions on our interpretation of the data. Once the research project has been completed, you will be contacted and provided with a summary of results if you have indicated that you would like one on your participant details form.

- **What are the possible benefits of taking part?**

We hope that taking part in the study will allow you to feel valued and listened to. We hope that it will feel valuable to offer your own experiences to contribute to the current understanding in this area. Findings from the research may be helpful in aiding the understanding of mental health professionals of why gender non-binary young adults self-harm and what could be helpful in managing self-harming urges and behaviours within this population.

- **What are the possible risks or disadvantages of taking part?**

We do not see any serious risks in taking part in the study. You will be asked to give up some of your time to take part. It would not be unusual for people to experience some emotional distress when they are asked to think about difficult experiences and feelings. If you are upset, you will be able to talk to the researcher and if you feel you require further support, they will be able to tell you about other possible sources of help or advice.

- **Will I be compensated for taking part?**

You will not be compensated for taking part in this study.

- **What happens if I do not want to take part or if I change my mind?**

It is up to you to decide whether or not to take part. If you would prefer not to take part then you do not have to give a reason and you will not be pressured to change your mind. If you do decide to take part you will be given this information sheet to keep and will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason and without detriment to yourself. However, it will not be possible to remove your data from the project once it has been anonymised as we will not be able to identify your specific data. This does not affect your data protection rights. If you decide not to take part you do not need to do anything further.

As audio recording is essential to taking part in the study, you should ensure this is something you feel comfortable with. You will be free to stop recording at any time.

## Data Protection and Confidentiality

- **What information will you collect about me?**

In order to participate in this research project we will need to collect information that could identify you, called "personal identifiable information". Specifically we will need to collect:

- Your name and signature (on your consent form)
- Your contact details (phone number or e-mail address)
- Your GP's contact details (name of practice and phone number)

- Whether or not you would like a copy of the results
- The address of your location (if your interview takes part via phone or zoom video conferencing)
- Demographic information (age, ethnicity and gender identity)
- Other personal information will be collected during your interviews. This may come from conversations about your experiences related to gender identity and self-harm. However, the information you provide during interview will be anonymised so it is not identifiable to you.

If your interview takes place over the phone or zoom video conferencing, the information collected via paper form will be filled in by the researcher on your behalf.

Audio recordings will consist of your voice only and will be obtained in one to one interviews. This will be the same for phone and zoom conferencing interviews.

**Under what legal basis are you collecting this information?**

We are collecting and storing this personal identifiable information in accordance with data protection law which protect your rights. These state that we must have a legal basis (specific reason) for collecting your data. For this study, the specific reason is that it is "a public interest task" and "a process necessary for research purposes". Procedures for the handling, processing, storage and destruction of your data will be compliant with GDPR 2018.

➢ **What are my rights in relation to the information you will collect about me?**

You have a number of rights under data protection law regarding your personal information. For example you can request a copy of the information we hold about you, including audio recordings.

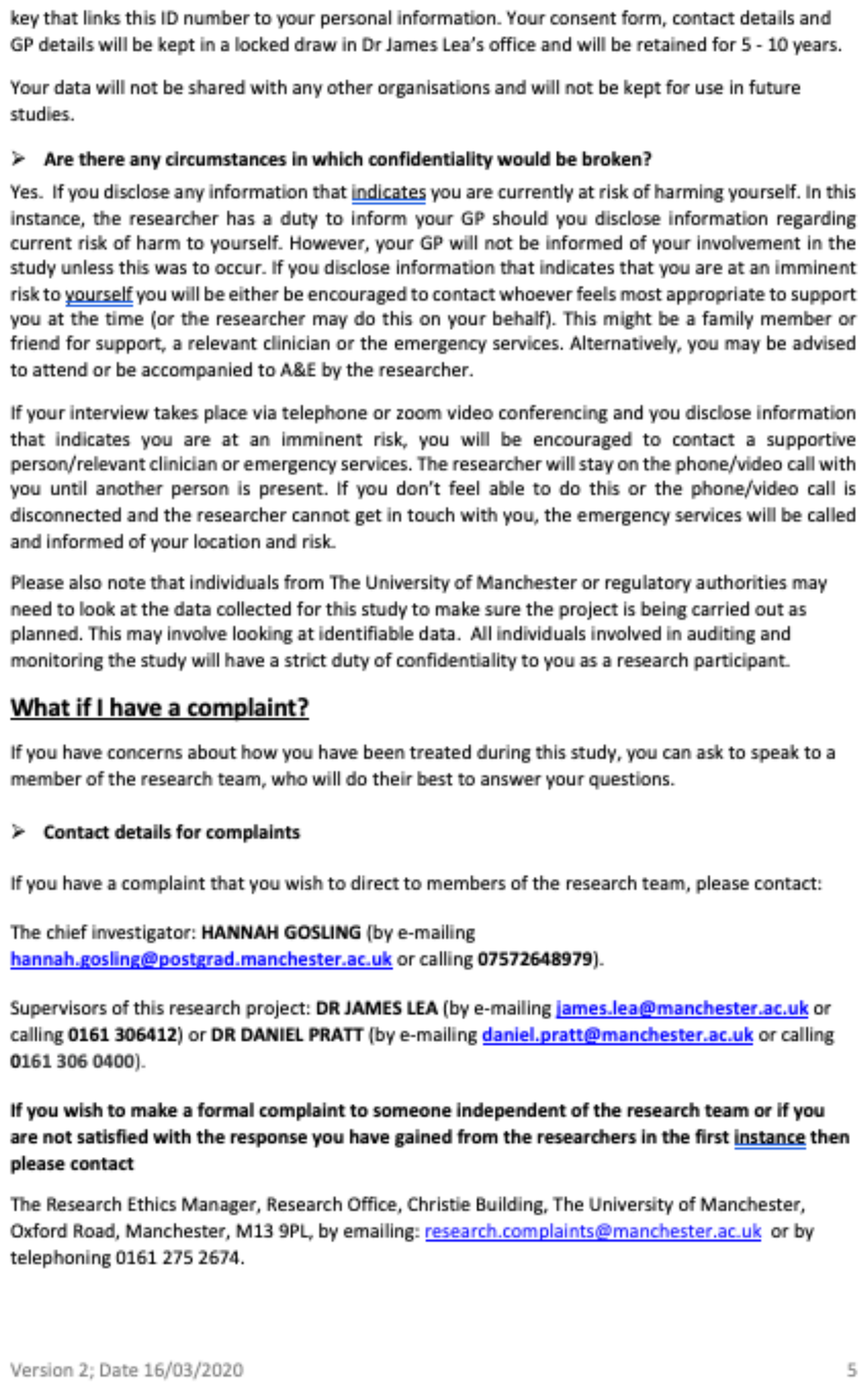
If you would like to know more about your different rights or the way we use your personal information to ensure we follow the law, please consult our Privacy Notice for Research http://documents.manchester.ac.uk/display.aspx?DocID=37095.

➢ **Will my participation in the study be confidential and my personal identifiable information be protected?**

In accordance with data protection law, The University of Manchester is the Data Controller for this project. This means that we are responsible for making sure your personal information is kept secure, confidential and used only in the way you have been told it will be used. All researchers are trained with this in mind, and your data will be looked after in the following way:

Demographic and interview data will be collected onto an encrypted recording device. Once recordings have been transferred onto a private drive, they will be deleted from the recording devise and transcribed into a word document that will also be saved on the private drive. Transcribing will be completed by a member of the research team or possibly another University of Manchester employee. It will be ensured that they are reminded of the guidelines regarding confidentiality and ask them to sign a copy of the Confidentiality Agreement.

Only the study team at The University of Manchester will have access to your personal information, but they will anonymise it as soon as possible. Your name and any other identifying information will be removed and replaced with a random ID number. Only the research team will have access to the



key that links this ID number to your personal information. Your consent form, contact details and GP details will be kept in a locked draw in Dr James Lea's office and will be retained for 5 - 10 years.

Your data will not be shared with any other organisations and will not be kept for use in future studies.

- **Are there any circumstances in which confidentiality would be broken?**

Yes. If you disclose any information that indicates you are currently at risk of harming yourself. In this instance, the researcher has a duty to inform your GP should you disclose information regarding current risk of harm to yourself. However, your GP will not be informed of your involvement in the study unless this was to occur. If you disclose information that indicates that you are at an imminent risk to yourself you will be either be encouraged to contact whoever feels most appropriate to support you at the time (or the researcher may do this on your behalf). This might be a family member or friend for support, a relevant clinician or the emergency services. Alternatively, you may be advised to attend or be accompanied to A&E by the researcher.

If your interview takes place via telephone or zoom video conferencing and you disclose information that indicates you are at an imminent risk, you will be encouraged to contact a supportive person/relevant clinician or emergency services. The researcher will stay on the phone/video call with you until another person is present. If you don't feel able to do this or the phone/video call is disconnected and the researcher cannot get in touch with you, the emergency services will be called and informed of your location and risk.

Please also note that individuals from The University of Manchester or regulatory authorities may need to look at the data collected for this study to make sure the project is being carried out as planned. This may involve looking at identifiable data. All individuals involved in auditing and monitoring the study will have a strict duty of confidentiality to you as a research participant.

## What if I have a complaint?

If you have concerns about how you have been treated during this study, you can ask to speak to a member of the research team, who will do their best to answer your questions.

- **Contact details for complaints**

If you have a complaint that you wish to direct to members of the research team, please contact:

The chief investigator: **HANNAH GOSLING** (by e-mailing **hannah.gosling@postgrad.manchester.ac.uk** or calling **07572648979**).

Supervisors of this research project: **DR JAMES LEA** (by e-mailing **james.lea@manchester.ac.uk** or calling **0161 306412**) or **DR DANIEL PRATT** (by e-mailing **daniel.pratt@manchester.ac.uk** or calling **0161 306 0400**).

**If you wish to make a formal complaint to someone independent of the research team or if you are not satisfied with the response you have gained from the researchers in the first instance then please contact**

The Research Ethics Manager, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester, M13 9PL, by emailing: research.complaints@manchester.ac.uk or by telephoning 0161 275 2674.

If you wish to contact us about your data protection rights, please email dataprotection@manchester.ac.uk or write to The Information Governance Office, Christie Building, The University of Manchester, Oxford Road, M13 9PL at the University and we will guide you through the process of exercising your rights.

You also have a right to complain to the Information Commissioner's Office about complaints relating to your personal identifiable information (https://ico.org.uk/concerns) Tel 0303 123 1113

## Contact Details

If you have any queries about the study or if you are interested in taking part then please contact the researcher:

**HANNAH GOSLING**
E-mail address: **nonbinary@manchester.ac.uk**
Phone number: **07572648979**

*Thank you for reading this.*

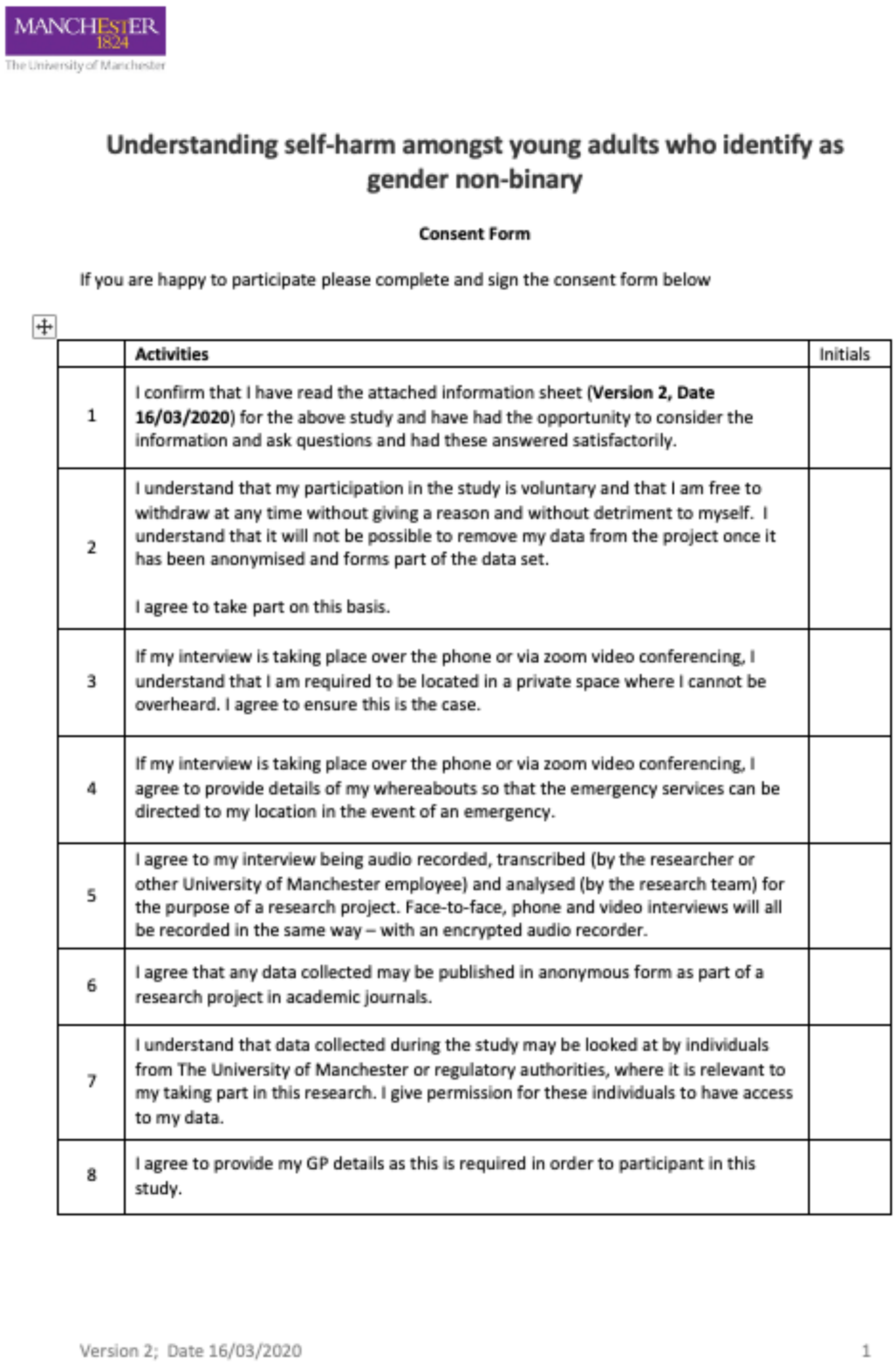
*If you need further information, please speak with a member of the research team.*

*We will give you this information sheet to keep as well as a signed consent form if you agree to take part.*

Should you require support during your participation in the study, you should contact your GP or access the following services:

| | |
|---|---|
| **MindLine Trans+**<br>A confidential, emotional, mental health support helpline for people who identify as Trans, Agender, Gender Fluid, Non-binary | **Call:**<br>0300 330 5468<br>Mondays and Fridays<br>8pm – Midnight |
| **Shout**<br>A free 27/7 text service for anyone in crisis at anytime, anywhere. | **Text:**<br>Shout to 85258 |
| **Samaritans**<br>24 hour confidential support | **Call:**<br>116123 |
| **In an emergency you could:**<br>Go to your local walk-in centre<br>Go to A&E<br>Ring an ambulance | |

## Appendix 8: Consent form



MANCHESTER
1824
The University of Manchester

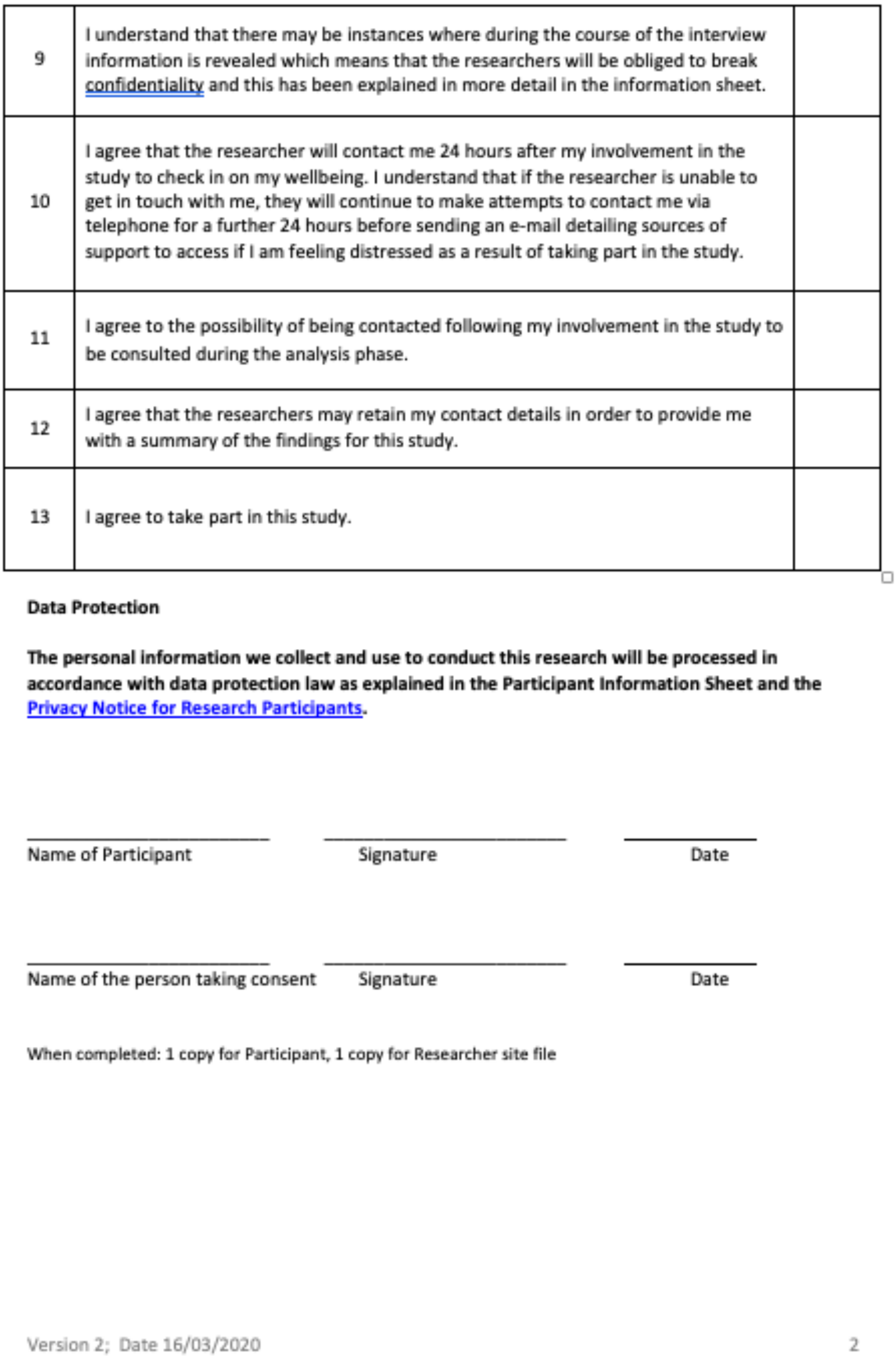
# Understanding self-harm amongst young adults who identify as gender non-binary

**Consent Form**

If you are happy to participate please complete and sign the consent form below

| | **Activities** | Initials |
|---|---|---|
| 1 | I confirm that I have read the attached information sheet (**Version 2, Date 16/03/2020**) for the above study and have had the opportunity to consider the information and ask questions and had these answered satisfactorily. | |
| 2 | I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason and without detriment to myself. I understand that it will not be possible to remove my data from the project once it has been anonymised and forms part of the data set.<br>I agree to take part on this basis. | |
| 3 | If my interview is taking place over the phone or via zoom video conferencing, I understand that I am required to be located in a private space where I cannot be overheard. I agree to ensure this is the case. | |
| 4 | If my interview is taking place over the phone or via zoom video conferencing, I agree to provide details of my whereabouts so that the emergency services can be directed to my location in the event of an emergency. | |
| 5 | I agree to my interview being audio recorded, transcribed (by the researcher or other University of Manchester employee) and analysed (by the research team) for the purpose of a research project. Face-to-face, phone and video interviews will all be recorded in the same way – with an encrypted audio recorder. | |
| 6 | I agree that any data collected may be published in anonymous form as part of a research project in academic journals. | |
| 7 | I understand that data collected during the study may be looked at by individuals from The University of Manchester or regulatory authorities, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data. | |
| 8 | I agree to provide my GP details as this is required in order to participant in this study. | |

Version 2; Date 16/03/2020 1



| | | |
|---|---|---|
| 9 | I understand that there may be instances where during the course of the interview information is revealed which means that the researchers will be obliged to break confidentiality and this has been explained in more detail in the information sheet. | |
| 10 | I agree that the researcher will contact me 24 hours after my involvement in the study to check in on my wellbeing. I understand that if the researcher is unable to get in touch with me, they will continue to make attempts to contact me via telephone for a further 24 hours before sending an e-mail detailing sources of support to access if I am feeling distressed as a result of taking part in the study. | |
| 11 | I agree to the possibility of being contacted following my involvement in the study to be consulted during the analysis phase. | |
| 12 | I agree that the researchers may retain my contact details in order to provide me with a summary of the findings for this study. | |
| 13 | I agree to take part in this study. | |

**Data Protection**

**The personal information we collect and use to conduct this research will be processed in accordance with data protection law as explained in the Participant Information Sheet and the Privacy Notice for Research Participants.**

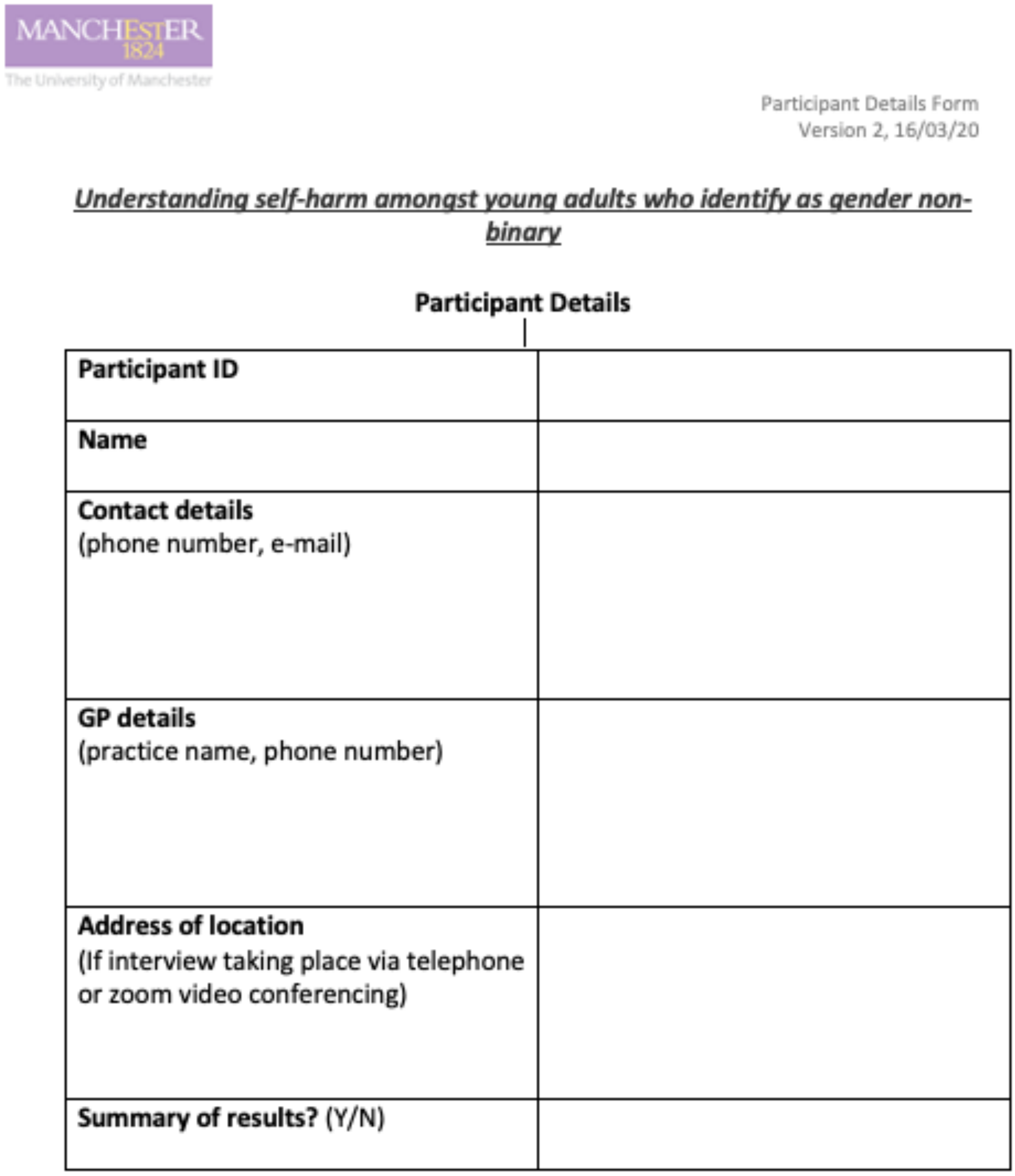
________________________ ________________________ _____________
Name of Participant Signature Date

________________________ ________________________ _____________
Name of the person taking consent Signature Date

When completed: 1 copy for Participant, 1 copy for Researcher site file

Version 2; Date 16/03/2020 2

## Appendix 9: Participant details form



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The University of Manchester

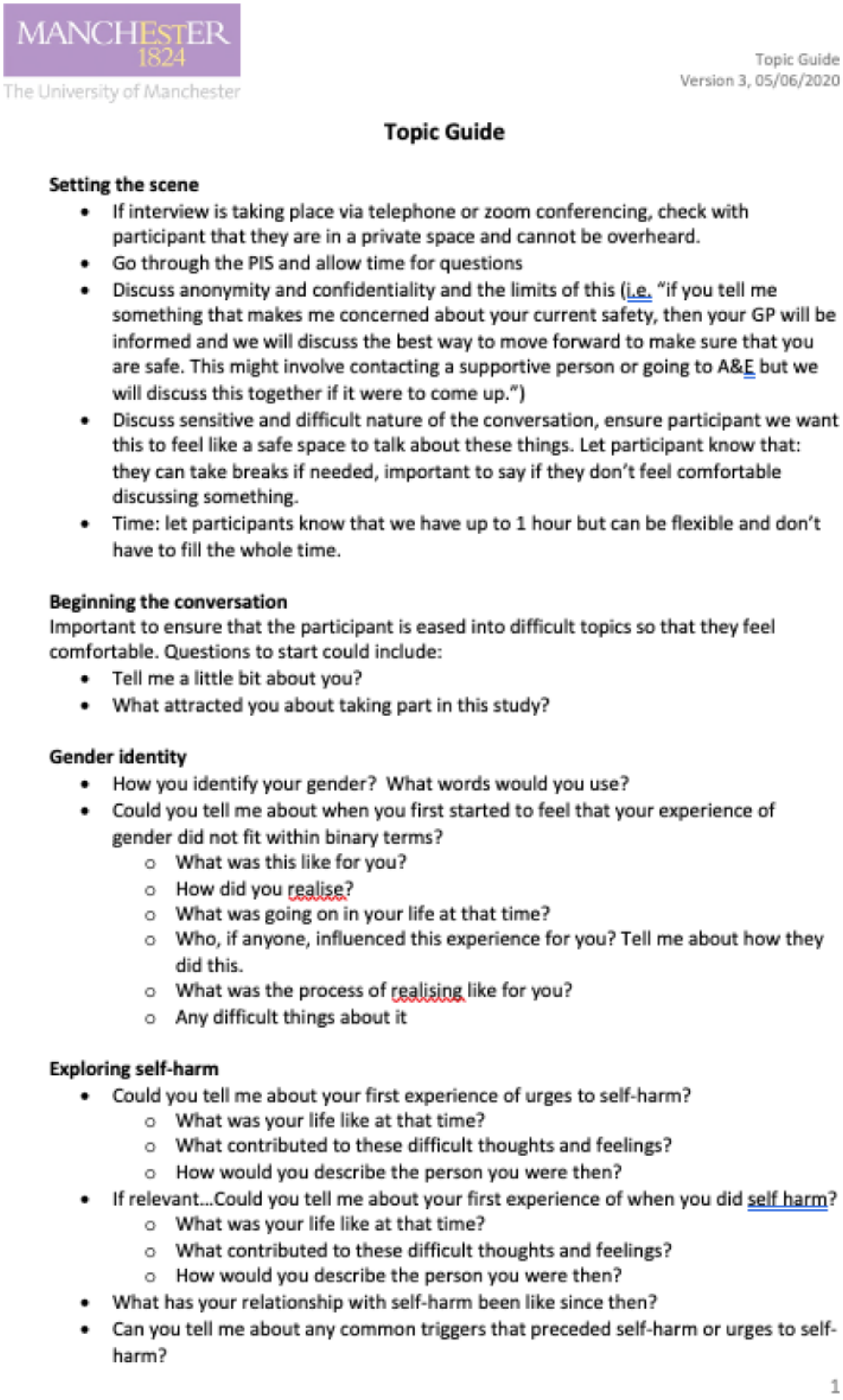
Participant Details Form
Version 2, 16/03/20

***Understanding self-harm amongst young adults who identify as gender non-binary***

**Participant Details**

| | |
|---|---|
| **Participant ID** | |
| **Name** | |
| **Contact details**<br>(phone number, e-mail) | |
| **GP details**<br>(practice name, phone number) | |
| **Address of location**<br>(If interview taking place via telephone or zoom video conferencing) | |
| **Summary of results?** (Y/N) | |

## Appendix 10: Topic guide



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Topic Guide
Version 3, 05/06/2020

### Topic Guide

**Setting the scene**

- If interview is taking place via telephone or zoom conferencing, check with participant that they are in a private space and cannot be overheard.
- Go through the PIS and allow time for questions
- Discuss anonymity and confidentiality and the limits of this (i.e. "if you tell me something that makes me concerned about your current safety, then your GP will be informed and we will discuss the best way to move forward to make sure that you are safe. This might involve contacting a supportive person or going to A&E but we will discuss this together if it were to come up.")
- Discuss sensitive and difficult nature of the conversation, ensure participant we want this to feel like a safe space to talk about these things. Let participant know that: they can take breaks if needed, important to say if they don't feel comfortable discussing something.
- Time: let participants know that we have up to 1 hour but can be flexible and don't have to fill the whole time.

**Beginning the conversation**

Important to ensure that the participant is eased into difficult topics so that they feel comfortable. Questions to start could include:

- Tell me a little bit about you?
- What attracted you about taking part in this study?

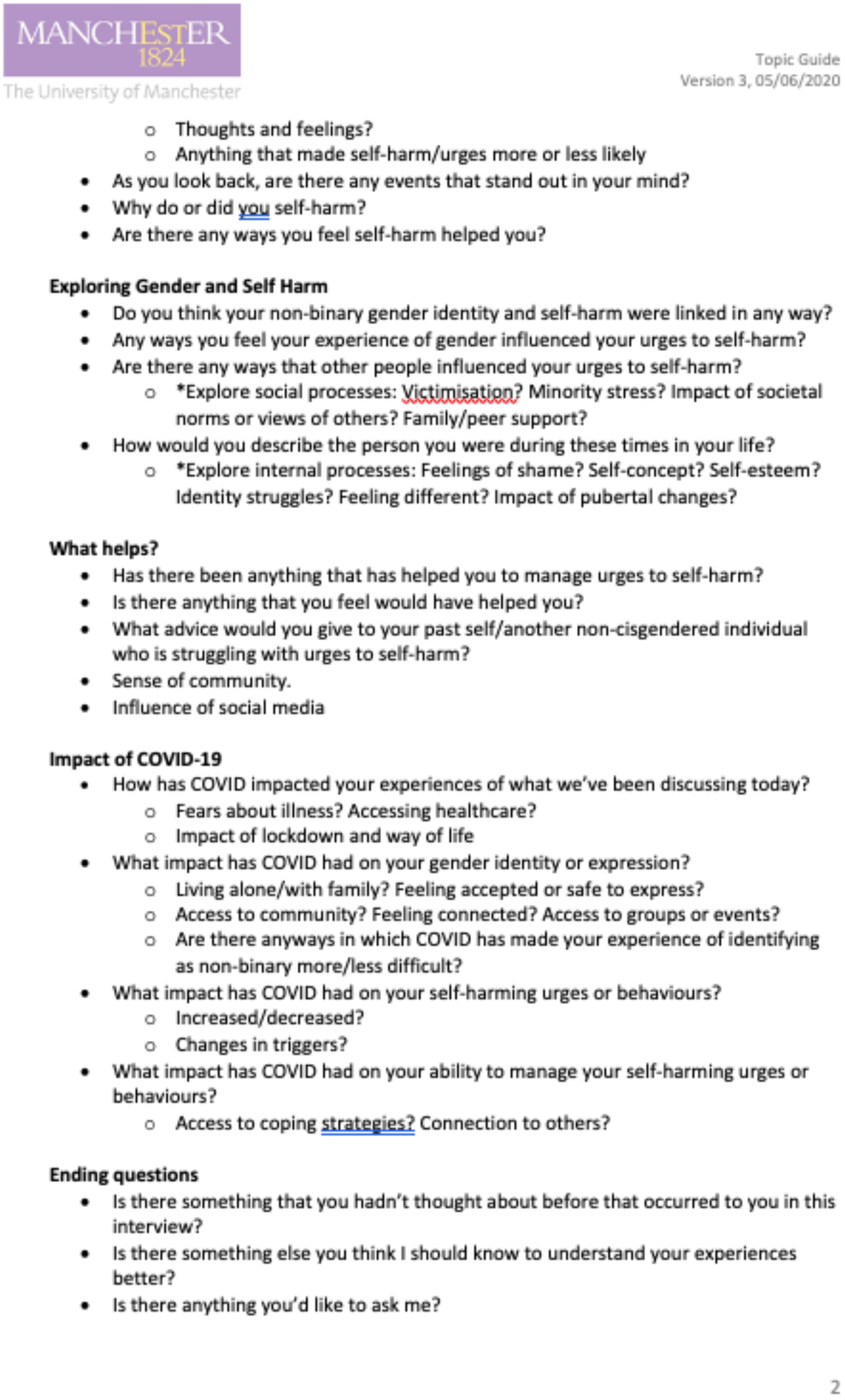
**Gender identity**

- How you identify your gender? What words would you use?
- Could you tell me about when you first started to feel that your experience of gender did not fit within binary terms?
    - What was this like for you?
    - How did you realise?
    - What was going on in your life at that time?
    - Who, if anyone, influenced this experience for you? Tell me about how they did this.
    - What was the process of realising like for you?
    - Any difficult things about it

**Exploring self-harm**

- Could you tell me about your first experience of urges to self-harm?
    - What was your life like at that time?
    - What contributed to these difficult thoughts and feelings?
    - How would you describe the person you were then?
- If relevant…Could you tell me about your first experience of when you did self harm?
    - What was your life like at that time?
    - What contributed to these difficult thoughts and feelings?
    - How would you describe the person you were then?
- What has your relationship with self-harm been like since then?
- Can you tell me about any common triggers that preceded self-harm or urges to self-harm?

1



    - Thoughts and feelings?
    - Anything that made self-harm/urges more or less likely
- As you look back, are there any events that stand out in your mind?
- Why do or did you self-harm?
- Are there any ways you feel self-harm helped you?

**Exploring Gender and Self Harm**

- Do you think your non-binary gender identity and self-harm were linked in any way?
- Any ways you feel your experience of gender influenced your urges to self-harm?
- Are there any ways that other people influenced your urges to self-harm?
    - *Explore social processes: Victimisation? Minority stress? Impact of societal norms or views of others? Family/peer support?
- How would you describe the person you were during these times in your life?
    - *Explore internal processes: Feelings of shame? Self-concept? Self-esteem? Identity struggles? Feeling different? Impact of pubertal changes?

**What helps?**

- Has there been anything that has helped you to manage urges to self-harm?
- Is there anything that you feel would have helped you?
- What advice would you give to your past self/another non-cisgendered individual who is struggling with urges to self-harm?
- Sense of community.
- Influence of social media

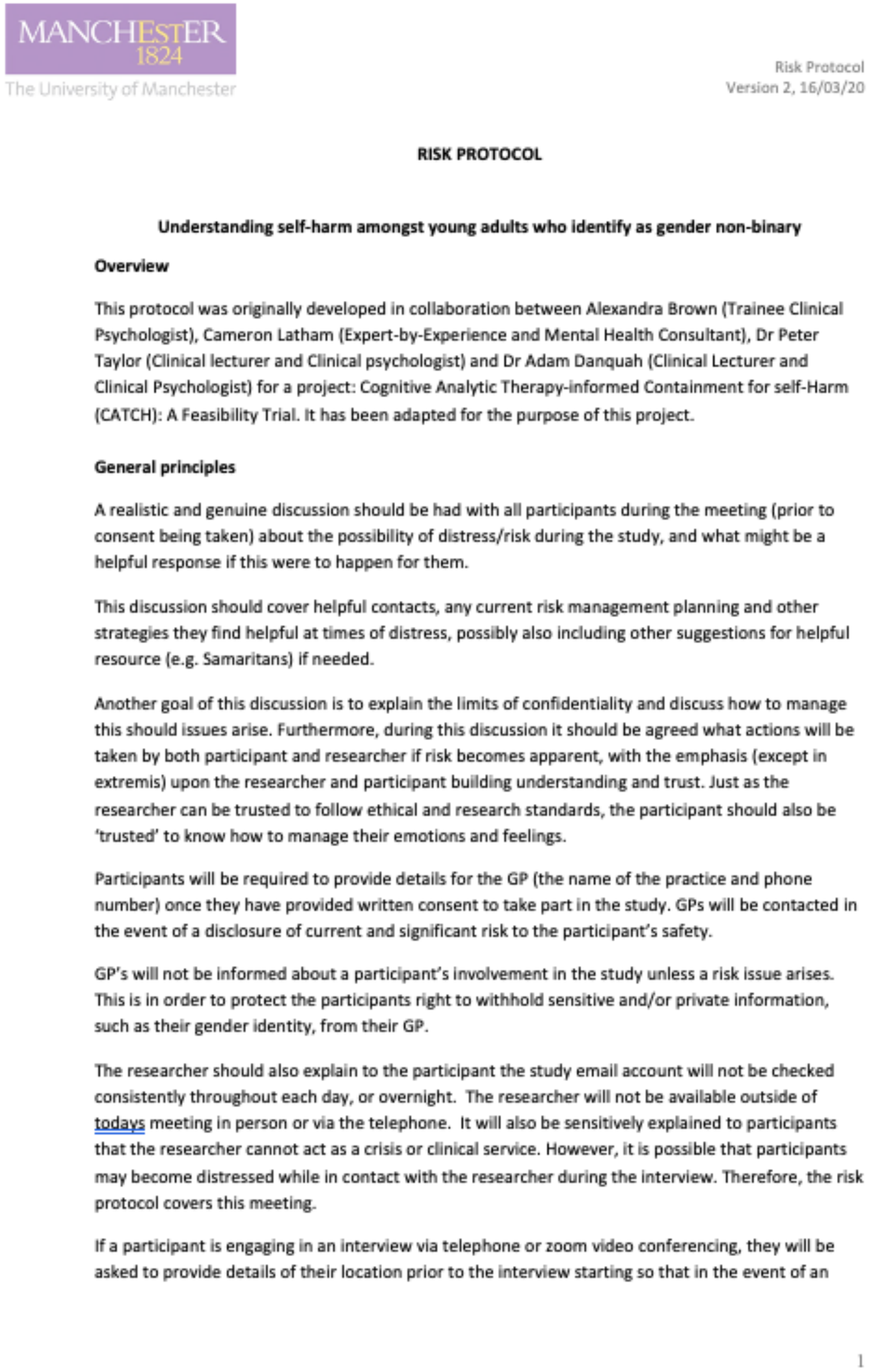
**Impact of COVID-19**

- How has COVID impacted your experiences of what we've been discussing today?
    - Fears about illness? Accessing healthcare?
    - Impact of lockdown and way of life
- What impact has COVID had on your gender identity or expression?
    - Living alone/with family? Feeling accepted or safe to express?
    - Access to community? Feeling connected? Access to groups or events?
    - Are there anyways in which COVID has made your experience of identifying as non-binary more/less difficult?
- What impact has COVID had on your self-harming urges or behaviours?
    - Increased/decreased?
    - Changes in triggers?
- What impact has COVID had on your ability to manage your self-harming urges or behaviours?
    - Access to coping strategies? Connection to others?

**Ending questions**

- Is there something that you hadn't thought about before that occurred to you in this interview?
- Is there something else you think I should know to understand your experiences better?
- Is there anything you'd like to ask me?

# Appendix 11: Risk protocol



## RISK PROTOCOL

### Understanding self-harm amongst young adults who identify as gender non-binary

**Overview**

This protocol was originally developed in collaboration between Alexandra Brown (Trainee Clinical Psychologist), Cameron Latham (Expert-by-Experience and Mental Health Consultant), Dr Peter Taylor (Clinical lecturer and Clinical psychologist) and Dr Adam Danquah (Clinical Lecturer and Clinical Psychologist) for a project: Cognitive Analytic Therapy-informed Containment for self-Harm (CATCH): A Feasibility Trial. It has been adapted for the purpose of this project.

**General principles**

A realistic and genuine discussion should be had with all participants during the meeting (prior to consent being taken) about the possibility of distress/risk during the study, and what might be a helpful response if this were to happen for them.

This discussion should cover helpful contacts, any current risk management planning and other strategies they find helpful at times of distress, possibly also including other suggestions for helpful resource (e.g. Samaritans) if needed.

Another goal of this discussion is to explain the limits of confidentiality and discuss how to manage this should issues arise. Furthermore, during this discussion it should be agreed what actions will be taken by both participant and researcher if risk becomes apparent, with the emphasis (except in extremis) upon the researcher and participant building understanding and trust. Just as the researcher can be trusted to follow ethical and research standards, the participant should also be 'trusted' to know how to manage their emotions and feelings.

Participants will be required to provide details for the GP (the name of the practice and phone number) once they have provided written consent to take part in the study. GPs will be contacted in the event of a disclosure of current and significant risk to the participant's safety.

GP's will not be informed about a participant's involvement in the study unless a risk issue arises. This is in order to protect the participants right to withhold sensitive and/or private information, such as their gender identity, from their GP.

The researcher should also explain to the participant the study email account will not be checked consistently throughout each day, or overnight. The researcher will not be available outside of todays meeting in person or via the telephone. It will also be sensitively explained to participants that the researcher cannot act as a crisis or clinical service. However, it is possible that participants may become distressed while in contact with the researcher during the interview. Therefore, the risk protocol covers this meeting.

If a participant is engaging in an interview via telephone or zoom video conferencing, they will be asked to provide details of their location prior to the interview starting so that in the event of an imminent risk, emergency services can be directed to their location. If a participant does not wish to provide these details, the interview will not go ahead.

**Procedures to be followed throughout the study:-**

**To be enacted if a participant and the researcher is concerned about the participant's current and subsequent welfare, for example if a participant:**

- Reports or displays notable distress
- Reports thoughts or feelings related to self harm and/or suicide
- Reports current urges to harm themselves

**If participant reports or shows signs of low or moderate distress:**

- Pause the session (with the participant's agreement) and allow time to talk about other topics including how the participant feels, and then carefully observe levels of distress.
- If distress seems to have lessened, discuss with participant whether or not they wish to continue with the study or session.
- If distress remains prominent or worsens, follow steps below.

**If participants report more severe distress or thoughts/feelings related to current urge to self-harm or suicidal ideation:**

- Halt or pause the interview.
- Try to assess what the participant needs at this point in time - active listening alone, validation, acknowledgement, normalisation.
- Allow the participant an appropriate amount of time to say more about how they are feeling and allow time to listen to them, be non-judgmental and empathic.
- Ask specifically about any thoughts of suicide, if not already mentioned.
- Where these are present, assess level of immediate risk (this should be done as part of a calm, collaborative conversation, avoiding appearing panicked). The researcher should ask about intent, planning/access to means, and how hard it feels to resist this for both suicide and self harm. A Likert scale could be used to assist this discussion and quantify risk.
- Ask the participant: Do you feel that taking part in this interview is affecting how you feel? If so, in what way? / Is participation making you feel more like self-injuring or suicidal?
- If so, explain that the researcher has a duty of care
- Risk management should be a collaborative process, taking into account the wishes of the participant; however the limits of confidentiality should be reiterated.
- In judging the level of risk associated with urges to self-harm/attempt suicide it is important to involve the participant themselves in discussing this. In doing this the researcher can check with the participant about the usual severity of their self-harm and aftercare (including any aftercare they provide themselves such as wound cleaning and also any health services they routinely attend), and also their degree of suicidal ideation.

- Be aware of the increased likelihood of subsequent contact, perhaps taking the form of a distressing email (see guidance below). The email account should have a standard automatic reply that reiterates signposting information.

**Where taking part in the study is having an adverse effect on the participant the study should be immediately halted.**

If the researcher considers the risk level to have returned to low to moderate, and the participant is euthymic, lucid and appears to have capacity, the participant will be asked if they wish to continue with the interview, and be reminded of their right to withdraw at any point without adverse consequences.

If the participant does not feel able to continue the interview, but is eager to remain involved in the research, this could be discussed with them, once they have had a break from the study, and once the issue has been reviewed by the study supervisors.

**The participant would be judged as high risk of intentional or accidental suicide if**

- Current suicidal ideation present, and suicidal intent rated moderate to high, but no plan or access to lethal means.
- Urges to self-harm that are hard to resist are present and could result in severe injury (e.g. planned overdose or hanging), long-term disability or death.

Clinical judgement should be employed in making this judgement and a cautious approach should generally be adopted where uncertain. The participant should be involved in this discussion where possible.

If high level of risk is identified **then the researcher should follow the procedure below:**

☐ Encourage participant to immediately contact support(s) and clinician(s)/psychiatric emergency services to inform of risk if relevant

☐ If the participant does not feel able to do so, the researcher will seek permission from the participant to contact these people for them (clinician(s)/contact support(s)/psychiatric emergency services) to inform them of level of risk and enlist their assistance in getting participant to a clinician

☐ If participant does not agree to contacting supports/clinician(s)/psychiatric emergency services, then the researcher should inform the participant that they must break confidentiality and contact GP and/or emergency services to inform them of level of risk and enlist their assistance in getting participant to a clinician.*

☐ Call Project Supervisor(s)

☐ Record adverse event

* Where researcher is required to contact and inform others of risk this should be first discussed with the participant where possible. It can be emphasised this action is about keeping the participant safe. It can also be discussed if the participant has preferences regarding who you contact or how you share this information. Where possible (and not conflicting with duty of care or other requirements of the researcher) participants' preferences should be taken into account.

**The participant would be judged as being at imminent risk of intentional or accidental suicide if:**

- Current suicidal ideation present, and suicidal intent rated moderate to high, with plan and access to lethal means. moderate to high
- Plan to self-harm in a way that could result in severe injury, long-term disability or death (e.g. planned overdose or hanging), and access to means

If imminent level of risk is identified **then the researcher should follow the procedure below:**

☐ Call Project Supervisor(s)

☐ If consent can be gained for the steps below then this is preferable, if not the researcher must break confidentiality

☐ Researcher tells/calls GP and/or emergency services (and people in support network, with the participant's consent) to inform them of level of risk and enlist their assistance in getting subject to a clinician

☐ If in with researcher: Participant should not be left alone. They can leave with family member/friend, researcher should accompany Participant to Hospital Emergency Department.

☐ If participant is on the phone or video call, the researcher should encourage the participant to contact a supportive person or relevant clinician. The researcher should stay connected to the participant until another person is present (supportive person, relevant clinician or emergency services).

☐ If the participant ends the call/video call before another person is present, the researcher should attempt to call them back. If they are unsuccessful, the researcher should call 999 and inform of participant's location and risk level.

☐ If an ambulance is being sent, stay with the Participant until the ambulance arrives or alternatively, stay on the phone/ video call to the participant if possible.

☐ If Participant refuses to do the above: call 999 and inform of subject's location and risk level.

☐ Call participant 1-2 days following the above to follow up, repair rupture if appropriate

☐ Record serious adverse event

**Risk expressed via email**

It will be made clear that the address is to be used for the research project only and that emails will only be checked at regular intervals. This will be noted on advertising material and also within an automatic reply. Moreover, the automatic reply will reiterate signposting information. It will be made clear to participants that researchers will not necessarily be able to follow up emails by contacting participants where risk or distress is shared. This is important as there is a possibility that participants may understandably seek care from the research team, if they feel distressed or vulnerable. The team will set up clear boundaries related to email use, including the account only being checked during normal office hours (9am-5pm) and from a work location.

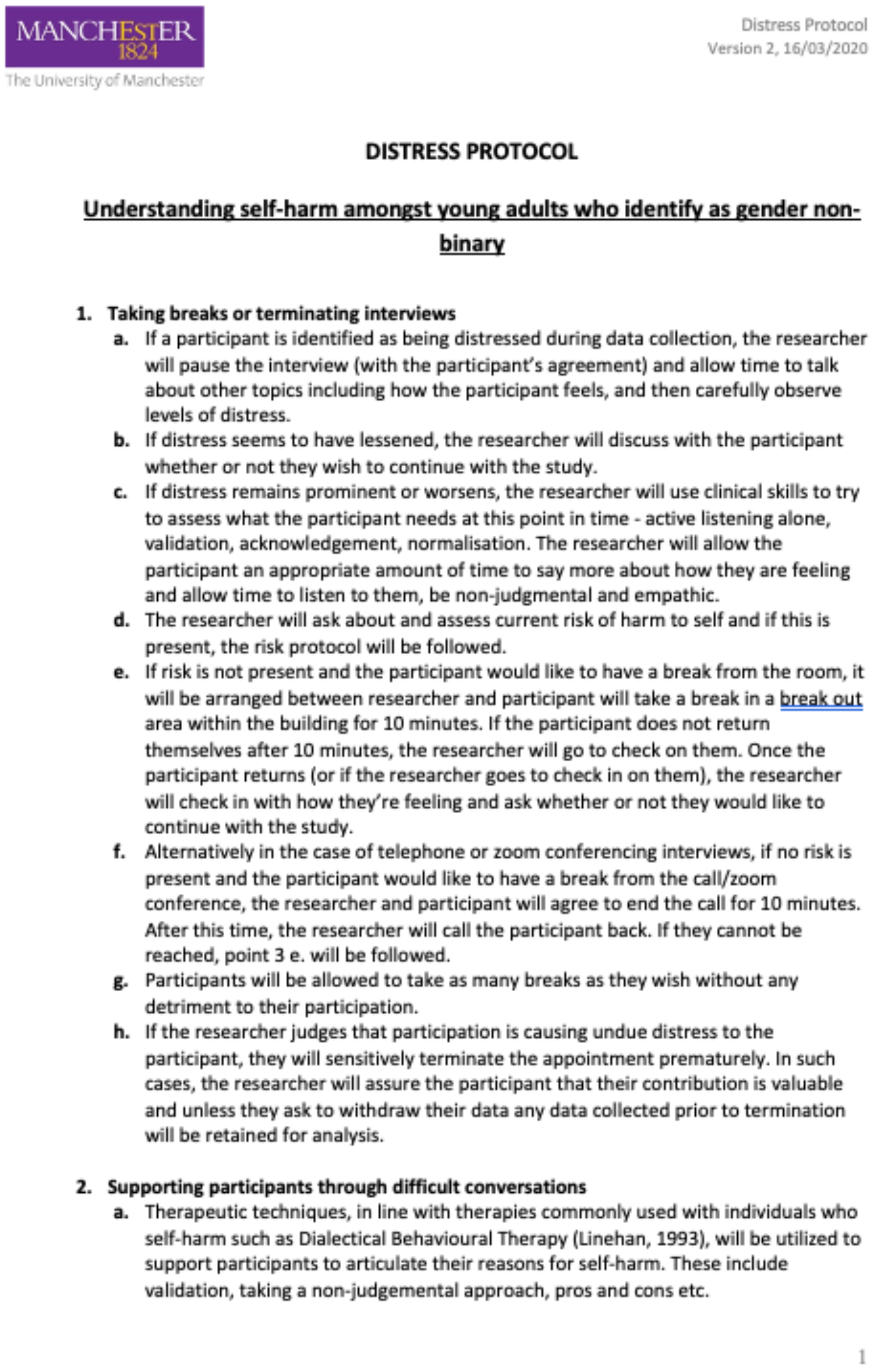
Where researchers read an email from a participant that indicates high or immediate risk to themselves they should act by informing the GP to inform them of level of risk.

**Personal Safety and Boundaries**

In responding to the above situations it is important that the researcher balances these actions against their own personal safety, and should avoid situations where their personal safety feels compromised. Lone working policies from The University of Manchester will be adhered to.

In addition, where any of the above incidents take place the researcher should inform their supervisor(s) and arrange a time to debrief with regards to the situation, including a focus on how they have personally been affected.

## Appendix 12: Distress protocol



MANCHESTER
1824
The University of Manchester

### DISTRESS PROTOCOL

### Understanding self-harm amongst young adults who identify as gender non-binary

1. **Taking breaks or terminating interviews**
    - **a.** If a participant is identified as being distressed during data collection, the researcher will pause the interview (with the participant's agreement) and allow time to talk about other topics including how the participant feels, and then carefully observe levels of distress.
    - **b.** If distress seems to have lessened, the researcher will discuss with the participant whether or not they wish to continue with the study.
    - **c.** If distress remains prominent or worsens, the researcher will use clinical skills to try to assess what the participant needs at this point in time - active listening alone, validation, acknowledgement, normalisation. The researcher will allow the participant an appropriate amount of time to say more about how they are feeling and allow time to listen to them, be non-judgmental and empathic.
    - **d.** The researcher will ask about and assess current risk of harm to self and if this is present, the risk protocol will be followed.
    - **e.** If risk is not present and the participant would like to have a break from the room, it will be arranged between researcher and participant will take a break in a break out area within the building for 10 minutes. If the participant does not return themselves after 10 minutes, the researcher will go to check on them. Once the participant returns (or if the researcher goes to check in on them), the researcher will check in with how they're feeling and ask whether or not they would like to continue with the study.
    - **f.** Alternatively in the case of telephone or zoom conferencing interviews, if no risk is present and the participant would like to have a break from the call/zoom conference, the researcher and participant will agree to end the call for 10 minutes. After this time, the researcher will call the participant back. If they cannot be reached, point 3 e. will be followed.
    - **g.** Participants will be allowed to take as many breaks as they wish without any detriment to their participation.
    - **h.** If the researcher judges that participation is causing undue distress to the participant, they will sensitively terminate the appointment prematurely. In such cases, the researcher will assure the participant that their contribution is valuable and unless they ask to withdraw their data any data collected prior to termination will be retained for analysis.

2. **Supporting participants through difficult conversations**
    - **a.** Therapeutic techniques, in line with therapies commonly used with individuals who self-harm such as Dialectical Behavioural Therapy (Linehan, 1993), will be utilized to support participants to articulate their reasons for self-harm. These include validation, taking a non-judgemental approach, pros and cons etc.

b. The researcher is a trainee clinical psychologist who has experience of having conversations with people who experience mental health difficulties about distress and self-harm.
c. As part of the clinical psychology doctorate, the researcher continues to undergo training in therapeutic approaches and skills that can be used to support these difficult conversations.
d. The researcher will also have access to regular supervision from their supervisors who are both qualified clinical psychologists. This will include further support and training in interview skills and managing difficult conversations about distress and self-harm.

### 3. Debriefing and follow-up

**a.** The researcher will ensure that participants are not left in a distressed state at the end of data collection. There will be time following the interviews for a thorough debrief.
**b.** At the end of the appointment participants will be provided with a debrief sheet detailing the contact details for supportive organisations that participants can contact or access should they feel the need. This will be e-mailed to the participant if they are engaging in a phone or zoom conferencing interview.
**c.** All participants will be reminded of the option to contact their GP should they feel they need further support after taking part in the study.
**d.** All participants will be contacted via telephone 24 hours after the appointment to check on their wellbeing. The researcher will provide further signposting to helpful resources if necessary.
**e.** If the researcher is unable to reach a participant via telephone, they will continue to make at least 2 attempts to contact them via telephone over the next 24 hours before then emailing each contact with a reminder of information about potential sources of support should they become distressed as a result of taking part in the study.
**f.** The chief investigator is a trainee clinical psychologist and is experienced in dealing with patient distress and risk issues. The trainee is supervised by Dr James Lea and Dr Daniel Pratt, who are experienced clinical psychologists.

### 4. Distress to researcher

**a.** Due to the sensitive nature of the interview topics, there may be a risk of distress to the researcher. In order to manage this, the researcher will be conscious of their own feelings and emotional responses.
**b.** Following interviews, the researcher's supervisors will be available to be contacted via telephone for a debrief.
**c.** The researcher will also receive regular supervision from their supervisors. This will allow for time to reflect and discuss any distress or emotional responses the researcher experiences.
**d.** The researcher is a trainee clinical psychologist and the research supervisors are qualified clinical psychologists. Therefore, the research team are experienced in managing other's distress and having conversations about difficult topics such as self-harm.

# Appendix 13: Initial coding

| Codes | Page number | Line number | Transcript |
|---|---|---|---|
| Biochemistry student;<br>About to do masters | 1 | 9,10 | I'm a biochemistry student, in between by final year at bachelors going into masters but I'm taking a year out. |
| Creative hobbies (writing, illustration) | 1 | 11 | .. my hobbies include writing and illustration, that sort of thing |
| Feeling frustrated with how non-binary people are treated;<br>Taking part due to feeling that non-binary people are unfairly treated | 1 | 15 | I'm quite frustrated with the state of how non-binary people are treated. |
| Identifying as non-binary<br>Using gender neutral terms interchangeably to identify gender | 1 | 17-21 | H: Ok brill.. so you mentioned that you're non-binary<br>F: Yeah<br>H: Are there any other words that you use to identify your gender or is it just that?<br>F: Erm.. I used to use neutrose and sometimes just gender neutral or.. occasionally masculine leaning. That's what I'd generally use to describe myself. |
| Gender non-conforming since 5 or 6;<br>Identifying as non-binary age 16 | 1 | 24,25 | I've been gender non-conforming since I was pretty young.. I mean even as young as about 5 or 6? But I started identifying as non-binary at about 16? |
| Experiencing distress and dysphoria around puberty;<br>Feeling odd and uncomfortable being thought of or treated as female | 1 | 27-29 | I've always felt odd calling myself a female or a woman and I had quite a lot of distress and dysphoria around puberty and also how people treated me as a woman and it.. it just made me generally uncomfortable |
| Experiencing thoughts about wanting to be male;<br>Seeing thoughts about gender as 'weird' | 1 | 29,30 | I was like hmm.. that's a bit weird! Erm.. and then I would also have weird thoughts like 'I wish I'd just been a dude'. |
| Discovering 'non-binary' term online;<br>Resonating with new term 'non-binary' | 1 | 31,32 | yeah I sort of fell down an internet rabbit hole and was like ah non-binary that kind of makes sense! |
| Feeling like a 'freak' | 1 | 35 | It just sort of felt like a thing being like oh I'm a freak |
| Cultural influences of cringe culture and anti SJW adding to stress;<br>Fears of how others might ridicule non-binary identity | 1 | 37,39 | And it was during like 2016 so the erm.. cringe culture anti SJW so non-binary people weren't exactly popular at the time? So it was like £oh no£.. £this is stressful£ |
| Appearing more male as a child (short hair, male clothes) | 1 | 51,52 | I mean when I was in primary school.. so young probably around 7 or 8.. I basically cut my hair and pretty much exclusively wearing boys clothes.. |
| Receiving very gendered messages at school;<br>Feeling fearful of pubertal changes | 1/2 | 53-55 | Then going into secondary school I had like short hair.. I felt very weird erm.. like especially during that time cos it was like 'you are a woman.. this is what's going to happen to your body'.. and I was like oh no.. that sounds £awful£. |
| Pubertal changes bringing discomfort and not feeling 'right' | 2 | 55-57 | And then obviously I started having those changes and I was like oh no this is still awful. And then it was just generally discomfort and like oh this doesn't seem quite right. |

## Appendix 14: Initial codes into focused coding

**Having the language to describe gender identity to self and others**
Having vocabulary for gender prompting realisation of self as not a man
Being able to vocalise feelings
Putting identity into words
Highlighting significance of saying 'I'm not male'
Feeling validated by language
Finding a term that fits
Being given the language to identify gender
Always knowing but not having the vocabulary to understand self
Being provided with the vocabulary to describe self
Being able to describe identity to others

**Stark realisation that transphobia exists**
Finding out trans people existed
Realising 'other' status
Growing up blissfully ignorant
"When I found out about transness, I found out about transphobia"

**Realising that other people's experience of gender was more restrictive and polarising than one's own**
Realising own experience is different to most
Gaining an understanding of the impact of gender binary on other's lives
Seeing the gender binary as polarizing

**Learning that others perceive self through 'cisnormative' lens**
Becoming aware how others might have negative perceptions of oneself
Gaining a new perspective
Re-evaluating how others have been perceiving oneself

**Becoming fearful that others will perceive self negatively**
Questioning people's perceptions
Mental health warping perception of what others think

**Learning to expect transphobia from others**
"When I found out about transness, I found out about transphobia"
Internalising an expectation that others would be transphobic

**Feeling lucky compared to other trans friends**
Experiencing little discrimination
Feeling lucky for having support
Recognising own resiliency as greater than that of others
Feeling lucky not to have had enforced gender norms
Feeling lucky

**Highlighting presence of many non-binary friends who haven't self-harmed**

**Expressing importance of they/them as preferred pronouns**
Wanting to be called 'they'
Expressing personal importance of pronouns
Feeling passionate about pronouns
Experiencing dysphoria in relation to pronouns

**Trivial debate and ridicule about pronouns feeling dehumanising, humiliating and invalidating**
Families concern about grammatical use of 'they'
Feeling invalidated
Identity feeling questioned
Trivial debate about language vs invalidating whole identity
Feeling ridiculed by jokes about pronouns
Internalising ideas about identity as being trivial
Transphobic incident soon after coming out
Being called an 'it' by 'cool boy' at school
Feeling depersonalised
Experiencing transphobia in relation to pronouns
Feeling the emotional impact of transphobia
Feeling humiliated by negative responses to gender identity
Difficult family relationships leading to constant dehumanisation
Being 'warned' by extended family about negative consequences of gender non-conforming behaviour
Being seen as 'lesser than' by extended family

**Dehumanisation linked to self-harm through loss of respect for own body**
Dehumanisation experiences linked to self-harm
Dehumanising experiences resulting in losing respect for own body
Wanting to take it out on own body
Internalising dehumanisation

**Others not using preferred pronouns as an aggressive act of denial**
Experiencing pushback from extended family in relation to 'they/them' pronouns
Lack of awareness re. importance of pronouns from extended family

## Appendix 15: Focused codes across interviews

**WIDER SOCIETAL LACK OF BELONGING OR ACCEPTANCE RESULTING IN FEARS ABOUT BEING 'TOO ODD' TO EVER BE COMMONLY UNDERSTOOD OR ACCEPTED**

Wider societal feeling of not belonging as a significant underpinning of distress
Structural transphobia leading to feeling a lack of belonging or acceptance within society at large
Self-hatred influenced by non-binary identity not being recognised by society
Lack of belonging leading to feelings of worthlessness
Shift from being loved as an oddball to feeling like the odd one out
Feeling 'too odd to be commonly understood'
Fears about never being accepted or understood as non-binary by majority of people
Feeling like an outsider
Being seen as 'that non-binary person' whilst other aspects of identity are over-shadowed
Non-binary experiences often misunderstood or ignored
Other people finding it difficult to see gender as a sliding scale

**EXPERIENCING A BUILD UP OF DIFFICULTIES IN MULTIPLE ASPECTS OF LIFE LEADING TO BREAKING POINT**

Managing home/family difficulties
Build up of difficulties in all aspects of life (work, home, school) leading to breaking point
Feeling overwhelmed by negative experiences at home and school simultaneously
Managing multiple difficulties in various areas of life at the same time
Struggles with gender adding to other experienced stressors
Dealing with multiple difficulties at once during time of self-harm

**LACK OF LGBT+ AWARENESS IN CONSERVATIVE HOMETOWN RESULTING IN GREATER LEVELS OF DISCRIMINATION, NONAFFIRMATION AND A LACK OF SUPPORT**

Feeling out of place in conservative, white, middle class hometown
Lack of discussion and awareness of gender diversity in conservative area leading to non-affirmation
Impact of conservative area on level of abuse
Lack of diversity in hometown resulting in a lack of support for LGBT issues

**CONTRAST OF LIVING IN CONSERVATIVE HOMETOWN AND MOVING TO ACCEPTING, AFFIRMING CITY ENVIRONMENT**

Contrast of accepting, affirming environment at uni to conservative hometown
University friends actively embracing compared to home friends awkwardness
Contrast of visiting online friends in cities and coming back to difficult life at home
Having different life in home town compared to current city

**IMPACT OF INTERSECTING GENDER, SEXUALITY AND ARABIC CULTURE**

Negative talk and criticism from adults as normal in Arabic culture
Being traumatised by incarceration for 'impersonating the opposite sex'
Being part of hidden lesbian community within Arabic/Islamic culture
Internalising cultural and religious messaged about being 'wrong' and a sinner
Developing platform for BAME, LGBT and disabled people

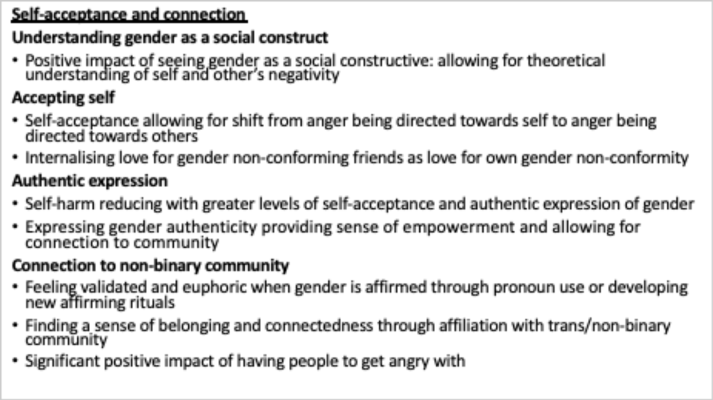
**PERFECTIONISM AND HIGH STANDARDS SET BY SELF OR FAMILY**

Striving to meet high expectations of extended family
Striving to meet family's high expectations resulting in self-loathing and depression
Being a perfectionist
High academic expectations resulting in exam stress
Family having high expectations
Perfectionism and high self-set standards
Mother's perfectionism resulting in high expectations of children's behaviour

**EXISTING FAMILY DIFFICULTIES: SPECIFICALLY, A LACK OF APPROPRIATE EMOTIONAL SUPPORT**

Parent's struggling to meet emotional needs impacting emotional functioning
Family difficulties resulting in own difficulties not being attended to
Parents emotionally distant
Existing relationship difficulties with parents
Relationship difficulties with mother contributing to depression
Family culture of not speaking about difficult things
Existing relationship difficulties and not feeling heard or respected by parents
Mother's own difficulties resulting in chaotic upbringing

## Appendix 16: Theoretical coding



**Self-acceptance and connection**

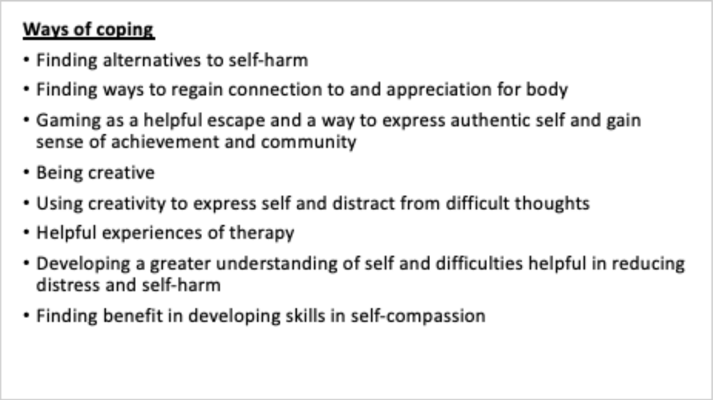
**Understanding gender as a social construct**
- Positive impact of seeing gender as a social constructive: allowing for theoretical understanding of self and other's negativity

**Accepting self**
- Self-acceptance allowing for shift from anger being directed towards self to anger being directed towards others
- Internalising love for gender non-conforming friends as love for own gender non-conformity

**Authentic expression**
- Self-harm reducing with greater levels of self-acceptance and authentic expression of gender
- Expressing gender authenticity providing sense of empowerment and allowing for connection to community

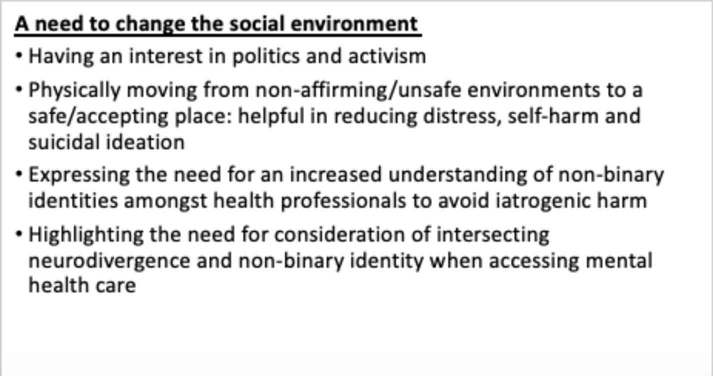
**Connection to non-binary community**
- Feeling validated and euphoric when gender is affirmed through pronoun use or developing new affirming rituals
- Finding a sense of belonging and connectedness through affiliation with trans/non-binary community
- Significant positive impact of having people to get angry with

7

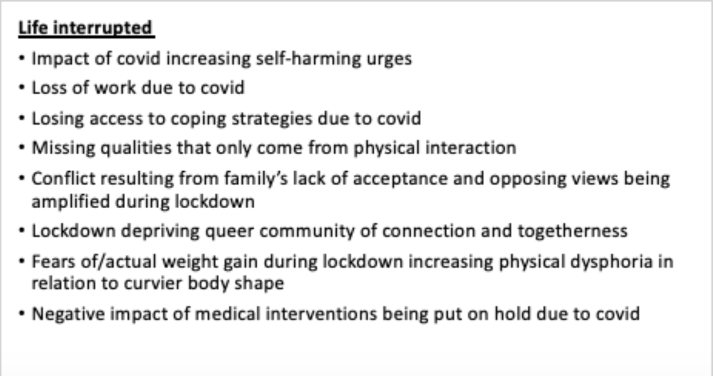


**Ways of coping**
- Finding alternatives to self-harm
- Finding ways to regain connection to and appreciation for body
- Gaming as a helpful escape and a way to express authentic self and gain sense of achievement and community
- Being creative
- Using creativity to express self and distract from difficult thoughts
- Helpful experiences of therapy
- Developing a greater understanding of self and difficulties helpful in reducing distress and self-harm
- Finding benefit in developing skills in self-compassion

8



**A need to change the social environment**
- Having an interest in politics and activism
- Physically moving from non-affirming/unsafe environments to a safe/accepting place: helpful in reducing distress, self-harm and suicidal ideation
- Expressing the need for an increased understanding of non-binary identities amongst health professionals to avoid iatrogenic harm
- Highlighting the need for consideration of intersecting neurodivergence and non-binary identity when accessing mental health care



**Life interrupted**
- Impact of covid increasing self-harming urges
- Loss of work due to covid
- Losing access to coping strategies due to covid
- Missing qualities that only come from physical interaction
- Conflict resulting from family's lack of acceptance and opposing views being amplified during lockdown
- Lockdown depriving queer community of connection and togetherness
- Fears of/actual weight gain during lockdown increasing physical dysphoria in relation to curvier body shape
- Negative impact of medical interventions being put on hold due to covid