FINDING ORDER IN CHAOS: ACCOUNTING FOR VARIATION IN ESTIMATES
OF SUICIDALITY AMONG TRANSGENDER ADULTS

by

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Abstract

This study, which uses a mixed methods design, within the framework of methodological triangulated design, examined the impact of 5 research variables (ethnicity, gender identity/sex at birth, education, suicidality questions, inclusion criteria) on variation in estimates of transgender suicidality; an inquiry largely absent from existing literature. I did so by collecting and examining qualitative and quantitative data over three separate stages (collecting statistical transgender suicidality data, collecting interview data, and analyzing the impact of these 5 variables on suicidality, using this data). I found that high educational attainment doesn't protect against suicidality, Black/African American ethnicity may, and that individuals assigned female at birth ideate less and attempt more than those assigned male at birth. These findings have utility for creating transgender-specific therapeutic treatment, legislative advocacy, and better research, which might focus on the effect of minority stress theory and suicidality protection/resilience factors to transgender individuals and communities.

List of Abbreviations Used

CD	Cross-Dresser
FAAB	Female Assigned at Birth
FTM	Female to Male transgender person
LGBT	Lesbian, Gay, Bisexual, and Transgender
MTF	Male to Female transgender person
MAAB	Male Assigned at Birth
US	United States/of America
WPATH	World Professional Association for Transgender Health
vs.	Versus

Glossary

Cisgender

A "cis/cisgender/cisperson, [is] a person whose gender identity is the same as the sex they were assigned at birth" (McNeil, Bailey, Ellis, Morton, & Regen, 2012, p. 93).

Cross-Dresser

This term describes individuals who desire to wear "clothing and/or... accessories that are considered to be more applicable to a person of the opposite sex... [They are typically] heterosexual males who dress in women's clothing, [and]... may or may not have erotic intentions" (Dickey, 2011, p. 19-20). Historically the slur transvestite was used to describe this group.

Gender identity

This term describes an individual's internal sense of themselves as male, female, both, neither, or some other permutation. This is distinct from sex, which refers to a person's natal, or birth 'sex'.

Gender Incongruence

Gender incongruence is the feeling, held by some transgender individuals, that one's sex assigned at birth and gender identity are misaligned. This feeling may extend to a desire "to have been born the other sex, or the desire to change sex" (Bockting, 2009, p. 103-104).

Gender Non-Conforming

This term describes individuals who do not identify as completely male or female and who may use descriptors like genderqueer, butch and/or transgendered.

Intersex

Intersex is an umbrella term that encompasses a number of medical conditions where an individual "is born with... reproductive or sexual anatomy that doesn't fit the typical definitions of female or male." This may manifest as elements of male and female anatomy in a single individual, or a potentially more invisible inconsistency of chromosomal sex (McNeil, Bailey, Ellis, & Regen, 2013, p. 53).

Inversion

This term, which is interchangeable with psychosexual inversion and total sex inversion, was historically used to describe "a spectrum of disorders, from mild effeminacy to homosexuality, transvestism, and finally transsexualism, each representing a more extreme form" (Benjamin, 1966, p. 76).

Suicidality

This term is used to collectively encompass both suicide attempts and ideation.

Suicide attempts

This term encompasses all occurrences where individuals attempt to intentionally kill themselves that do not end in death.

Suicidal ideation

This term describes the process of contemplating suicide, from passively wishing to be hit and killed by a vehicle or falling object, to actively planning to kill oneself.

Transition

Transition is typically defined as the time when an individual begins to live as a new gender that is different from the sex they were assigned at birth. This process usually starts with changing one's name and documents to reflect the new gender and may

include hormones and surgery to make the individuals body more closely match that of the gender to which they're transitioning (Grant et al., 2011, p. 181).

Transgender

Transgender is "an umbrella term that includes Two-Spirit people, transsexuals, cross-dressers, drag queens... drag kings, gender outlaws and all those whose gender roles are ambiguous" (Taylor, 2006, p. 13).

Transman

This term is synonymous with transman, FTM, and female-to-male. It describes an individual that is "assigned female at birth but has a male gender identity and... proposes to transition, is transitioning or has transitioned to live as a man, often with the assistance of hormone treatment and" surgery (McNeil et al., 2012, p. 93).

Transphobia

Transphobia describes an "intense dislike of or prejudice against transsexual or transgender people" (Oxford Dictionaries, n.d.).

Transwoman

This term is synonymous with transwoman, MTF, and male-to-female. It describes an individual that is "assigned male at birth but has a female gender identity and... proposes to transition, is transitioning or has transitioned to live as a woman, often with the assistance of hormone treatment and" surgery (McNeil et al., 2012, p. 93).

Transsexual

This term describes individuals who feel that "their inner sense of being male or female [fundamentally] conflicts... with [their] biological sex... [These individuals] have taken or want to take measures (surgery or hormones, etc.) to permanently change their

physical sex" (Taylor, 2006, p. 13).

Two-Spirit/ed

Two-spirit/ed is a term that is sometimes employed by first nations transgender individuals. It is "an umbrella term for aboriginal individuals who live between socially defined male and female gender roles" (Scheim et al., 2013, p. 108).

Chapter 1 Introduction

1.1 Introduction

The suicidality rate in the general population is consistently measured at about

.5% for attempts (Centers for Disease Control and Prevention, 2012, p. 1), and 4% for

ideation (Statistics Canada, 2004). By contrast, 43% of transgender individuals have been

reported to attempt and 77% to ideate (Scanlon, Travers, Coleman, Bauer & Boyce,

2010). These figures, however, are not consistent across the literature, and a wide variety

of transgender-specific estimates exist, including attempts of 3%, ideation of 50%

(Imbimbo et al., 2009), and everything else in between. This affects practice, policy and

research in a number of ways. For example, without an understanding of the relative

suicidality of transgender clients, the comparative effects of suicidality within this group

(e.g. due to ethnicity, level of education, etc.), or the degree to which ideation may

predict suicidality among its members, therapists are unable to create and practice from a

nuanced and evidence-based perspective that takes into account this population's

differential experience of suicidality. Specifically, "generalizable information is lacking

about suicidal behavior and suicide risk among transgender populations, and thus there is

currently little empirical basis for specific recommendations for practices involving

transgender individuals" (Haas et al., 2010, p. 33).

Similarly, campaigns for transgender-specific anti-discrimination legislation (e.g.

Bill C-279) are vulnerable to counter-attacks, because they rely heavily on citing

transgender-specific suicidality statistics that may be inaccurate. Likewise, many public

health materials, like suicidality prevention brochures, cite different and sometimes

inaccurate statistics, leaving transgender clients without clear information on this

phenomenon. Finally, researchers investigating this topic risk subjecting their

respondents to potentially distressing questions, without the probable gain of more accurate suicidality data, or the assurance that they won't compound the errors that led to this inconsistency in the first place. My research seeks to address the difficulties with applying transgender suicidality data to practice, policy and research, by clarifying the extent to which transgender suicidality varies in the literature, the factors that cause this variation, and the best methodology for measuring it in the future. This will provide more accurate data that, in the manner described above, can be immediately applied to practice and policy, while also laying the groundwork for future research.

This Chapter outlines and identifies the focus of this thesis in greater detail, by identifying transgender suicidality as a social problem; how I intend to address it; and why this methodology was chosen, relative both to the impact it will have on the phenomenon of transgender suicidality variation, and the benefits to the individuals and communities that experience it. Within this chapter, I begin by providing a discussion of the context in which transgender suicidality occurs, following which I identify the location of this thesis, within the literature on this topic; the utility of this literature to practice, policy and research; and an analysis of my own motivations for undertaking this investigation. I then discuss the purpose of this investigation, its intended impact on future practice, policy and research, and it's significance and scope. I also identify the use of a number of likely unfamiliar terms, whose definitions are provided throughout this thesis. Finally, I provide a synopsis of the organization and framework of this thesis, by way of a summary of the chapters within it.

1.2 Background

In recent years, transgender[1] individuals have become increasingly visible. Laverne Cox, who stars in *Orange is the New Black* (Kohan, 2013), is one such example. This visibility accompanies several critical civil rights battles, particularly in the areas of legislative protection, which affect the transgender community as a whole. Ontario's Toby's Act (*Bill 33*, 2013), Nova Scotia's *Bill 140* (2012), and *Bill C-279*[2] (2013), are three such examples.

Nevertheless, transgender individuals and communities, regardless as to whether they identify as Two-Spirit, transsexual[3], cross-dressers[4], drag performers, or gender outlaws (Taylor, 2006, p. 13), continue to be "at risk for multiple types and incidences of violence… particularly sexual violence" (Stotzer, 2009, p. 170), "systematic violence, marginalization, and identity erasure" (Scanlon et al., 2010).

Perhaps as a result, studies of transgender suicidality[5] result in appallingly high estimates. For example, an estimated 43% of transgender Ontarians have attempted and 77% ideated about suicide in their lifetimes (Scanlon et al., 2010), which contrasts with

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[1] Transgender is "an umbrella term that includes Two-Spirit people, transsexuals, cross-dressers, drag queens... drag kings, gender outlaws and all those whose gender roles are ambiguous" (Taylor, 2006, p. 13).

[2] This bill, designed to protect Canadians from discrimination based on gender identity, has recently been stalled by senate committee amendments that "bar transgender people from entering single-sex washrooms" (Hager, 2015). Nevertheless, its introduction does appear to have led 6 provinces to adopt its earlier provisions within their human rights codes (2015).

[3] This term describes individuals who feel that "their inner sense of being male or female [fundamentally] conflicts... with [their] biological sex... [These individuals] have taken or want to take measures (surgery or hormones, etc.) to permanently change their physical sex" (Taylor, 2006, p. 13).

[4] This term describes individuals who desire to wear "clothing and/or... accessories that are considered to be more applicable to a person of the opposite sex... [They are typically] heterosexual males who dress in women's clothing, [and]... may or may not have erotic intentions" (Dickey, 2011, p. 19-20). Historically the slur transvestite was used to describe this group.

[5] This term is used to collectively encompass both suicide attempts and ideation.

the general population, of which 0.5% attempt[6] (Centers for Disease Control and Prevention, 2012, p. 1), and 3.7% ideate[7] (Statistics Canada, 2004) about suicide annually. Frustratingly, estimates of transgender suicidality also appear to be highly variable, in distinct contrast to the general population, for whom rates are virtually the same from year to year[8]. For example, compared to the above rates, other studies have measured transgender suicidality at 25% for attempts and 65% for ideation (Xavier, Honnold, & Bradford, 2007, p. 22-23); and still others report approximately 3% for attempts and 50% for ideation (Imbimbo et al, 2009, p. 2739). Clearly this is a wide degree of variation over a relatively short period of time.

There is, furthermore, a documented "lack of trans-positive, trans-inclusive and trans-responsive clinical services and supports" (Ontario Public Health Association, 2003, p. 3), despite the clear indication for "trans-specific and sensitive" suicidality resources (p. 11-12). In fact, it is conceivable that this variation may undermine the creation of such materials, by calling in to question the level and accuracy of knowledge regarding the impact of suicidality on transgender individuals.

Accordingly, the goal of this thesis is to measure the extent of variation in transgender suicidality studies, examine the factors that lead to this variation (e.g. ethnicity), and determine the best methodology for measuring this in the future. This is expressed in the following three research questions.

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[6] This term encompasses all occurrences where individuals attempt to intentionally kill themselves that do not end in death.
[7] This term describes the process of contemplating suicide, from passively wishing to be hit and killed by a vehicle or falling object, to actively planning to kill oneself.
[8] Completed suicide ranges from a low of 10.8/100,000 in 2011 to a high of 11.6/100,000 in 2010 (Statistics Canada, 2012). Similarly, Canadian and US (US) rates are virtually identical.

1. How much do estimates of transgender suicidality vary?

2. What factors cause transgender suicidality variation?

3. And what is the best methodology for measuring transgender suicidality?

1.3 Context

This inquiry is a natural outgrowth of previous transgender suicidality research, as, while this research has increased overall, no investigations have been conducted on the degree to which transgender suicidality estimates vary, why they do so, what this variation means, or the best way to decrease it. In fact, "little research has compared prevalence of suicidal behavior in transgender people to other population groups [with]... virtually no generalizable conclusions... generated about suicidal behavior or... risk in this population" (Haas et al., 2010, p. 27-28). This is despite the urgent need to

identify prevalence, causes, and pathways to suicidal behavior for... individuals in all gender, age and racial and ethnic groups [as well as to]... examine the relationship between [transgender] suicidal behavior and stigma and discrimination, and document the impact of evolving policies and laws related to LGBT people (p. 32).

Furthermore, although it is known that transgender suicidality is high, the wide degree of variation and low degree of generalizability, of suicidality statistics, provides "little empirical basis for specific recommendations for practices involving transgender individuals" (p. 33). Similarly, the lack of systematic and generalizable data makes dissemination of existing findings difficult, despite "growing recognition of the need to include more extensive information on [transgender suicidality] in educational and training programs for… professionals (p. 35)", as well as public health campaigns.

Indeed, the National Transgender Discrimination Survey (Grant et al., 2011) is one of the few studies to be widely disseminated.

Accordingly, the goal of this research is to determine the degree of variation in rates of transgender suicidality; whether particular variables (e.g. ethnicity) might be more accurately measured, or conversely, contribute to variation; and what methodology is best used in reducing the impact of this variation, both in general and with regards to the variables mentioned. The hope is that these inquiries will increase the utility, of research on transgender suicidality, to practice, policy and for future research, because

> as long as unnecessary variations in methodology remain, as long as the issue of
> what we are actually studying and how we are measuring that is not yet settled, as
> long as one is unaware of pitfalls in statistical interpretation, a better
> understanding of suicidal behavior will not be gained (de Wilde, 2002, p. 55).

Specific to the impact of this research on practice; investigating suicidality rate variation may allow therapists to inform their practice with evidence on the comparative effects of suicidality within this group (e.g. based on education) and the degree to which ideation predicts suicidality among its' members. The latter would be particularly useful in assessing the level of risk faced by a transgender client experiencing suicidal ideation, and thus the urgency of intervention, relative to the therapists' clinical judgment and expertise. With respect to policy, these inquiries allow for the creation of transgender suicidality statistics that are less vulnerable to counter-attacks, when used in advocacy for transgender-specific anti-discrimination legislation (e.g. *Bill C-279*). They also allow for the replacement of inaccurate suicidality-prevention public health materials (e.g. suicide prevention brochures). Finally, these inquiries will help future researchers inquire into

transgender suicidality, with less risk of compounding the errors leading to this variation, and less of subjecting study respondents[9] to potentially distressing questions, for research of questionable quality.

On a more personal level, this investigation is driven by my own experiences as a transgender person that has done a significant amount of activism on the subject. It matters deeply to me that every transgender person I know has either been suicidal or knows another who has. I would like for no trans person to ever again feel that their only solution to a lifetime of trauma and oppression is death; and I want our larger society to both be aware that this is happening and to care. I often hear transgender people talk about suicidality and the hopelessness instilled by both reports of high suicidality and the fact that even this data cannot be relied on. As a known researcher in this area, I am often asked by other transgender individuals to clarify this discrepancy and it is distressing and disappointing to both of us that I cannot.

1.4 Purpose

The primary purpose is to determine how much estimates of transgender suicidality vary in the current research literature, whether particular factors are implicated in this variation, and what methodology is best used to limit it, both in general and specific to the factors assessed. Note that these variables include ethnicity, gender identification and sex at birth, education, suicidality questions and inclusion criteria, while the manner in which they are selected is discussed in Chapter 3. The secondary benefits include the identification of best methodologies for researching this topic, as well

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[9] For the sake of clarity, within this thesis, the interview participants are referred to as either 'interview participants', or 'participants', while the respondents to their studies are referred to as 'respondents'.

as implications for transgender suicidality practice and policy.

Note also, that this thesis focuses on suicidal ideation and attempts[10], rather than completion, which is the common convention in suicidality research. In fact, conclusively classifying a death as suicide is an exceptionally difficult task, as homicide, illness, and disease must be ruled out, while self-injury, inflicted with the goal of causing death, must be proven (Corcoran, & Arensman, 2010, p. 174). Similarly, "the deceased, or… bereaved, may have tried to disguise the suicidal nature of the death… police may be less inclined to seek further information [once homicide has been ruled out, and]… coroners may be resistant to giving a verdict of suicide" (p. 174). Further complicating matters, there is no single operational set of criteria for determining suicide, with definitions varying depending on the authority (e.g. police, emergency responders, coroner) (p. 174).

Issues associated with accurately classifying a death as suicide are exacerbated in LGBT populations, "because death records do not routinely include the deceased person's sexual [or gender] orientation (Haas et al, 2010, p. 15) [and there is]… little information… available about completed suicide among transgender individuals" (p. 26). Privacy, stigma, and inability of officials to identify transgender individuals also prevent accurate data gathering (Haas, & Lane, 2015, p. 85). As a result, the focus of this thesis is on suicidal ideation and attempts, among transgender individuals.

This investigation is critical, because we are at a stage in transgender suicidality research, where we must step back and take stock of what we know and what we do not, before we can either use the former to benefit transgender individuals and communities, or rectify the latter. This investigation, which will be disseminated to the transgender

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[10] In this thesis, suicidal ideation and attempts are collectively referred to as suicidality.

community via academic publications, conferences, and community events, is a first step down this path.

1.5 Significance, Scope, and Definitions

This research is both significant and wide in scope. It is significant because it addresses both an under-researched field (transgender suicidality) and specifically, a topic that has not been investigated (transgender suicidality variation). It is wide, because it is applicable to a number of areas, particularly practice and policy. Practice implications, for example, could include the creation of transgender-specific suicidality prevention and treatment materials to augment the few that currently exist (e.g. Massachusetts Transgender Suicide Prevention Working Group, n.d.[a]; National Aboriginal Health Organization, 2012). Implications for policy creation, on the other hand, include the creation of more generalizable transgender suicidality statistics, which can be used to advocate for legislation (e.g. *Bill 33*, 2013[11]) that supports the elimination of underlying causes of transgender suicidality, such as "stigma, prejudice... discrimination, [and] hostile and stressful social environments [which cause] mental health problems" (Meyer, 2003, p. 674). More coherent suicidality statistics might also be employed in arguing for the financial support and resources needed to create these materials and further this advocacy, particularly as regards organizations that mandate evidence-based practice, precise statistics, 'actionable' criteria, and measured outcomes.

Four other factors are significant in my research project; the potential for it to impact the creation of guidelines for transgender suicidality research, the unique research

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[11] Known as Toby's Act, this law bans discrimination in Ontario, based on gender identity and expression, while also providing an avenue for redress through the Ontario Human Rights Tribunal.

design, the use of insider expertise and its political expedience. In the first case, my research, focusing as it does on the causes and impacts of variance in rates of transgender suicidality, may result in, or influence the creation of guidelines for future transgender suicidality research. Such guidelines could improve the consistency and coherence of transgender suicidality data by encouraging consistent application of research methodologies.

As noted, my research project also employs a unique methodological design. Specifically, I use a mixed methodological and methodologically triangulated research design, to combine an analysis of studies on transgender suicidality, with interviews[12] of the authors of this research. This design may potentially be useful in future research, particularly where the inclusion of author perspectives would add to a robust understanding of the research area generally and the specific methodological choices made by individual researchers.

Regarding the use of insider experience; as a transgender individual myself, I have the advantage of insider expertise (aka insider authority, or insider knowledge), defined as knowledge of oppression held by those "most directly connected with the experience of social exclusion" (Richardson, & Le Grand, 2002, p. 22). John Hostetler, for example, who was both a leading ethnographer of Amish societies and a former Amish man, often "wrote squarely from the middle of the insider/outsider continuum" (Eppley, 2006).

One crucial benefit "to being a member of the group one is studying is acceptance

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[12] These interviews are conducted with the first, or second, authors of the 28 original North American studies, published since 1997, that measured transgender suicidality either 'ever', or during a specific period (e.g. months, years) (see Appendix A for more information on how this group was selected).

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[, where] one's membership automatically provides a level of trust and openness that would likely not have been present otherwise" (Dwyer & Buckle, 2009, p. 58). This is particularly useful in the case of research with transgender respondents, given "the sordid history of transgender populations' relationship with psychology, [which] for many years [has studied them]... as objects of interest... [and] often pathologized and further stigmatized [them]... within the psychological literature" (American Psychological Association of Graduate Students Committee on LGBT Concerns, 2013, p. 2).

Of course, while I don't claim to represent the entire transgender community, my research does exist within the tradition of "community members bringing their knowledge and lived experience to the research [which I do with the explicit] goal of [achieving] social change [to] benefit the community" (Lazarus et al., 2014, p. 2). The belief that "minority stressors require group-level resources because only the group can repair or replace societal prejudicial norms and values... and promote affirmative social support, role models, and so on" makes this particularly important (Meyer, Teylan, & Schwartz, 2015, p. 450).

Regarding the political expedience of my research. As already noted, transgender individuals and communities are becoming increasingly visible in both popular media and everyday scenarios, such as workplaces and educational settings. This visibility accompanies key civil rights battles, particularly for legislated human rights protections (e.g. *Bill 33*, 2013; *Bill 140,* 2012), which may help to reduce transgender suicidality. Transgender suicidality statistics, particularly from the National Transgender Discrimination Survey (Grant et al., 2010) and TransPULSE (Scanlon et al., 2010), are often used to advocate for this legislation (e.g. DiNovo, 2012).

However, this legislation also invariably attracts vociferous and sometimes vicious debate, as evidenced by dissenters' tendency to characterize these bills as 'bathroom bills' (Hager, 2015) that "threaten the lives of girls and women by putting them at greater risk from male sexual predators" (Baklinski, 2012). Narratives, such as these, are often presented as expert evidence of the harm that this legislation could cause (e.g. Ditchburn, 2013), while the supporting research is subjected to criticism on both real and perceived grounds. For example, discrepancy in rates of transgender suicidality and purported methodological faults in transgender suicidality research have been used to attempt to discredit both this research in general and its suicidality findings specifically (e.g. Shanko, 2011a[13]). Regarding the latter, dissenters have leveraged the perceived research flaws to refute the phenomenon of high transgender suicidality (e.g. Shanko, 2011a), anti-transgender discrimination (e.g. Shanko, 2011b), and the associated need for specific transgender human rights protections. Dissenters have also relied on research, which argues that transgender individuals experience higher suicidality following surgical transition (Meyer & Reter, 1979).

Regarding the treatment of more recent research, in a highly politically charged environment, it is critical to ensure that transgender suicidality research is taken seriously and not written off. My study will further this goal by allowing those arguing for transgender-specific human rights protections to frame a suitable rebuttal to claims that this research inaccurately finds high rates of suicidality. Regarding the continued use of Meyer & Reter (1979), my literature review provides ample evidence of the widely

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[13] As noted, at least one campaigner has made this connection (Shanko, 2011a) and while her allegations are not yet widely disseminated, her blog is widely read by those who lobby against transgender rights, and it would be prudent to have a counter argument.

acknowledged bias in this particular study (e.g. Fleming, Steinman, & Bocknek, 1980; Denny, 2014). In fact, it seems that the question of whether sexual reassignment surgery leads to suicidality is one that continually reappears, often in response to public outcry, despite no credible study finding this outcome (e.g. Pauly, 1965; 1974a; 1974b; 1981).

Lastly, a word about the political motivations of transgender suicidality researchers; an increasing number of these researchers are either members of, or embedded in the transgender community, and undertake this research with the goal of ending transgender discrimination in its various forms. It is sometimes even explicitly hoped that this research will be used to advocate for legislative protections (e.g. Grant et al., 2011). In this highly charged political environment, researchers may chose not to investigate particular areas for fear of findings being taken out of context. For example, while the transgender community is increasingly complex, it may sometimes be seen as politically expedient to present it as a more homogenous and socially palatable group, which may be reflected in the gender identity categories used. My own research may provide some clarification of the areas where this has occurred and the researchers rationale for doing so.

Finally, regarding unfamiliar terms used throughout this thesis (e.g. cisgender[14]). Definitions are provided for these terms, both in the glossary (p. xi) and upon the first instance of a terms use, where the definition is provided in a footnote. These definitions are based on authoritative sources from the relevant literature.

1.6 Outline

In Chapter 2, I present a description, analysis and review of the literature on

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[14] A "cis/cisgendered/cisperson, [is] a person whose gender identity is the same as the sex they were assigned at birth" (McNeil et al., 2012, p. 93).

transgender suicidality, including its historical and theoretical background, current trends, previous attempts to measure suicidality variation, and the implications of these factors to this thesis. Throughout this chapter, the process of cataloguing transgender suicidality provides the answer to question 1[15], while also identifying factors implicated in variation (question 2[16]), and potential methodologies for reducing it (question 3[17]).

In Chapter 3, I discuss the research design employed by this thesis; for example, the use of a mixed methodological and methodologically triangulated research design, to collect and analyze data, as well as the technology used to collect and analyze it. The ethical implications of the research design are also outlined, as are the methods of reducing potential risks, such as to anonymity.

In Chapter 4, I present the qualitative and quantitative analysis, as regards both data extracted from the interviews, and descriptive analyses of published rates of transgender suicidality. The latter of which involves, first, the 28 North American studies, published since 1997, that measured transgender suicidality either 'ever', or in relation to a specific time period; and second, the 20 studies that measured this 'ever', as compared to the effect of 5 variables identified through the interviews (ethnicity[18], gender identity and sex at birth, education, questions asked, and inclusion criteria). This chapter is particularly relevant to questions 1 and 2.

Whereas Chapter 4 is interested in presenting the qualitative and quantitative data without comment, Chapter 5 discusses and explores these findings, particularly in regards

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[15] How much do estimates of transgender suicidality vary?
[16] What factors cause transgender suicidality variation?
[16] What is the best methodology for measuring transgender suicidality?
[18] For example, the suicidality rate in studies where a majority of respondents are of a particular ethnicity (e.g. Caucasian), compared to that of other ethnicities (e.g. Black/African-American).

to their context, in terms of formulating and conducting the analyses and compared to other suicidality research; their utility to practice, and policy; and the possible direction of future research. While both questions 1[19] and 2[20] are relevant to this chapter, it is in the discussion of these findings, in the context of other suicidality research, that the answer to question 3[21] is found. Finally, in Chapter 6 I summarize the entirety of this thesis and its findings, as regards its methods and design, the three research questions, and the application of these findings to practice, policy and future research.

1.7 Conclusion

The intention of this chapter was to identify the inquiry conducted by this thesis, explain and justify why it was chosen, and identify how I did so. Also discussed were my personal motivations, the key terms employed, and an outline of the remaining chapters.

This chapter establishes both that transgender suicidality varies a great deal and that it is several times higher than the general population. This is in the context of a population that, while suffering disproportionately from violence, has also successfully lobbied for several recent pieces of human rights legislation. However, the impact of the latter on suicidality is, as yet, unknown. Were this known, practice and policy resources, such as informational brochures, treatment materials, and prevention-related policy, could be created to address it. This inquiry attempts to address this knowledge gap, by determining the degree and cause of transgender suicidality variation, with respect to the role that ethnicity, gender identity and sex at birth, education, suicidality questions and

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[19] How much do estimates of transgender suicidality vary?
[20] What factors cause transgender suicidality variation?
[21] What is the best methodology for measuring transgender suicidality?

inclusion criteria play.

I present the literature review and analysis in the following chapter, starting with a discussion of the major theory and themes, within the body of literature on this topic, and using a framework that divides the literature into a classical and modern period. Following this, previous attempts to measure transgender suicidality, via meta-analyses and systematic reviews, are discussed, with specific attention paid to the deficiencies in these attempts. Finally, the creation and usefulness of transgender-specific practice and policy materials, such as brochures, suicide-prevention hotlines, and legislation, are elaborated on.

Chapter 2 Literature Review

2.1 Introduction

The purpose of this chapter is to review the English-language literature on

suicidality in adult[22] transgender individuals, beginning with the first report in 1953, and

ending in 2014[23]. This began by identifying the 166 publications[24] that mentioned

transgender suicidality, in peer-reviewed journals, books, and community reports[25] and

identifying how they relate to my own inquiries[26]; for example, whether they examine the

lack of accuracy in estimates of transgender suicidality, scarcity of literature on this topic,

and/or usefulness of more accurate suicidality statistics to public policy efforts, advocacy,

and the creation of materials for practice and suicidality prevention. In this last case, the

relative dearth of transgender-specific practice and suicidality prevention materials is also

discussed.

The theory and themes, used in the literature on transgender suicidality, are

addressed first. Primarily this involved identifying two periods that take place in different

eras and apply distinctly different theories of transgender behavior to their research on

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[22] Publications that reported on respondents who were mostly under 18 (50+1%) were excluded from this study, as this is a separate population.

[23] Although the modern period is ongoing, data collection for this thesis ended on May 26, 2014, and the literature is only reported on to this date.

[24] Publications were found at conferences, by searching Google Search, Google Scholar, and the WorldCat database and by hand-searching references in identified articles (see Appendix A).

[25] Community reports are created to relay research findings to the group being studied, usually self-published, and used extensively by transgender community-led Community-Based Participatory Research. They are included both to mitigate academic publication bias, which favors positive findings, and maximize the contribution of transgender researchers and communities.

[26] How much do estimates of transgender suicidality vary; what factors cause transgender suicidality variation; and what is the best methodology for measuring transgender suicidality?

suicidality in this population. Following this, previous attempts to measure and catalogue

transgender suicidality are discussed, with particular attention paid to the deficiencies in

this research, with regard to answering the research questions[27]. Finally, with respect to

both consumers and practitioners, the literature that drives transgender suicidality

practice and policy, such as transgender-specific anti-suicidality brochures, prevention

hotlines, and policy creation efforts, is identified and discussed.

2.2 Theory and Themes

Transgender suicidality literature falls into classical[28] (1953-1997) and modern[29]

(1997- present) periods, so named for their dictionary definitions. These periods are

primarily distinguished by the dominant theory/model of transgender identity and

behavior employed, with the classical period using the disease-based model exclusively

and the identity-based model ascendant in the modern period, particularly in non-clinical

settings. In fact, this distinction pervades all aspects of the literature on transgender

suicidality, as we will see.

2.2.1 The classical period: 1953 – 1997. The inaugural report on transgender

suicidality investigated its occurrence, before transition[30], in a 'transvestite'[31]

(Hamburger, Sturup, & Dahl-Iverson, 1953). Prior to this, transgender suicidality

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[27] How much do estimates of transgender suicidality vary; what factors cause transgender suicidality variation; and what is the best methodology for measuring transgender suicidality?

[28] "Accepted as standard and authoritative, [rather than]… novel or experimental" ("classical", n.d.)

[29] "Of or relating to present and recent [rather than] ancient or remote" ("modern", n.d)

[30] Transition is typically defined as the time when an individual begins to live as a new gender that is different from the sex they were assigned at birth. This process usually starts with changing one's name and documents to reflect the new gender and may include hormones and surgery to make the individuals body more closely match that of the gender to which they're transitioning (Grant et al., 2011, p. 181).

[31] See Cross-Dresser (CD).

research followed the convention of conflating transgender and homosexual identity, using terms such as inversion[32] (Ellis, 1927). It should, therefore, be no surprise that little of the early work on transgender health, and none on suicidality, was completed by openly transgender individuals. Indeed, Dr. Laurence Michael Dillon, who was one of the few to do so (1946), is only known to be transgender because of a discrepancy between peerage listings ("A Change of Heir", 1958, p. 36).

Similarly, within this period, no research undertook to investigate, or even conceived of individuals that are Gender Non-Conforming[33], or have non-binary gender identities. Instead, transsexual respondents were conflated as either Male-to-Female (MTF[34]), or Female-to-Male (FTM[35]), depending on the sex to which they were assigned at birth. If not so assigned, an individual might be categorized as a transvestite[36], which was sometimes conflated with transsexual, and usually identified the wearing of female clothing, by male-bodied individuals, as a sexual pathology (Edgerton & Meyer, 1973, p. 121). As a result, not much can be said about the experiences of Gender Non-Conforming respondents in this period.

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[32] This term, which is interchangeable with psychosexual inversion and total sex inversion, was historically used to describe "a spectrum of disorders, from mild effeminacy to homosexuality, transvestism, and finally transsexualism, each representing a more extreme form" (Benjamin, 1966, p. 76).

[33] This term describes individuals who do not identify as completely male or female and who may use descriptors like genderqueer, butch and/or transgendered.

[34] This term is synonymous with transwoman, MTF, and male-to-female. It describes an individual that is "assigned male at birth but has a female gender identity and... proposes to transition, is transitioning or has transitioned to live as a woman, often with the assistance of hormone treatment and" surgery (McNeil et al., 2012, p. 93).

[35] This term is synonymous with transman, FTM, and female-to-male. It describes an individual that is "assigned female at birth but has a male gender identity and... proposes to transition, is transitioning or has transitioned to live as a man, often with the assistance of hormone treatment and" surgery (McNeil et al., 2012, p. 93).

[36] See CD.

The classical period is deeply rooted in the belief that transgender identity is fundamentally psychopathological (e.g. Edgerton & Meyer, 1973, p. 118; Hunt, & Hampson, 1980) and profoundly influenced by psychoanalysis (Walinder, 1967). This belief came to be identified, within the modern period, as the disease-based model (Bockting, 2009). Accordingly, within the academic literature of this period, transgender individuals are described as deviant (Stoller, 1968), criminal (Randell, 1971), "demanding, manipulative…[and] coercive" (Lothstein, 1979, p. 434). It is unsurprising that these beliefs existed in an era that criminalized the act of "publically impersonating a woman [or man, and] charged [violators] with elastic offenses such as disturbing the peace or being a public nuisance" (Green, 1970, p. 1599).

Within this period, various attempts at curing transgender identity and behavior were made, involving methods such as "psychoanalysis, hypnosis, aversion, deconditioning, [and]… chemotherapy" (Pauly, 1968, p. 465). Indeed, despite a "lack of empirical support a large number of psychologists and psychiatrists… [remained] formally opposed to all surgical transformation… [believing that it] would inevitably lead to suicide or psychotic breakdown" (Michel, Ansseau, Legros, Pitchor, & Mormont, 2002, p. 356). Even those that acknowledged the immutability of transgender identity (Benjamin, 1966, p. 53; Benjamin, 1969, p. 136; Randell, 1971, p. 154) and endorsed gender recognition surgery[37] only did so as an "adjunctive therapy" (Edgerton & Meyer, 1973, p. 118) for transsexuals that were "pathetically female" (Randell, 1971, p. 157) and "screaming homosexuals" (p. 161); and this, from the perspective that, "if [MTFs] are going to be ladies they should be lady-like… conform, and not give trouble" (p. 157).

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[37] Also referred to as sexual reassignment surgery and gender realignment surgery.

Suicidality, within the classical period, is usually characterized as a symptom of the psychopathology underlying transgender identity and reactive to the desire for gender recognition surgery (e.g. Randell, 1959, p. 1450; Randell, 1971). Even so, it is often viewed as a manipulative act, designed to "force physicians to carry out desired surgery" (Pierce, 1977, p. 436); and while "there [often is] marked improvement following ... surgery" (Mate-Kole, Freschi, & Robin, 1988, p. 550), it is felt to be "second-best to a method of preventing these tragic reversals of gender identity and role" (Hastings, 1974, p. 344).

2.2.2 The modern period: 1997 – Present. The modern period, beginning in 1997 (Devor)[38], is characterized by the shift to an identity-based model of transgender identity and behavior (Bockting, 2009, p. 104). This model, which is increasingly employed, sees transgender identity as a natural part of a spectrum that includes identities inside and "outside of the boundaries of male versus [vs.] female, man vs. woman and masculine vs. feminine" (p. 104). Its proponents point out that transgender identity is only seen as deviant, because socio-cultural boundaries and taboos are constructed with the intention of fixing sex and gender as both congruent and binary. These researchers note that a major cause of transgender suicidality is the anxiety, oppression, and stigma that result from this cultural clash (Clements-Nolle, Marx, & Katz, 2006, p. 54; Nuttbrock, Hwahng, Bockting, & Rosenblum, 2010; Scanlon et al., 2010).

In practice, the identity-based model has been used to design research that centers the transgender community' opinions and goals. This model has also led to the use of creative and novel methodologies, like needs assessments and Community Based

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[38] Note that, although published in 1997, research was initiated up to 10 years prior to this date, as in Devor (1997).

Research/Community-Based Participatory Research, in this field. Devor (1997), for example, used this model as a framework to explore the personal identity and experiences of Female-to-Male (FTM) individuals. Other researchers, using this model, have also found evidence of decreased suicidality following surgical and/or medical transition (Imbimbo et al., 2009).

Nevertheless the disease-based model has continued to hold relevance in this period (Bockting, 2009), primarily within clinical and research environments (Richmond, Carroll, & Denboske, 2010, p. 114). Practitioners using this model continue to see transgender identity and behavior as disordered, although they are increasingly at odds as to whether it is caused by mental, hormonal, biological, and/or genetic factors (Richmond et al., 2010). As a result, researchers in this period disagree as to whether transgender suicidality is caused by individual pathology, or anti-transgender stigma and oppression (Clements-Nolle et al., 2006, p. 54; Nuttbrock et al., 2010; Scanlon et al., 2010). Notably this disagreement occurs among users of both identity-based and disease-based models.

The quality of modern transgender suicidality research has also improved over the classical period. This is true of non-transgender research as well, which "has increased dramatically during the past two decades" (de Wilde, 2002, p. 55), possibly due to increased interest in the subject of suicidality generally (p. 56). However, improved technology and widespread access to personal computers and statistical software also play a role (p. 56). For example, statistical models that twenty years ago required a few days and several years of statistical training to perform, today require just "a few clicks of a mouse... and good understanding of a program's function" (p. 56).

In the case of transgender suicidality research, improved quality may be partially

due to the use of novel and creative methodologies; for example, the use of seed-based[39] respondent selection (Scanlon et al., 2010), which allows researchers to improve generalizability by statistically approximating random sampling (Heckathorn, 1997), while avoiding the ethical pitfalls of randomized controlled trials. An example of these pitfalls would be a study that measured the impact of suicidality on transgender individuals by denying hormone replacement therapy to one group and giving it to another. This would, of course, be deeply unethical, because it exposes respondents to the "increased risk of depression and suicidality", which is known to occur when hormone replacement therapy is withheld from transsexuals (Meier et al., 2011, p. 295). Another creative methodology is Hwahng, & Nuttbrock's (2007) adaptation of the Life Chart Interview to focus on the life experiences of transgender individuals.

Nevertheless, while the identity-based model has come into common use in North American research[40] it has not been consistently utilized in that conducted and published internationally. For example, international research has continued to rely heavily, though not exclusively, on clinical research settings, which, as mentioned, tend to eschew community-based research methods, transgender participation, and have a legacy of using the disease-based model (e.g. Dhejne et al., 2011; Landen, Walinder, & Lundstrom, 1998; Walinder, 1967). Similarly, while North American research increasingly views

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[39] A particularly rigorous type of snowball sample, this methodology allows the researcher to compensate for convenience samples. It starts with a set of respondents (seeds), who are selected for their position in the hidden population being sampled, much like key informants. After participating in the research, these seeds are responsible for recruiting a specific number of other respondents in their community, who are themselves responsible for recruitment of other respondents. Recruitment continues on, in this manner, until 'equilibrium' is reached (Scheim, & Bauer, 2014).

[40] North American research is defined as either being published in Canada/the US, or employing a majority North American cohort.

transgender-identity as part of a natural spectrum (Bockting, 2009, p. 104), much international research continues to see this through a modified disease-based lens, which identifies transgender identity as neurobiological in origin, rather than psychopathological (Kruijver et al., 2000). On the other hand, the treatment of suicidality has shifted in both environs, with North American and international research tending to view transgender suicidality as primarily the result of anti-transgender oppression and stigma, rather than inherent psychopathology. The differences between the models presently in use in North American and international research may, in part, be due to differences in their history of transgender healthcare.

In the US, transgender healthcare was traditionally accessed via gender identity clinics. In 1979, however, Meyer & Reter published a study purporting to find that "sex reassignment surgery... conferred no objective advantage in terms of social rehabilitation" (1979, p. 1015). This finding was (and continues to be) in direct contrast to the majority of research findings, which show "psychiatric and psychological improvement after hormonal and/or surgical treatment" (Dhejne et al., 2011, p. 2). While Meyer & Reter (1979) was quickly discredited as methodologically unsound (Fleming et al., 1980) and likely ideologically motivated (Denny, D, 2014; McHugh, 1992), it remained influential, perhaps because it "came from [the Johns Hopkins Gender Identity Clinic, which was] the first and biggest US academic medical center [to] provide transgender care" (Erickson-Schroth, 2014, p. 217). Indeed, Meyer & Reter (1979) was used to eliminate "most insurance coverage for transgender care… [and] justify the closure of [all but one] gender program at US academic medical centers [after which]… almost all [transgender healthcare] in the United States was provided outside of

mainstream academic medicine (Erickson-Schroth, 2014, p. 217; Denny, 2014). In fact, Meyer & Reter (1979) continue to be cited in the media, primarily by politically and religiously motivated partisans, as proof of the high rate of negative GRS outcomes, such as suicide (McHugh, 2014, Heyer, 2013). As such, it is a prime example of the actively harmful effect of inaccurate and biased transgender suicidality statistics.

Nevertheless, while a significant blow, the closure of gender identity clinics succeeded in breaking their monopoly on transgender healthcare, resulting in the "creation [of] a market economy for [gender recognition surgery, and]… helping professionals who viewed transsexuals" through an identity-based lens (Denny, 2014). Likewise, this situation resulted in "the development of a more patient-centered model of transgender medicine [as]... transgender care [left] academic medical centers and [for] community settings" (Erickson-Schroth, 2014, p. 217). This has increasingly empowered transsexuals to demand the individualized application of gender recognition surgery approval criteria and surgical techniques (World Professional Association for Transgender Health, 2012). On the other hand, however, those who cannot afford private services must rely on public insurance, where available (e.g. Medicare, British Columbia Medical Services Plan), which usually requires them to meet more stringent assessment criteria, with less choice of surgeon and technique (Vancouver Coastal Health; Transcend Transgender Support & Education Society; & Canadian Rainbow Health Coalition, 2006, p. 2-4).

By contrast, in Europe, where the bulk of transgender suicidality research outside North America is published, gender identity clinics don't appear to have ever been widely shut down; nor was this the case internationally, outside of Europe. As a result, these

clinics' control over transgender healthcare generally, and gender recognition surgery specifically, was never systematically disrupted (van der Ven, 1999, p. 18). Clearly Meyer & Reter (1979) did not have the same impact internationally as in the US. While nothing has been written as to why this was so, it may be that, in the context of countries that had pioneered state-provided transgender healthcare (e.g. Hamburger et al., 1953) and absent the director of Johns Hopkins Gender Identity Clinic's documented anti-transgender bias[41], such drastic and immediate course changes were neither feasible, nor attractive. Certainly, just one year after it was published, there was clear evidence that Meyer & Reter (1979) was fatally flawed (Fleming et al., 1980), and these international clinics may indeed have felt vindicated in their decision to 'wait and see'.

In any case, outside of the US, gender identity clinics' continued to be the lone access point and their use of stringent, often arbitrary, and frankly offensive assessment criteria (e.g. Randell, 1971) continued to stand between transgender individuals and transgender healthcare. Indeed, where transgender healthcare (especially gender recognition surgery) is provided publically, more stringent assessment criteria are usually applied (van der Ven, 1999, p. 18; European Parliament, 2010), than for those who pay privately. These clinics are also usually research-based and tend to conduct studies in clinical or laboratory settings, which eschew community-based research methods, transgender participation, and have a legacy of using the disease-based model (e.g. Cole, O'Boyle, Emory, & Meyer, 1997; Dhejne et al., 2011).

2.3 Previous Attempts to Measure Variation in Rates of Transgender Suicidality

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[41] Then director of the John Hopkins Gender Identity Clinic, Dr. Paul McHugh, has stated that, when he "arrived in Baltimore in 1975... he "set out to... discredit what he viewed as a 'misdirection of psychiatry' [and to] help end [transgender healthcare at the clinic]" (Erickson-Schroth, 2014, p. 217; McHugh, 1992; McHugh, 2014).

Since the inaugural report on suicidality in a gender incongruent[42] individual (Hamburger et al., 1953), 97 other reports[43] (that provide estimates of transgender suicidality in 5 or more respondents) have followed. While this literature clearly demonstrates variation in suicidality rates, few attempts have been made to measure the extent of this variation, and no one has undertaken to explain why it occurs, or to investigate other incongruencies, such as the discrepancy between FTM and MTF suicidality rates (Lothstein, 1980, p. 555). In fact, only seven systematic reviews and meta-analyses, which include some degree of transgender suicidality measurement, have been conducted. Unfortunately, for a number of reasons, these reviews and meta-analyses are unable to sufficiently address the proposed research questions[44]. For example, none identified every publication, whether because of oversight, or restriction to a particular geographic region (e.g. Meads, Pennant, McManus, & Bayliss, 2009), nor did they investigate variation in estimates of suicidality. Furthermore, all seven addressed transgender suicidality in the context of other research questions. Nevertheless, these publications do provide evidence of variation in estimates of transgender suicidality, as well as key insights into this phenomenon. Accordingly, they are outlined in the following paragraphs.

2.3.1 1965 – 1981. Ira Pauly conducted three systematic reviews into transgender

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[42] Gender incongruence is the feeling, held by some transgender individuals, that one's sex assigned at birth and gender identity are misaligned. This feeling may extend to a desire "to have been born the other sex, or the desire to change sex" (Bockting, 2009, p. 103-104).

[43] Excluding 68, of the aforementioned 166 publications, which either did not report an original rate of transgender suicidality, or provided non-quantifiable suicidality information (see Appendix A for more details).

[44] How much do estimates of transgender suicidality vary; what factors cause transgender suicidality variation; and what is the best methodology for measuring transgender suicidality?

suicidality, the first of which assessed "the clinical material of 100 [primarily single] case reports of male [MTF] transsexualism [in]... the medical literature… from 54 primary authors" (1965, p. 172). The second inspected 80 (primarily) single-case histories of FTM transsexualism in this same body of literature (Pauly, 1974a; 1974b[45]). The first review found that "35% threatened suicide, and 17% made overt attempts" (1965, p. 176), while the second found that "14 patients (17.5% of all 80 cases) had actually made suicide attempts" (1974b, p. 512).

Unfortunately, these reviews were not faultless; for example, because Pauly's inclusion criteria didn't require that researchers had recorded data on suicidality, this information was sometimes missing from individual studies. The reviews also relied on narrow and clinical definitions of the two groups surveyed (MTF and FTM), which were reported on in separate publications. This is in sharp contrast to suicidality research since 1997, which tends to define gender identity in less stringent terms and to study a spectrum of transgender identity. Finally, as was common in this period, Pauly only recruited individuals diagnosed with Gender Identity Disorder, which, by design, limited participation to transsexuals. Ultimately, these limitations make it difficult to compare these two reviews, either to each other (e.g. MTF vs. FTM suicidality), or more recent research.

Pauly's third and final review (1981) was conducted in response to the Meyer & Reter (1979) study, discussed earlier, which purported to find that gender recognition surgery was ineffective in reducing suicidality. In updating his previous findings, in support of these procedures, Pauly identified 283 MTFs and 83 FTMs in the academic

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[45] Pauly published this review (Female Transsexualism Part 1 and 2) as two separate publications.

literature published over the previous decade (1981, p. 45). His review of this literature found that 2.1% of MTFs and no FTMs committed suicide after undergoing GRS (p. 47-48). By contrast, shortly after being refused gender recognition surgery, approximately 20% of FTMs committed suicide and 62% of MTFs attempted to do so (p. 49), which, while not conclusive, would seem to indicate a link between being refused gender recognition surgery and suicidality.

In fact, "very few studies report suicide in sex change applications, [and] when it is mentioned, it is most often in cases where the transformation request was refused" (Michel et al., 2002, p. 355). This, together with consistently low rates of surgical regret (p. 359-360), would seem to both assuage and trump the fears, held by many researchers and clinicians, that surgery will lead to regret (e.g. Hamburger et al., 1953, p. 395; Smith, 2002, p. 33) and/or suicide (Michel et al., 2002, p. 356). Indeed, Pauly (1981) concluded that it was "not justified to [find] that surgery carries a higher risk of suicide or attempted suicide than... refusal" (p. 49). Accordingly, while this review evidences the same weaknesses as his prior two, it is also an important rebuttal to Meyer & Reter (1979).

2.3.2 1998. In 1998 the Wessex Institute for Health Research and Development conducted an evaluation of the long-term risks and benefits of MTF gender recognition surgery in research published between 1980 and approximately 1997 (p. 1). Among other issues, they found that suicide attempt rates varied a great deal (0% to 18%) (p. 1-2). However, while this study reiterates the presence of suicidality variation, it is also specific to a 17-year period, only assesses attempts, and fails to report which study each attempt rate occurred in, or the conditions under which attempts took place.

2.3.3 2002. In 2002 Michel et al. conducted a meta-review of reviews on gender

recognition surgery and suicide. This meta-review was a response to the persistently held, and often rebutted (e.g. Pauly, 1981), belief "that suicide is strongly associated with surgical transformation" (Michel et al., 2002, p. 353). As would be expected from previous reviews, Michel et al. found the notion to be unfounded; with few more than 1% of individuals completing suicide after gender recognition surgery (p.353).

Although this meta-review is vulnerable to the same caveats as those previously discussed, having relied on them for the analysis, it also provides insight into the difficulties associated with divining a consistent rate of transgender suicidality from the literature on this subject. For example, Michel et al., report that the tendency to group multiple issues under the term 'suicide' (e.g. depression, suicidal thoughts, threats, attempts, and completed suicides) causes confusion (p. 355). Similar issues are seen with definitions of 'transsexualism', methods of data analysis, length of follow-up, assessment methods (e.g. interview vs. psychometric instruments), selection bias, and objectivity (p. 354). Finally, Michel et al., (2002) found that respondents vary by age, number, type (e.g. FTM, MTF), and stage of transition of (p. 353-354). These findings were critical in the design of this thesis project, particularly in targeting variables likely to result in variation, as outlined in Chapter 3.

2.3.4 2008. In 2008, Herbst et al. conducted a systematic review of the 29 studies that assess HIV and risk behaviors among transgender individuals. Among other goals, they hoped to determine the prevalence of suicidality among these individuals. In fact, Herbst et al. (2008) found that MTFs tended to report higher rates of both suicidal ideation (weighted mean, 53.8%) and lifetime attempts (weighted mean, 31.4%) (p. 1). This review's use of meta-analytic techniques did increase the precision of results.

Unfortunately, only 5 out of all 29 studies included data on FTMs, or ideation, while a total of 6 reported on attempts. Similarly, Herbst et al. (2008) neglected to report on which studies assessed both ideation and attempts, or their specific rates of suicidality. Finally, the review' focus on HIV, although common in transgender health research (Richmond et al., 2010, p. 114), is not necessarily generalizable to the experience of all transgender individuals.

2.3.5 2009. Lastly, in 2009, Meads et al. conducted a systematic review comparing research findings on Lesbian, Gay, Bisexual and Transgender Health, in the West Midlands, to the UK as a whole. They found a total of 36 surveys, systematic reviews, and research papers that, due to low respondent response rates, lack of detailed reporting, unexplained discrepancies, and over generalization from limited samples (p. 130), were "generally of poor quality" (p. V). Furthermore, Meads et al. (2009) failed to analyze the available suicidality data in any way. Accordingly, the contribution of this study, to the field of transgender suicidality, is limited and should be taken as an example of why conflating Lesbian, Gay, Bisexual, and Transgender respondents may fail to either garner a significant number of transgender respondents, or accurately differentiate their experiences from their Lesbian, Gay, and Bisexual peers.

2.4 Practice and Policy

With the exception of the few transgender-specific suicidality prevention resources discussed here, very few have been created, particularly for adults, which is a dilemma that is also true of policy creation. By contrast, LGB*T* suicidality prevention resources and policy creation efforts are relatively plentiful today (e.g. Centre for Suicide Prevention, 2012; It Gets Better Project, n.d.; The Trevor Project, n.d.) and though they

sometimes mention transgender individuals, it is usually in amalgamation with LGB (e.g.

Centre for Suicide Prevention, 2012, p. 2), or to highlight how limited data and resources

are for this group (p. 3). However, although suicidality rates are high for LGB people,

they are higher still for transgender individuals (Rainbow Health Ontario, 2011). This

may be, in part, because transgender individuals experience unique risk factors, like

transphobia[46], in addition to those experienced by the larger LGB community (e.g.

violence, harassment, low income) (2011). Accordingly, while both generic and LGBT-

specific suicide prevention resources and policy offer some utility to transgender-specific

prevention efforts, they are ill equipped to meet the full scope of needs.

On the other hand, transgender-specific suicidality prevention resources have

tended to arise out of Community-Based Participatory Research that was led by the

transgender community (e.g. Grant et al., 2010; Scanlon et al., 2010). Similarly, these

research findings, including statistics on suicidality, are generally more widely

disseminated. An example of this includes the use of the National Transgender

Discrimination Survey (Grant et al., 2011) to lobby for the passage of *Bill 33* (2013)[47],

which protects individuals against discrimination on the basis of gender identity and

expression (DiNovo, 2012). In this spirit, the following is a discussion of the utility and

limitations of existing transgender-specific materials and policy, as well as the potential

use of more generalizable suicidality statistics in their improvement.

   2.4.1 Transgender Suicidality Prevention Materials. A limited number of

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[46] Transphobia describes an "intense dislike of or prejudice against transsexual or
transgender people" (Oxford Dictionaries, n.d.).
[47] Known as Toby's Act , this law bans discrimination in Ontario, based on gender
identity and expression, while also providing an avenue for redress through the Ontario
Human Rights Tribunal.

transgender-specific suicidality prevention materials exist (e.g. brochures, booklets, videos and postcards). Generally speaking, the objective of these materials is to prevent individual transgender suicides, by equipping those around transgender people with the tools to identify and respond to suicidality. More specifically, however, their objective varies dependent on the intended audience, particularly in the case of the four materials created by the Massachusetts Transgender Suicide Prevention Working Group (n.d.[a; b; c; d]), as noted below.

The objective of the brochure, created by the Massachusetts Transgender Suicide Prevention Working Group for healthcare providers (n.d.[a]), is to make these professionals aware of the high rate of transgender suicidality, and provide them with resources and tools to respond to it. As such, this brochure identifies the high transgender suicidality rate, frequency of contributing mental health problems (e.g. Post Traumatic Stress Disorder), and population-specific warning signs and protective factors. Interestingly, this resource is unique, among the four created by the Massachusetts Transgender Suicide Prevention Working Group, as it identifies both a rate of transgender suicidality, and variation within these rates (n.d.[a], p. 2), neither of which are discussed in other resources. More confusingly, the website that lists these materials cites the suicidality statistics from the National Transgender Discrimination Survey, which conflicts with those cited in the providers brochure (Massachusetts Transgender Political Coalition, n.d.). Unfortunately, the upper limits provided are lower than what has been reported, significantly so, in the case of attempts.

On the other hand, the objective of the brochure intended for "transgender people, family, friends and allies" (Massachusetts Transgender Suicide Prevention Working

Group, n.d.[b]) is primarily to provide a transgender individuals' loved ones with the tools needed to identify and respond to their experience of suicidality. To this end, it lists suicidality warning signs, 'myths and realities', and resources. Helpfully, this brochure provides a risk assessment flowchart, which identifies questions to ask a person suspected of being suicidal, and the appropriate responses to their answers. Unfortunately, while some of the information is transgender-specific (e.g. 'myths and realities'), the majority is taken directly from the brochures, created for the general public, by The Good Samaritans, from which the Massachusetts Transgender Suicide Prevention Working Group's materials were adapted (n.d. [b; c; d]). By contrast, much more transgender-specific information is provided in the brochure created for providers (Massachusetts Transgender Suicide Prevention Working Group, n.d., [a]).

The Massachusetts Transgender Suicide Prevention Working Group also created a postcard, with the objective of equipping the general public with information to help a suicidal transgender individual (n.d. [c]). It offers many of the same tips and resources as the brochure created for the friends and families, albeit in a much more condensed format. This postcard also provides a link to an accompanying 10 minute video (The Massachusetts Transgender Suicide Prevention Working Group, n.d.[d]), which gives a more narrative account of the organization's other resources (n.d.[b; c], through a series of role plays. Accordingly, the video's objective is to provide transgender-specific suicidality prevention to the general public, as well as the loved ones of a transgender individual.

Another brochure was created by the Trans Equality Network Ireland (2012). This brochure was intended, ostensibly, to disseminate the suicidality findings of the *Trans*

Mental Health and Well-being Survey to the transgender community and general public

(McNeil et al., 2013). However, it also explicitly connected anti-transgender

"discrimination, stigmatization, and marginalization... [to suicidality, by pointing out that

it] leaves trans people particularly vulnerable to self-harm and suicide" (p. 2); ultimately

calling for "immediate action on the part of our community, policy-makers, service

providers and educators" (p. 1). Suggested actions include equipping suicide prevention

and crisis services for transgender individuals and advocating for improved human rights

legislation (p. 1). Unfortunately, when comparing their findings to rates of North

American transgender suicidality, they don't cite the full extent of variation, estimating a

higher suicidality rate than is warranted (p. 1).

Finally, the National Aboriginal Health Organization has produced a booklet on

Suicide Prevention and Two-Spirited People (2012). The objective of this booklet is to

help non-aboriginal academics, activists, and healthcare providers to identify and respond

to Two-Spirited[48] suicidality. As such, it provides a background on suicidality among

aboriginal and Two-Spirited individuals and communities, as well as culturally relevant

suicidality prevention resources tools and strategies. This booklet also contains

suggestions for practice and policy, urging service providers to develop comprehensive

research and resources that are supportive of Two-Spirited individuals, and "become

familiar with the Canadian Human Rights Act (p. 11). However, like so many of these

materials, no data is provided on transgender suicidality variation, or indeed, rates of

transgender suicidality at all. Further complicating matters, Two-Spirit is a culturally

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[48] "Two-Spirit/ed is a term that is sometimes employed by first nations transgender
individuals. It is "an umbrella term for aboriginal individuals who live between socially
defined male and female gender roles" (Scheim et al., 2013, p. 108).

specific term that is not transferrable, or directly comparable, to non-First Nations transgender individuals.

Clearly there are a number of concerns with these materials, not least that they do not consistently represent the rate of transgender suicidality, either in terms of variation, or an average. This is likely quite confusing to individuals using these resources, particularly if they have encountered more than one. In fact, these discrepancies may be sufficient to call the larger resource into question, even though the suicidality prevention information provided is accurate. However, my investigation into transgender suicidality variation will help to provide the clarity needed to report a consistent and explicable rate, if not overall, than specific to populations with particular demographic characteristics.

2.4.2 Hotlines. Within North America, most major cities (Distress Centres Ontario, n.d.), and even nations (US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, n.d.), have dedicated suicide prevention hotlines. There are also a handful of hotlines intended for specific communities, such as military veterans (suicide.org, n.d.) and LGBT individuals (The Trevor Project, n.d.). The last hotline notwithstanding, no transgender-specific services existed until approximately November 2014 (Busey, 2014), when Trans Lifeline (n.d.) was created. This service, developed and run entirely by the transgender community, appears to be taking advantage of newly developed online technologies and crowd sourcing, to inexpensively set up and staff the phones (Busey, 2014; Steinmetz, 2014). It is interesting to note that both articles (Busey, 2014; Steinmetz, 2014) use suicidality data from the National Transgender Discrimination Survey to illustrate the need for resources.

2.4.3 Policy. As noted, recent strides have been made in the area of transgender

public policy, particularly in banning discrimination on the basis of gender identity and expression, as with Toby's Act (*Bill 33*, 2013) in Ontario, *Bill 140* (2012) in Nova Scotia, and *Bill C-279* (2013). In the US, "Ninety-one jurisdictions [and eight states, representing 37% of the country]… explicitly protect people based on gender identity/expression" (National Center for Transgender Equality, n.d.[a]). While it is too soon to measure the impacts of these policies on transgender suicidality, their impact has been investigated in other populations. For example, in the US, gay and lesbian mental health has been demonstrated to be worse in States without marriage equality and/or gay and lesbian anti-discrimination measures (e.g. Hatzenbuehler, Keyes, & Hasin, 2009; Massachusetts Department of Public Health, 2009).

This finding supports Meyer's minority stress theory, which posits that oppressed groups experience stress that is both general and experienced by all people, as well as that which is chronic and experienced in addition "to general stressors" (Meyer, 2003, p. 674). Considerable evidence exists in support of this theory, particularly regarding its relationship to suicidality (e.g. Meyer et al., 2015), the experience of LGB People of Color (Meyer, 2010) and, to a lesser extent, transgender individuals (e.g. Claes et al., 2015). As it relates to policy, this theory reinforces the need for resources and policy to be transgender-specific (Meyer et al., 2015). It also points out that "policy makers must remember that [all identities] are relevant [and no single identity] should be conceived as more significant for a person" (Meyer et al., 2015, p. 451).

At present, advocates for transgender-specific policies and legislation usually cite various statistics from the National Transgender Discrimination Survey (Grant et al., 2011), particularly those specific to suicidality; for example Ontario's *Bill 33* (2013;

DiNovo, 2012) and federal *Bill C-279* (2013). Suicidality statistics from Trans PULSE (Scanlon et al., 2010) are also used for this purpose (e.g. Kennedy, 2012), although to a lesser extent, which is interesting in light of the fact that TransPULSE explicitly presents their data alongside a call to address high suicidality through the advancement of "human rights legislation for trans people of all ages, to ensure that discrimination, harassment and violence are prevented" (Scanlon et al., p. 2). On the other hand, TransPULSE may not be as widely cited, because their materials are of a more academic nature, in addition to not being as widely, or aggressively distributed as the National Transgender Discrimination Survey (see The TransPULSE Project, n.d.).

Indeed, the National Transgender Discrimination Survey research team has actively promoted the wide dissemination of their findings via avenues that lend themselves to advocacy and lobbying[49]. For example, the flyer, *Preventing Transgender Suicide*, was created in partnership with the National Center for Transgender Equality (National Center for Transgender Equality, 2010), which is "the nation's leading social justice advocacy organization winning life-saving change for transgender people" (National Center for Transgender Equality, n.d.[b]). This document presents the study's statistics on transgender suicidality, together with particular risk factors, as well as suicidality prevention resources for individuals and providers. While its stated purpose is to provide "information about transgender people and suicide and resources to prevent self-harm" (p. 1), it holds a wider purpose, because it is published and disseminated through the networks of a national lobbying organization.

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[49] This is likely due to the fact that this study was designed and directed by the National Center for Transgender Equality and the National Gay and Lesbian Taskforce and, rather than an academic institution.

In any case, while these statistics have been successfully employed in some policy advocacy (e.g. DiNovo, 2012), due to both methodological issues and the noted overall variation in rates of suicidality, they are extremely vulnerable to attack from individuals and groups invested in blocking transgender human rights. These parties might use these weaknesses to call the entire phenomenon of high transgender suicidality into question (e.g. Shanko, 2011a), which would be consistent with ongoing attempts to deny the existence of anti-transgender discrimination (e.g. Shanko, 2011b; Morgan, 2015), and thus the need for protective legislation. This is despite significant research linking transgender suicidality to "unremitting discrimination... the prejudice of others... [and the inability to] find work, housing, or other practical necessities of life" (National Center for Transgender Equality, 2010, p.1).

While these types of arguments wouldn't rise to an academic standard of proof, based as they are, on appeals to emotion, they have been successful in highly charged political spheres; for example, the characterization of *Bill C-279* (2013), which would protect against discrimination on the basis of gender identity and expression, as 'the bathroom bill'[50] (Hager, 2015). Ultimately, the proposed analysis into transgender suicidality would help to protect against these vulnerabilities, by creating a more nuanced understanding of these statistics, providing a framework needed to deploy them with greater accuracy, and identifying the ways in which future research could correct the issues leading to variation.

2.5 Conclusion

The intention of this chapter was to explore the literature relevant to transgender

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[50] This characterization capitalizes on the unfounded fear that men will dress as women in order to harass and assault women and children in female-only facilities (Hager, 2015).

suicidality, as well as that implicated in practice and policy. In the first case, this consisted of a review of the 166 English-language reports on adult transgender suicidality, including 7 meta-analyses and/or systematic reviews. In the second, this includes an additional 9 publications and 1 resource.

Of the 166 English-language reports that were published in peer-reviewed journals, books, and community reports, 74 were identified by searching Google Search, Google Scholar, and the WorldCat database, 5 at conferences[51], and 87 by hand-searching the reference lists of those articles already identified. Reviewing these reports revealed that transgender suicidality literature, which began in 1953, tends to cleave into a classical and a modern period, with the former ending and the latter beginning in 1997. The classical period tends to employ "a disease-based model [of transgender identity and behavior, which posits that] something went wrong during the individual's development that needs to be corrected" (Bockting, 2009, p. 104). This research also tends to be authored by non-transgender experts, heavily influenced by psychoanalysis, and primarily focused on Male-to-Female (MTF) transsexuals. Gender recognition surgery, in this context, is seen as the treatment of last resort, for those (Edgerton & Meyer, 1973; Randell, 1971) too pathological for a cure (Denny, 2004).

By contrast, the modern period has shifted to using "an identity-based model of transgender health", which views gender variance-related social stigma and health disparities, rather than the individual experiencing gender dysphoria, as the problem (Bockting, 2009, p. 104). Community-based research methods, such as needs assessments and Community-Based Participatory Research, not used in the classical period, have

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[51] See Appendix A for more detail on the conferences attended.

come into common use in this one. Transgender-identified researchers and communities have used these methodologies to create and design research that prioritizes their research vision, rather than that of non-transgender academics (e.g. Grant et al., 2011; Scanlon et al., 2010). Indeed, these individuals and communities are increasingly participating in and creating this research, which, in the sense of being a sort of 'positive feedback loop', may be the result of research environments that are more welcoming and accessible, because of the availability of these methods. If this is the case, we can expect to see the contributions of transgender individuals and communities increase.

A small number of materials have been created for the purpose of transgender suicidality practice and policy, including 5 brochures and 1 postcard, 1 booklet, 1 video, and 1 transgender-specific suicidality prevention hotline. To varying degrees, these materials cite high transgender suicidality rates, connected to the experience of anti-transgender discrimination, and provide transgender-specific resources, tools, and information. Their audience includes transgender individuals, their loved ones, advocates, healthcare professionals, and politicians. Similarly, their purpose ranges from the education of healthcare providers, to individual suicidality prevention and lobbying for anti-discrimination legislation, which would attack the root causes leading to high transgender suicidality rates. In Canada, 6 provinces have created this type of legislation, including Ontario's Toby's Act (*Bill 33*, 2013) and Nova Scotia's *Bill 140* (2012), in addition to federal *Bill C-279* (2013), which is currently being proposed. In the US, "Ninety-one jurisdictions [and eight states, representing 37% of the country]… explicitly protect people based on gender identity/expression" (National Center for Transgender Equality, n.d.[a]).

Unfortunately, these materials, in particular the brochures, cite varied and often incorrect transgender suicidality data, particularly when referring to the range of findings, while others don't mention statistical findings at all. As a result, some materials (in one case two brochures created by the same group) provide conflicting suicidality data (Massachusetts Transgender Suicide Prevention Working Group, n.d.[a]; Massachusetts Transgender Political Coalition, n.d.). This creates confusion for consumers and, as regards legislative advocacy, presents a weakness to political opponents, who might, and in some cases have, called into question the legitimacy of arguments that transgender individuals experience high rates of suicidality and discrimination. A more comprehensive and nuanced understanding of current transgender suicidality statistics would help to address these problems in the present and, by identifying methodological errors, prevent them in future research.

The following chapter describes the research design employed in this thesis. It begins with a discussion of the collection of data from both transgender suicidality literature and interviews with the authors of this literature. The following section discusses the creation of the survey instrument (see Appendix C), after which, the manner of data analysis is addressed. The final sections detail the technology and software used, as well as the ethical implications and limitations of this thesis.

Chapter 3 Research Design

3.1 Introduction

This chapter provides a detailed description of the research design employed in this thesis and in pursuit of an answer to the three research questions[52, 53, 54]. It first discusses the way in which data was collected from the literature on transgender suicidality (published statistical estimates of suicidality) and from interviews with the authors of this literature (participants). Following this, the design and purpose of the interview questionnaire is outlined. Particular attention is then paid to detailing the methods of data analysis, specific to both qualitative (interview) and quantitative (statistical) data. Finally, the technology and software employed, as well as the ethical implications and limitations of this thesis are discussed.

3.2 Data Collection

Data on variation in reported estimates of transgender suicidality was collected using a mixed[55] methodological design, within the framework of a larger methodologically triangulated design[56], which helped to increase the robustness and power of the resulting analysis. For example, regarding methodological triangulation, this research project consisted of three distinct, but interrelated subprojects, with the first two being relevant to data collection. To this end, the first subproject extracted quantitative and statistical estimates of transgender suicidality, from the research literature on this

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[52] How much do estimates of transgender suicidality vary?

[53] What factors cause transgender suicidality variation?

[54] What is the best methodology for measuring transgender suicidality?

[55] Mixed methodology research is defined as "the incorporation of various qualitative or quantitative strategies within a single project" (Tashakkori & Teddlie, 2003, p. 190).

[56] A methodologically triangulated design "is a project that is composed of two or more subprojects… these projects fit to complement or enable the attainment of the overall programmatic research goals" (Tashakkori & Teddlie, 2003, p. 190).

phenomenon, while the second gathered qualitative data, from semi-structured qualitative interviews with the authors of this literature.

3.2.1 Literature.

As indicated, the first stage of data collection consisted of analyzing the primary source literature on suicidal ideation and attempts in transgender individuals. This literature was eventually pared down to a set of 20 statistically comparable studies in the manner described below. Ultimately, this resulted in eliminating a majority of the 166 publications on transgender suicidality, beginning with the 10 that only mentioned transgender suicidality', without reporting on original research, or a quantifiable suicidality estimate. The 59 publications that 'mention incidence of suicidality in literature, or original, non-quantifiable research' were then eliminated, either because the estimate provided was not based on original research (e.g. meta-analyses), or was not quantifiable (e.g. '2/3 of respondents were suicidal').

This left 97 publications (53 studies) that 'present an original and quantifiable report on suicidality incidence'. Of these, 23 publications (14 studies[57]) made prior to 1997 were eliminated for a number of reasons. First, as was typical of the period, researchers tended to view transsexuality through a psychoanalytic and disease-based lens and transsexualism as limited to male-bodied individuals. Unsurprisingly, none cited the input or participation of transgender communities, or openly transgender researchers. As a result, these publications are quantitatively and qualitatively distinct from transgender suicidality research published since 1997. Second, given that they were published at least 19 years ago, their authors are far more likely to be unavailable for

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[57] Some studies published findings and/or updates multiple times.

interviews, whether because they have retired, or passed away. Still, while this period is

not appropriate for the investigation at hand, an exploration into the impact of researcher

prejudice on respondent suicidality would be both unique and fascinating.

The 74 remaining publications (41 studies) have tended to take the opposite

approach from those published prior to 1997. These researchers, for example, tend to see

transgender-identity in less pathological and more self-defined terms, perceive stigma

and oppression as causative factors, and involve transgender communities and

researchers in study design and implementation. Population health and community-based

methodologies have also become more common, in part because of the efforts of

transgender-identified researchers. Ultimately, this period was selected because it is

relatively internally homogenous, representative of current transgender suicidality

research, accessible and, in these ways, distinct from the preceding period.

Nevertheless, of these 74 publications (41 studies), 17 (13 studies) that utilized a

majority non-North American cohort were eliminated. This was done both because of

methodological and demographic disparities, as well as obstacles to arranging interviews

with non-North American researchers. It is also worth noting the potential for significant

discrepancies in definitions of key concepts, such as 'gender', between relatively disparate

countries (e.g. Turkey and Canada). This alone would undoubtedly impact the experience

of suicidality and its risk factors.

This left 57[58] publications (28 studies), from which suicidality data was extracted.

Note that both Canadian and United States (US) research is considered in an

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[58] Kenagy (2005a) presents the findings of a Philadelphia needs assessment, while
Kenagy (2005b) reports on both these and related findings from a Delaware Valley needs
assessment. They are counted here as discrete studies, but in further analysis are
combined, due to the amalgamation of data in 2005b.

amalgamation, because of the small amount of Canadian research (5 studies), and the

relative similarity of both the demographic make-up of these groups and the key concepts

used. Additionally, although these studies did differ in their research design (see Figure

2), this is not considered in the subsequent analyses, as sorting studies, according to this

factor, resulted in groups that were too small to enable a robust comparison.

However, after the initial collection of suicidality data (see Figures 1; Table 1), it

became clear that, of these 28 studies, there were fundamental differences between the 20

that measured suicidality 'ever'[59] and the 8 that examined it over a specific time period[60]

(e.g. months, years). For example, there was little comparable data for the latter (e.g.

most didn't record the same time period), while, in general, "different

operationalizations... identify different groups [and]... come up with different [findings]"

(de Wilde, 2002, p. 57). Ultimately, it wasn't possible to reduce the set of studies further,

without losing significant statistical power and, in any case, no amount of reduction

would result in a set identical in all aspects. Therefore, only the 20 studies (46

publications) that reported on suicidality 'ever' were subjected to a comparative

descriptive analysis, which measured the impact of ethnicity, gender identity and sex at

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[59] Devor, 1997; Singer, Cochran, & Adamec, 1997; Mathy, 2002; Kenagy, & Bostwick, 2005; Kenagy, 2005a; Kenagy, 2005b; Risser et al., 2005; Xavier, 2000; Xavier, Bobbin, Singer & Budd, 2005; Clements-Nolle, Marx, Guzman, Katz, 2001; Zians, 2006; Taylor, 2006; Maguen & Shipherd, 2010; Scanlon et al., 2010; Bauer, Pyne, Francino, & Hammond, 2013; McDuffie & Brown, 2010; Grant et al., 2010; The Williams Institute, 2014; Nuttbrock et al., 2010; Nemoto, Keatley, Operario, & Soma, 2002; Operario & Nemoto, 2005; Nemoto, Bodeker, & Iwamoto, 2011; Meier, Fitzgerald, Pardo, & Babcock, 2011; Xavier et al., 2007; Goldblum et al., 2012; Testa et al. 2012; Heinz & MacFarlane, 2013; and Moodie & Smith, 2013.

[60] Bockting, Robinson, Forberg, & Scheltema, 2005; Bockting, Huang, Ding, Robinson, & Rosser, 2005; Hayes, Locke, & Castonguay, 2011; Effrig, Bieschke, & Locke, 2011; Beemyn & Rankin, 2011; Testa, Jimenez & Rankin, 2013; Brown et al., 2013; Blosnich et al., 2013; Cole et al., 1997; Massachusetts Department of Public Health, 2009; Rehman, Lazer, Benet, Schaefer, & Melman, 1997.

birth, education, suicidality questions and inclusion criteria, on transgender suicidality

(see Figures 3-12).

Figure 1

Hierarchy of Evidence in North American vs. International Research, Before and After 1997 [a, b, c]
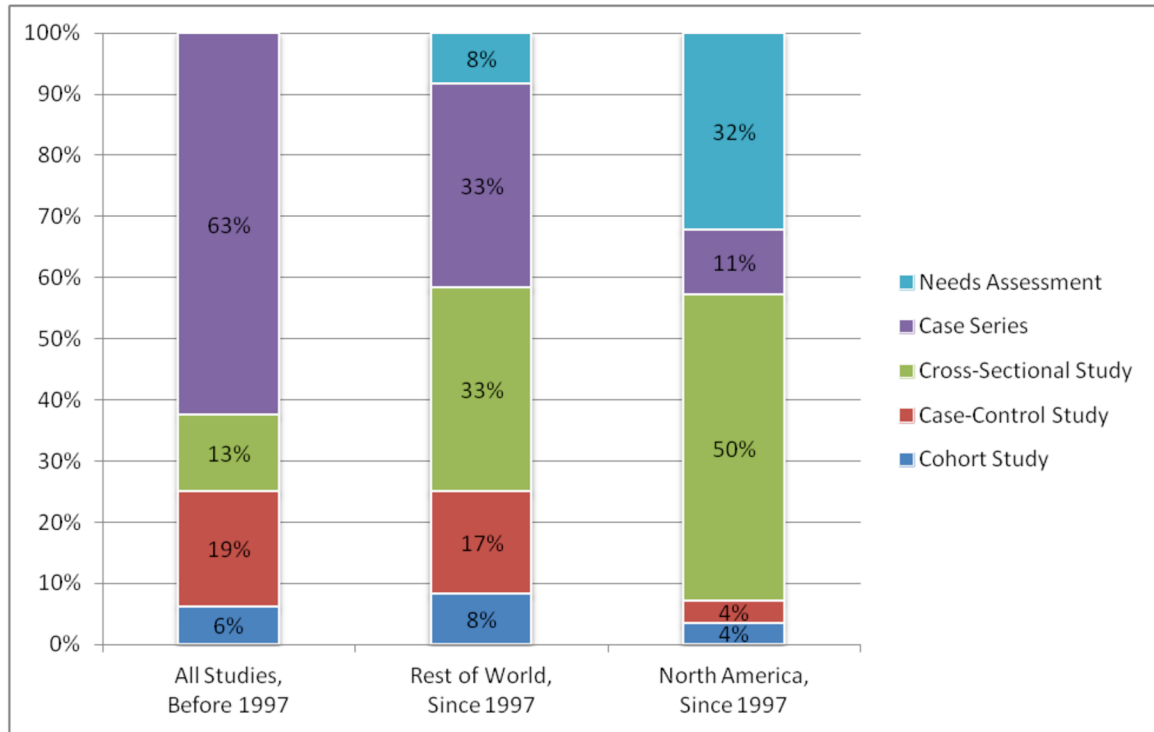
[a] Those studies that produced multiple reports are only counted once, except for occasions where updates evidenced new findings.
[b] This chart is based on the full sample of 28 studies.
[c] Studies were placed into mutually exclusive groups, according to the study design reported in the source publication.

3.2.2 Interviews. Qualitative data was obtained from interviews and was important to provide context and clarity to the statistical data, as well as a framework for the subsequent descriptive analyses. These interviews, which were conducted with the authors of the 28 North American transgender suicidality research studies, published since 1997, allowed me to ask them, first hand, why transgender suicidality literature indicates high and wildly variable suicidality estimates, what their contributions to this might be, which particular variables they collectively feel caused this variation, and if they believe that they have accurately captured the realities of transgender suicidality.

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I obtained, between February 7th and May 26, 2014[61], interviews with the authors of 18[62] (64%) of the aforementioned 28 studies, far exceeding my initial goal of 11 (39%), as suggested by my committee. My own identification as transgender may have helped with this, by allowing me to more quickly establish rapport and trust with other transgender-identified researchers, with whom I share a common history (Bernard, 2006, p. 351). Certainly, I suspect that some researchers only agreed to participate after confirming this information with others, and in more than one instance, participants were far more forthcoming after I proactively 'outed' myself.

Of course, strong rapport is crucial to "asking sensitive and personal questions", which was certainly the case where the questionnaire concerned transgender suicidality and possible weaknesses in a participant's research (p. 265; see Appendix C). To this end, when I could sense that participants were disengaging from, or failing to 'warm up' to questioning, I sometimes intentionally sought to build rapport by encouraging them to discuss digressions and unrelated topics (p. 368). Likewise, I found Bernard's assertion that "if you are studying highly educated people, you may have to prove that you know a fair amount about research methods before they will deal with you", to be very true (p. 367). In fact, in some cases, I was only able to elicit detailed responses after extolling on the field of transgender suicidality generally and my approach to it specifically.

Participants were contacted in the following manner; on February 5th I sent an e-mail invitation (Appendix B) to all 28 primary authors, except the two for whom I could not find contact information. I was able to locate contact information for one of these two

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[61] Although I had initially planned a 2-month window, I twice extended this deadline in order to accommodate scheduling and rescheduling requests.

[62] 2 authors were responsible for more than one of the 28 studies. As a result, these interviews account for data on 19 studies.

authors the following day), but never identified working contact information for the other. If they did not respond after the first contact, I sent one reminder a week, for two weeks. If they responded to one of these contacts, I attempted to schedule an interview, for which I sent reminders until they failed to respond twice. If an interview could not be conducted with the primary author, whether because of failure to respond to the initial request, or to follow through on scheduling an interview, I contacted the second author and repeated this procedure. Those who asked were sent a copy of the questions (Appendix C) prior to the interview. Only one person declined to participate after receiving the questions, with several using them to prepare written notes.

Owing to the busy schedule and geographic distance between researchers, interviews were conducted using their preference of in-person, telephone, or Internet video chat (e.g. Skype); however, if no other options were available, a list of the interview questions were provided for them to complete on their own schedule. Interviews typically took 45 minutes and while the vast majority took place via Internet video chat, or telephone, 1 was conducted in-person and 1 partially by e-mail. Interviews varied in quality, with in-person, Internet video chat, and phone being, in that order, far superior to e-mail, which did not allow for engagement and rapport building.

3.3 Instrument

The sole instrument employed was a semi-structured interview guide, designed by myself and employing open-ended questions (see Appendix C). Semi-structured interviewing, which, though "open ended… follows a general script and… list of topics", was selected because it both allows for a specific set of questions and themes to be addressed and encourages respondents to answer fully and in their own words (Bernard,

2006, p. 210). It is also considered ideal for "situations where [there is only] one chance to interview someone… [and for participants that] are… elite members of a community" (p. 212). Similarly, open-ended questions, such as "what is the most important, critical problem the Internet is facing today?" (p. 159), were selected because they "allow the respondent to express a [spontaneous] opinion without being influenced by the researcher" (Reja, Manfreda, Hlebec, & Vehovar, 2003, p. 161). Accordingly, these questions acted as 'jumping off' points, from which a larger, more unguided conversation could take place.

In the pursuit of quantitative data, the interviews presented an invaluable opportunity to clarify details that were either unclear in the original publications (e.g. educational attainment, ethnicity), and/or seemed to be likely sites of variation (e.g. how many different definitions of 'suicide' and 'transgender' were employed?). Qualitative information, however, was solicited more extensively, with questions focusing on participants' experiences conducting and creating research on this topic; for example, why they chose the topic and methodology, their interpretation and analysis of the results, and their opinion on variation in estimates of transgender suicidality.

3.4 Data Analysis

As with data collection, data analysis employed mixed methodologies and methodological triangulation; however, unlike data collection, methodological triangulation consisted of three data analysis subprojects. The first subproject consisted of identifying the actual quantitative variation in estimates of transgender suicidality, starting with the 53 studies (97 publications) that have reported an original estimate on this, and proceeding to the 28 North American studies (57 publications) that were

published since 1997. This variation was subjected to a descriptive analysis, using summary statistics (e.g. the mean of transgender suicidality estimates, both generally, and specific to the five variables), measures of dispersion (e.g. range of transgender suicidality estimates), and visual descriptions of data (e.g. line graphs and bar charts). The analysis was conducted in Excel and SPSS.

The second subproject qualitatively examined the data collected from participant interviews with the authors of the latter 28 studies, using grounded theory, which is discussed below, and primarily in NVivo, but also, to a lesser extent, Excel. During this stage, the participants expressed that 5 particular variables (ethnicity, gender identity and sex at birth, education, suicidality questions, and inclusion criteria) were specifically implicated in variability of transgender suicidality estimates. Subsequently, the third and final subproject analyzed the impact of these 5 variables on estimates of transgender suicidality. Both the qualitative interview data and the quantitative statistical estimates of transgender suicidality, in studies that measured these variables, were examined.

In presenting the results of these data analyses, the qualitative interview data is addressed first, so as to provide a context and framework for the selection of the five variables and, in particular, the participants' expectations for what the proceeding descriptive analyses will reveal.

3.4.1 Quantitative. The quantitative analysis began with the 97 publications (53 studies) that 'present an original and quantifiable report on suicidality incidence'. It consisted of charting[63] and comparing the 77 suicidality estimates in these studies (see

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[63] Note that all suicidality estimates were recorded in IBM's Statistical Program for the Social Sciences version 20 (SPSS), where they were subsequently manipulated and visualized. This data was also exported to Excel, as needed, for the same purpose.

Figure 2; question 1[64]). The second quantitative assessment was performed on the 28 studies that met the above condition, while also being published since 1997, using North American respondents. This analysis consisted of calculating the range and average rate of suicidal ideation and attempts for this data set (see Table 1; question 1). The third and final quantitative analysis followed the qualitative analysis and was performed on the 20 studies that met the above conditions, while only measuring suicidality 'ever'. It analyzed the impact of the 5 variables, selected during the qualitative analysis and described shortly, on estimates of transgender suicidality in these 20 studies (see Figures 3-12; questions 1-2[65]).

Additionally, except where noted, descriptive analyses were calculated using all respondents (e.g. all study respondents) as a denominator, rather than -non-respondents (e.g. just those that answered and/or were asked the suicidality question/s). Although the smaller -non-respondent sample may be more homogenous, few studies reported enough raw data to ascertain the number of -non-respondents for any given question, or whether they were excluded from suicidality calculations. It was, therefore, safer to limit analysis to the more clearly defined 'all respondents' sample.

3.4.2 Qualitative. As mentioned, qualitative analysis was employed in analyzing the interview transcripts. Specifically, techniques from grounded theory were used to analyze the interview transcripts and inform the subsequent quantitative analyses. First described in 1967 (Glaser & Strauss), grounded theory was developed as a set of "strategies and techniques" (Strauss & Corbin, 1990, p. 5) created to enable the "generation [of] new theory from data, as opposed to testing existing theory" (Birks &

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[64] How much do estimates of transgender suicidality vary?
[65] What factors cause transgender suicidality variation?

Mills, 2011, p. 2). Described by Glaser as an "issues free" (Glaser, 2003, p. 115) and 'neutral' (Holton, 2008), rather than a qualitative (Glaser, 2008) methodology, it was actually "couched in a clear and deliberate [objectivist and] positivist view of scientific research… in the sense that representation is seen as ultimately unproblematic once a neutral point of reference can be assured for the researcher" (Bryant, 2003).

In 1990, Strauss and Glaser ended their partnership, with Glaser continuing in the development of what is now termed 'Glaserian' grounded theory and Strauss going on to form 'Straussian' grounded theory. Straussian grounded theory differs from Glaserian, primarily, in developing more rigorous coding and data analytic techniques (Strauss & Corbin, 1990), in addition to emphasizing "theoretical and social sensitivity, [which is] the ability to maintain analytical distance while at the same time drawing upon past [professional and personal] experience" (p. 18), as well as that "acquired during the research process through continual interactions with the data" (p. 47).

Some commentators have also interpreted Straussian grounded theory as taking a less positivistic turn (Mills, Bonner & Francis, 2006). In fact, Strauss & Corbin (1994) clarify that they believe that "a theory is not the formulation of some discovered aspects of a preexisting reality 'out there'. To think otherwise is to take a positivistic position that… we reject… Our position is that truth is enacted" (p. 279). However, from the outset, this methodology has been described in positivistic terms; for example, the "philosophical principle underlying this approach is… [to prevent] the researcher's biases and presence [from] intruding upon the data" (Strauss & Corbin, 1990, p. 21). While Mills et al. (2006) identify this approach as vacillating "between postpositivism and constructivism" (p. 3), the end result, regardless, is that Straussian grounded theory still

appears to pursue the positivistic goal of objective data collection and analysis.

In this thesis I have adopted a mixed approach, employing Glaserian techniques to analyze the interview transcripts (e.g. open-coding, memoing), in the manner described below, and a Straussian epistemological and ontological approach. This means that, ontologically, the rate of suicidality variation, factors complicit in it, and methodologies for reducing it, can be objectively measured, so far as we are only reporting on what has already been published; for example, within the literature on transgender suicidality, the extent of suicidality variation (question 1[66]) and the variables measured alongside it (e.g. ethnicity, education; question 2[67]) can be catalogued. Likewise, the effect of these variables, on transgender suicidality, can be measured in some fashion. However, I reject the suggestion that variation in estimates of transgender suicidality are caused by a single set of unchanging factors (question 2), or that a single set of methodologies will solve this problem in all cases (question 3)[68].

Epistemologically, the meaning of these findings is also relative to the location and environment in which they were conducted, in the same way that the factors complicit in variation and best methodologies are relative to individual studies, although I allow that generalizations can be tentatively made. This echoes Strauss and Corbin's assertion that "theories are embedded 'in history'—historical epochs, eras, and moments are to be taken into account in the creation, judgment, revision and reformulation of theories" (1994, p. 280).

Regarding my own relationship to the perception and acknowledgement of bias in

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[66] How much do estimates of transgender suicidality vary?
[67] What factors cause transgender suicidality variation?
[68] What is the best methodology for measuring transgender suicidality?

this research inquiry; while I respect the importance of "guarding against researcher bias (Strauss & Corbin, 1990, p. 7), I also feel that "it is not possible to be completely free of" (Strauss & Corbin, 1998, p. 97) it, which is a positivistic stance, utilized more in Straussian than Glaserian grounded theory. In practice, my identification as a transgender person complicates my ability to be unbiased and objective to both the source material and with the research participants, some of who are also transgender. Accordingly, I acknowledge that, where in question, my sympathies lie with the goals of the transgender community to reject pathologization and increase community ownership of transgender research. This is consistent with the belief that the researcher constructs theory as an outcome of their interpretation of the respondents' stories (Mills et al., 2006, p. 7), so long as this fulfills "their obligation to 'give voice'" (p. 6) to the respondent.

Returning to the use of Glaserian techniques in analyzing the 18 interviews; the first step consisted of identifying the responses to each of the interview questions (see Appendix C). This was accomplished by going through the interview transcripts line-by-line and closed-coding responses into nodes named for the questions. This was performed in NVivo, which is a qualitative analysis software designed for this purpose. During this process, multiple memos and open-codes were created to identify, keep track of, and compare emerging themes and concepts. Interestingly, though unsolicited and absent from the questionnaire, the impact of age on suicidality, researcher's personal experience in transgender communities, and the history of the research itself were often mentioned.

The second step, conducted simultaneously with the first, consisted of classifying transcripts according to the following factors, specific to their source; archival vs. original data, the interview participants' (known) gender identity; whether they were a student,

post-doc, or had graduated; if they were a member of the LGBT, or transgender-specific community; their primary field of practice and geographic location; the year the study was initiated; and the year it was first published. Of course, not all of this information was used for analysis, but much of it informed the following analyses and discussions.

The third step involved re-reading each transcript in order to more intentionally create memos and open-codes. These were subsequently sorted into nodes, dependent on how often they were mentioned by different respondents. The fourth step directly followed and involved classifying participants' answers (or portions thereof), which were identified in the first step, into nodes named for the three emergent concepts, also evidenced in the first step.

These four steps resulted in the identification of 5 variables, most often suspected by the interview participants as being related to transgender suicidality variation; ethnicity, gender identity and sex at birth, education, suicidality questions and inclusion criteria (question 2[69]). The suicidality rate of studies that recorded these variables was then compared in the final quantitative analyses. Unfortunately, it was not possible to assess the impact of additional variables, such as HIV and age, due to limited resources, time, and raw data.

3.5 Technology and Software

Interviews were recorded with WireTap. The Internet video chat software used was either Jitsi or Skype, as per the individual's preference. Express Scribe, coupled with a foot pedal, was used to transcribe the resulting audio files. Qualitative analysis was performed in NVivo, selected for its ability to accommodate grounded theory, multiple

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[69] What factors cause transgender suicidality variation?

data formats and unstructured data. Quantitative analysis was performed in SPSS, selected for its capacity to store, statistically analyze, and graphically represent data. In addition to SPSS, some of the data from the 46 publications (20 studies) was recorded and organized in Excel, prior to being transferred to SPSS for further analysis. These programs were operated on a Mac laptop.

3.6 Ethics

3.6.1 Likelihood of risks to participants and the community. This research meets the criteria for minimal risk, as "potential participants can reasonably be expected to regard the probability and magnitude of possible harms implied by participation in the research to be no greater than those encountered by the participant in … his or her everyday life" (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, Social Sciences and Humanities Research Council of Canada, p. 23, 1998).

As with any participant research, however, certain risks are unavoidable. These risks include the emotional distress of reflecting on transgender suicidality, adverse reaction of transgender and/or academic communities, and risk to the transgender community itself. Harm caused by emotional distress is mitigated by its transient nature and limited to brief recall of potentially unpleasant memories. Likewise, harm caused by the negative reaction of transgender and/or academic communities to participants' statements in this research, is proportionately smaller than the risk they took in undertaking their own research, for which they were not anonymous. The ability of this research to harm the transgender community is similarly limited, as it strictly investigates published research already available for comment. Multiple steps are, however, taken to

counteract the risk to anonymity represented by the relatively small sample size (50^{70}

potential participants), insular nature of the research community, and possible unique

nature of their research.

      3.6.2 Mitigating risks via design. As with any research involving risks to

participants, certain safety precautions and safeguards are necessary to reduce the

likelihood that they will occur and the amount of harm caused if they do. The primary

safeguard taken is the disclosure of these risks via an informed consent form (Appendix

D). In particular, this document informs participants of their right to skip questions,

pause, or stop the interview at any point. The design of the questionnaire (Appendix C) is

also intended to reduce potential for discomfort or anxiety. For example, questions on

rationale for undertaking suicidality research are limited to professional, rather than

personal motivation. Furthermore, participants' own experiences, as transgender

suicidality researchers, will have contributed to the development of coping strategies and

techniques aimed at reducing discomfort associated with these questions. Finally,

participants were rendered anonymous via a pseudonym and given the opportunity to

approve[71] any quotations used.

      3.6.3 Mitigating risks via technology. The participants' anonymity is secured by

labeling the audio files and transcripts with a numerical code, in place of their name.

Furthermore, particularly sensitive data, such as transgender identity, is recorded in the

aggregate. This information is stored, under password protection, only on the researcher's

laptop and secure cloud storage. Should I sell this laptop in the future, this data will be

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[70] 22x2 (22 studies with at least 2 authors) + 6 studies with only 1 author
[71] While this was not originally part of the study design, one researcher requested this and
I subsequently offered it to all interview participants.

securely wiped from the hard drive before doing so. Regardless, all data will be destroyed after five years have passed from the initiation of data collection.

3.7 Limitations

The majority of limitations are specific to the use of the source studies that make-up this investigation; for example, definitions of key terms differ a great deal, across these studies. I have attempted to mitigate this by classifying and analyzing studies that use similar terminology (e.g. inclusion criteria and suicidality questions). However, in cases like the conflation of gender and sex, this terminology is both flawed and necessitated by the scarcity of research into suicidality among individuals who do not identify within a gender binary.

Generally speaking, the relatively small number of studies on this topic prevented me from eliminating these risks. Nevertheless, I have attempted to mitigate them by reducing the sample to as homogenous a group as possible. Similarly, I have attempted to reduce publication bias, by including non-published community reports (e.g. Grant et al., 2011).

As regards limitations I introduced; while the interviews are used to provide depth and cultural context to this analysis, they are also biased towards participants who self-selected to participate. To this end, I should not have omitted mention of my gender identity from the letter of invitation (Appendix B), due to the apparent benefits, to recruitment and rapport building, of making this information available to other transgender-identified researchers. Similarly, I did not anticipate that some participants would ask for the questionnaire before agreeing to an interview. I dealt with this by providing it on request; however, I should have made it available to all participants, as there are likely differences between the information shared by those that had a chance to

prepare and those that didn't.

Finally, this thesis would have benefited from a more statistically robust analysis. For example, multivariate analyses would be useful in narrowing down the relationship between different factors and suicidality, as seen in the analysis of education and ethnicity vs. suicidality. In fact, "univariate statistics [while robust] offer very modest evidence for theory or model building [while] multivariate techniques [although difficult to enact, are] the quantitative cornerstones of theory building" (de Wilde, 2002. p. 57). Ultimately, the result is that this thesis is exploratory in nature and should not be relied on for definitive estimations of suicidality.

3.8 Conclusion

The purpose of this chapter was to explain the rationale behind my methodological approach, as well as the manner in which I collected and analyzed data, including the instruments, technology and software used to do so, as well as the ethical implications and limitations to this design. The most salient piece, in this chapter, is the utilization of a research design that employs mixed methodology and methodological triangulation to collect and analyze data on variation in transgender suicidality. In the case of methodological triangulation, this research consisted of three distinct, but interrelated subprojects, with the first two being relevant to data collection, and all three to data analysis. In the case of mixed methodologies, data was both collected from qualitative and quantitative sources, and analyzed using qualitative and quantitative methods.

Specific to the data collection stage; the first subproject examined and catalogued transgender suicidality variation in the research literature, while the second interviewed

the authors of this research literature, in order to determine their perspectives on and contributions to this variation. The examination of the literature began with the 97 publications on transgender suicidality (53 studies) that 'present an original and quantifiable report on suicidality incidence'; than proceeded to the 57 publications (28 studies) that were published since 1997, using North American cohorts; and finally, the 46 publications (20 studies), that restricted this to the measurement of suicidality 'ever'. The second subproject, however, selected participants from the larger group of 57 publications (28 studies). Note that a questionnaire was designed for this set of interviews. Mixed methodological data collection, on the other hand, is more simply described as the collection of both qualitative (semi-structured participant interviews) and quantitative (statistical estimates of transgender suicidality) data on transgender suicidality variation.

Regarding data analysis; the quantitative statistical data on variation in estimates of transgender suicidality, as obtained in the first subproject, was analyzed first (question 1[72]). This analysis employed both SPSS and Excel to conduct a variety of descriptive data analyses analytic techniques (e.g. measurement of range, mean and summary statistics). Following this, qualitative data from the interviews obtained in the second subproject was subjected to a grounded theory analysis, which was conducted with the help of NVivo. This analysis led to the identification of 5 specific variables (ethnicity, gender identity and sex assigned at birth, education, suicidality questions, and inclusion criteria), which were felt, by the participants, to be highly implicated in variability in estimates of

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[72] How much do estimates of transgender suicidality vary?

transgender suicidality (question 2[73]). The effects of these five variables, on estimates of

transgender suicidality (question 3[74]), were measured in a third subproject; which, for

example, contrasted the suicidality estimates of studies whose respondents were majority

Black/African-American, against those whose respondents were majority Caucasian. This

third subproject was conducted using the 20 North American studies that were published

since 1997 and which measured suicidality 'ever'. In reporting these analyses, I have

presented the qualitative interview data first, so as to place the following descriptive

analyses in the context of the participants' impressions and predictions.

Finally, regarding the limitations and ethical concerns with this research;

limitations primarily include the discovery, after data collection, that I would have

garnered a better response rate and more open communication, from transgender

identified researchers, had I openly identified as such in the recruitment letter. Similarly, I

should have provided the questionnaire to all participants, rather than only to those who

requested it. Most concerning, however, even the studies included in the final analysis

differ significantly in some respects. While everything has been done to mitigate these

and other limitations, the generalizability of this thesis' results are suspect, and they

shouldn't be compared to other transgender populations or research.

Ethical concerns are similar and related primarily to participants' anonymity, their

potential for distress in answering questions about suicidality, and the possibility of the

transgender community either reacting negatively to the interview participants'

statements, or being harmed by this research. None of these are likely, particularly

because participants are selected on this basis of already having performed this research,

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[73] What factors cause transgender suicidality variation?
[74] What is the best methodology for measuring transgender suicidality?

the majority of data has already been published, and the fact that participants are rendered anonymous.

In Chapter 4, I report the findings of my investigation into transgender suicidality variation, without commentary or analysis, which is provided in Chapter 5. Following the introduction, the first section of this chapter deals with the general extent of this variation in the literature[75], beginning with the 53 studies that have published estimates of transgender suicidality, proceeding to those published in North America, since 1997 (28 studies), and ending with the 20 that investigated this 'ever'. The second section deals with the measurement of this variation in regards to specific variables, and as such, deals with both the first and the second questions[76]. Within this chapter, the qualitative interview data is addressed first, followed by the quantitative statistical data. The qualitative data is drawn from participants' responses to the interview questions (see Appendix C), and these participants are, in turn, drawn from the 28 North American, transgender suicidality studies, that have been published since 1997. By contrast, the quantitative, statistical data is taken from the 20 studies that reported on suicidality 'ever', unless otherwise noted.

The second section addresses, in turn, each of the five variables, selected by interview participants, as having a particular impact on estimates of transgender suicidality (ethnicity, gender identification and sex assigned at birth, education, suicidality questions, and inclusion criteria). As in the preceding section, the qualitative interview data is addressed first, followed by a descriptive analysis of the impact that this variable has on transgender suicidality, using the 20 North American, transgender

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[75] How much do estimates of transgender suicidality vary?
[76] What factors cause transgender suicidality variation?

suicidality studies, that have been published since 1997, and measured this 'ever'. Note, however, that in contrast to the first section, the qualitative interview data used here addresses participants' selection of each of these 5 variables, as well as their expectations for the subsequent descriptive analysis.

Chapter 4 Results

4.1 Introduction

The purpose of this chapter is to present the results of this investigation's analysis into variation in estimates of transgender suicidality, first overall, and than specific to particular variables. The chapter begins with a section that addresses the overall extent of variation in estimates of transgender suicidality (question 1[77]), as reported in all 97 publications on transgender suicidality (53 studies) that 'present an original and quantifiable report on suicidality incidence'; than more narrowly, the 57 North American publications (28 studies) that were published since 1997. Within this section, the interview data, in response to the questions soliciting information on transgender suicidality variation (see Appendix C), is addressed first.

The following section addresses the factors that cause transgender suicidality (question 2[78]) and the extent of variation, based on these factors (question 1). This section is subdivided into 5 headings, named for each of the 5 variables selected by interview participants, as being most likely to cause variation in transgender suicidality (ethnicity, gender identity and sex at birth, education, questions asked, and inclusion criteria). In keeping with the previous section, the first topic addressed, for each of these variables, draws on the qualitative interview data to explain why this variable was chosen and participants' expectations for the subsequent descriptive analysis. The following topic presents the descriptive analysis, of the impact that this variable has on estimates of transgender suicidality, in the 20 studies that report estimates of transgender suicidality 'ever', in North American research, and were published since 1997.

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[77] How much do estimates of transgender suicidality vary?

[78] What factors cause transgender suicidality variation?

4.2 The Overall Extent of Variation in Transgender Suicidality

  4.2.1 Interviews. During the interviews, participants were asked to identify and discuss the extent of transgender suicidality variation and any possible discrepancy between their expectations and their research findings (Appendix C). Of course, given the open nature of the interview format, many participants commented on this phenomenon throughout and in answers that were better classified as responding to other interview questions. The extent to which this topic dominated individual interviews ranged from approximately 3% to 18%, as calculated when transcripts were analyzed and coded into NVivo[79].

  The majority of participants agreed that transgender suicidality is high, having found this in both their own research and as "frequently reported in trans-related literature" (Rebecca). In fact, even those participants that conducted research where "suicidality really was not... the focus" (Rebecca[80]), noted that the rate of suicidality immediately "jumped out at us as being one of the major findings" (Brian). When asked whether they were surprised by these findings, the answer was usually

   not really, I expected that the rate would be higher and… I think that the more

   levels of oppression... [someone has] the more suicidality there is... and as social

   workers we see... people who are oppressed and disadvantaged, and you look at

   the number of layers that someone whose trans has, especially if they're a

   minority... they also have one for sex, they have another one because of gender...

   That's what the research is generally showing (Michelle).

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[79] These figures are rounded and include the original question and any prompts.
[80] Interviews conducted with transgender suicidality researchers, as part of this thesis, are referred to by a randomly chosen pseudonym.

On the other hand, while many participants expected to find high suicidality rates, several weren't prepared for the degree of suicidality that they did find. Josef attested to this when he stated that "we expected to get a high number, but we didn't expect to get the number we got. The number we got made us all cry". Indeed, their surprise ranged from horrified, to relatively circumspect; for example, Lucy attested that "my heart broke so often... I remember thinking, my god it's 2005, and 2004, how can this still be happening"; while Carter remembered "being pretty surprised by what we found. That it was even higher than I expected... which was pretty significant to me. I'm not talking statistically; I'm talking in terms of the human dimension of it".

Tom connected high suicidality to not being able to transition, commenting that, among his own respondents, those

> who transitioned, often... did so because they felt they could not go on living the way they were and so their choices were stop living, or to make a transition so... I wasn't surprised to [hear that] yes I decided to transition, but before I decided to transition I considered suicide, or... attempted suicide.

Other participants had similar findings; for example, Dell noted that his respondents "talked a lot about how starting hormones and transitioning really helped with their mental health" and Barbara reported that some of her respondents reported "no longer [being] suicidal... or suicidal ideation [stopping] once they identified as trans and/or socially or physically transitioned". Irwin, in discussing

> the [high] number of people [in his research] who had bad outcomes from… hormone replacement [therapy, due to transitioning later in life, said clients often told him;] I'd rather spend two years settled or stable and die as some kind of side

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effect of treatment, rather than continue living like I am now. [Untreated Gender

Identity Disorder] can kill you like cancer, heart attack, or stroke".

In any case, several participants believed, simultaneously, that the suicidality

findings in their research exceeded all others. For example, a number stated that theirs

were "higher than the highest... [they'd] ever seen" (Dell), and one cited their findings as

being "20 times higher... than their non-transgender... peers" (Dillon). Still another noted

that, respective to research on sexual minorities, "rates for LGB suicidality... [range]

between 20 and 53 percent" (Janice). In actual fact, we can see, in the proceeding

descriptive analysis, how accurate these estimates are and where they stand, in relation to

other transgender suicidality research.

4.2.2 Descriptive Analysis.

Figure 2

Rates of Transgender Suicidality [a, b]
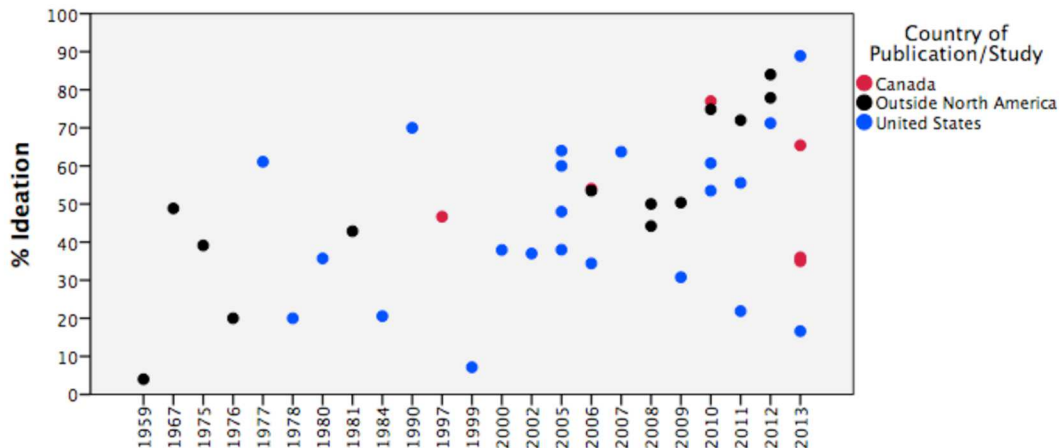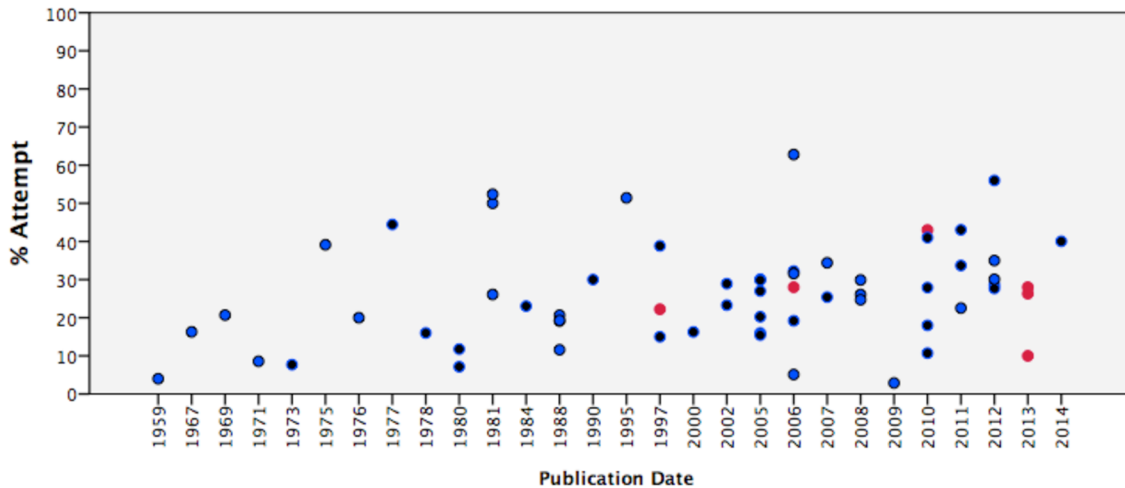
^a These figures are imprecise, as in some studies they were calculated using the total study population, while others used the subset that responded to the question at hand.
^b All 77 estimates are charted here, including a number of sub-analyses.

Since the first report on transgender suicidality (Hamburger et al., 1953), 97 other reports (53 studies) and 77, sometimes very disparate, estimates of transgender suicidality have followed. In fact, over the last 55 years, suicide attempts have ranged from a low of 3% to a high of 63%, while ideation has ranged from 4% to 89%.

Table 1

Average and Range of Suicidality Figures for 'All Respondents' vs. 'Non-respondents' [a, b]

	Ideation		Attempts	
	Average	Range	Average	Range
All Respondents	48.43%	21-77 (56%)	27.45%	9-43 (34%)
-Non-respondents	49.07	21-77 (56%)	31.5%	11-61 (50%)

^a Suicidality figures in individual studies were rounded to the nearest whole number.
^b This chart is based on the full sample of 28 studies.

A closer analysis of the rate of transgender suicidality, as reported in the 28 North American studies that were published since 1997, reveals up to 56% variation in estimates of ideation and 50% in attempts (see Table 1), while also identifying approximately 10,598[81] respondents. As noted in Table 1, this measurement is divided

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[81] This figure is approximate, due to the abundance of cross-sectional community surveys leading to an assumed degree of shared respondents. Note also that the respondent numbers reported for the National Transgender Discrimination Survey (Grant et al.,

between those reports that used the total number of study respondents as a denominator (all respondents), and those that used only the respondents that were asked and/or answered the suicidality question (-non-respondents). The only major difference between these groups is that, of the two, the -non-respondents have a wider range of attempts. In any case, unless otherwise noted, the 'all respondents' group was used in subsequent calculations, due to the small number of studies that reported the number of respondents for individual questions. Note also that subsequent calculations are based on the 20 studies that measured suicidality 'ever'.

4.3 What Factors Cause Transgender Suicidality Variation?

This section addresses the specific impact of 3 demographic (ethnicity, gender identity and sex at birth, and education) and 2 methodological (question asked, inclusion criteria) variables on variability in estimates of transgender suicidality. In all likelihood, a number of additional factors, such as age and geographic location, also impact on this variability; however, it was simply not practical to individually investigate every possible variable, nor, in any case, was sufficient information available, in individual studies, on all of them. As a result, only the above 5, identified through interviews with the authors of this research, and for which sufficient information exists in the majority of their studies, were analyzed.

4.3.1 Ethnicity.

4.3.1.1 *Interviews*. Of the 19 interviews[82] conducted, 14 interview participants

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2011) vary by approx. 20 individuals, depending on the publication. I have used 6436 in these calculations, because this is the figure for which most data is available.

[82] As noted, 2 authors were responsible for more than one of the 28 studies, with the result being that the 18 interviews account for data on 19 studies. For simplicity, the 19th study is hereafter referred to as the "combined study".

(74%) commented on the impact of ethnicity and/or race[83] on their research and findings, although opinions varied as to the nature and extent of this impact; for example, many felt that "there's a lot of underrepresentation of people of color... [who] we know seem to be higher risk for a lot of different things [such as suicidality, perhaps because of a bias towards online, over in-person recruitment, whereas] a lot more people of color [are] at the conferences" (Dell). Dell further suggested that this might be because

> You can get more... [and] different respondents based on your own race, ethnicity. I was told when I was trying to recruit more people of color that, cause I was white... a lot of people would not participate, which is unfortunate cause you do this work to try to... have more representative samples and it doesn't matter. So getting... those connections, community buy-in, people [to] understand the importance of research... [that they're not going to be] a guinea pig [and that we need to]... get good data out there that doesn't pathologize us anymore [is really important].

Barbara also professed to have been "somewhat surprised to find... [lower suicidality] among the African American population... [although this was mitigated by her knowledge that] high suicidality has really been reported in White populations". Juan elaborated on this, stating that

> there were definite differences between the responses for people who completed on the internet, who tended to be more middle class, and white and vs. people who completed [by] paper, who tended to be lower [social economic status] and [people] of color. It does seem that the trans women of color, as they grow older,

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[83] Determined by searching transcripts in NVivo for mentions of "race" OR "ethnicity" OR "black" OR "african" OR "aboriginal" OR "white" OR "color".

they actually are less depressed and less suicidal because they're able to form these tight-knit social networks with each other and people in the communities, [which] helps to mitigate the depression [and] suicidality they had experienced when they were younger... African-Americans are, in general, less suicidal than White-Americans in the US... I think it's the resiliency in a lot of communities of color in general.

4.3.1.2 *Descriptive Analysis.*

Figure 3

Ethnicity of Respondents in Transgender Research vs. the US and Canadian Populations [a, b, c, d, e]
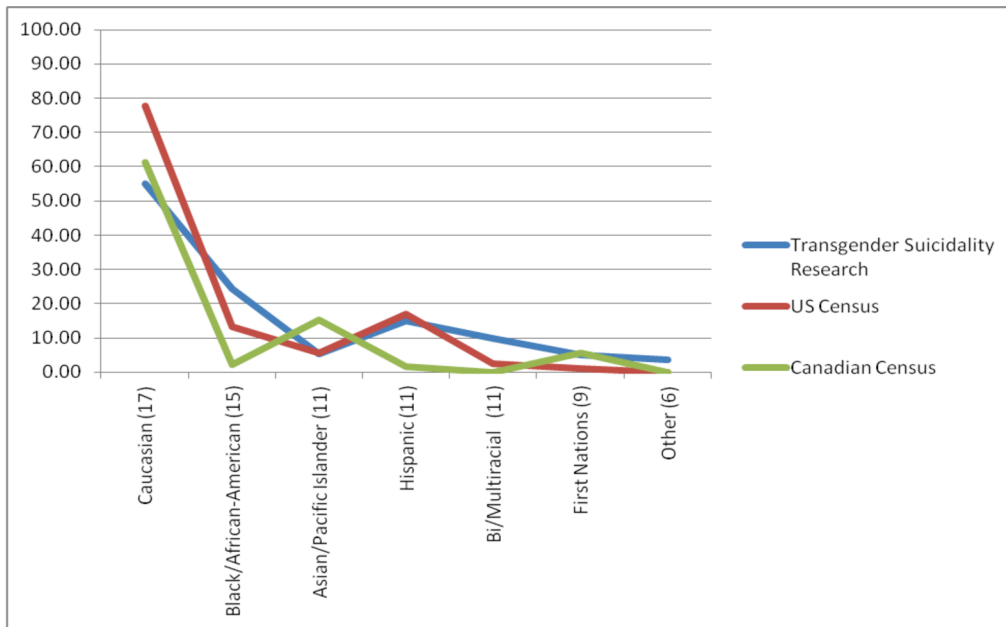
[a] The numbers following the ethnicity labels indicate the number of studies that recorded both suicidality and education.
[b] People of Color includes the Black/African-American group.
[c] Canadian governmental statistical data focuses on recording ethnicity according to whether a person is a 'visible minority', and what the country of origin was.
[d] United States Census Bureau, 2014 [a; b].
[e] Statistics Canada, 2013.

A total of 18 studies recorded categorizable data, on both the ethnicity and

suicidality of 10,471 respondents[84], 14 of which reported respondents as being majority

Caucasian, 8 as People of Color, 3 as Black/African-American and 1 as Hispanic. When

these 18 are considered together, Caucasians account for 55% of all respondents,

Black/African-Americans for 24%, Hispanic for 15%, Bi/Multiracial for 10%,

Asian/Pacific Islander for 5%, First Nations for 5%, and 'other' for 4% (see Figure 3).

Furthermore, contrary to expectations, Caucasians are underrepresented and

Black/African-Americans overrepresented, in comparison to the general population

(United States Census Bureau, 2014 [a; b]; Statistics Canada, 2013). On the other hand,

Asian/Pacific-Islander's are only underrepresented compared to the Canadian population,

Hispanics to the US population, while First Nations are overrepresented in comparison to

the US.

Figure 4

Suicidality According to Ethnicity [a, b, c]
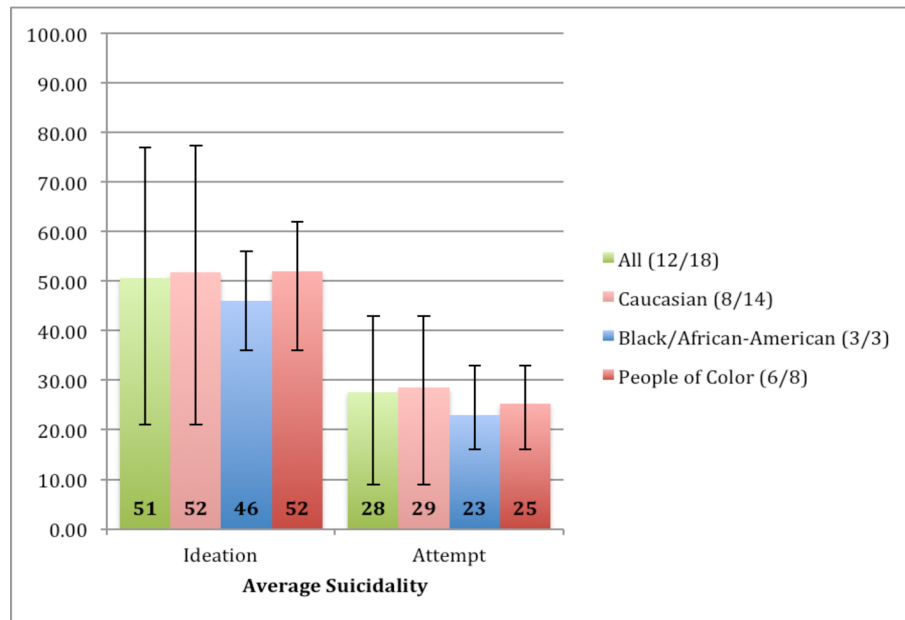
[a] The numbers (ideation/attempts), following the ethnicity labels, indicate the number of studies

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[84] Although Heinz & MacFarlane (2013) recorded ethnicity, it was excluded because it
recorded British descent' and 'European', in place of Caucasian. Unfortunately, it could
not be determined, which of these respondents were Caucasian, or People of Color.

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where information on both suicidality and ethnicity is reported.
[b] Figures for Caucasian and Black/African-Americans are calculated based on studies that report these as the majority of respondents, whereas People of Color is derived from studies where Caucasians are less than 50% of study respondents. As a result, the calculations for People of Color and Black/African-Americans overlap.
[c] All figures are rounded.

Studies with a Caucasian-majority recorded the highest average suicidality rate and range of estimates, while those with a Black/African-American majority averaged the lowest for both. On the other hand, the suicidality average and range, for Caucasian-majority studies, was essentially identical to that of all studies (for which ethnicity was recorded). Finally, studies that reported a majority of respondents being People of Color recorded a substantially smaller range of suicidality, while having a similar average, particularly regarding attempts, to that found for all studies.

4.3.2 Gender identification and sex assigned at birth.

4.3.2.1 *Interviews*. 100% of the interview participants discussed the manner in which they identified transgender respondents for inclusion in their own research studies. In all, only 2 participants discussed using a psycho-medical diagnosis of Gender Identity Disorder, as per the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013). The remaining 16 (17 including the combined study) discussed employing criteria that relied on respondents self-identifying, either generally (e.g. transgender), or more specifically (e.g. transsexual, MTF).

The vast majority of participants, who used self-identification based inclusion criteria, grounded their application in the "two-step method", which classifies, as transgender, a person whose sex assigned at birth opposes their self-identified gender (Barbara). A number further adapted this method to include questions that identify a potential respondent along a gender binary (e.g. man vs. woman), and allow for the selection of multiple gender identities, from a non-exhaustive list. Josef, for example,

explained that they used these adaptations, because they eschewed "a pathology frame...

[for] an identity frame.... [which allowed respondents to see] themselves immediately... in

the first four questions, instead of feeling like someone was trying to put them in a box

that didn't make any sense to them". Others explained that, while this decision represents

a

> challenge... it always works well if you provide self-identification, as well as...
>
> preset categories.... [because,] to be able to speak to a population, you have to
>
> have some good faith that the people, whose words you're representing, actually
>
> consider themselves to be part of [that group] (Rebecca).

It is, however, also important to note that the words and terms, used to self-

identify and signify gender identity, can change significantly in meaning and

acceptability over extremely short distances and periods of time; for example, "in DC...

terms like fag, dom, aggressive, [and] dominant" are used by some Black/African-

American lesbians and transmasculine individuals to identify a specific gender identity

and/or sexuality that may, or may not, involve transitioning. "Passing women" is an

analogous term that was used by older Caucasian lesbians and transmasculine individuals

(Barbara). Another participant described how, between now and the late 2000s, the

definition of transsexual has changed from an acceptable way to classify "people who

were treatment-seeking, or at least thinking about and wanting to... have any sort of

surgeries or testosterone treatments" to one that is seen as stigmatizing (Dell). Similarly,

it is increasingly less acceptable to use "female transsexuals" to refer to FTMs (Dell).

Many participants also discussed their expectations, regarding the relationship

between suicidality and gender identification and sex assigned at birth. For example, a

number predicted that FTMs would experience more suicidal ideation and fewer attempts than MTFs. These participants theorized that, because suicidality is "a trait carried through transition... [FTMs, like] non-trans women are more likely to report... depression and... ideation... and less likely to... attempt... [while MTFs, like cis] boys are less likely to report it, but much more likely to... attempt" (Barbara). Others agreed, noting that MTF/MAAB individuals might also be somewhat overrepresented, relative to FTM/FAAB individuals.

> What we saw in the old research was that trans women are just so mentally unhealthy and transmen are pretty unhealthy too, but not as much as trans women. So I figured a lot of the numbers that I was seeing before were inflated by transwomen, because of that research... but when... my sample [had] no transwomen and [was] higher, I was like, oh, okay, that's not what was going on (Dell).

Furthermore, participants experienced numerous problems when attempting to assess the combined impact of gender identification and sex assigned at birth, on transgender suicidality. Several plausible explanations were identified, including the need to "pay attention to the demographics… [such as when a] sample [is] mostly white" (Jane), and whether "males-to-females and females-to-males [are] combined in [a] study" (Jane). For example, one participant identified tension between the need to create discrete identity categories, for the purpose of descriptive analyses, and the risk of grouping together individuals based on shared physical and transitional goals (e.g. FTM), rather than gender identity (e.g. transmasculine, or transgender, vs. male) (Sandra). She explained that this dilemma was "part of why... [her research] ended up [classifying]

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people who selected trans and people who selected other [as not identifying] as men, or women" (Sandra).

4.3.2.2 *Descriptive Analysis.*

Figure 5

Proportion of Respondents by Gender Identification and Sex at Birth [a, b]
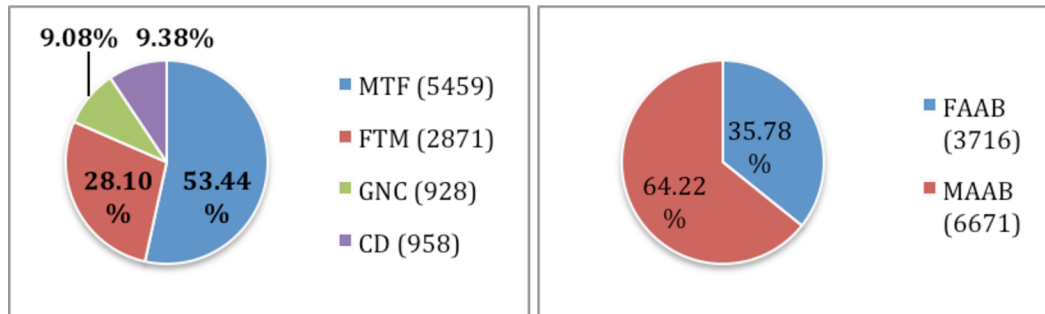
[a] The total for Gender ID does not include the 11 individuals, in Maguen & Shipherd (2010), who did not declare one.
[b] n=6441 for the National Transgender Discrimination Survey (Grant et al., 2011)

17 studies reported on both suicidality and gender identity in 10,216 respondents, while 18 reported on both suicidality and sex assigned at birth in 10,387 respondents. Note, however, that these figures are approximate, as while MTF was largely mutually exclusive of FTM, and Female-Assigned-at-Birth (FAAB)[85] of Male-Assigned-at-Birth (MAAB)[86], Gender Non-Conforming and CD were neither mutually exclusive of each other, or FTM and MTF. 81 individuals were also identified and explicitly classified as intersex[87], although this is likely an underestimate, as this information was almost always volunteered, rather than solicited. In fact, one participant attested that "12% of our [respondents]... had a diagnosed [Disorder of Sexual Development]... so we know that

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[85] Female Assigned at Birth
[86] Male Assigned at Birth
[87] Intersex is an umbrella term that encompasses a number of medical conditions where an individual "is born with... reproductive or sexual anatomy that doesn't fit the typical definitions of female or male." This may manifest as elements of male and female anatomy in a single individual, or a potentially more invisible inconsistency of chromosomal sex (McNeil et al., 2013, p. 53).

there are... some overlaps between intersex and trans populations" (Bob).

Figure 6

Suicidality According to Gender Identity [a]
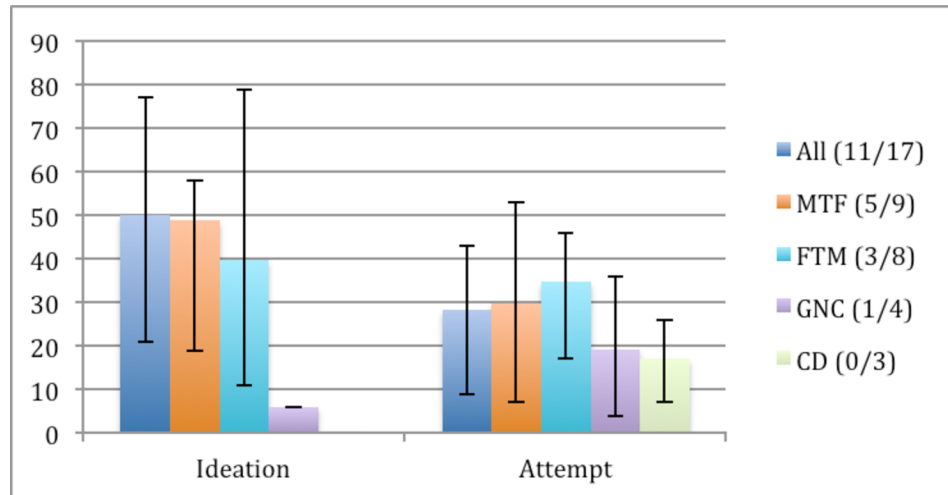
[a] The numbers (ideation/attempts), following the Gender Identity labels, indicate the number of studies where information on both suicidality and Gender Identity is reported.

As compared to the average, MTF respondents reported slightly less suicidal ideation and greater attempts. FTM respondents, on the other hand, reported substantially less ideation, and greater attempts, than both the average and MTF respondents. Gender Non-Conforming and CD respondents, in this order, both expressed far less suicidality than any other group. Interestingly, Gender Non-Conforming respondents appeared to attempt suicide far more often than they ideated. Conversely, the greatest range of ideation estimates was observed for FTM respondents and the greatest range of attempts for MTF respondents. Leaving aside the range for Gender Non-Conforming respondents, as it is based on a single data set, ideation data would appear to be most representative of MTFs, and attempt data of CDs, although even these ranges vary a great deal.

Figure 7

Sex Assigned at Birth and Suicidality
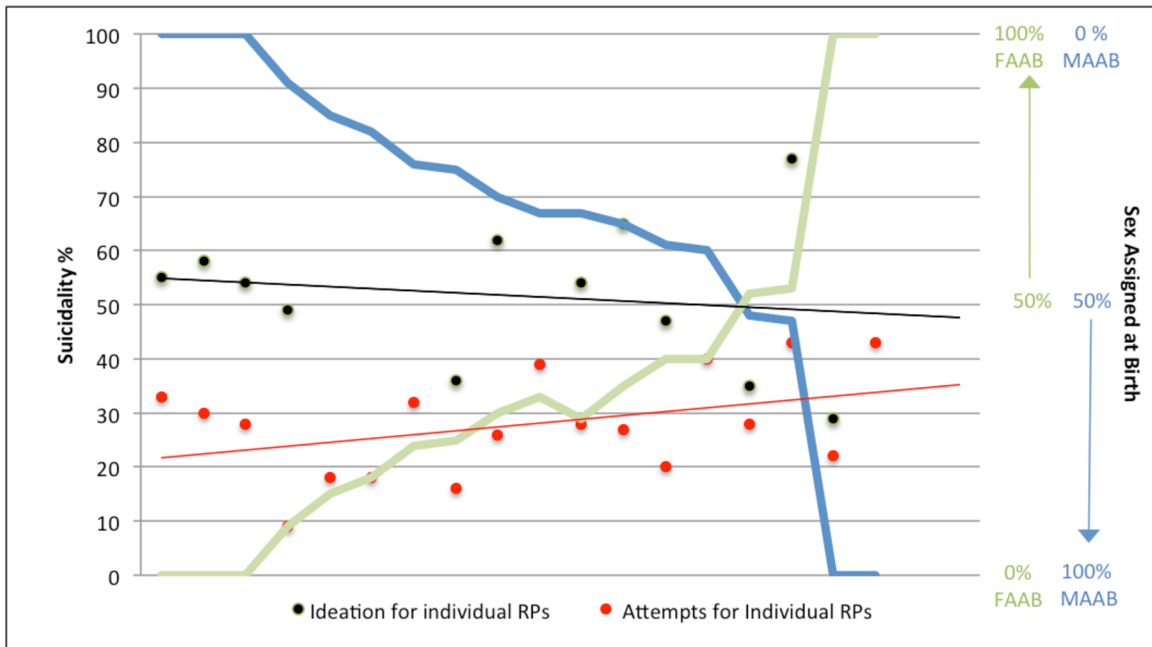
Figure 7 was created to attempt to assess the relationship between sex assigned at birth and suicidality. Two findings are presented in this chart; first, by following the rise and fall of the suicidality trend lines, we can see that ideation is greater among MAAB individuals, when the trend line rises on the left, and FAAB individuals, when it rises on the right. Although the relationship is slight, it would appear that MAAB individuals ideate more often, and attempt less, than those that are FAAB. Second, because MAAB (blue) and FAAB (green) lines cross on the right, we can see that the majority of respondents are the former, with most studies consisting of more than 50% MAAB individuals (specifically 64% vs. 36% FAAB). Interestingly, the first finding roughly corresponds to the proportion of suicidality between MTFs and FTMs (Figure 6), and the second to the proportion of MTFs (53%) vs. FTMs (28%). This may indicate overlap between these two populations, although more research is needed to verify this.

4.3.3 Education.

4.3.3.1 *Interviews*. Although educational attainment was reported in almost all 20 studies analyzed, only 6 of 18 interview participants mentioned their respondents' educational attainment[88]. The most common remarks, made by participants, regarded discovering that their own respondents had higher rates of educational attainment than the general population. Josef, for example, commented that

> our educational attainment is off the map. This is a relatively privileged trans
> sample in the US, there's no doubt about it. I mean, when we've been depending
> [on] the sample as... representative of the population, and it is to some extent,
> because [we've] got a good distribution, both racially... ethnically, and
> geographically, but there's no way that the entire trans population, in the US, is
> more highly educated than the general population.

Despite this assertion, however, Brian also found that "63% [of his respondents] were... college graduates or higher", and "a large portion of... [Juan's were] educated, middle class, [and came] from middle-class backgrounds". Likewise, Janice indicated that the "vast majority of [her respondents]...were highly formally educated [or had] at least some university".

Therefore, at first glance, it appears that high rates of educational attainment aren't that unusual in this population. However, it is also worth noting that "the vast majority of [these respondents] identified as white, or of European descent [which may indicate] overrepresentation of white, formally educated, trans folks" (Janice). Indeed, the transgender community is diverse and the finding of high educational attainment may indicate a failure to reach a large segment of this population. In any case, despite high

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[88] Determined by searching transcripts in NVivo for mentions of "graduate" OR "university" OR "school" OR "education"

rates of education, the transgender respondents sampled here continue to "experience

devastatingly high levels of depression and suicidality (Juan).

4.3.3.2 Descriptive Analysis.

Figure 8

Education Level of Transgender Respondents vs. US and Canadian Population [a, b, c, d, e]
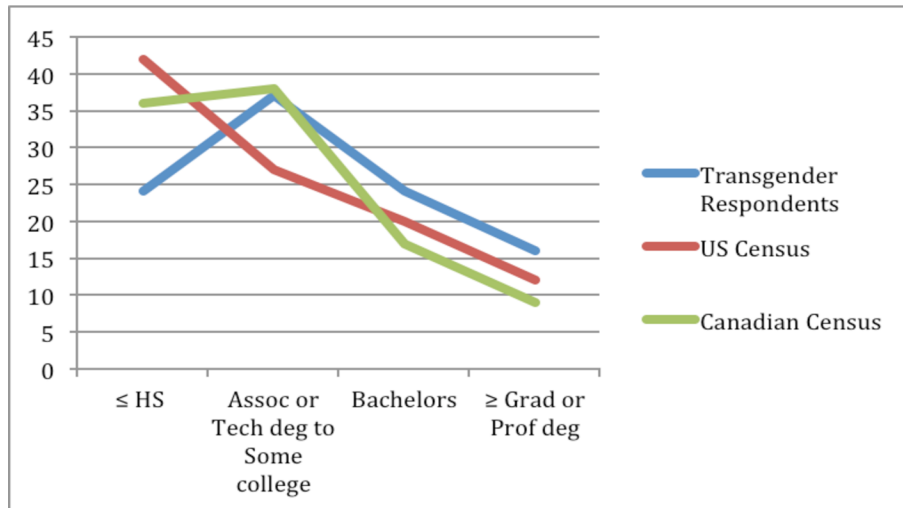
[a] Canadian Census data for 'Assoc. or Tech. Degree to Some College' includes trades
certification, diploma, regular apprentice certificate, college diploma and university certification
other than Bachelors.
[b] All figures are rounded.
[c] Canadian Census data specifies ages 25-64, while US Census data specifies 25+
[d] Statistics Canada, 2011.
[e] US Census Bureau, 2014.

10 studies[89] reported categorizable data on both transgender suicidality and

education in 8419 respondents. As can be seen in Figure 8, these respondents tended

towards higher educational achievement than the general population (Statistics Canada,

2011; US Census Bureau, 2014). Nevertheless, the respondents in the studies that

recorded educational data ideated about as often as the full sample (47%) and attempted

(41%) suicide more often.

4.3.4 Suicidality questions.

4.3.4.1 *Interviews*. All 18 participants (19 including the combined study)

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[89] 5 studies on ideation and 10 on attempts.

discussed the suicidality questions they used in their research and/or the impact of these questions on their findings, and on larger variation of transgender suicidality estimates. In fact, a minority of participants didn't actually employ suicidality questions, instead recording admissions of suicidality made "in... response to questions that were not directly on suicide" (Tom), or from archival data. Another small minority employed "validated, reliable measures, [like the Beck Scale for Suicidal Ideation[90]]" (Janice). The majority, however, either developed their own questions, or utilized ones developed by other transgender suicidality researchers. This generally resulted in minor variations on questions like, "have you ever tried to kill yourself... [or] have you ever attempted suicide? (Josef). Unfortunately, "not everybody thinks that [these questions] mean the same thing, especially if you're not a health provider... I mean, that information's still important to know clinically... But we're not catching that with a yes or no question" (Dell). Indeed, as more than one participant remarked,

> we were only gonna be able to draw very weak conclusions, from the questions that were asked, [because] people interpret... 'have you ever tried to kill yourself?'... in very different ways. ... [saying yes when] they really would only have survived because somebody found them, [while others say yes]... when they [only] thought about taking their lives that day. (Bob).

Michelle elaborated that

> you can ask somebody, for example, have you attempted suicide in the past 6 months, and the validity of that question is very low, because people don't necessarily remember past 6 months, past year and people who [are] highly

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[90] This is not the name of the actual scale used by this participant. Instead, another has been substituted, in order to protect their anonymity.

suicidal are likely to state that they had a suicide attempt within the past 6 months, even though it was remotely longer ago.

Bob further pointed out that these questions don't probe into "how much... issues... [of] gender identity or expression cause these thoughts[91]", an intersection that was rarely investigated in the transgender suicidality research literature.

Despite these problems, relatively few participants discussed the issue of question validity, while those that did, tended to rely on "face-validity" (Victor) over a "validated measure that examines suicidality and has been tested in clinical and non-clinical populations [which] you know how people are going to interpret." (Ted). A small minority did acknowledge the sparse but existing research on transgender suicidality measurement and employed it to craft more specific and targeted inquiries. Bob, for example, indicated that he learned to ask respondents, who responded positively to the question "have you ever tried to kill yourself… [if they had required] any medical interventions... afterwards". Fortunately, only one participant expressed regret at including suicidality questions, stating that, given these difficulties, it would have been better to either omit them altogether, or explore the topic in more depth (Rebecca).

4.3.4.2 *Descriptive Analysis.*

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[91] A small number of the 28 North American, transgender suicidality publications (since 1997) do have an additional question that asks respondents to specify whether suicidality was related to their gender identity. Unfortunately, there were not enough comparable publications to include this data in this study.

Figure 9

Structure and Format of Suicidality Questions in Transgender Suicidality Research

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1. Have you ever [thought about] and/or [considered] [committing] and/or [attempting] [suicide] and/or [killing yourself] and/or [taking your life]?
   a. Have you ever *seriously* [thought about] and/or [considered] [committing] and/or [attempting] [suicide] and/or [killing yourself] and/or [taking your life]?

2. Have you ever [attempted to] and/or [tried to] [commit suicide] and/or [kill yourself] and/or [take your life]?[92]
   a. If yes (to ideation), have you ever tried to kill yourself?

---

14 studies, representing 9570 respondents, reported on the questions they used to operationalize or elicit suicidality data, in a manner that could be consistently sorted (see Figure 9), ultimately, into 2 overarching types of questions, each of which contained its own sub-question. Note that, while some studies used multiple questions, none used 1. and 1a., or 2. and 2a. 6 studies were of a type that used the first question, while 3 used 1a. instead. An additional 10 used the second question, with the exception of 2, which used 2a. and only asked respondents about suicide attempts, if they had endorsed experiencing ideation.

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[92] The single study that specified attempts as 'serious' was excluded from analysis, because it could not reliably be compared either to other serious attempts, or those that did not specify seriousness.

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Figure 10

Suicidality vs. Questions [a, b, c, d, e]
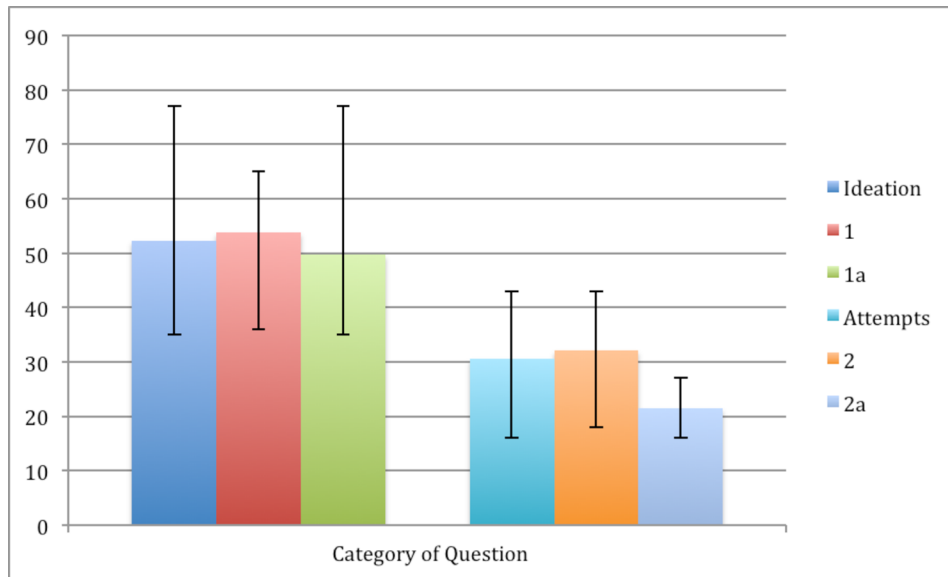
[a] 1 Have you ever [thought about] and/or [considered] [committing] and/or [attempting] [suicide] and/or [killing yourself] and/or [taking your life]?
[b] 1a Have you ever *seriously* [thought about] and/or [considered] [committing] and/or [attempting] [suicide] and/or [killing yourself] and/or [taking your life]?
[c] 2 Have you ever [attempted to] and/or [tried to] [commit suicide] and/or [kill yourself] and/or [take your life]?
[d] 2a If yes, have you ever tried to kill yourself?
[e] Ideation' is based on the average of questions 1. and 1.a, and 'Attempt' on the average of questions 2. and 2.a

As regards Figure 10, respondents that were asked question 1[93] expressed a slightly higher rate of ideation (54%) than the average for all 9 studies that inquired into this factor (52%). Similarly, those asked if their ideation was 'significant' expressed slightly less (50%). Conversely, significantly fewer respondents (22%) reported attempts, when only those who were found to ideate were asked, compared to those who were asked, whether or not they ideated (32%), or when both groups were considered together (31%).

4.3.5 Inclusion criteria.

4.3.5.1 *Interviews*. All participants (excluding the combined study) spoke, in

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[93] How much do estimates of transgender suicidality vary?

varying detail, about their inclusion criteria, when asked to discuss the specific questions and statements that they employed to recruit and select respondents for their research. While some relayed limited detail, in one case allowing only that they were "very inclusive... [in selecting] trans-identified… folks." (Barbara), most were quite descriptive. Jane, for example, explained that she used inclusion criteria that limited participation to MTFs, who had "started hormone therapy... and…[were] diagnosed... [with] Gender Identity Disorder". She further clarified that these criteria were "suggested to [her] by an expert panel of [transgender-identified] consultants" and that respondents were originally identified as transgender in all research materials, but that she was required to change this to transsexual by a journal reviewer (Jane). A number of participants discussed employing similar criteria, with several employing variations on the following question; "according to one definition, being transgender is the recognition of conflict between gender at birth, and present gender identity... according to this definition, do you consider yourself to be transgender?" (Carter).

Generally speaking, and using varying levels of inclusiveness, the majority of participants employed criteria that allowed for self-identification; for example, on one extreme, Lucy reported that

> we asked about their gender at birth, their gender of identity... their sexual
>
> orientation, and... [the] gender of their sex partners... we asked whether they
>
> were… pre-surgery, post-surgery, partial surgery. Whether they wanted additional
>
> surgeries, whether they were comfortable being non-surgical, whether they
>
> dressed opposite gender... If they identified as transgender, they also had to
>
> answer one of those questions, and we [also included]... drag queens that cross-

dressed for entertainment and enjoyment.

On the other extreme, Dillon explained that he used an "index diagnosis... [of Gender Identity Disorder", which made him uncomfortable because

> as a researcher, I want to do as much as I can in the most sensitive way possible [and] it felt very dirty using just the diagnosis codes, cause we know it's imperfect; we know that it doesn't represent all transgender people... There are a lot of trans folk in there who don't have GID diagnosis and a lot of people with a GID diagnosis who may not self-identify as transgender (Dillon).

4.3.5.2 *Descriptive Analysis.*

Figure 11

Elements of Inclusion Criteria[a]
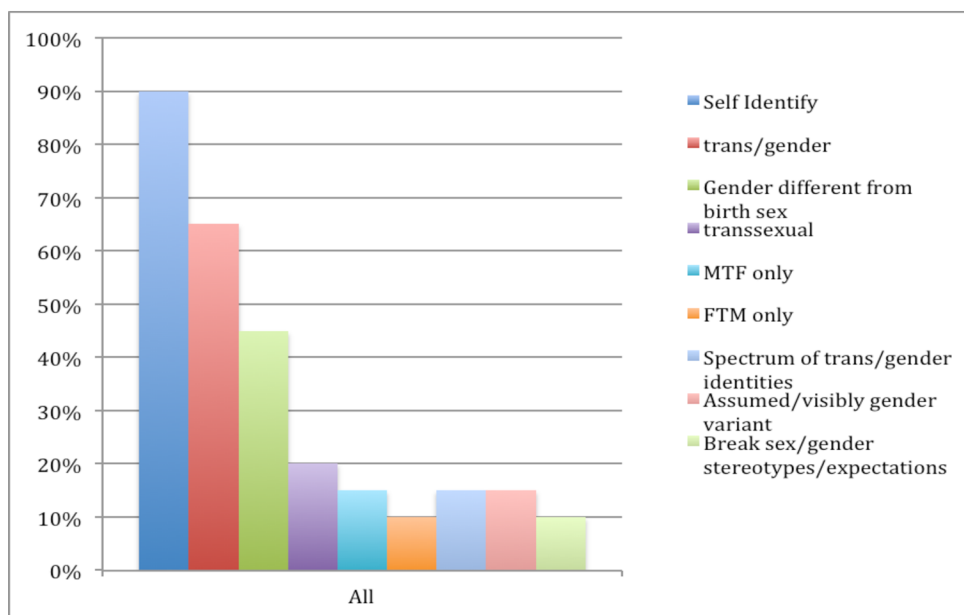
[a] All figures are rounded.

All 20 studies, representing 10,598 respondents, used some manner of inclusion criteria, in the form of a question or statement, to recruit and/or select respondents. These criteria were made up of the 9 distinct elements outlined in Figure 11. The first and foremost of these is 'self-identify' (90% of studies), which invites respondents to select

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themselves, based on identification with the criteria. Several studies also specify

particular transgender identities, including trans/transgender (65%), transsexual (20%),

MTF only (15%), and FTM only (10%)[94]. On the other hand, 15% of studies listed an

array of gender identities (e.g. transgender, transsexual, Gender Non-Conforming, cross-

dresser, etc.), inviting respondents from the entire transgender spectrum. Others (45%)

asked for respondents that experience their gender in a manner distinct from their birth

sex and 10% identified respondents that break and/or confront sex and gender stereotypes

and expectations. Finally, 15% of studies indicated that respondents were recruited

because the interviewer and/or recruiter either believed, or knew them to be transgender,

based on a visual assessment.

Figure 12

Impact of inclusion Criteria on Suicidality [a]

_____
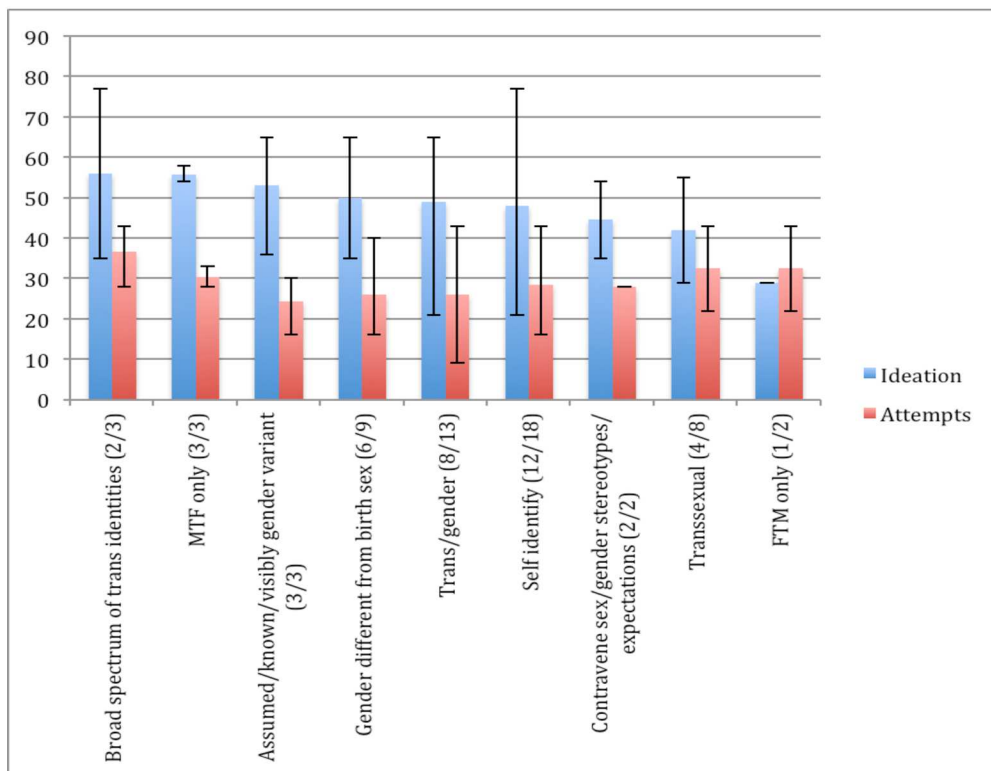
[94] Note that these do not add to 100%, because not all studies specified this factor.

As can be seen in Figure 12, suicidality rates varied depending on the particular inclusion criteria employed; for example, MTF only results in a much higher rate of ideation (56% vs. 29%), and a slightly lower rate of attempts (30% vs. 33%), than FTM only. On the other hand, lower rates of ideation (42% vs. 56%) and attempts (33% vs. 37%) are seen for 'transsexual', compared to 'broad spectrum of trans identities'. In fact, suicidality rates are generally lower when a more specific transgender identity is given.

4.4 Conclusion

The purpose of this chapter was to present multiple findings from an assessment of variation in estimates of transgender suicidality, as gathered from two separate data sources. Throughout this chapter, qualitative data is presented first, followed by a descriptive analysis of the quantitative, statistical data. The first data source consists of 18 interviews, which were conducted with the authors of the 28 studies that measured North American transgender suicidality, either 'ever' or over a specific period of time, and which were published since 1997. During these interviews, participants were asked to discuss their reasons for conducting this research, as well as their knowledge of and thoughts as to why transgender suicidality variation occurs. The second set of data is sourced from the transgender suicidality literature, beginning with the 97 publications (53 studies) that 'present an original and quantifiable report on suicidality incidence'. This was followed by the 57 North American publications (28 studies) that were published since 1997, and finished with the 46 publications (20 studies) that measured suicidality 'ever'. In this case suicidality estimates were measured both generally and relative to five distinct variables (ethnicity, gender identity and sex at birth, education, questions asked,

and inclusion criteria), identified, from the 18 completed interviews, as most likely to cause variation in estimates of transgender suicidality.

The first analysis regarded the degree of variation in estimates of transgender suicidality, which was a direct response to the first question (how much do estimates of transgender suicidality vary?). As noted, the qualitative data, regarding participants' experience of researching transgender suicidality and expectations regarding variation, was presented first. This analysis found that participants were generally aware of high rates of transgender suicidality, but also that they often mistook their findings for being exceptionally high, which many found surprising, or even upsetting. Participants also discussed the connection between transitioning and suicidality; however, variation itself was usually not described in detail.

Following this, the degree of transgender suicidality variation was measured, using a descriptive analysis, beginning with the full set of research data (97 publications/53 studies) and ending with North American research that was published since 1997 (57 publications/28 studies). This analysis found that, across the entirety of this research, estimates of ideation range 85% and attempts range 60%. It also found that, when accounting just for North American research, published since 1997, ideation ranges 56% and attempts range 50%.

The second analysis addressed the second question[95] but also related to the third[96], which is discussed, in greater detail, in Chapter 5. The qualitative component, of this analysis, identified a number of variables (e.g. education, ethnicity, etc.) that were used by the participants, in their research, and which were particularly implicated in

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[95] What factors cause transgender suicidality variation?
[96] What is the best methodology for measuring transgender suicidality?

transgender suicidality variation. The quantitative component, on the other hand, measured the numerical impact, of each of the resulting five variables, on estimates of transgender suicidality in the 20 studies that measured it 'ever'. Descriptive, rather than statistical analyses were used for this purpose.

According to the qualitative analysis, participants identified ethnicity, gender identification and sex assigned at birth, education, suicidality questions, and inclusion criteria, as having a significant impact on transgender suicidality variation. Specifically, the majority of participants suspected that ethnicity was a factor in transgender suicidality variation. In some cases, they even suspected that their own ethnicity limited their ability to recruit respondents of differing ethnicities, particularly if they were Caucasian. A number of participants also expressed surprise at finding lower suicidality among Black/African-American respondents, vs. Caucasian respondents. The qualitative descriptive analysis tended to agree with this, showing the highest rates of suicidality among Caucasians, and a much lower rate among Black/African-Americans.

Regarding gender identification and sex assigned at birth; participants used a range of methods to identify these factors, in their own respondents, including diagnosis of Gender Identity Disorder, and selection of respondents that self-identified with an assortment of sex and/or gender identity-based descriptors. The latter was usually employed, as part of the two-step method, to triangulate gender identity from a respondent's sex and gender identity. Note, however, that these descriptors rapidly change meaning across time and space. Generally speaking, participants expected to find higher rates of ideation and lower rates of attempts among FTMs, compared to MTFs, and were surprised when this didn't occur, as was often the case in their own research and

my descriptive analyses. These analyses also revealed that more MTF and MAAB respondents participated in this research, than FTM and FAAB, or any other group for that matter.

Regarding education; although this variable was discussed in all 20 studies, and quantifiable data provided in 10, only 6 participants mentioned their respondents' educational attainment during the interviews. Within these interviews, participants were generally surprised to find that their respondents achieved much higher rates of education than the general public and believed this to mean that their sample was atypical and privileged. However, my subsequent descriptive analysis showed this to be common, at least within the purview of the component studies. Nevertheless, suicidality remains higher, among these transgender respondents than the general population.

Regarding suicidality questions; a small number of participants utilized suicidality data that was volunteered, rather than solicited, while the majority employed some variation of 'have you ever tried to kill yourself' and/or 'have you ever attempted suicide', which, despite their simplicity, are interpreted in wildly different ways. It is surprising, then, that the problem of question validity was rarely discussed. Although the effect was small, the descriptive analysis elaborated on the ways in which these questions differed, sometimes subtly, and the impact that this might have on suicidality estimates. To this end, some evidence exists that broad questions elicit higher suicidality estimates, while more targeted questions gather lower estimates.

Finally, regarding inclusion criteria; the majority of participants selected for respondents that self-identified as some variation of trans, although this category ranged from very inclusive (e.g. all variations of transgender, to more rigid (e.g. MTF only).

Likewise, the questions and criteria used to solicit this information, while often similar, varied from exhaustive to terse. Likewise, as revealed in the descriptive analysis, most studies allowed respondents to self-identify with inclusion criteria that were often more broad (trans/gender) than specific (MTF only). While it was difficult to measure the impact of this variable on suicidality, in general, groups assigned MTF-only ideated more and attempted less than FTM-only, while lower suicidality was found among groups assigned transsexual, than groups that included respondents from a broad spectrum of identities.

Chapter 5 explores these findings, in sections that discuss the context of this research, in regards to formulating and conducting the analyses and compared to other suicidality research; their relevance to practice and policy; and possible directions for future research. Each of these sections discusses both the calculation of overall variation in estimates of transgender suicidality, as well as specific to the 5 variables. In this way the answer to the third[97] research question is provided, while the first two[98] are clarified.

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[97] What is the best methodology for measuring transgender suicidality?
[98] How much do estimates of transgender suicidality vary; what factors cause transgender suicidality variation?

Chapter 5 Discussion

5.1 Introduction

In this chapter, I discuss the results that were presented in chapter 4. In particular, the

first section of this chapter identifies the extent of overall variation, in the measurement

of transgender suicidality, and in answer to question 1[99]. Following this, the second to

seventh sections discuss, in turn, each of the five variables (ethnicity, gender identity and

sex at birth, education, suicidality questions, and inclusion criteria), in answer to

questions two[100] and three[101]. Respective to their subject, all seven sections discuss the

finding's context, as well as their relationship to practice, policy and future research

directions.

5.2 Overall Variation

    5.2.1 Context

In some ways, an analysis of the overall variation in estimates of transgender

suicidality was the most difficult to construct, as it required narrowing down the literature

to the few studies that could be reliably compared; whereas all subsequent analyses rested

upon these studies. Ultimately, this resulted first, in identifying a series of 28 North

American studies, published since 1997, and second, a subgroup of 20 studies that

measured suicidality 'ever'. The interviews, obtained with authors of 18 of the 28 studies

in this first set, also revealed a number of surprising findings.

Perhaps surprisingly, although participants generally expected to find higher

transgender suicidality rates, many expressed both disbelief at the degree of suicidality

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[99] How much do estimates of transgender suicidality vary?
[100] What factors cause transgender suicidality variation?
[101] What is the best methodology for measuring transgender suicidality?

they uncovered and belief that theirs were atypically high and exceeded other findings. However, it is only possible for one study to have the highest rate, which suggests that researchers in this area aren't always aware of the larger body of transgender suicidality research, or the extent of variation.

In fact, across the 28 studies that measured suicidality either 'ever', or in relation to a specific period of time, the average rate of ideation is 48% (21%-77%) and the average rate of attempts 27% (9%-43%). As already discussed, this is far higher than the general population[102], of which, 0.5% attempt (Centers for Disease Control and Prevention, 2012, p. 1), and 3.7% ideate (Statistics Canada, 2004) about suicide annually. These figures are also remarkably consistent from year to year (Centers for Disease Control and Prevention, 2012; Statistics Canada, 2012), which may be partially due to the much larger number of respondents in general population-based suicidality research, than that specific to transgender individuals.

5.2.2 Practice and Policy

Out of these larger findings, a number of possible avenues for transgender-specific suicidality prevention practice and policy reveal themselves. For example, as described in Chapter 4, one participant related that his respondents talked about choosing transition over suicidality, which characterizes transgender suicidality as an active process and transition as both a protective factor and indication of resilience. Accordingly, practitioners might use this knowledge to help clients to engage with these protective factors; for example, by supporting transgender clients, who are experiencing

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[102] Although other high-risk populations may seem to be a better starting point for comparison, "little research has compared prevalence of suicidal behavior in transgender people to other population groups" (Haas et al., 2010, p. 27).

suicidality, to obtain support from the transgender community and help them to address

barriers to transition, if these are present (Hendricks & Testa, 2012, p. 465). Emphasis

should be placed on transition as a protective factor and the client's resilience in choosing

it. However, practitioners should be aware that not all transitions look the same (e.g.

some may involve surgery, while others won't), some transgender individuals do not

desire to transition, and that there are multiple barriers (e.g. financial, family) to

transition. In the latter case, it may help to explore these barriers; however, be aware that

suicidality may present regardless of transition status, and individual transgender people

may not be comfortable exploring transition in a therapeutic setting. Hendricks & Testa

(2012) note that

> trans clients who wish to obtain medical transition services… may be particularly
>
> reticent to divulge the extent of prior victimization, future expectations,
>
> internalized transphobia, and related distress… [due to well documented
>
> evidence] that certain types of levels of psychopathology can interfere with
>
> receiving these services (p. 465).

It would, therefore, be advisable for the practitioner to spend some time, in the rapport

building stage, "clarifying their position to psychopathology and its relationship to

transition" (p. 465).

On a larger level, however, these findings indicate that some researchers are

unaware of variation in estimates of transgender suicidality, which may shine some light

on the proliferation of transgender-specific suicidality prevention materials that use

inaccurate, or conflicting, suicidality data (e.g. Massachusetts Transgender Suicide

Prevention Working Group, n.d.[a]); Massachusetts Transgender Political Coalition, n.d.).

The measurement of transgender suicidality rates in this thesis could be used to correct these errors; for example, given the evidence of high rates of transgender suicidality in this thesis, evidence-based materials could be developed to assist therapeutic practitioners in identifying this in their practice (e.g. Massachusetts Transgender Suicide Prevention Working Group (n.d.[a; b; c; d]). Similar materials could also be created for public health campaigns to raise awareness of this issue. Finally, these findings would support the creation of legislation, such as Nova Scotia's *Bill 140* (2012), that protects transgender individuals from discrimination based on their gender identity. This legislation would particularly help to reduce the impact of suicidality risk factors, like oppression and discrimination.

While the relative average and range of suicidality estimates, presented here and measured in North American research, since 1997, could be used to correct existing prevention materials, it is important to note that these rates will likely change upon publication of the next transgender suicidality study. A more preferable temporary solution might, therefore, be to use the largest and most widely cited research, which in the US is the National Transgender Discrimination Survey (Grant et al., 2011) and in Canada is the Trans PULSE study (Scanlon et al., 2010).

5.2.3 Future Research

As regards future research, many possible avenues present themselves and while not all can be listed here, the most salient include the exploration of minority stress theory and protective factors, as they relate to transgender suicidality. In the first case, recall minority stress theory posits that oppressed groups experience chronic and "general stressors" that are experienced by all people (Meyer, 2003, p. 674). There is considerable

evidence for this theory (e.g. Meyer, 2010; Meyer et al., 2015), but relatively little specific to transgender individuals (e.g. Claes et al., 2015). This is unfortunate, as this theory demonstrates the importance of creating group-specific policy and prevention materials (Meyer et al., 2015). Accordingly, a potentially fruitful avenue for future research would commit to exploring the applicability of this theory to transgender individuals, both generally, but particularly in relation to their experience of suicidality.

In the second case, few attempts have been made to explore protective factors, relative to transgender individuals and their experience of suicidality, with Moodie and Smith (2013) being the notable exception. However, a thorough and detailed knowledge of these factors would allow therapeutic practitioners to reinforce them, thereby preventing individual occurrences of suicidality.

5.3 Ethnicity

5.3.1 Context

Ethnicity is a highly fraught and complex identity-based category, with various difficulties associated with conducting an assessment of its impact on transgender suicidality, particularly as regards categorizing respondents. For example, while some studies asked respondents to record their own ethnicity/s, permitting multiple options, others determined this through a visual assessment, allowing only one. Similarly, some studies distinguished between Caribbean and Black/African-American, and 'white' and 'non-white' Hispanic; while several declined to provide definitions of ethnicities, or information on how many individuals didn't report an ethnicity, and if they were included in these calculations.

Ethnicity was often referenced in the interviews and many participants felt that, in

general, transgender suicidality research oversampled Caucasians, while under sampling

Black/African-Americans. These participants also tended to assume that suicidality

should be higher among Black/African-Americans, due to "social and economic

exclusion, barriers to health service access, and high burdens of violence" (Scheim et al,

2013, p. 117). A minority, however, having observed this in their research, felt that

Black/African-Americans were correctly reported as experiencing lower rates of

suicidality, relative to other transgender individuals generally and Caucasians

specifically.

This finding is seemingly at odds with minority stress theory, which would predict

that Black/African-Americans experience higher rates of suicidality, due to their

experience of

> unique stressors—which do not affect members of advantaged groups, such as
>
> those related to prejudice— [and] place added burden on members of…
>
> *disadvantaged* [sic] groups. Thus… prejudice causes members of disadvantaged
>
> social groups to experience greater burdens (e.g., poorer educational systems,
>
> exposure to neighborhood pollutants, life events due to discrimination) and have
>
> fewer resources (e.g., discordant values and norms, such as heterosexism, barriers
>
> in access to coping and support resources) than members of advantaged groups...
>
> The minority stress argument goes further to suggest that this unique stress causes
>
> mental health problems[103] (Meyer, 2010, p. 448).

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[103] Note that I do not view suicidality, or those experiencing it, as inherently pathological and/or permanently disordered. While Meyer does use the term 'mental health problem/disorder' to encompass suicidality, among other issues, he has consistently identified this behavior as a potential reaction to oppression and stigma, rather than a necessary indicator of pathology or permanent disorder (Meyer, 2003, p. 683; Meyer,

This paradox is, however, acknowledged in research on minority stress theory, which reports, "contrary to minority stress predictions, LGB people of color do not have more mental disorders than LGB Whites… [despite consistent findings of more] mood, anxiety, and substance use disorders" among LGB individuals, compared to heterosexuals (p. 449). What could be termed the resilience lens of stress theory, posits

> that despite the excess in stress among Blacks, they do not have higher rates of
> disorders… [because of] good coping facilities and skills (including not only
> personal but also community-wide coping resources)… [which help them to]
> overcome the potential negative effects of stress (p. 449-450).

The results of this analysis also appeared to reinforce some of the participants' predictions. For example, although Caucasians represent 55% of my total study population, this is still less than the proportion found in the general population (see Figure 3; Statistics Canada, 2013; United States Census Bureau, 2014[a; b]). Similarly, Black/African-Americans seem to be overrepresented at 24% (Statistics Canada, 2013; United States Census Bureau, 2014[a, b]). It is further interesting to note that, as compared to the US and Canadian Census, the proportion of First Nations respondents is almost identical to the rate in Canada and far higher, comparatively, than the US, while the opposite is true for Hispanics. Conversely, the proportion of respondents that are Asian/Pacific Islander was near identical to the US, but much lower than for Canada, while the proportion of Bi/Multiracial respondents was higher, in both cases, than the Canadian and US Census data, which was actually quite similar. These findings suggest both that this analysis is more representative of Caucasian respondents, than any other

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2010, p. 449). In this characterization, suicidality may, in many cases, cease to be an issue in the absence of these pressures, or stress.

group, and that this is not irregular. They also relate some interesting comparative data on the relative proportion of particular ethnicities among transgender individuals in Canada, vs. the US.

In any case, contrary to the majority of participants' expectations, Black/African-American were found, through the descriptive analysis, to experience suicidality less and Caucasians more than any other ethnic group. Nevertheless, these findings are consistent with non-transgender suicidality research, which tends to record the highest rates of suicidality among Caucasians and the lowest among Black/African-Americans (e.g. National Institutes of Mental Health, 2002; Xavier et al., 2005)[104].

Various theories as to why this occurs have been proposed, including "higher religiosity and less cultural acceptance of suicide" (Rockett, 2010, p. 10). Others suggest, "experiences with positive racial identity may be protective to Blacks both directly, by contributing to high self-esteem and indirectly, by facilitating self protective mechanisms associated with stigma" (Meyer, 2003, p. 21). Unfortunately, "no research explains how being Black protects against suicide" conclusively (Rockett, 2010, p. 10). In any case, regarding my own research, as with the preceding finding, this would suggest that my research accurately assessed the impact of this variable, as did the majority of the included studies.

Although participants often assumed that these findings did not accurately reflect the relationship between ethnicity and suicidality, nevertheless, several sought to provide plausible explanations for them. Some participants, for example, suggested that online surveys, which are increasingly favored in this research (Richmond et al., 2010, p. 114),

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[104] Note that, at present, the rate of suicide in Black/African-American males does appear to be disproportionately increasing (Joe & Niedermeier, 2008, p. 515).

tend to oversample Caucasians and under sample People of Color. Participants further pointed out that researchers from the same ethnic background as their respondents may have an advantage in demonstrating, to these respondents, that their research is ethical and respectful, which strongly argues for the use of key informants (e.g. Hwahng & Nuttbrock, 2007; Xavier, 2000; Xavier et al., 2007; Zians, 2006).

5.3.2 Practice and Policy

While it is beneficial to know that suicidality is implicated more in Caucasian than Black/African-American transgender individuals, I am hesitant to suggest the creation of public policy that highlights this knowledge, primarily for fear of centering the experience of Caucasians, in the midst of a wave of violence directed at transgender women of color[105] (Grant et al., 2011). However, this knowledge may be useful in two other ways; first, suicidality prevention materials, such as brochures, could be created to emphasize the theoretical relationship between in-group protective factors, for example among People of Color generally and Black/African-Americans specifically, and lower rates of suicidality. This would have the effect of celebrating the strength of the transgender Black/African-American community, whilst calling attention to factors that may protect against suicidality in Caucasians.

Second, while all therapeutic clients have their own individual needs, these findings are useful for informing practitioners of a generally higher risk of suicidality among Caucasian transgender clients, and the potential presence of more protective factors among People of Color/Black/African-Americans. In practical terms, this means "experience with positive racial identity may be protective to Blacks both directly, by

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[105] At the time of this writing at least 7 transgender women (6 People of Color) have been violently and brutally murdered in North America this year (Kellaway, 2015).

contributing to high self-esteem, and indirectly, by facilitating [or encouraging the continued development of] self-protective mechanisms associated with stigma" (Meyer, 2003. p. 21). In operational terms, practitioners should "support and encourage clients' engagement [with those protective] factors that promote resilience… [for example, by helping them to] engage… and identify with other members of the minority group", both in general and specific to their ethnic identity (Hendricks & Testa, 2012, p. 465). On the other hand, increased resilience in Black/African-American transgender individuals, comes at the cost of added oppression and social stress and "social workers… must consider the role of stigma related to suicide… particularly when working with suicidal African-American clients" (Joe, & Niedermeier, 2008, p. 524).

5.3.3 Future Research

Several suggestions for future research can be made; first, allowing that the ethnic proportion of respondents is representative of the general population, one might still wish to recruit respondents of a particular ethnicity, either to explore their relationship to suicidality, or because they have been under sampled in an ongoing study. This analysis suggests that recruitment of Black/African-Americans and People of Color may be aided through the use of key informants, as well as in-person and conference-based recruitment. Conversely, Caucasian recruitment may increase through the use of key informants, online survey methodology, and recruitment in communities and locations with a higher proportion of Caucasians. However, there may be little cross-communication between transgender communities stratified by poverty, ethnicity, immigration status, and transitional goals and, as a result, the ability of a single key informant to access multiple sub-communities, even within a single ethnicity, must be considered.

Additionally, future researchers should consider whether their choice of ethnic categories (e.g. 'white', vs. 'non-white' Hispanic) is generalizable to the majority of other research. They should also undertake to report exhaustively on their findings, alongside the raw study data. While word requirements in academic journals may make this impractical, a Cochrane Review type database would be useful for cataloguing and archiving this information. From a quantitative standpoint, this would help with the standardization of data collection. However, from a qualitative standpoint, variation allows for the expression of a multitude of opinions and expressions, regardless as to whether they frustrate analysis and policy creation. A compromise could involve providing the ethnic categories used in the most recent census and directing respondents to select all that apply and/or specify an 'other'. Canadian researchers may also wish to consider whether they will use the ethnic categories provided in the US Census, which allows for closer comparison to the majority of research, or the Canadian, which is perhaps more representative of their respondents.

Regarding topics for future research; although seen in the general population, the finding of greater suicidality among Caucasian respondents (and lower among Black/African-Americans) calls for further investigation. It would be particularly interesting to determine whether lower suicidality rates result from culturally protective factors, unique to communities that are tightly knit by shared ethnicity and transgender status. If research found these factors to be protective, practice and policy could emphasize their use in suicidality prevention materials and interventions. Conversely, one could also investigate whether culturally unique factors are implicated in increased rates of Caucasian suicidality and, determining this, seek to undermine their impact.

Furthermore, "Studying [the] distinction between [suicidality in] LGB [or transgender] individuals and Blacks may reveal important aspects of the effect of stigma on mental health" (Meyer, 2003. p. 21).

5.4 Gender Identification and Sex Assigned at Birth

5.4.1 Context

While this was not the most difficult analysis, there were a number of problems; for example, few participants discussed the relationship between gender identification and sex assigned at birth, on transgender suicidality, in either the interviews, or publications. As a result, while I wished to explore the interconnection between these factors, it was necessary to treat them as distinct. Another issue was the wide range of definitions and criteria used to categorize respondents, according to gender identification and sex assigned at birth; for example, FAAB and MAAB were relatively exclusive categories, while FTM and MTF, although generally mutually exclusive, were often used interchangeably with and sometimes in addition to Gender Non-Conforming and CD (e.g. Grant et al., 2011). Unfortunately, absent the raw respondent data for each study, it was not possible to eliminate this difficulty. A further complication, described by the participants, is that the terms used to identify sex assigned at birth and especially gender identity, are rapidly evolving, while varying a great deal dependent on geography. As a result, despite the best intentions of individual researchers, misinterpretation and misuse of language remain stumbling blocks to both gaining the trust of transgender communities and accurate representation of this community.

On the other hand, the participants correctly identified and described the use of the 'two-step method', which identifies transgender respondents by triangulating sex

assigned at birth and current gender identity. This technique is, in fact, backed by a considerable amount of research (Sausa, Sevelius, Keatley, Iniguez, & Reyes, 2009) and is also one of the few consistently applied methodologies in this field (e.g. Mathy, 2002; Xavier, 2000; Xavier et al., 2007).

Furthermore, to the extent that some participants suggested transgender individuals might carry their sex-based risk of suicidality through transition with them, specifically that FTMs would attempt less and ideate more than MTFs, my findings revealed the opposite. Indeed, I found that FTMs ideate less and attempt more often than almost all other groups, including MTFs. This finding may show that FTMs and MTFs tendency towards suicidality reflects their felt, rather than natal, gender identity. On the other hand, it may also show partial evidence of the participants' theory, through what is known as 'the gender paradox in suicidal behavior'. Simply put, there is a consistent "overrepresentation of [cis] females in nonfatal suicidal behavior and a preponderance of [cis] males in completed suicide" (Schrijvers, Bollen, & Sabbe, 2012, p. 19). This is generally attributed to "higher rates of internalizing disorders in [cis] females… [vs. the] commission of more impulsive, lethal, and determined suicidal behavior" in cismales (p. 24). Accordingly, based on the theory discussed by participants, we would expect to see FTMs attempt *and* ideate more often than MTFs who, were the data available, we would expect to see complete suicide more often.

It also revealed that binary-identified respondents (MTF, FTM) were generally more suicidal than non-binary (Gender Non-Conforming, CD), although some research suggests that this is less true for MAAB, Gender Non-Conforming individuals, who are visibly gender variant (Grant et al., 2010, p. 9; The Williams Institute, 2014, p. 9). Most

surprising, however, the attempt rate for Gender Non-Conforming individuals is almost

three times that for ideation, although this may be explained by the fact that only one

study was available for this calculation. Similarly, it is somewhat suspect that FTM

ideation and MTF attempts report a wider degree of variation than any other group.

On the other hand, although not mentioned by the participants, the majority of

respondents in the descriptive analyses appear to be MTF/MAAB (see Figure 5). While

this may be due to recruitment bias, it appears more likely to be an accurate reflection of

greater population prevalence of MTF/MAAB individuals, in relation to FTM/FAAB. In

fact, reports consistently indicate the incidence of MTF to FTM as approximately 75% to

25%, which is similar to the 64% (MAAB) to 34% (FAAB) and 53% (MTF) to 28%

(FTM) found here[106] (Olyslager & Conway, 2007; Bakker, Van Kesteren, Gooren, &

Bezemer, 1993, p. 237; Walinder, 1967, p. 102). Figure 7 also supports this, showing

both that a larger proportion of respondents are MAAB and echoing findings of higher

ideation and fewer attempts among this group.

5.4.2 Practice and Policy

Regarding practice and policy; first, therapeutic practitioners should be mindful of

the greater potential for suicidal ideation among MTFs, and attempts among FTMs. This

is particularly important as this finding differs somewhat from that seen for cisgender

men and cisgender women and, in this respect, is contrary to participants' predictions.

Unfortunately, at this stage of research, it isn't possible to definitively state why FTMs

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[106] Note that these estimates are based on the assumption that MTF=MAAB and
FTM=FAAB. As a result, they do not allow for the other gender identities shown in
figure 5's left chart. Accordingly, if the remaining 18% (CD and Gender Non-
Conforming) are split evenly between MTF and FTM, we reach a similar proportion to
that seen in the right chart (FAAB vs. MAAB).

ideate less and attempt more than MTF's, except to suggest, in a modified form of the participants' theory, that an individual transgender persons' risk of suicidality may be more representative of their natal sex, than felt gender (e.g. Schrivers, Bollen, & Sabbe, 2012).

Similarly, suicidality prevention materials could be created to both disseminate this information and create targeted responses for ideation in MTFs and attempts in FTMs. This might also include materials addressing the fact that

family rejection is associated with increased risk of suicide attempts [and] family acceptance is associated with greater self-esteem, social support, and better general health status and is protective against suicidal ideation and behaviors… [Therefore, while] an effective proven preventive approach [remains] elusive, early identification and intervention… [via] education of both the public and clinicians is important so that risks for suicide can be identified in time for intervention to take place (Meyer et al., 2014, p. 26).

As mentioned throughout this chapter, these findings also strongly support the creation of human rights legislation that addresses many of the suicidality risk factors, described here, but particularly discrimination in various spheres (e.g. jobs, housing).

5.4.3 Future Research

Methodologically speaking, the two-step method remains a useful, time-tested method of identifying individuals that identify within a gender binary (e.g. male/MTF or female/FTM). It is not, however, ideal for use with individuals that express their gender outside of a binary (e.g. Gender Non-Conforming). Fortunately, the two-step method can be adapted to incorporate these experiences, via the addition of female-to-other, male-to-

other, a space to write in a unique gender, and allowing respondents to select multiple options. Such adaptations have already been successfully piloted (Grant et al., 2011; Heinz & MacFarlane, 2013, p. 3; Scanlon et al.; 2010, p. 1). Of course, such adaptations would make analysis of gender identity more complicated; however, doing otherwise increases the likelihood of conflating, or even excluding non-binary identities.

As regards future research topics, three are particularly salient in regards to gender identity and sex assigned at birth. First, in light of the possible overlap between transgender and intersex individuals (who may, or may not identify as transgender), respondents should be asked whether they have an intersex condition. As it stands, these individuals may make up a substantial minority of respondents; however, only 81 were known to participate, and these only because they volunteered this information. Second, an investigation into the specific experience of suicidality among Gender Non-Conforming individuals would be welcome. At present, the little research that does exist is buried within larger binary-identified populations (e.g. Grant et al, 2011). We can, as a result, say little about Gender Non-Conforming suicidality.

Finally, given the findings of greater ideation among MTFs and attempts among FTMs, it would also be interesting to explore the participants' theory, that suicidality is a trait carried through transition, in more detail; because, while this appears to be grossly correct, it is inaccurate, so far as these interview participants specified that this would indicate higher rates of attempts among MTFs and ideation among FTMs. This theory also doesn't account for higher rates of suicidal completion and more violent methods among cisgender men. In this train of thought, it would be useful to examine whether, like cisgender men, FTMs use more violent methods of suicidality. Similarly, should

suicide completion data become available for this population, it would be interesting to compare the rate of completed suicidality, dependent on gender identity and sex assigned at birth, to matched pairs of cisgendered individuals.

5.5 Education

5.5.1 Context

Several interview participants expressed an interest in determining whether education protects against suicidality in the transgender population; however, for a number of reasons, this analysis was exceptionally difficult to formulate. There are two main reasons for this difficulty; first, although all 20 studies reported on their respondents' educational level, the manner in which they did so varied a great deal. For example, some of these studies recorded the highest level obtained by respondents in each of six common categories ($\leq$ some high school, high school, completed Associate or technical degree, some college, Bachelor's degree, and $\geq$ graduate or professional degree). However, other studies either combined these categories in various ways, or only reported on the highest level of education reached by the majority of respondents. Where the latter was the case, educational data did not always appear to add to 100%. The second difficulty related to apparent regional variation in the definitions of educational level used by individual studies (e.g. college vs. university).

I addressed the first difficulty by eliminating several studies, including 4 that didn't report 100%[107] of respondents' education, 2 that reported everything above high school in a single category, and 3 that combined the above 6 educational categories in ways not shared by the remaining 10. I then combined the categories $\leq$ some high school

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[107] +/- 3%, due to rounding.

and high school, which allowed me to include 2 studies that had reported on this in aggregate. In all, I was able to compare 10 studies across 5 categories ($\geq$ some high school, completed associate or technical degree, some college, bachelor's degree, and $\geq$ graduate or professional degree).

In addressing the second difficulty, I choose to assume that the language used by individual studies had identical meaning, by recording what was explicitly reported. I deliberately avoided the quagmire of determining whether college and university were synonymous and only used 'completed associate or technical degree' when the terms 'vocational', 'technical', or 'associate' were present. I also included 'some technical or vocational training' in this category. Unfortunately, this leaves some uncertainty; first, because it wasn't always clear whether studies that indicated a respondent 'completed college' were indicating a Bachelors or Associate degree; and second, because respondents who completed 'some' of a category may have been recorded as either attempting, or completing this level of education.

There remained one final problem; of the 10 remaining studies, none reported the highest rate of education for 'completed associate or tech degree', only 1 for each of '$\geq$ high school' and '$\geq$ graduate or professional degree', and 2 for 'Bachelors', with the remaining 6 clustered under 'some college'. In order to obtain a large enough number of studies to compare, I was forced to combine the category 'completed associate or technical degree' with 'some college', and 'bachelors' with 'graduate or professional degree'. Even then, it was only possible to determine suicidality across all 10 of these studies, rather than for specific levels of education.

Confirming the interview participants' expectations, Figure 8 demonstrates that

transgender individuals achieve higher levels of education than the general population. However, while one might think that high levels of education protect against suicidality, as more highly educated people are accorded a similarly high social and economic status, transgender suicidality ideation remains high at 47%, while attempts actually increase (41%). Clearly higher levels of education do not protect against suicidality in this population, nor does lower education seem to predict it. Shah & Bhandarkar (2009) have, however, found that educational attainment only protects against suicidality to a point. They suggest that

> Individuals with higher educational attainment may be predisposed to… suicide, if there is a mismatch between levels of educational attainment and anticipated socioeconomic benefits from higher levels of education, including better jobs, higher income, and better housing (p. 467).

Similarly,

> higher levels of education in… African-Americans and Hispanics… [generally] increases the likelihood of suicide in these populations… It appears likely that among these groups, frustration or despair that their education is not paying off as it should results in weakened social integration… A similar study… among African-American males… [found that] educational attainment increases the risk of suicide (Joe & Niedermeier, 2008, p. 515).

In fact, a great deal of research has demonstrated that transgender individuals tend to experience barriers to housing, employment, and other indicators of success (e.g. Grant et al., 2001). This, combined with a higher rate of education, could help to explain both higher rates of suicidality and the failure of education to protect against it.

5.5.2 Practice and Policy

Regarding practice and policy; therapeutic practitioners should be aware of the potential for disconnect, between higher educational achievement and continued oppression, to contribute to suicidality and, in light of this, mindful of the increased potential need for emergency interventions. They might ameliorate this risk by assisting clients to anticipate post-educational oppression, explore its impact on expectations and stress, and formulate responses and reactions to it. Resource materials, such as brochures celebrating higher educational achievement and warning of the possible relationship to suicidality, could also be created. Finally, these findings could be used to lobby for anti-discrimination and human rights legislation that protects transgender individuals' equal access to jobs, housing, and other necessities of life and happiness.

5.5.3 Future Research

Regarding future research; methodologically speaking, investigations into the impact of education on transgender suicidality would only be strengthened by standardized data collection. In particular, researchers should allow for flexible categorization by requesting only the highest completed level of education (e.g. grade 11, 3 years college, Associate of Healthcare Administration Degree). Furthermore, as with other variables, raw respondent data should be made available.

On the other hand, one potential avenue for future research would involve confirming whether higher educational achievement, combined with continued barriers to jobs, housing, and other indicators of success, contributes to higher suicidality in this population. Multivariate methodology would be helpful in this regard (de Wilde, 2002, p. 57). More generally, an investigation into the educational experiences of transgender

individuals, without regard to suicidality, would be useful in establishing a robust set of data on this particular life stage.

5.6 Suicidality Questions

5.6.1 Context

All of the interview participants spoke about the questions they used to elicit suicidality information from their own respondents, although most didn't directly address question validity. In fact, these questions vary a great deal; for example, some studies create their own questions, while others adapt, or borrow those used by other research, which may, or may not be transgender-specific. As noted by both the participants, and spoken about in relation to suicidality research in general, question variation can be extremely problematic, leading to

> vulnerability of epidemiological data [to] methodical choices. It is not far-fetched to suggest that the differences in operationalizations… identify different groups... and therefore would come up with different [results]... [As a case in point,] studies that use the phrase 'ending your life' have higher percentages than studies that use the phrase 'attempt suicide' (de Wilde, 2002. p. 57-58).

Indeed, regarding the statistical data, few of the 20 studies analyzed were directly comparable.

Speaking broadly, however, the aforementioned 20 studies tended to fall into 2 major groups, based on whether they addressed ideation or attempts (see Figure 9). Once so divided, the questions were further sorted according to whether they indicated that ideation had been 'serious', or if they only asked about attempts, when respondents had reported positively for ideation. The resulting analysis compared the suicidality rates of

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studies that fit into these groups; however, this is a fairly shallow analysis, made more so by the fact that some groups contained as few as 2 studies.

While the relationship is slight, the descriptive analyses suggest that slightly fewer respondents may report experiencing suicidal ideation when it is specified as 'serious' (see Figure 10). Conversely, significantly fewer respondents report attempting suicide, when this question is only asked of those that ideated. This is odd as, compared to the transgender population as a whole, one would expect to see higher rates of suicidality among those who are confirmed to have experienced suicidal ideation. On the other hand, recall that these analyses were conducted using all respondents (e.g. all study respondents), rather than -non-respondents (e.g. just those that answered and/or were asked the suicidality question/s), as a denominator. Therefore, the analyses include studies that measured suicidality in both those who did and did not experience suicidal ideation. We would, as a result, expect the descriptive analyses to report less suicidality, given that the number of individuals that both attempt and ideate is smaller than the number that attempt, which is smaller than the number that ideate.

These findings confirm that transgender suicidality questions often lack consistency. More specifically, they suggest that questions that are unclear and inconsistent are likely to be interpreted, by survey respondents, in a wide variety of ways, resulting in data that is, at times, incoherent. Despite this, these findings fail to specifically elaborate on the ways that respondents differ in their interpretation of suicidality questions, nor the significance and reliability of these questions, on an individual basis.

5.6.2 Practice and Policy

Unfortunately, as regards the impact of suicidality questions on the measurement of transgender suicidality, these findings are more useful to transgender suicidality researchers, than to practice and policy. However, as noted, where the quality of research demonstrating a link between discrimination and transgender suicidality can be improved, its utility to advocacy for transgender-specific human rights legislation also improves. This is, in part, because it is consequently less vulnerable to being discredited, by individuals and groups invested in blocking transgender human rights, as has sometimes been the case (e.g. Shanko, 2011a, b). Additionally, as has also been described in Chapter 2, transgender-specific suicidality prevention materials often cite conflicting and even inaccurate suicidality statistics (Massachusetts Transgender Suicide Prevention Working Group, n.d.[a]; Massachusetts Transgender Political Coalition, n.d.), causing their validity to be questioned by both practitioners and consumers. Higher quality transgender suicidality research would certainly help to counter this issue.

5.6.3 Future Research

Regarding future research methodologies; first, researchers should be careful to consider the design of their suicidality questions. For example, although this needs to be confirmed, some evidence suggests that broader definitions (e.g. 'have you ever [attempted to] and/or [tried to] [commit suicide] and/or [kill yourself] and/or [take your life]?') solicit higher suicidality rates than those that are narrower (e.g. '… have you ever tried to kill yourself?'). Similarly, the specification of terms like 'serious' may result in lower suicidality rates. Practically speaking, while the validity and reliability of these questions should be tested statistically, consistency could be increased by employing suicidality questions (with permission) that have already been designed and piloted (e.g.

Grant et al., 2011; Scanlon et al., 2010). However, the numerous factors that vary independently of suicidality questions (e.g. research design, demographics, location) should never be ignored or underestimated.

Second, as remarked on in the interviews, few of these studies asked respondents whether their experience of suicidality was related to their transgender identification, which complicates any assessment of the risk that suicidality presents to transgender individuals. Future research should attempt to correct this by building upon the few studies that have attempted to make this connection (e.g. Kenagy, 2005a, Kenagy, 2005b, Xavier et al., 2007).

Other avenues for future research include a detailed and thorough investigation of the suicidality questions employed in transgender suicidality research, which would, ideally, include raw respondent data from each of the included studies. A similar line of investigation might involve employing cognitive interviews to ask respondents, who have completed a suicidality inventory, how they interpreted particular questions and definitions. Finally, research into the creation and pilot testing of a transgender-specific suicidality questionnaire would also be welcome.

5.7 Inclusion Criteria

5.7.1 Context

Almost all participants discussed the criteria they used to include or exclude study respondents and all of the studies subjected to a descriptive analysis specified this information. Much like with suicidality questions, these criteria varied a great deal, but in general, they tended to range from the broadly inclusive (e.g. all individuals who self-identify as transgender), to the narrow and specific (e.g. MTF individuals diagnosed with

Gender Identity Disorder). In fact, an individual study's particular inclusion criteria tended to be constructed out of a constellation of elements that targeted self-identity (e.g. transgender, MTF only) and/or psychomedical diagnosis (e.g. Gender Identity Disorder, assumed/visibly gender variant). As revealed in both the interviews and studies, there also appears to be a trend towards the use of broader criteria and/or those selected, or whose selection was influenced by consultation with the transgender community. Additionally, reminiscent of the two-step method discussed in relation to gender identity and sex assigned at birth, a number of participants specified that their respondents must experience their gender in a manner distinct from their birth sex.

Unfortunately, as with suicidality questions, it was quite difficult to construct an analysis of the impact that inclusion criteria have on the measurement of transgender suicidality; for example, few studies shared consistent inclusion criteria, while several used elements that were exclusive of each other (e.g. FTM only, MTF only), making comparison difficult. As a result, while 'self identify' was used by 18 studies, a direct comparison of the impact that this element has on the measurement of transgender suicidality was made difficult, because of the additional use of divergent exclusive elements. Nevertheless, it was possible to roughly contrast the studies that used similar, or identical elements of inclusion criteria, although it was often necessary to include a single study in more than one of these groups and the resulting analysis is far from conclusive.

Based on this analysis, suicidality appears to be greater in studies that use elements based on a broad (e.g. 'broad spectrum of trans identities'), rather than a more binary (e.g. FTM only) definition of transgender (see Figure 12). There are two

explanations for this seemingly counterintuitive finding. First, recall that, as with the suicidality questions, this calculation is based on the full respondent sample (all respondents), rather than just those who answered the question on suicidality (-non-respondents). Accordingly, although the proportion experiencing suicidality in the more exclusive group may be higher, we would expect to see a smaller overall suicidality rate in this group, when this effect is diluted within the 'all respondents' group. Note also, that the suicidality rates found for 'MTF only' vs. 'FTM only' mirror findings for gender identity (see Figure 6) and sex assigned at birth (see Figure 7), which show trends toward more ideation and fewer attempts for MTF/MAAB, compared to FTM/FAAB. Regarding the second explanation, however; this seemingly counterintuitive finding may accurately reflect greater suicidality among individuals who identify as non-binary and/or have 'ambiguous' gender presentations, as compared to individuals that are perceived to fit within a male/female binary, who are, in any case, overrepresented in this research.

5.7.2 Practice and Policy

As with the last variable, policy and practice are relatively untouched by these findings, with the following exceptions; first, as with the findings for gender identity and sex at birth, FTMs appear to ideate less, and attempt more than MTFs, who ideate at a higher rate than any other group except 'broad spectrum of trans identities'. This reinforces the need to address this through legislation, public health and therapeutic materials, as detailed in Chapter 2.

Second, clearly the transgender community is quite diverse, encompassing those who identify on a binary (male, or female), as well as individuals who identify as both, neither, or something else entirely (e.g. Gender Non-Conforming). Furthermore, as

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already outlined in Chapter 4 and earlier in this chapter, these identities and the terms used to denote them, are subject to rapid and unpredictable shifts, dependent on both time and location. As a result, practitioners would be well advised to stay flexible in their therapeutic practice and update their transgender-specific cultural competency training often.

> Attaining such cultural competence surpasses mere acceptance of trans people… [and extends to ensuring] that they are able to comfortably and effectively communicate with their trans clients and are able to understand and empathize with the psychological issues that trans clients may present… [In practice, this means that clinicians should] disclose their level of knowledge and comfort with [these issues, as well as] their willingness to educate themselves… [and] consult with others who have experience with these populations (Hendricks & Testa, 2012, p. 465).

> Practitioners should also be aware that self-identity is a cornerstone of the

transgender community, and that only the individual can identify their gender, which may change over time. This also extends to policy, which should acknowledge gender diversity as a counterpoint to the homogenization of transgender identity into a binary of male and female. Indeed,

> the specific identities by which people define themselves may challenge clinicians to step outside their gender normative paradigm to allow for the possibility of gender identity that is not only incongruent with one's physical appearance, but may not be binary… Thus [therapeutic practitioners] are called upon to reexamine their own understanding and assumptions about gender to identify and address

any biases that they may have toward this population (p. 465).

5.7.3 Future Research

Regarding future research methodology; ultimately, researchers should be aware that the rate of suicidality might differ, dependent on the inclusion criteria used and the population recruited. More specifically though, given the use of 'self-identity' in 90% of the studies subjected to a descriptive analysis, the selection of respondents, for transgender suicidality research, should continue to be based on self-identification with the provided criteria. However, as transgender "communities continue to produce new and individualized self-labels... classification for research purposes [becomes]... increasingly difficult" (Richmond et al., 2010, p. 114). Accordingly, the options provided for 'self-identification' should be described more specifically and used with greater caution; for example, by considering the manner in which 'transgender' is defined by the population being sampled.

Practically speaking and given the current definitions in use, researchers that wish to investigate suicidality, among individuals whose male identity contradicts their sex assigned at birth, might use the elements 'FTM only' and 'gender different from birth sex'. Similarly, using the element 'transsexual' is likely to limit recruitment to individuals that intend to, or have already physically and/or socially transitioned[108]. This contrasts with 'broad spectrum of trans identities' and 'trans/gender', which targets individuals both with and without transitional goals.

While only spoken of by one participant, I would also recommend against the use of 'assumed/known/visibly gender variant as a recruitment tool. Given the participants'

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[108] This would, of course, have different implications, dependent on available transitional technologies and resources.

comments, this may be a particular risk when utilizing key informants and contending

with their extensive and largely uncodified knowledge of their transgender community.

However, it is possible and even advisable to offer training that instructs these individuals

not to refer or interview someone based on their subjective assumption that an individual

is, or 'looks' transgender.

Additionally, provided researchers intend to target the same population (in this

case, a 'broad spectrum of trans identities'), they could improve the comparability of

their research to others by employing verified inclusion statements (e.g. Heinz &

MacFarlane, 2013, p. 3; Scanlon et al., 2010, p. 1; Singer et al., 1997, p. 4). Similarly, if

investigating the experience of suicidality in individuals with binary identities, the criteria

piloted by The Washington Transgender Needs Assessment *(*Xavier, & Simmons, 2000)

and The Virginia Transgender Health Initiative Survey[109] (Xavier et al., 2007) would be

useful.

Finally, regarding future research topics, an investigation into the accuracy with

which particular elements and criteria target transgender communities (e.g. FTM,

transsexual) would be useful. Another interesting avenue would be an assessment of the

range of transgender identities, within self-identification ('self identify'); for example,

how broadly do respondents define this, who is excluding/including themselves and why?

5.8 Conclusion

The purpose of this chapter was to discuss the findings, presented in Chapter 4, of

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[109] Individuals are considered to be "transgender if they had lived or want to live full-time
in a gender opposite their birth or physical sex; have or want to physically modify their
body to match who they feel they really are inside; or have or want to wear the clothing
of the opposite sex in order to express an inner, cross-gender identity" (Xavier et al.,
2007, p. 52; Xavier, & Simmons, 2000, p. 1).

the analyses into transgender suicidality variation as a whole and specific to the impact of the five variables (ethnicity, gender identity and sex at birth, education, suicidality questions, and inclusion criteria). In particular, the intention was to explore the context of these findings, within the creation and application of the analyses and as compared to other suicidality research, their utility to practice and policy, and possible directions for future research. This chapter also acted to synthesize this study's qualitative findings, from the participant interviews, with it's quantitative findings, from the descriptive analyses; as such, some elaboration is provided on participants' selection of the 5 variables, and what their predictions for my analyses were, relative to the actual results.

None of these analyses were simple to perform, with common barriers being the failure of studies to report their data in a detailed and exhaustive manner and the lack of standard data recording measures. Additionally, all were constrained by the inclusion of studies that often lacked sufficient funding, time, and investigated transgender suicidality within the framework of much more general research.

In general, however, it can be said that the interview participants selected the variables based directly on their own experiences and observations as transgender suicidality researchers. On the other hand, anecdotal reports from other researchers and the transgender community played a role as well. Their predictions, regarding the impact of these variables on the measurement of transgender suicidality, were an extension of these observations and reports, and were also broadly correct, although sometimes inaccurate as to the effect`s direction; for example, while the participants tended to expect higher rates of transgender suicidality, they were incorrect in their assumption that FTM respondents would experience more ideation, and attempt less, than MTFs. In actual fact,

this effect ran in the opposite direction, with MTFs consistently ideating more, and attempting less often than FTMs. Although not always immediately apparent, these seeming contradictions were often explained by existing suicidality research; for example, the finding that higher suicidality rates are not uncommon among individuals more highly educated than the general population, which was true of the transgender respondents in the analyses (Shah & Bhandarkar, 2009).

Finally, as regards the application of these findings to future research, practice and policy; in the first case, it can generally be advised that identifying transgender respondents via the use of broad and evolving language will garner a greater response rate, whether this is for higher rates of suicidality, or simply more respondents. Similarly, the best avenues for future research generally consist of topics that confirm the findings herein, or explore transgender-specific suicidality risks and protective factors.

In the case of practice, on the other hand, these findings are primarily applicable to the need for practitioners to receive regular cultural competency training; particularly regarding transgender identity language. They also apply to the creation of transgender-specific suicidality prevention materials that highlight, for example, accurate suicidality statistics, the possible protective factors discussed herein (e.g. being Black/African-American), and the continued risk of suicidality, despite factors like higher educational attainment than the general population.

Finally, the applicability of these findings to policy creation is largely centered on their use in advocacy for transgender-specific human rights legislation that addresses some of the contributory factors (e.g. interpersonal and systematic anti-transgender discrimination). Although advocates of this legislation consistently rely on transgender

suicidality statistics to promote the necessity of this legislation (e.g. *Bill C-33*, 2012), the high degree of variability and even inaccuracy, in these statistics, creates a vulnerability that could be exploited by individuals invested in preventing transgender human rights. In this context, efforts to shore up the methodological robustness of this data are both important and practical.

The following, and final chapter summarizes this thesis and presents its conclusions. In doing so, the thesis' methods and design are revisited, first by presenting the empirical findings, discussing each research question in turn[110]; then by reviewing the larger implications for future research, as well as practice and policy.

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[110] How much to estimates of transgender suicidality vary; what factors cause transgender suicidality variation; and what is the best methodology for measuring transgender suicidality?

Chapter 6 Conclusions

6.1 Introduction

This study set out to explore the phenomenon of variation in estimates of transgender suicidality, which the current literature is inconclusive on, by employing a mixed methodological and methodologically triangulated research design, which is described further below. Specifically, it sought to determine the extent of variation, in research literature on estimates of transgender suicidality, the factors that cause it, and the best methodologies for measuring transgender suicidality in the future. This is expressed in the following three research questions.

1. How much do estimates of transgender suicidality vary?

2. What factors cause transgender suicidality variation?

3. What is the best methodology for measuring transgender suicidality?

The current state of transgender suicidality research has resulted in little understanding of the transgender-specific relationship between ideation and attempts, or, for example, suicidality and ethnicity. Likewise, suicidality prevention materials (e.g. brochures) are often inaccurate and while many campaigns use current transgender suicidality statistics to advocate for legislative protection, they run the risk of being discredited by anti-transgender campaigners, who cite this variation (e.g. Shanko, 2011a). Finally, researchers themselves risk subjecting respondents to potentially distressing questions, without at least the compensatory benefit of obtaining data that is more explicable, within the context of other research. Indeed, as it stands, future research may compound these errors. The goal of this research project is, therefore, to enable current and future estimates of transgender suicidality to better support practice, policy, and

future research endeavors.

Furthermore, this research project is politically expedient, given the potential importance of anti-transgender discrimination legislation, which is increasingly tabled (e.g. *Bill 33*, 2013; *Bill 140*, 2012), to suicidality prevention. This is in light of the use of transgender suicidality statistics to advocate for this legislation (e.g. Grant et al., 2011; Scanlon et al., 2010) and the subsequent attempts, by ideological dissenters, to discredit first this research (e.g Shanko, 2011a, b) and ultimately the necessity of transgender-specific anti-discrimination legislation. Indeed, the methodological design and statistical findings, regarding suicidality, have been singled out in these dissents (e.g. Shanko, 2011b) and presented to the media (e.g. Baklinski, 2012; Ditchburn, 2013; Hager, 2015), as an argument for writing off this research and its findings.

This research project is also timely in light of the continued use of Meyer & Reter (1979) to assert that suicidality is caused by surgical transition. Indeed, this was found to be a recurring question, which seemed to be tied to public alarm and moral panic; however, upon review, it seems that Meyer & Reter (1979) was highly biased and ultimately discredited as methodologically unsound (Fleming et al., 1980) and ideologically motivated (Denny, D, 2014; Fleming et al., 1980; McHugh, 1992). By contrast, research before after this study has consistently shown lower rates of suicidality post-transition (e.g. Pauly, 1974a; 1974b, 1981).

Finally, many of these researchers are themselves either transgender, or embedded in transgender communities. As such, their primary goal is often to end transgender discrimination (e.g. Grant et al., 2011) and they may choose to avoid investigating certain aspects of transgender suicidality, for fear of the findings being misrepresented, or used

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out of context. For example, while gender identity is quite diverse within the transgender community, it may be seen as more important to present it as homogenous and binary and, as such, socially palatable to the general public. Different approaches to this concern may partially explain the diversity of approaches to gender categorization revealed in this thesis.

Regarding the research design utilized in this thesis, mixed methodologies were used, within the framework of methodological triangulated design, which consisted of, in the first case, three distinct, but interrelated subprojects, two of which were implicated in data collection and three in analysis, and in the second case, both quantitative and qualitative data collection and analysis methodology. The first subproject collected original quantitative and statistical research data on estimates of transgender suicidality, beginning with all 97 publications (53 distinct studies) that reported this, narrowing to the 57 (28 studies) North American reports, published since 1997, and ending with the 46 publications (20 studies) that measured suicidality 'ever', rather than specific to time (e.g. past year). The second subproject collected primarily qualitative data, using semi-structured and qualitative interviews, from interviews with the authors of the 28 studies that measured transgender suicidality either 'ever', or specific to a time period. In fact, 18 interviews were conducted.

In the analysis stage, the quantitative statistical data on estimates of transgender suicidality was first subjected to descriptive analyses, using SPSS and Excel. In particular, the range and mean were calculated, while descriptive analyses were performed. Following this, the qualitative interview data was subjected to a grounded theory analysis, using NVivo, and leading to the identification of 5 variables (ethnicity,

gender identity and sex assigned at birth, education, suicidality questions, and inclusion criteria), which participants felt were highly implicated in transgender suicidality variation.

The actual impact of these five variables, on variation of transgender suicidality estimates, was determined in the third subproject, which compared, for example, the rates of suicidality in studies composed of respondents that are majority Black/African-American, against those with a majority of Caucasian respondents. These comparisons used the 20 studies (46 publications) that had measured suicidality 'ever', as it became clear that there were fundamental differences between these and the 8 that conducted a time-related analysis. There was also little comparable data for the latter (e.g. most didn't record the same time period), particularly when specifying only studies that contained data on the five variables.

Ultimately, I have been successful in establishing the extent of this variation (question 1), some of the factors implicated in it (question 2), and how researchers might address this topic in the future (question 3). It must be said, however, that no one group of factors are solely implicated in transgender suicidality variation, nor is any single methodology responsible for ending it. The answer lies in the strategic application of a host of methodological and research tools, coupled with the intention to interpret the resulting research within the lens of the environment in which it was conducted and the respondents that were involved.

6.2 Quantitative and Qualitative Findings

6.2.1 How much do estimates of transgender suicidality vary? Qualitatively speaking, the interview participants tended to expect these rates to be high, although they

were often surprised and sometimes distressed, by the degree of suicidality they found. In actual fact, estimates of transgender suicidality have varied greatly across the 97 English-language publications (53 distinct studies) that reported measuring it. Indeed, ideation has ranged 60%, from 3%-63%, while attempts have ranged 85%, from 4%-89%. Disregarding research prior to 1997, and considering only that published in North America, ideation has ranged 56%, from 21%-77% (average 48%) and attempts 34%, from 9%-43% (average 27%). However, estimates of transgender suicidality also vary less when the five aforementioned variables (ethnicity, gender identity and sex assigned at birth, education, suicidality questions, and inclusion criteria) are taken into account, as seen the next section.

Regarding the practice, policy and future research implications of these findings; practitioners would do well to consider exploring transition as a protective factor when working with suicidal transgender clients, although care should be taken to attend to the significant barriers to transition (e.g. monetary, familial), as well as the fact that not all transgender people desire to transition. In regard to policy; the transgender suicidality statistics, resulting from this research project, might be used to correct transgender-specific suicidality prevention materials and in anti-discrimination campaigns; however, given the possibility of these figures changing upon publication of the next transgender suicidality study, it may be preferable to use the figures from the National Transgender Discrimination Survey (Grant et al., 2011) in the US, and the Trans PULSE study (Scanlon et al., 2010) in Canada, as both are large, statistically robust, and well cited. Finally, viable avenues for future research include exploring how transgender individuals may actively choose transition over suicidality, transgender-specific suicidality protective

factors, and the application of minority stress theory to this issue.

6.2.2 What factors cause transgender suicidality variation? Numerous factors are implicated in the varied rates of suicidality obtained from research on transgender suicidality; for example, the design of transgender suicidality studies continues to vary intensely, particularly according to the methodology employed and the respondents assessed. Michel et al. (2002), who was responsible for a recent meta-analysis touching on this phenomenon, implicates the conflation of individuals who express "depressed mood, suicidal thoughts... threats... attempts, and suicides [as well as the use of] study populations [that] vary [considerably according to] the... type of transsexuals... [and] methods of data analysis" (p. 353-355). The interview participants tended to agree and, in particular they suggested that variation in study respondents' ethnicity, gender identity and sex at birth, and level of education, as well as the suicidality questions and inclusion criteria employed, might be particularly responsible. In fact, when this was tested, through analyses using a subgroup of 20 of the 28 North American studies, published since 1997 (those that measured suicidality 'ever'), these factors were confirmed as having an impact on this variation.

When controlling for the majority of respondents being of a particular ethnicity, studies where the majority of respondents were Black/African-Americans reported lower suicidality rates than either the average, or studies with a majority of Caucasian respondents, which were also slightly higher than the average. Similarly, regarding gender identification, studies with an FTM majority showed lower rates of ideation and higher attempt rates than those with an MTF majority. Less can be said about sex assigned at birth, other than that the same analysis shows that, like FTMs and MTFs,

FAAB individuals appear to ideate less and attempt more than MAAB individuals. On the other hand, when controlling for the majority of respondents' reaching one of 4 educational levels (≤high school, Associate or technical degree to some college, Bachelor's degree, and ≥ graduate or professional degree), we can see that transgender respondents are more educated than the general populace and, despite this, still far more suicidal. The effects of controlling for suicidality questions and inclusion criteria are less distinct, demonstrating that these elements vary a great deal, without clarifying their relationship to transgender suicidality variation.

6.2.3 What is the best methodology for measuring transgender suicidality?

First of all, as suggested above, there is no one best methodology for measuring all transgender suicidality. Indeed, the methodology and research design selected should reflect the respondent population and environment in which the study is conducted, while the interpretation of this research should be considered in the same light. Accordingly, these findings only act as a guide in making informed decisions for practice, policy and research.

Generally speaking, researchers would be well advised to utilize methodology that has been successfully employed in similar transgender suicidality research; for example, the gender identity options in Scanlon et al. (2010, p. 1), or the inclusion criteria employed by Xavier et al. (2007), would be useful for researchers attempting to recruit a large and diverse sample of transgender respondents, but poor if the intention was to investigate only FTMs.

6.3 Implications for Practice and Policy

Therapeutic practitioners should attend to the results shown here (e.g. greater

suicidality among Caucasians and attempts among FTMs) in assessing and monitoring their clients' risk. They should also be mindful of the association between higher educational achievement, more common in transgender individuals, and greater rates of suicidality. Given this knowledge, practitioners might help clients to consider and manage their responses to continued oppression. More systematically, this knowledge can be used to address the pernicious nature of oppression based on gender-identity, through the creation of public health resources (e.g. brochures advising of particular risks) and human rights legislation (e.g. *Bill C-279*, 2013).

6.4 Future Research

Aside from those mentioned in Chapter 5, two research topics would be particularly helpful to furthering this line of inquiry; first, a nation, or continent-wide transgender health census, in the model of the National Transgender Discrimination Survey (Grant et al., 2011), the Trans Mental Health Study (McNeil et al., 2012), or Trans PULSE (Scanlon et al., 2010). This would be driven by and involve participation and resources at all levels of the transgender community and, as such, would be a massive undertaking. If successful, however, it would both mobilize the transgender community and provide invaluable data on the state of transgender health in North America.

More practical research, however, might seek to investigate a therapeutic response to the phenomenon of transgender suicidality. This could involve offering suicidality resilience and intervention training (e.g. Applied Suicide Intervention Skills Training [Living Works, 2014]) to a group of transgender individuals, whose risks and protective factors are measured before and after this intervention. If, over a period of time, the

intervention demonstrated reductions in suicidality-related behavior, it could be taken to a wider level; for example, by measuring the suicidality of a transgender community (e.g. Vancouver), offering the intervention systematically, and then measuring the suicidality-related behavior of both the respondents and the larger community afterwards.

6.5 Reflections

Lastly, some final reflections on the process of conducting this thesis project and the adaptations I would consider in retrospect. First, this thesis began with the assumption that it was both possible and preferable to reduce variation in reported rates of transgender suicidality. Accordingly, the research questions reflected this this goal. However, through the process of conducting this research, I have come to see this variation in a more nuanced manner. For example, although suicidality rates clearly vary, I have found that this is often explained by differences in the population being sampled (e.g. gender, location, socioeconomic status), rather than due solely to methodological flaws and design errors, as I had initially suggested. Indeed, the interview participants didn't tend to note transgender suicidality variation as being particularly worrisome, although they did repeatedly identify variation in the population under observation as posing a problem to comparing different studies. As a result of reflecting on these findings, my focus has shifted from decreasing this variation to understanding it.

Some reflections were also brought about by the thesis defense and suggestions made by the examining committee; for example that issues of survivor bias, 'death by cop', and intersectionality are unaccounted for in this thesis. First of all, survivor bias, which is the tendency of research to reflect the available data, is relevant to this thesis, because it relies on published rates of transgender suicide attempts and ideation, which,

by definition, excludes those who completed suicide. This is a problem in transgender suicidality research generally, as little suicidality completion data is available for this population (Corcoran, & Arensman, 2010). Nevertheless, it would have been prudent to explicitly consider survivor bias in designing and implementing this thesis research.

'Death by cop', which is defined as "engaging in acts designed to evoke fatal responses from those officers involved" (Greenstone, 1994, p. 59), is also relevant and, in fact, this may help to explain the finding of a lower rate of suicidality among Black/African-Americans, compared to Caucasians. Specifically, given that Black/African-Americans carry a higher burden of death at the hands of law enforcement officers (Gabrielson, Grochowski, & Sagara, 2014), suicidality may be underestimated, due to misclassification. This possibility bears further investigation, both in relation to transgender suicidality rates, but also more broadly.

Finally, also missing from this thesis is an explicit discussion of intersectionality, which

> "theorizes multiple identities and argues for the necessity of coalitions that cross lines of class, race, sexuality, gender, and disability [to] address more than one structure of oppression or form of discrimination (racism, classing, sexism, heterosexism, transphobia, ableism, nationalism, etc.) (Doetsch-Kidder, 2012, p. 3).

In practical terms, intersectionality posits that an individual can have multiple intersecting identities, which are neither mutually exclusive, nor more or less important than one another. That is, that a person who is gay, can also be Black/African-American and that neither issue can be addressed in isolation. So, for example, it is inappropriate to

exclude issues relevant to a lived experience of racism, from LGBT activism.

Clearly intersectionality would help to frame and understand the interactions revealed in this thesis, such as among ethnicity, gender identity, and suicidality. In fact, my overemphasis on reducing transgender suicidality variation, as discussed above, would tend to make invisible the experience of transgender individuals that are at the highest risk of suicide, in favor of a generic rate. Accordingly, intersectionality theory would shift the discussion of suicidality to understanding the nuance of this phenomenon, rather than expressing it through a single figure, and any future analysis of this work should take this theory into account.

6.6 Conclusion

In spite of the seeming unpredictability and immutability of transgender suicidality variation, my research has shown that this isn't wholly the case. In fact, not only can it be measured and reduced, both generally and specifically, the direction of variation can be roughly predicted, according to the demographic make-up of a study's respondents. This research is particularly valuable for identifying higher suicidality rates among groups with high levels of educational attainment and lower suicidality in research where the majority of respondents are Black/African-American. It is hoped that these findings can be used to provide some clarity on the issue of transgender suicidality to both the transgender and academic communities.

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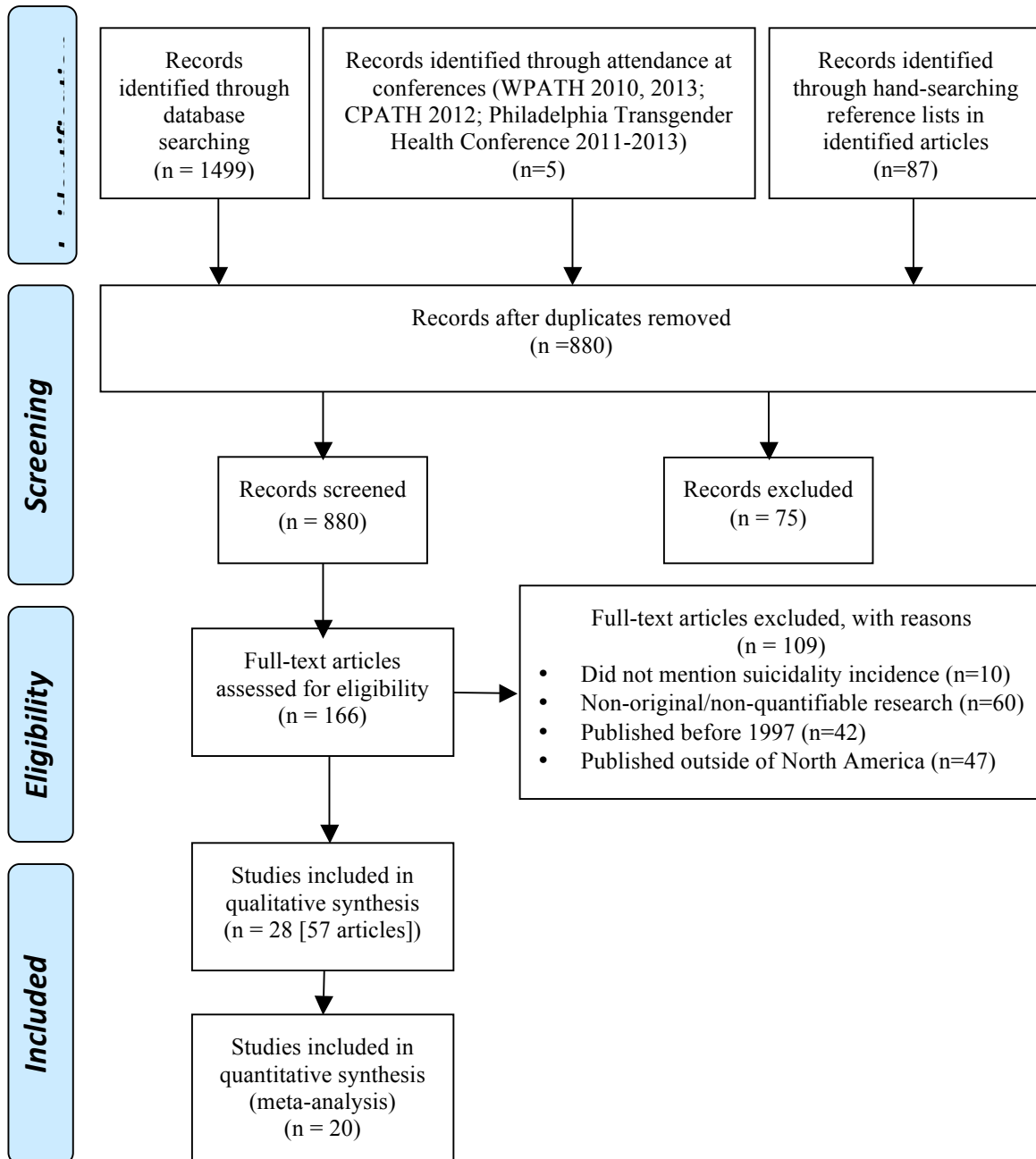
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Appendix A Identification of Literature[111] [112]

PRISMA flow diagram with vertical phase labels (Identification, Screening, Eligibility, Included):

Identification
- Records identified through database searching (n = 1499)
- Records identified through attendance at conferences (WPATH 2010, 2013; CPATH 2012; Philadelphia Transgender Health Conference 2011-2013) (n=5)
- Records identified through hand-searching reference lists in identified articles (n=87)

Screening
- Records after duplicates removed (n =880)
- Records screened (n = 880)
- Records excluded (n = 75)

Eligibility
- Full-text articles assessed for eligibility (n = 166)
- Full-text articles excluded, with reasons (n = 109)
  - Did not mention suicidality incidence (n=10)
  - Non-original/non-quantifiable research (n=60)
  - Published before 1997 (n=42)
  - Published outside of North America (n=47)

Included
- Studies included in qualitative synthesis (n = 28 [57 articles])
- Studies included in quantitative synthesis (meta-analysis) (n = 20)

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[111] PRISMA Flow Diagram courtesy of Moher, Liberati, Tetzlaff, & Altman (2009).

[112] Records were identified by searching for "transgender suicide" (n=692), "transsexual suicide" n=162, "FTM suicide" n=13, "MTF suicide" n=27, "transsexual suicidality" n=27, "transgender suicidality" n=196, "transgender suicide attempt n=298, and "transsexual suicide attempt" n=74.

Appendix B E-mail Recruitment Letter

Subject Line: Participants being sought for a research study on the knowledge, motivations and insights of individuals who conduct research on transgender suicidality

My name is Noah Adams. I am a Masters student in the School of Social Work at Dalhousie University in Halifax, Nova Scotia, under the supervision of Dr. Catrina Brown. I am conducting a modified meta-analysis on transgender suicidality and your research is part of it. I would like to interview you to learn about the methodology you used, why you chose it, and to clarify anything that may have been unclear or absent from your report. I will use this information to help me determine if and why methodology is a factor in transgender suicidality variation and if so, to determine a consistent rate.

The interview would be at a convenient time between February 1st and April 1st, 2014 and will take about 1½ to 2½ to complete. You can participate by telephone, voice-over-IP (i.e. Skype, Google Talk), or at the upcoming World Professional Association for Transgender Health Conference, in Bangkok, Thailand.

Also, as is common in this relatively small field, you may have previously met and/or worked with me. If this is the case, you should not feel pressured to take part in this study, nor will there be any negative effects should you choose not to, or later drop out.

If you are interested in participating, or have any questions about the study, please contact me at noah.adams@dal.ca or (416) 895-8313. Alternately, you can contact my supervisor, Catrina Brown, at catrina.brown@dal.ca, or (902) 494-7150.

Appendix C Interview Questionnaire

1. Professionally speaking, what led you to investigate transgender suicidality, either on its own, or within other research? For example, were you asked to collaborate with a colleague, or a community group; does your work often lead you to address this issue with clients; or did your previous research touch on this issue?
   a. Do you feel like your prior research experiences prepared you to investigate this topic?

2. How did you specifically define and measure suicidality (i.e. ideation, attempts, success, in the last year, lifetime)?
   a. Why did you make this choice (was other research influential, what research, why)?
   b. What were some of the challenges and limitations here?

3. How many participants responded to your question about suicide attempts? Ideation?
   a. How many female-bodied people participated in your research? Male-bodied?

4. How did you define your study population and the terms used to describe them (i.e. transgender, transsexual, youth, adults, etc.)?
   a. Why did you make that choice?
   b. What were some of the challenges and limitations here?

5. Why did you choose to sample the transgender population via survey?
   a. Did there seem to be any other options?
   b. What were some of the challenges and limitations inherent in this format?
   c. In a 'perfect world', what kind of methodology would you use?

6. How did you choose to collect survey data and why (i.e. Likert, open questions, prompts, questionnaire, interviews, in person, telephone, mail, e-mail)?

7. How did you recruit participants? (i.e. seeds, word of mouth, random selection, community events/sites)
   a. What were some of the challenges and limitations here (i.e. difficulty finding participants, gaining access to community events, suspicion of research/researchers)?

8. How did you measure the suicidality of your participants (i.e. Beck Inventory for Depression, original questions, questions used by other studies)?
   a. (If you used original questions) How did you choose/develop them and why?
   b. (If you borrowed questions from other research) Which ones, and why?
   c. (If you used psychiatric inventories and measures) Which ones did you use and why?
   d. What were the challenges and limitations with the questions/inventories you choose?

9. What research outcomes did you expect (i.e. confirm/disprove high rate, potential benefits to transgender community)?
   a. Did the actual outcomes surprise you and why (or why not)?
   b. (If study was a follow-up, or phase based research) Did, or will you, attempt to capture information not captured in the preceding studies (what information, how did you identify the need to capture it, and why was it not included in prior studies?)

10. Compared to others, what do you feel were the particular advantages of your study?
   a. The disadvantages/challenges?
   b. How would you have corrected for them?

11. Many transgender suicidality studies have resulted in different rates of suicidality, why do you think this is so?
   a. Why do you think it varies more than other suicidality research (i.e. General, LGB, First Nations)?

12. Any other comments?

Appendix D Informed Consent Form

Study: Accounting for Variation in Estimates of Suicidality Among Transgender Adults

We invite you to take part in a research study on transgender suicidality. Your participation is voluntary, does not pay any money and you may drop out at any time. The information below tells you about any risks, or drawbacks that may result and while your participation probably won't help you, we might learn things that will help improve future research.

Who will be conducting this research?

Primary Investigator
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(902) 494-7150
catrina.brown@dal.ca

Study Purpose

The purpose of this study is to determine why the rate of transgender suicidality varies so widely between studies.

Who can participate in this study?

Anyone who has conducted original research on transgender suicidality that resulted in quantifiable suicidality data, involved at least five participants and was reported, since 1997, in an English-language, North American, peer-reviewed journal, book, or community report.

What will you be asked to do?

You will be asked to discuss the methodology you used, why you chose it, and to clarify anything that was ambiguous, unclear, or absent in the original report. This includes potentially unpublished information on the number of participants that were assigned female or male at birth and whether you recorded both suicidal ideation and attempts. This information will be used to more comprehensively compare the rate of suicidality you determined against that of other studies and hopefully to determine a more reliable rate. Any unpublished data that you share may be used to generate original findings, which would appear in my thesis and other resulting publications and will be properly cited and attributed to your research. You would not, however, receive co-authorship. It will not be used for any other purpose. If you do not wish to share this data, you may still participate in the remainder of the interview. The interview will take about 1½ to 2½ hours, including 15 minutes to go through this consent form. If you opt for VoIP, you may also need an additional 20 minutes to download and set up the software.

Possible discomforts and risks

There is little chance of physical discomfort or risk, although you may find reflecting on the social issue of transgender suicidality to be emotionally unpleasant. An adverse reaction from within the academic and/or transgender community is also possible, though remote. I will go to great lengths to protect your anonymity; however, there is some unavoidable risk of identification, via the uniqueness of your methodological choices and the relatively small sample size.

Possible benefits

Upon request, you will receive a copy of the transcript of your interview and all participants will receive a digital copy of the completed thesis; however, there is little chance that this research will personally benefit you, though you may appreciate thinking and speaking about your experiences. Your participation will assist in better understanding transgender suicidality research, which will help future research.

Compensation & reimbursement

No money will be paid for taking part. While every effort is made to reduce any costs to you, there may be some transit costs for in-person interviews, which neither Dalhousie, or the researcher can pay for.

Confidentiality & anonymity

General

All information obtained from your interview will be password protected and stored for 5 years after the completion of this research. In the thesis and any following reports, it will either be reported in an aggregate, or unattributed, in the case of quotations, except for unpublished data, which will be attributed to the source research. Because of the small sample size, I cannot guarantee that you won't be inadvertently identified, based of your answers to interview questions, or my description of study characteristics. For example, specific characteristics of your methodology may make your identity apparent to others.

<u>VoIP, E-mail, and Basic Online Security Precautions</u>

Unless you choose otherwise, the researcher will contact you via Jitsi, due to its robust privacy settings. This does not require additional software. You should be aware that it's easier to 'tap into' cell phones than landlines and no protection can be provided for your end of this conversation. If you prefer to be interviewed via Skype, please be aware that the company keeps records of all conversations, as do services like Hotmail and Gmail. Creating a separate account, with no voluntary account information, may give you some additional privacy. If you opt to take part by e-mail, you will be sent the interview questions through Dalhousie's File Exchange (https://filedrop.dal.ca/), which is more secure. You are encouraged to use it to return the questions.

Participation is voluntary

Participation in this study is voluntary. You are free to turn it down or withdraw at any time, subject to the following guidelines. You are also free to skip any question, pause the interview, or stop completely, at any time, without explanation.

Questions & dropping out

Contact Noah Adams if you wish to drop out or have questions. You are free to withdraw your consent to use any statistical/quantitative data until the end of the interview and your consent to use quotations until approximately July 1st, when the thesis will be turned in. Dropping out of this study will have no impact on any existing professional relationship with the researcher. During this study, you will be informed of any new information that might affect your decision to remain in it. If you have any problems or concerns please contact Catherine Connors, Director of Research Ethics at Dalhousie University, at (902) 494-1462 or at ethics@dal.ca.

Conflict of Interest
This research has no sponsor and the researchers don't stand to gain any money from it. Some of you will have worked with them before; however, this in no way means that you should feel compelled to participate and there won't be any adverse effects if you choose not to.

Signature Page

"I have read the details about this study. I have been given a chance to talk about it and my questions have been answered. I hereby consent to take part in this study; however, I know that my participation is voluntary and that I may withdraw at any time."

Participant   **Researcher**

Name: _____   Name: _____

Signature: _____   Signature: _____

Date: _____   Date: _____

"I understand that this interview will be audio recorded and I give consent to do so."

Participant   **Researcher**

Name: _____   Name: _____

Signature: _____   Signature: _____

Date: _____   Date: _____

"I agree to let you directly quote any comments or statements made in any written or audio reports, without seeing the quotes prior to their use, and I understand that my anonymity will be preserved by not attributing them to me."

Participant   **Researcher**

Name: _____   Name: _____

Signature: _____   Signature: _____

Date: _____   Date: _____

"I agree to provide unpublished data from my original research, which I understand may be presented in your thesis and resulting publications, with citations attributing it to my research and that it may be used to determine original findings on transgender suicidality."

Participant   **Researcher**

Name: _____   Name: _____

Signature: _____   Signature: _____

Date: _____   Date: _____

You will get a copy of this form for your records. No waiver of rights has been, or will be sought for this research.