Longitudinal Outcomes of Gender Affirming Hormone Therapy on Gender Incongruence and Psychosocial Wellbeing: A Mixed Methods Study

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Abstract

Access to Gender Affirming Hormone Therapy (GAHT) has increased internationally and in Aotearoa, New Zealand, in recent years. While majority of research supports the positive impact of GAHT on gender congruence and wellbeing, there is a dearth of longitudinal data specifically within Aotearoa. To address this gap, I conducted a mixed methods study to explore the longitudinal outcomes of GAHT on gender congruence and psychosocial wellbeing.

In study one, 35 participants aged between 18 and 59 years (m = 27.5) completed the Patient Health Questionnaire (PHQ-SADS) measuring somatic, depressive, and anxious symptomology, the Personal Wellbeing Index (PWI), the Transgender Congruence Scale (TCS), and a Visual Analogue Scale tracking their personalised goals (GTF). Survey scores were collected at baseline (prior to starting GAHT) and at a six month and 12 month follow up of GAHT commencement. Both binary and non-binary trans identities were included in this study. In total, 22 participants received oestrogen-based gender affirming hormone therapy (E-GAHT) and 13 participants received testosterone-based gender affirming hormone therapy (T-GAHT). Differences between survey responses over time were measured using repeated measures ANOVA.

Quantitative findings revealed that scores on the TCS and GTF significantly increased over time, suggesting participants experienced enhanced gender congruence and progress towards their individual GAHT goals after one year of treatment. Responses from the PHQ-SADS did not significantly change over time suggesting that these symptomologies remained stable following GAHT. Similarly, responses from the PWI showed no significant change over time. Of note, participants mean baseline scores on the PHQ-SADS were within the minimal and mild ranges resulting in a floor effect for detecting any reduction in symptomology.

Study two comprised of semi structured interviews with 10 participants from study one aged between 21 and 45 years (m=30). Qualitative analysis was performed using Reflexive Thematic Analysis. From this study, five participants were taking T-GAHT and five E-GAHT, six participants identified with a binary trans identity, and four identified with a non-binary or agender trans identity.

Qualitative analysis yielded five overarching themes. The first theme highlighted the lengthy and thoughtful decision-making process of participants preceding the initiation of GAHT, reflecting participants' extensive contemplation and understanding of their gender identity and desire to seek GAHT. Themes two, three, and four explored the outcomes of GAHT on the physical body, sense of self, and social interactions. Changes in these three areas were mostly positive and well received,

while discussions also acknowledged aspects that GAHT did not affect, such as certain physical changes and certain societal attitudes and reactions towards trans individuals. The fifth theme centred on the importance of support throughout the GAHT journey, encompassing interpersonal relationships, community support, and comprehensive healthcare services.

Overall, the research indicated that GAHT did not significantly impact participants' mental health, physical health, or subjective wellbeing after one year. GAHT positively influenced feelings of gender incongruence and the achievement of specific goals. Participants' decisions to pursue GAHT were well considered, and they expressed satisfaction with the outcomes. Additionally, robust social support and access to comprehensive services were deemed essential alongside GAHT.

These findings highlight many favourable longitudinal outcomes of GAHT across physical, emotional, and social areas with findings from the qualitative analysis providing further context for the quantitative findings. These findings also underscore the necessity for improved access to GAHT within primary healthcare settings, increased availability of additional gender-affirming services beyond the scope of GAHT, and the need for ongoing advocacy and support for trans people from wider society

Acknowledgements

Completing a thesis can be isolating at times, many hours are often spent alone with just the literature, data sets, transcripts, and statistics software for companionship. It can be easy to get overwhelmed and deterred by the sheer size of the project and the never ending list of tasks that need to be completed before reaching the final product. Looking back at what I have just accomplished, I cannot fathom how I could have done this without the support and encouragement from so many people.

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I would also like to thank all the people who participated in this research. You have all contributed to a piece of work that will hopefully bring about better outcomes and more positives stories for trans communities. I feel incredibly honoured to have heard some of your stories about how this journey has been for you. I hope the rest of the world catches up soon and learns to accept, love, and embrace diversity.

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I tipu ake au ki Te Raki Pae Whenua

E noho ana au ki Tamaki Makaurau ināianei

Ko Emma ahau

Background

When I found out I got preliminarily accepted in to the clinical psychology programme in 2017, I was faced with the task of completing my honours research first as a prerequisite to entry. I was asked if I had any ideas of what I wanted to do for my honours research. Since completing my undergraduate degree in 2012, I had spent the last five years living and working overseas and felt rather out of touch with the academic world, therefore this question left me feeling rather stumped. I made the decision to pursue a career in psychology, in part, due to the belief that I could help make a positive difference in people's lives, not just interpersonally within therapeutic spaces, but also systemically by using my position of power to advocate and educate for and alongside those who have been routinely marginalised within our society. I was made aware of the importance of social equity from an early age thanks to my parents and wider family circle – which lead me to perusing an undergraduate degree in humanities in the first place.

Additionally, during the time I had been outside of the country I had begun to realise and accept my own sexuality. I identify as queer, broadly, and while I personally don't wholeheartedly believe in the need for labels, one could classify me under the bisexual/pansexual umbrella. Growing up, I had been subjected to bi-phobia both internally and externally which prevented me from being able to understand myself fully. I had spent most of my life up until then presenting as heterosexual, and most of my friends and family were not aware of my sexuality. Coming home meant that I was faced with the decision of how I would now navigate and establish this part of myself around my loved ones, and this was therefore at the forefront of my mind during my entry into the clinical programme. While seeking to understand myself further, it became glaringly apparent how disparate the visibility and rights are within the LGBTQ+ umbrella, as progress for LGB communities had come so far in the past five years, however trans communities had been mostly left behind.

These experiences led me to voice my interest in doing research within trans communities and I was thankfully pointed in the direction of the Endocrine Department in Wellington Hospital where I began my honours research with Jemima Bullock - a descriptive study of psychosocial issues for trans people seeking gender affirming hormone therapy. From doing this research, I began to further realise the extent of the dearth in research in this area both internationally, and even more so in Aotearoa. This realisation resulted in me wanting to continue research in gender affirming hormone therapy for my doctorate, research that would *hopefully* assist in providing more positive outcomes for trans communities in accessing equitable health care. Therefore, the genesis

of this study came about through my belief that upholding social justice is an imperative part of being a psychologist and also through my own personal experiences as a queer woman.

It would be remiss of me not to acknowledge that during the course of me completing this research, so many incredible studies have been undertaken and disseminated by trans and cis researchers in this space, many of which are cited within this thesis. I feel honoured to be part of this academic community and remain hopeful that our collective work will continue to highlight disparities and provide further foundations to instil positive change.

Additionally, it is important to note that the findings from this thesis reflect a snapshot of the current climate of gender affirming health care that is specific to one region of the country. The results, themes, and conclusions I have drawn from this study stem from the experiences of participants accessing gender affirming hormone therapy while living in Wellington, the capital city of Aotearoa. Moreover, the participants who generously provided their stories for this research talked to so many differing and nuanced experiences which I was unable to fully capture and discuss within the confines of this thesis. Therefore, the knowledge I have gained and conveyed from this research reflects a drop in the ocean when understanding trans experiences in Aotearoa and with accessing gender affirming health care.

Organisation of the Thesis

This thesis is presented across four sections. Section one, the literature review, provides context to the current study by outlining the history of trans identities, changes in trans terminology, relevant theories for trans wellbeing, and the history of gender affirming health care both internationally and within Aotearoa. Section's two and three discuss the methods and results, and analysis for study one and study two respectively. Section four presents the discussion of findings for both studies separately, as well as in combination to provide a more contextual and nuanced analysis. The last two chapters in section four present discussion around the current study's contributions to existing literature as well as implications, strengths, and limitations of the study, and considerations for future research in the area of gender affirming health care.

Section One: Literature Review

Chapter One: Terminology and History of Transgender Identities

This chapter provides an overview of the terminology used within transgender (trans) discourses. It also provides a brief history of sex and gender including current conceptions of what it means to be trans as well as past and present-day prevalence of trans people. This chapter acknowledges the evolving nature of terminology and the need to respect the self-determination of individuals in defining their identities.

Terminology

The terminology that can be used to define and describe members of trans communities is as extensive, diverse and fluid as the notion of gender itself. There are a multitude of words that were used historically that are no longer deemed accurate or appropriate with many now considered offensive (Serano, 2016). Furthermore, most contemporary terminology has come into existence within the last decade, and even terms considered contemporary are regularly changing (Lee et al., 2016; Serano, 2016). Therefore, the terminology used in this thesis is, at the time of writing, up to date. However, it is acknowledged that with time these terms may become outdated.

The variability of trans terminology can be explained through the changes in societal, legal, political, and medical understandings of what it means to be trans, as well as developments in understanding and acknowledgement of who should be responsible for defining such terminology (Carabez et al., 2015; Halberstam, 2018). Also, it is important to note that the terminologies and histories explained within this thesis do not adequately address terms used outside of western cultures, of which many gender identities also exist (Zucker et al., 2016). A glossary outlined in Appendix A defines many terms relevant to and mentioned within the thesis. This inexhaustive list includes commonly used words and their most accepted interpretations in Aotearoa and also includes Māori and Pacific terms. This glossary has been adapted from the Gender Minorities Aotearoa free online glossary (Gender Minorities Aotearoa, 2023).

Trans terminology previously existed predominantly in the medical realm. However, from the mid to late twentieth century such terminologies changed due to a reaction against the pathologising and stigma inducing language used. The autonomy in deciding terminologies shifted towards trans communities, allowing opportunity for trans people to self-determine nomenclature (Halberstam, 2018). For example, the term transgender appeared officially in print in the United States of America in 1965, but became more widely used in the 1990's due to the fact that many people did not necessarily want Gender Affirming Genital Surgery (GAgS) and therefore sought a

label for themselves that was not intrinsically tied to GAgS the way the term transsexual was (Adams, 2015). Furthermore, the term cisgender was established in 1994 which resulted from the argument that everybody has a gender identity, and to aid in reducing the stigma associated with being trans (Adams, 2015). Over time, the term transgender (and the shorthand trans) has become a commonly used umbrella term to include everyone who's gender identity is not congruent with their sex assigned at birth including all trans people regardless of medical transition (Gender Minorities Aotearoa, 2023). However, not everyone who is considered to fall under this umbrella identifies with this term, as many feel that it does not aptly account for the diversity within their communities (Serano, 2016). For example, the etymology of the word "trans" means "across", and is understood to indicate moving from one side to another. Therefore, the use of this term within trans terminology can be seen as embedded in a male-female binary classification (i.e. someone assigned female at birth and identifying as male: trans man, and someone assigned male at birth and identifying as female: trans woman), and thus excluding those with gender identities that fall between or outside of this binary (Fiani & Han, 2019). The term non-binary, therefore, is commonly used as an umbrella term for people who may identify as neither male nor female, both male and female, somewhere between this binary, or completely outside of it (The Rainbow Project, ND) and can encapsulate identities such as genderqueer, gender fluid, bi-gender, and agender (see appendix A for definitions).

However, using the term "trans and non-binary" together or excluding non-binary from the trans umbrella can also be seen to differentiate non-binary identities from trans identities, resulting in non-binary people feeling excluded from trans nomenclature and made to feel not "trans enough" (Garrison, 2018). This issue has emerged prominently within medical spaces when non-binary people are looking to access gender affirming care (which I discuss further in chapter five). Therefore, while acknowledging that not all non-binary people identify as trans, many do, and so deciding on the correct terminology to use within this thesis comes with the task of aiming to be as inclusive as possible. Thus within this thesis I refer to the term "trans" as an inclusive term that is in keeping with the aforementioned definition of someone whose gender identity is not congruent with their sex assigned at birth (Gender Minorities Aotearoa, 2023). At times where I need to differentiate between binary trans people and non-binary trans people I will do so in this manner.

Despite the term transgender appearing in official print in 1965, The history of people blurring the gender binary goes back much further, with known accounts being documented as early as the 17th century (Stryker, 2016). By the 19th century, medical, legal, and religious institutions began to define, categorise, and pathologise trans people through their hetero- and cis- normative

lenses (Halberstam, 2018; L. Meyer & Sikk, 2016). These classifications were, at large, insensitive, alienating and stigma inducing - such as "sexual invert" (Manion, 2020), and implied that "normal" gender identity was determined by the male/female sex binary and any other identities were therefore divergent or abnormal (L. Meyer & Sikk, 2016). Further, such classifications either tended to be permanent with little room for people to move between the two binaries or weren't inclusive for those people whose identities fell outside of the binary (Halberstam, 2018).

During the 19th century, sexologists initially conflated gender diversity with homosexuality (Manion, 2020; L. Meyer & Sikk, 2016), believing that those who experienced same sex attraction had their souls stuck in the wrong gendered body (Adams, 2015). However, by the mid-late 1900's this theory was disputed by lesbian, gay, bisexual, trans, queer, and/or questioning (LGBTQ+) organisations who argued against the fusing of homosexuality and transgender identities and argued for the variability of sexual orientation amongst cisgender and transgender people (Manion, 2020; Romesburg, 2018). This was then mirrored by new developments and attitudes within medicine, psychiatry, and in greater society (Romesburg, 2018). Nonetheless, this confusion and conflation of gender and sexual identity continued into the 1980's with the the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III) diagnosis of transsexualism requiring specifiers for sexual orientation: homosexual, asexual, and heterosexual. Not only were these specifiers irrelevant, they were also problematic as they were used to determine which people received gender affirming care based on their sexual identity as those with a heterosexual orientation were determined as more likely to "transition" successfully (which I will discuss further in chapter five) (Prunas, 2019; Zucker et al., 2016).

Because of the lack of teaching in schools, and the lack of general societal knowledge and exposure around LGBTQ+ experiences and identities, the internet has become a crucial source for those wanting to educate themselves and others on current terminologies. For example, Fox and Ralston (2016), found that one of the most common online searched topics for their LGBTQ+ participants was around identity labels and meaning. Not only does the internet provide a wealth of knowledge not always available through interpersonal sources, it can also provide an anonymous space for people to learn while minimising negative interpersonal social consequences such as discrimination or harassment (Fox & Ralston, 2016). The internet also provides a space for members of trans communities to be able to communicate their own experiences and perceptions without being constrained by medical and academic disciplines. One example can be seen in a blog written by Mitchell (2017) for the page *TransSubstantiation* titled "Some Terms are Better than Others" where she explains why the terms 'MtF'/'FtM are "horribly inaccurate". These labels are

the shortened version of ‘Male to Female’ and ‘Female to Male’ and are used frequently within medical and academic writing as a way of incorporating what a trans persons’ sex assigned at birth was. However, for Mitchell, the term MtF is incorrect as she never actually identified as a male who physically transitioned to a female, she always identified as female, but was initially perceived by others to be male. The terms and abbreviations that Mitchell regards as a more accurate alternative are ‘Assigned Male at Birth’ (AMAB) and ‘Assigned Female at Birth’ (AFAB). These labels place the onus of the gender identity given to a trans person on the perception of others rather than being an identity that the individual personally identified with or felt comfortable using.

Contemporary terminology often transcends medical and academic realms due to members of trans communities determining which labels are most applicable to them. For example, the word “enby” which is a phonetic pronunciation of “NB”, can be used as a shorthand for non-binary (Garvin, 2018). While some of these words get adopted within medical and academic spheres, often terminologies used within academia are outdated and offensive. It is therefore important that researchers strive to learn appropriate terminologies used outside of academia to remain current and respectful of trans communities. It is also crucial that those working within trans spaces understand the right trans individuals have to self-determine their labels, identities and forms of expression as well as the right to change and evolve their identities and expressions over time. As this prevents classification being placed upon individuals and groups and prevents blanket terms being applied inappropriately.

Sex, gender, and sexual orientation

Sex, gender, and sexual orientation are three separate concepts. However, due to these terms being commonly misconstrued and inextricably linked in everyday language by many western societies, it is important to define and clarify their difference (Jourian, 2015). Of note, it is also important to clarify that while these are separate terms that can be discussed and defined independently, they all make up components of a whole person and have potential to shift within an individual throughout their life time (Fausto-Sterling, 2019).

Sex refers to the differences in biological sex characteristics between female and male, and sex is typically assigned at birth based on observation of external reproductive organs (genitalia). However, many other additional biological differences can be examined when attempting to determine someone’s sex, and there is, in fact, a broad scope of variation in these physical sex characteristics in humans that do not fit into this sex binary (Carabez et al., 2015; Jourian, 2015; Serano, 2016). For example, the term intersex is defined as being “born with physical or biological

sex characteristics (such as sexual anatomy, reproductive organs, hormonal patterns and/or chromosomal patterns) that are more diverse than stereotypical definitions for male or female bodies" (Darlington Statement, 2017). Furthermore, for some intersex people, these characteristics can be recognised before or at birth, while for others, they can become evident much later, such as during puberty (Darlington Statement, 2017). Therefore, the act of only using external genitalia to ascertain someone's sex has obvious limitations.

Moreover, once someone's sex has been determined, their gender identity and gender expression are then expected to be congruent with their assigned sex due to society's historic and culturally constructed beliefs around gender (Carabez et al., 2015; Jourian, 2015). To elaborate, the terms male and female are typically used to classify both the sex binary and the gender binary, and the terms masculine and feminine are used as ways to describe gender expressions such as speech, mannerisms, and clothing (Ault & Brzuzy, 2009; Carabez et al., 2015; Serano, 2016). Subsequently, it has historically been considered against the norm for males to exhibit feminine traits and for females to exhibit masculine traits or for people to exhibit both or neither.

However, it has since been established that gender is determined by an individual's own sense of self as being male or female, neither, or both and that someone's gender is not necessarily a "natural" progression from their assigned sex, as gender can fluctuate, and people can express their gender in a multitude of ways that are not strictly feminine or masculine (Gender Minorities Aotearoa, 2017). Unfortunately, however, societies outdated perceptions and understandings of sex and gender play a large role in why people incorrectly normalise a mutually exclusive gender binary of male and female (Gender Minorities Aotearoa, 2017; Serano, 2016). Therefore, not only are many trans people experiencing distress around the internal incongruence they feel between their sex assigned at birth and their inherent gender identity, they are also faced with the distress that their gender expression is not compatible with the socially constructed norms surrounding sex, gender identity, and gender expression (Serano, 2016).

As stated earlier, a trans identity can mean a multitude of things and does not fall under a binary of just trans men and trans women. Serano (2016) offers an example to explain why so many people come under the trans umbrella with varying identities and development of identities. Some trans some people may realise from childhood that they are trans, while others may not come to this realisation until much later on, with the onset of puberty typically being an initial indicator as their bodies move through a puberty that does not align with how they see themselves, and for others, this may not come about until adulthood for a myriad of reasons (e.g. lack of access to information,

or societal and cultural constraints). Moreover, other people may identify as trans because they intellectually oppose societies socially constructed views of the sex/gender binary (Serano, 2016). Furthermore, trans people can use differing identities to describe themselves over time (Zucker et al., 2016).

Sexual orientation refers to a person's pattern of sexual attraction to particular groups of people (typically defined by that particular groups gender) and can include physical emotional, spiritual, and erotic attraction (Gender Minorities Aotearoa, 2023 [see Appendix A]). For example, a heterosexual orientation is someone who is attracted to people of the opposite gender, a homosexual orientation, is someone who is attracted to people of their own gender, and a bisexual orientation is someone who is attracted to more than one gender. There are many other differing types of sexual orientations such as pansexual and asexual which are also defined in Appendix A. Of note, sexual orientation is sometimes differentiated from romantic orientation whereby someone can be sexually attracted to a person but not romantically attracted and vice versa. Although it is now understood that sex, gender identity, and sexual orientation are separate concepts, non-heterosexual and non-cisgender individuals are still commonly grouped together within the LGBTQ+ acronym. This is because these communities have often shared similar experiences of discrimination and oppression from cisgender and heteronormative societies alongside being subjected to the belief by others that their sexual orientation and gender identity are able to be changed or converted (Snyder, 2011). Additionally, LGBTQ+ communities have historically resisted oppression collectively as evidenced by the Stonewall riots, and they continue to advocate for equal rights within society (Stryker, 2016). While some members dislike being placed under this acronym together, for various reasons, others prefer the acronym as it unifies their shared plight for equal rights.

When discussing trans identities it is important to recognise other identities that may also coincide alongside gender identity. In other cultures, for example, a trans identity can hold a different meaning to what western cultures conceptualise it to be. For example, Roen (2001) comments on the importance for cultural identity to be considered before gender identities and sexual orientations for both takatāpui and fa'afafine people. This can be seen in the word takatāpui itself, defined by Kerekere as a term which "emphasises Māori culture and spiritual identity as equal to – or more important than – gender identity, sexuality or having diverse sex characteristics" (2017, p. 25). It is key, therefore, to understand gender diversity within its own cultural and historical framework, rather than viewing it through a western lens (Jourian, 2015).

Historical Instances and Prevalence of Trans People

It is almost paradoxical to be discussing trans history due to accounts being either sparse, incomplete, or misconstrued (Stryker, 2016). However, the little history that is available provides important context and understanding around the difficulties that endure today with describing trans prevalence.

The earliest accounts of trans people can be found predominantly in sensationalised newspaper articles based on court cases, and in police and legal reports (Manion, 2020; Stryker, 2016). For example, a person known as Thomasine or Thomas Hall who was raised female but who lived as both a man and a woman was held for trial in 1629 to decide their fate for wearing men's clothing (Stryker, 2016). This was preceded by an anti-cross-dressing law established in Massachusetts in the late 1600's which traversed through the USA by the end of the nineteenth century (Stryker, 2016). The existence of this law signified the existence of arrests and prosecutions of people living as a gender that was not congruent to their sex assigned at birth. Manion (2020) also describes the instance of 'female husbands' in the middle of the eighteenth century. A term used to describe people who were AFAB, but who persistently lived as males, binding their chests, wearing men's clothing, working in male professions, socialising in male only places, and marrying women. Manion details instances of "female husbands" being documented in legal reports and newspapers across the UK and USA. Once these female husbands were outed by others as AFAB, the local newspapers would portray them as astonishing, devious, and manipulative "criminals", thus indicating to the public that this form of gender expression was alarming, illegal, and arguably contributed towards sensationalising rather than understanding (Manion, 2020).

In Aotearoa, prior to colonisation, takatāpui were accepted within te ao Māori and held their own important roles within their whānau (families) such as providers of childcare for wider family members, second mothers or caregivers of whangai (adopted children), as well as teachers (P. Reynolds, 2012). Colonisation played a significant role in marginalising, oppressing, and eradicating indigenous cultures, including LGBTQ+ people within them, often resulting in trans individuals being ostracised from their own culture (Jourian, 2015; P. Reynolds, 2012). For instance, the Western and Christian perspectives that were imposed upon Māori after colonisation lead to takatāpui being discriminated against and excluded by their own iwi (tribe), hapū (subtribe), and whānau (P. Reynolds, 2012). Post colonisation, trans owned and operated night clubs and coffee lounges have been running in Aotearoa since the 1950's in both Wellington and Auckland which served as places for trans people to connect with their community, discuss politically relevant

issues, and have opportunities for employment. The first official transgender organisation was established in 1972 known as Hedesthia (Hansen, 2020).

Over recent years, an increase in the establishment of formal trans associations as well as LGBTQ+ social justice movements has resulted in increased trans visibility (Stryker, 2016). However, the way today's media portrays trans individuals is still sensationalised, hyperbolised, ill-informed and based upon negative and inaccurate stereotypes that perpetuate stigma towards trans people. In her collection of essays, Serano (2016) breaks down the representation of trans women across media to fall under two categories of the "pathetic" and the "deceiver". The pathetic representation shows a trans woman who is unable to "pass" as a cisgender woman and has been used across film and television as part of a comedy plot line. The deceiver representation portrays trans women who "pass", but who are then often "found out", and subsequently demonised, portrayed as a threat to the straight cisgender men they have "tricked". Across media, trans women are also represented as highly feminine, wearing skirts, high heels, pink clothes, and makeup which is not an accurate representation of trans women. Further the actors playing the parts of trans women are usually never actually trans women themselves and will be portrayed by either cis men or women, such as Felicity Hauffman in the film Transamerica. Lastly, Serano points out the over representation of trans women within film and television and the overall exclusion of trans men and non-binary people (Serano, 2016).

Trans invisibility is prevalent within medical research, which has historically had little focus on LGBTQ+ issues (Lee et al., 2016). For example, research and literature that uses the phrase LGBTQ+ very rarely includes bisexual and trans participants (Clarke et al., 2010; Lev, 2013). Moreover, even today, mainstream public are only being exposed to a small subcategory of trans identities and trans issues. These subcategories are stereotyped, disparaging, and focussed predominantly on trans women, which serve to perpetuate the invisibility of other trans people within society.

Prevalence Today

The historic and current treatment of trans people results not only in a lack of awareness and visibility of trans identities, but also in stigma and discrimination resulting in many trans people not feeling safe to be visibly trans in public (RainbowYouth, ND). Further, trans prevalence rates have historically not been sought within public systems such as census collections, health questionnaires, and patient intake forms (Carabez et al., 2015; Statistics New Zealand, 2019). Therefore, gathering prevalence rates of people who are trans is difficult.

As an alternative, many studies resort to gathering data from participants who are seeking gender affirming healthcare. While useful, this does not collect a true representation from within the general population (American Psychological Association, 2015; Veale, 2008; Zucker et al., 2016). However, one study from the Netherlands used retrospective data from 6,793 trans people who sought gender affirming health care between 1972 to 2015 to estimate a national prevalence (Wiepjes et al., 2018). From this study estimates indicated a prevalence of 0.03% of trans women (1: 3,800) and 0.02% of trans men (1: 5,200), with no account of non-binary trans identities. Within the United States of America, approximations are also made to estimate trans prevalence rates throughout the country. Some sources cite estimates of between half a million and one million within adult populations, and between four and ten million within youth populations (Stryker, 2016), while others estimating 0.2-0.5% of the adult population (Carabez et al., 2015).

When considering trans prevalence in Aotearoa, a nationwide youth survey that was conducted in 2012 found that out of 8,166 high school students, 1.2% identified as trans and 2.5% were uncertain based on a single question on the Child Behaviour Checklist (Clark et al., 2014). However, findings from this study have since come under scrutiny due to the gender identity survey question being based solely on a single question not deemed robust enough to aptly capture gender diversity. In 2018 a comprehensive national survey, called *Counting Ourselves*, reviewed the wellbeing of trans people living in Aotearoa (Veale et al., 2019). There were 1,178 respondents to this survey with the percentages of the geographical spread of participants being similar to that of the general population. Participants ages ranged from 14 to 83 years with most participants (93%) ranging from 14 to 54 years (Veale et al., 2019). There were 24 different gender identities included in the survey including an option for “other”. However, for comparison purposes the authors created three gender groups of trans men, trans women, and non-binary. From this, the majority of respondents were non-binary (45%), followed by trans men (29%) and then trans women (26%). Other key demographics from this survey found that 78% of respondents were of European decent, 14% were Māori, 4% were Pasifika, and 4% were Asian.

Although prevalence rates both nationally and globally are unreliable, the continued increase in research around trans health will hopefully change this inaccuracy in due time. The incorporation of more inclusive questions around sex, gender identity, and sexual orientation in the Aotearoa 2023 census (Statistics New Zealand, 2021) and in other censuses around the world will also aid in a better understanding, acceptance, and visibility of trans identities.

Summary

Trans terminologies are fluid and have been influenced by historic, medical, cultural, and social factors. Over time, classification systems for defining trans identities shifted away from pathologising medical and criminalising legal structures and towards trans communities engaging in self-determination of their own identities. Despite this shift, perceptions of trans people within modern day western societies are still predominantly misconstrued, ignorant and negative due to outdated beliefs and stereotypes of the male female gender binary. This is illustrated by inconsistencies in knowledge on the prevalence rates of trans people within the general population and by damaging and inaccurate media stereotypes of trans people. Continued research around transgender issues, the incorporation of gender inclusive questionnaires across public institutions, and increases in more positive and accurate portrayals of trans people's experiences across media would all contribute towards a more accurate understanding of the prevalence and diversity of trans people.

Chapter Two: "Collectively Oppressed Rather than Individually Disturbed" Gender Dysphoria and the DSM

This chapter highlights the contribution the Diagnostic and Statistical Manual of Mental Disorders (DSM) has made to the pathologising of trans identities and the justification of conversion therapy. It also explains the reluctance of DSM working groups to remove Gender Dysphoria from the DSM-5, as well as the International Classification of Diseases 11th Revision's (ICD-11) alternative use of the term Gender Incongruence. This chapter provides background knowledge for further discussions around trans peoples historic and current access to gender affirming health care outlined in chapter five.

Gender Dysphoria and the DSM

Transsexualism first emerged as a diagnosis in the DSM-III (1980), with the additional inclusion of Gender Identity Disorder of Childhood (Lev, 2013; Zucker et al., 2016). The psychiatric diagnostic of trans identities has since been revised twice, as editions of the DSM have been updated. This occurred once in 1994, to Gender Identity Disorder (GID), and then once again most recently for the current DSM (DSM-5) to Gender Dysphoria (GD) in 2013 (Halberstam, 2018). GD can be described as significant distress an individual experiences due to the marked incongruence felt between their gender identity and their sex assigned at birth. The DSM-5 criteria for GD in adults and adolescents' states that this incongruence must be shown in at least two of the following for at least six months:

1) incongruence between an individuals expressed/experienced gender and their primary and/or secondary sex characteristics;
2) a strong want to remove primary and/or secondary sex characteristics due to the incongruence;
3) a strong want for the primary and/or secondary sex characteristics that are in line with the gender they identify with;
4) a strong want to be of an alternative gender to what was assigned at birth;
5) a strong wish to be perceived and regarded as the alternative gender; or
6) a strong belief by the individual that their reactions and emotions are that of the gender they identify as.

The above criteria must also cause significant distress and/or impairment in their day-to-day functioning in areas such as work or social situations (American Psychiatric Association, 2013).

The history and politics of changing GID to GD in the DSM-5 follows a similar trajectory to the inclusion and removal of homosexuality in the DSM, which was introduced into the DSM-II in

1952 (Clarke et al., 2010), renamed in 1973 as Ego-Dystonic Homosexuality in the DSM-II (Lev, 2013), and fully removed in 1987 (Ault & Brzuzy, 2009; Halberstam, 2018). Such a trajectory reflects how both public and professional opinions were impacted by the DSM; forming the association that homosexual and trans people are mentally unwell, sick, or disturbed, and creating a justification for psychiatrists to institutionalise and "cure" such "disorders" (Ault & Brzuzy, 2009; Lev, 2013). In both the DSM-III and the DSM-IV, Transsexualism and GID were placed under the section of "psychosexual disorders" and then "sexual and gender identity disorders" respectively. Under these same sections were other paraphilic disorders such as pedophilic disorder and exhibitionist disorder (Ross, 2015). This categorisation gave both health professionals and the public a reason to assume that because trans identities were classified in the same section as pedophilia and exhibitionism, that they must be of a similar vein (Drescher, 2013). Not only did this form a foundation for trans people to be pathologised by health and mental health practitioners, but this inevitably influenced the greater public in their fostering of stigma and discriminatory attitudes.

Another implication of these categorisations and classifications, is that they justify therapies which serve to "cure" the "mental illness" of being trans. Similarly, to when homosexuality was considered a mental disorder, people who identify as trans can be, and are, subjected to conversion therapy in order to "convert" them to a cisgender identity (Drescher, 2015). The negative impacts of conversion therapy for LGBTQ+ people have been shown across various studies. For example, Turban et al. (2020) surveyed 27,715 trans participants across the United States of America about receiving gender identity conversion treatment. Out of the 19,741 who had sought support for their gender identity, 3869 had been exposed to conversion therapy. Compared to participants who had not received conversion therapy - those who had, experienced higher levels of psychological distress within the month leading up to the study. Also, lifetime exposure as well as childhood exposure to conversion therapy was associated with higher instances of suicide attempts throughout participants' lives. Within Aotearoa, a national health survey for trans people found that out of 1,178 survey respondents, 17% reported experiences with conversion therapy (Veale et al., 2019). Further, a follow up study based on these findings found that those exposed to conversion therapy were more likely to report psychological distress, suicide attempts, self-injury, and internalised transphobia (Veale et al., 2021). Additionally, the American Psychiatric Association has opposed treatments such as conversion therapy for both homosexuality and trans identities since 1998, highlighting its documented harm, and has instead encouraged psychotherapies which affirm peoples gender identities and sexual orientations (American Psychiatric Association, 2018).

Despite this, conversion therapy is still legal and practiced in many countries today (Fleck, 2022). Currently, 14 countries have either a full or partial ban on conversion therapy practices (Stonewall Staff, 2022). Other countries have specific cities and states that have banned conversion therapy, such as, the United States of America, where 20 states have passed bills prohibiting or restricting the use of conversion therapy (Fitzsimons, 2020). Furthermore, for these states in the USA, this ban applies to minors only due to the need to protect children (who may not otherwise have a choice) from being exposed to the potentially harmful and long-lasting effects of such a therapy (Byne, 2016; Fitzsimons, 2020). In Aotearoa, conversion therapy was only recently made illegal, in 2022 (Treisman, 2022). This law prohibits the use of conversion therapy practices on people under the age of 18 and creates a pathway for complaints of malpractice with the Human Rights Commission if it is believed the practice is causing serious harm to the individual regardless of their age (Treisman, 2022).

The recent changes of diagnostic criteria for GD in the DSM-5 no longer place the criteria for diagnosis on being trans in and of itself, but on the distress experienced by the individual. However, the sheer fact that GD is still present in the Diagnostic Manual for Mental Disorders implies that the dysphoria that one feels for their gender being incongruent to their body is a mental disorder rather than a reasonable response to that incongruence (Lev, 2013). Therefore, although attempts have been made over time to reduce the pathologising of trans identities and the outdated association they have with sexual dysfunction or mental illness, there are still many scholars, health practitioners and the public alike who hold this view today due, in part, to the DSM.

In 2007, during the DSM-IV revision and development, there was heightened contention and indecision around either taking GID out of the DSM-5 altogether, or replacing it with GD (Ault & Brzuzy, 2009). Due to the DSM being the predominantly used diagnostic manual in the USA, the inclusion of some form of diagnostic criteria for trans people is useful as it allows access to insurance funded gender affirming health care (Adams, 2015; Clarke et al., 2010). If such a diagnostic category were removed completely this would help to mitigate the current pathologisation of trans people, however, it would also mean that insurance companies and public health providers would not be able to cover gender affirming health care. Drescher (2015) summarised this divide well by stating:

> This is no simple task as it is difficult to find reconciling language that removes the stigma of having a mental disorder diagnosis while maintaining access to medical care. Those seeking removal aim to frame gender variance as a narrative or normal

> variation, yet access to medical treatment for any condition usually requires a narrative pathology. (p. 3)

Gender Incongruence and the ICD-11

Conversely, the newest revision of the International Classification of Diseases and Related Health Problems (ICD-11), released in 2019, responded to this dilemma faced in the USA by changing their diagnostic label to Gender Incongruence, and shifting it from the mental disorders section, placing it under "conditions related to sexual health" instead (Moser, 2017). The diagnostic criteria for Gender Incongruence, although similar to the criteria outlined in the DSM-5, does not require the individual to be experiencing significant distress or impairment to be diagnosed, instead using the phrasing "dislike" and "disagreement" rather than distress (Rodríguez et al.,2018).

Moreover, this edition addressed the fact that the diagnosis and treatment method for trans individuals are in accordance, as they both fall under a medical scope, rather than an individual requiring a diagnosis of a mental disorder in order to receive medical interventions such a hormone therapy and surgeries (Ault & Brzuzy, 2009). This addition also addresses the fact that not all trans people who are seeking gender affirming care are experiencing distress around their gender identity or incongruence (Coleman et al., 2012; Oliphant et al., 2018). Therefore, those who feel an incompatibility between their gender and their body but are not distressed by it are still able to receive the treatment they need.

During the ICD-11 revision, pressure was placed upon both the Council of Europe Commissioner for Human Rights as well as the World Health Organization to ensure that Transsexualism was removed, and that its replacement was not placed under any classification of mental or behavioural disorders – as its existence in such a section was considered a human rights issue due to its pathologising nature (Drescher, 2013). This edition not only reduces the negative associations between trans identities and mental health, it also still provides insurance companies and national health care systems with a diagnosis so that trans people have access to funded affirmative care (Zucker et al., 2016).

Gender Dysphoria vs Gender Incongruence

Although the term GD will continue to be used in some instances in this thesis, my position is that the requirement of a DSM-5 diagnosis for GD perpetuates the implication, and therefore the misconception, that being trans is a mental disorder. Therefore, a preference for the term Gender Incongruence will be found throughout the rest of this thesis.

Summary

Instrumental progress has been made towards reducing the pathologisation of trans identities from within psychiatric and medical spheres including revisions to the DSM as well as the ICD-11. However, the existence of Gender Dysphoria in the DSM-5 and the existence of conversion therapy as a legal treatment option still reflects the continued progress needed within society to mitigate the damaging psychosocial issues that are experienced by trans people.

Chapter Three: Psychosocial Issues and Gender Incongruence

This chapter outlines international and local research on the psychological and social factors that impact trans people. Much research in this area has been deficit focussed. For instance, higher rates of suicidality, depression, and anxiety compared to cisgender people; higher rates of unemployment and homelessness; more experiences of violence and discrimination; as well as rejection from family members. This chapter also describes the sparse amount literature that includes non-binary trans people, as they have been previously neglected from trans research due to society's preoccupation with binary genders.

Mental Health and Health Disparities

Aside from the distress trans people can experience from their gender incongruence, trans individuals can also experience mental health issues which occur at rates much higher than cisgender populations. Most concerning, trans people are found to be at a higher risk of suicide, attempted suicide, and non-suicidal self-injury (Cavanaugh et al., 2015; Mueller et al.,, 2017; Su et al., 2016; White Hughto & Reisner, 2016). Further, other studies have found higher diagnoses of depression and depressive symptoms (Bouman et al., 2016; Dhejne et al.,, 2016; Su et al., 2016), as well as anxiety within trans populations (Bouman et al., 2016; Davey et al., 2015; Davis & Colton Meier, 2014; White Hughto & Reisner, 2016).

In Spain, research comparing health and wellbeing factors between 856 binary trans, non-binary trans, and cisgender youth (14-25 years) found 40% of their cisgender participants had contemplated suicide compared with 70% of their binary trans participants and 77% of their non-binary trans participants (Aparicio-García et al., 2018). Another study assessed suicide attempts and non-suicidal self-injury in 96 binary trans participants in the USA. From this sample, 42% reported self-injury and 30% reported at least one suicide attempt (Peterson et al.,, 2017). Moreover, a Canadian study using health surveys, compared mental health concerns of 923 trans youth with cisgender populations (Veale et al., 2017). Trans participants were more likely than cisgender controls to report major depressive episodes, self-harm, suicidal ideation and attempts as well as overall psychological distress. Similarly, a qualitative study looking into the relationship between non-suicidal self-injury and trans youth in the UK found many participants self-harmed due to dissatisfaction with parts of their body that weren't congruent with their gender identity (McDermott et al., 2015). Some international studies have also reported higher instances of alcohol and substance abuse among trans populations compared with cisgender populations (Cheung et al., 2018; Hall et al., 2020; Mueller et al., 2017; Newcomb et al., 2020). However, in Spain one study

noted among 856, youth, that binary and non-binary trans participants consumed less alcohol than their cisgender counterparts (Aparicio-García et al., 2018).

Aside from major mental health disparities being researched within trans populations, higher rates of sexual health issues, especially HIV/AIDS for trans women in the USA, are also a prominent issue (Pinto et al., 2008; Reisner et al., 2016). Trans women are 49 times more likely to have HIV compared to other adults with the estimated global HIV prevalence among trans women being nearly 20% (Jaspal et al., 2018). Further still, the death rate from HIV/AIDS for trans women is thirty times more than that of age-matched cisgender controls, and trans women are also twice as likely to receive a late diagnosis compared to cisgender people (Jaspal et al., 2018).

Trans historian Susan Stryker explains that this AIDS epidemic is mostly due to trans women needing to engage in sex-work to make a living, and also sharing needles for hormone therapy which they often obtain from the street (Stryker, 2016). To exemplify, research has shown that prevalence rates of HIV among trans women sex-workers is much higher than cisgender sex-workers, suggesting that unprotected sex and/or sexual violence is a common contributor towards trans women contracting HIV/AIDS (Jaspal et al., 2018). Unfortunately, when trans women contract HIV/AIDS they are not always treated equally. For example, in the UK, trans patients with HIV experienced delays and refusals of treatment compared to cisgender patients (41% vs. 16%) which resulted in them avoiding seeking sequential health care (Hibbert et al., 2018). Moreover, in their study, Pinto et al. (2008) comment on the lack of health services and care available for the trans population in the USA. Many of their participants faced both institutional and financial barriers to accessing other health services, such as gender affirming treatment. This resulted in the acquisition of feminising hormones from the street or from a friend which led to a higher risk for contracting HIV. Another study conducted in Spain also noted that around 60% of their trans women participants had previously taken feminising hormones without medical consultancy due to financial and institutional inaccessibility (Gómez-Gil et al., 2009). Barriers to accessing gender affirming health care and their implications will be discussed further in chapter five as well as in the discussion.

International studies comparing whether AMAB or AFAB trans people suffer more from mental health issues have had inconsistent results. One study conducted in Chicago by Newcomb et al. (2020) found trans women and AMAB non-binary trans participants had higher rates of traumatic experiences and suicidal ideation compared with trans men and AFAB non-binary trans participants, with no differences in rates of depression. However, Peterson et al. (2017) found

AFAB trans participants reported higher instances of self-harm and suicidality compared with AMAB participants. Correspondingly, similar findings have been mirrored by Rimes et al. (2019) whereby out of 677 survey respondents in the UK, participants who were AFAB reported higher rates of mental health issues and were more likely to have a history of self-harm compared to AMAB participants. In Canada, trans men/boys and non-binary trans youth overall were found to be at higher risk of reporting self-harm compared to trans women/girls. And overall, rates of suicidality and self-harm were higher in younger groups (14-18) compared to older groups (19-25) (Veale et al., 2017).

In Australia, *Trans Pathways* conducted the largest nationwide study to date, looking into aspects of mental health in 859 trans youth aged 14-25 (Strauss et al., 2017). This study found almost 75% of participants had been diagnosed with depression at some point in their lives, and 72% had been diagnosed with an anxiety disorder. Moreover, 78% had engaged in non-suicidal self-harm and 48% had attempted suicide at some stage throughout their lives. A further 25% of participants had been diagnosed with PTSD, and 22% of participants had been diagnosed with an eating disorder. Another Australian study collected retrospective data from 540 trans medical records in Melbourne and found a 56% prevalence of depression and a 40% prevalence of anxiety, which was higher than the age-matched general population (Cheung et al., 2018).

An extensive nationwide survey exploring the health and wellbeing of trans people in Aotearoa titled: *Counting Ourselves* was published by (Veale et al., 2019) demonstrated similar patterns of psychological distress as the international literature. Of the 1,178 trans participants who completed this survey, 71% had experienced high or very high instances of depression and/or anxiety (compared with 8% of the general population), 56% had experienced serious suicidal ideation within the last 12 months, and 37% had previously attempted suicide. This study also found that trans men and non-binary trans respondents were more likely to report psychological distress than trans women, however older trans women experienced more psychological distress than younger trans women (Tan et al., 2020). Additionally, a smaller retrospective study analysing the descriptive data from 69 trans patients ‘medical files in Wellington, Aotearoa found that 78% of participants had experienced suicidal ideation, 74% either had a history with, or current depression, 70% had a history or current experiences with anxiety, and 36% of participants had previously attempted suicide (E. Reynolds, 2019).

Social Disparities

A plethora of studies have assessed the various social disparities trans people face. Such as: bullying and harassment in workplace and education settings; discrimination in seeking employment and housing; experiences of verbal, physical and sexual violence; and overall rejection from family and greater society.

Unemployment and Homelessness.

Lower socio-economic status due to inability to find employment and adequate housing has been found in multiple studies when looking at trans participants compared with cisgender controls (Gómez-Gil et al., 2009; Mueller et al., 2017; Olson et al., 2015; Pinto et al., 2008). A retrospective audit conducted in Australia looking at 540 trans participants found that 23.8% had experienced homelessness and 21.3% unemployment even though 73% had obtained formal qualifications above high school, with 53.4% holding a university degree or higher (Cheung et al., 2018). Additionally, in Australia, the *Trans Pathways* survey found that, 22% of survey respondents had experienced homelessness or difficulty finding accommodation, and 41.9% had experienced difficulty with employment (Strauss et al., 2017). Bowling et al. (2019) found that trans people in the United States of America experienced lower socioeconomic status and higher rates of unemployment due to employment discrimination which directly resulted in trans people not having the means of employer-sponsored insurance to seek gender affirming health care or to privately fund it themselves. These findings were mirrored by results from the 2015 *U.S Transgender Survey* (USTS) report which found that out of 27,715 respondents 15% were unemployed at the time of the survey compared to 5% of the general population in the U.S (James et al., 2016). Furthermore, 29% of respondents were living in poverty compared to 14% of the general population, 30% experienced homelessness at some point in their life, and 16% of respondents reported owning a home compared to 63% of the general U.S population. Authors from this study linked the high instances of poverty and homelessness to the higher unemployment rate experienced by respondents (James et al., 2016).

Discrimination, Harassment, and Violence.

The USTS report not only highlighted participants' experiences with unemployment and poor housing, but also their experiences with harassment. Respondents who were "out" about their trans identity during high school experienced verbal harassment (54%), physical assault (24%) and sexual assault (13%), with 17% leaving their schooling early as a result of their abusive experiences (James et al., 2016). From this same survey, the authors found that 30% of respondents who had been employed within the past year had either been denied a promotion, made redundant, or had

experienced some form of workplace harassment (either verbally, physically, or sexually) and had attributed these experiences to their gender identity or expression.

Another study looking at trans individuals' perceptions of discrimination in the workplace while undergoing gender affirmation in the USA found that at least 80% experienced some form of aggression or non-acceptance (Brewster et al., 2014). Instances of such hostility ranged from: immediate termination from their employment; verbal threats, insults and harassment from colleagues; being excluded from social events; being told to change their clothes or remove makeup; and being asked highly private or unusual questions. On top of the distress experienced from the direct stigma of co-workers, participants also experienced discomfort from occurrences of institutional discrimination, such as gendered uniforms and bathrooms.

Additionally, in Spain, trans survey respondents experienced either verbal or physical violence both in and outside of school significantly more frequently than cisgender respondents (Aparicio-García et al., 2018). Research from Australia indicated that 74% out of 859 trans youth surveyed stated they had experienced bullying within school (Strauss et al., 2017). *Counting Ourselves* also found high instances of participants experiencing bullying in school, with 21% reporting such experiences (compared with 5% of the general population),67% of participants reporting experiences with discrimination at some point in their lives, and 44% having experienced discrimination in the past year (Veale et al., 2019).

Outside of school or working environments, respondents from the USTS also reported instances of verbal harassment (46%), physical harassment (9%), and sexual assault (47%) at some point in their lifetime (James et al., 2016). From the 47% who had experienced sexual assault, 58% were non-binary trans people AFAB, 51% were trans men, 41% were non-binary trans people AMAB, and 37% were trans women. In Australia 24.3% of trans youth had experienced sexual abuse from outside of the family, and 16% from within the family (Strauss et al., 2017). Results also highlighted that 25% of trans youth had experienced physical abuse from within their families and 58% had experienced other forms of abuse (not physical or sexual) from within their families. Overall, 69% of respondents stated that they had experienced discrimination and 89% had experienced peer rejection (Strauss et al., 2017). Similar findings are mirrored in an Aotearoa study whereby 46% of participants reported experiences of verbal abuse, 27% physical abuse, and 29% sexual abuse (E. Reynolds, 2019). From this 29% reporting sexual abuse, 50% were trans men and 13% were trans women.

Furthermore, data collected from a state-wide school survey in Colorado found that heterosexual binary trans respondents were at an increased risk of experiencing sexual violence, six times higher compared to cisgender heterosexual respondents. Lesbian, gay, and bisexual binary trans respondents were nine times more at risk of sexual violence compared to cisgender heterosexual respondents (Atteberry-Ash et al., 2020).

Non-binary Trans Experiences

Until recently, most literature focussed primarily on either trans women and/or trans men with little consideration for non-binary trans people. As Frohard-Dourlent et al. (2017) explain, this is often due to research being constructed within a predominantly western lens, resulting in the misclassification of gender as a binary construct. Also, trans research tended to follow the medical model, which previously placed emphasis on the linear transition from one "sex" to the other (Frohard-Dourlent et al., 2017). Such a focus on binary transitions was then mirrored in high-profile media representations, reinforcing public belief that to transition is to move from male to female or vice versa, with examples including Caitlin Jenner and Chaz Bono (Austin & Goodman, 2018). This focus has resulted in a lack of understanding regarding the specific experiences of non-binary trans people, whose identity or gender affirming journey may fall outside of "normed" medical and gender-binary expectations. Frohard-Dourlent et al. also argue that non-binary trans people may be especially vulnerable considering that their gender identity is consistently held within a "non-conforming" space, which creates more instances of confusion and unacceptance from others, thus making them more susceptible to interpersonal discrimination. Further, with regards to a more institutional level of discrimination, infrastructures within society are often constructed based on the gender binary such as clothing stores, public bathrooms, and the use of gendered language such as "ladies and gentlemen" or languages that divide their nouns into the masculine or the feminine, such as French. The use of gendered language is heavily pervasive in our society once one's awareness has been alerted to it. Moreover, western society has yet to fully incorporate the inclusion of gender-neutral language within all spaces and situations. Therefore, non-binary trans people are often faced with both interpersonal and institutional discrimination simply by way of omission (Matsuno & Budge, 2017).

For example, a qualitative study interviewed 15 binary and non-binary trans participants in The USA, to analyse the similarities and differences experienced by both groups (Fiani & Han, 2019). From these interviews, lack of media representation was a pervasive narrative of the non-binary participants in this study, exemplified by their examples of not having any non-binary role models of which to look to (Fiani & Han, 2019). Another qualitative study with participants from

both New York and San Francisco, generated the term “invalidation” to describe non-binary people’s experiences or situations where their gender identity was not only omitted or unaffirmed but also invalidated (Johnson et al., 2020). In this study, 14 non-binary youth aged 16-20 were interviewed. Using inductive thematic analysis, the authors from this study discussed four main themes around invalidation of non-binary participants’ identities. The first, invalidation in interpersonal contexts, was due to other people dismissing their identity, calling it “fake”, laughing at their pronouns, or refusing to use they/them pronouns. The second, was within LGBTQ+ communities, being perceived as an “inauthentic” trans person, especially if they were not experiencing dysphoria or seeking to affirm their gender medically, which resulted in some non-binary participants feeling unsafe to seek peer support in trans spaces. Thirdly, within institutions due to the lack of gender-neutral bathrooms, the exclusion of gender-inclusive education in school curriculums, the lack of non-binary gender options on forms, and lack of awareness and education from health care providers. Lastly, invalidation was seen through the media by the lack of non-binary representation in books, television series, movies, and with trans media representation being focussed on binary trans identities (Johnson et al., 2020).

In response to the omission of non-binary people within research, contemporary research on the health and wellbeing of non-binary identities has emerged. Some studies have found that experiences of mental health and social disparities are about the same, or better for non-binary people as they are for trans men and trans women, while others have found that these experiences are in fact worse for non-binary people.

The USTS report showed that a higher percentage of non-binary trans participants indicated current serious psychological distress (49%), compared to trans men and trans women (35%) (James et al., 2016). In the U.K, a study was conducted to compare instances of depression, anxiety, and non-suicidal self-injury (NSSI), as well as measuring levels of self-esteem and social support between binary trans participants (n = 331) and non-binary trans participants (n = 57) aged 16-25 years (Thorne et al., 2019). Non-binary participants experienced significantly more depression and anxiety compared to the binary trans participants. Non-binary trans participants also had significantly lower self-esteem than their binary trans counterparts. However, instances of NSSI as well as levels of social support were not significantly different between the two groups (Thorne et al., 2019).

In contrast, a study in the UK comparing mental health measures between non-binary trans people and control groups of both binary trans people and cisgender people, found opposing results.

Although non-binary participants experienced significantly worse mental health compared to cisgender controls, they had significantly better mental health compared to their binary transgender controls (Jones et al., 2019). It is important to note, that neither the binary nor non-binary trans participants had received any gender affirming health care (hormones or surgery) as criteria for this study.

Another survey conducted in the UK looked at mental health, substance use, NSSI, suicidality, and experiences of abuse in a community sample of 667 trans participants aged 16-25 (Rimes et al., 2019). Out of these participants, 105 identified as trans women, 210 as trans men, 93 as AMAB non-binary, and 269 as AFAB non-binary. From this survey, results showed that AMAB non-binary participants reported suicidality less than all other groups and were also less likely to seek support for depression and anxiety. Additionally, non-binary participants reported higher life satisfaction than the trans men and trans women participants. However, both trans men and AFAB non-binary participants reported higher rates of NSSI as well as current mental health distress (Rimes et al., 2019). Nonetheless, instances of mental health issues, NSSI, substances use, experiences of abuse, and suicidality from this study were still higher than that of the aged matched general population.

In Spain, a survey conducted with 856 youth (14-25 years) looked into their experiences of violence, well-being, and social support (Aparicio-García et al., 2018). Non-binary trans respondents (n = 70) experienced the most amount of cyberbullying, participated the least in social activities, and received the least amount of support from their family and friends compared to the binary trans (n = 180) and cisgender (n = 532) participants.

In Aotearoa, another study used data from the 2018 *Counting Ourselves* survey to examine the instances of mental health within trans populations and not only compare these against mental health statistics from the general population of Aotearoa, but also draw comparisons between gender identities within this sample (Tan et al., 2020). After controlling for age, researchers found that non-binary trans participants and trans men had a higher likelihood of being diagnosed with anxiety and depression compared to trans women. The authors suggest that this could be linked to the higher reports of domestic violence and sexual abuse experienced within this group compared to trans women. The authors also noted that the majority of their non-binary sample were AFAB, and therefore may share similar likelihood of abuse (Tan et al., 2020).

Summary

There are high disparities in ill health and mental health for trans people compared with cisgender populations. Moreover, many people within trans communities are experiencing heightened amounts of discrimination from family members, peers and society either by way of direct abuse and rejection or by omission of representation within public spaces, with some research indicating higher instances of mental health concerns and social exclusion for non-binary trans people compared to binary trans people.

Chapter Four: Minority Stress Model and Gender Minority Stress

This chapter provides an overview of the Minority Stress Model, as useful for explaining higher rates of both mental and physical health presentations and social disparity experienced by those with minority sexual identities. It also includes an explanation of The Gender Minority Stress and Resilience model and the similarities and discrepancies between minority and gender minority stress theories. Research that links these disparities to both theories is also detailed, and the role that social support plays in mitigating such disparities. Critiques of the minority stress model are also included.

The minority stress theory was originally conceptualised by Virginia Brooks who first articulated the theory in her Doctorate dissertation in 1977 (Rich et al., 2020). Brooks, then went on to further develop minority stress theory with the publication of her book *Minority Stress and Lesbian Women* published in 1981 (Rich et al., 2020). Ilan Myer then extended this theory in 2003, gaining notable recognition. Myers Minority Stress Model (MSM) offers an alternative explanation for why members of the lesbian, gay and bisexual (LGB) communities experience significantly greater instances of mental distress compared to heterosexual populations (I. Meyer, 2003). It was historically assumed that the higher instances of mental illness within homosexual communities were due to homosexuality being considered a "mental disorder". As a counter, Meyer argued that such mental health disparities are not because the individual is homosexual per se but are instead tied to the societal stressors associated with being homosexual. Thus, the psychosocial disparities experienced by members of LGB communities are a consequence of hostile societal environments which involves prejudice, exclusion, discrimination, and abuse (Kelleher, 2009; I. Meyer, 2003). The MSM also states that people with minority sexual orientations experience stress in multiple ways, on top of general stressors that everyone can be expected to experience throughout their lives. These include *Distal Minority Stress Processes*, such as being subjected to negative external events or circumstances because of having a minority identity (for example, being verbally or physically abused or being fired from your job), and *Proximal Minority Stress Processes* which can occur in two ways. Firstly, expecting negative events to occur and living in stressful anticipation, and potentially resulting in the individual concealing aspects of themselves for fear of negative consequences. Secondly, internalising society's hostile attitudes resulting in the individual viewing themselves in a similar way (internalised homophobia). Lastly, The MSM posits that both social support and coping resources can moderate the impact of minority stress on health outcomes. Therefore, stress is experienced through both overt (or distal) instances of discrimination, as well as

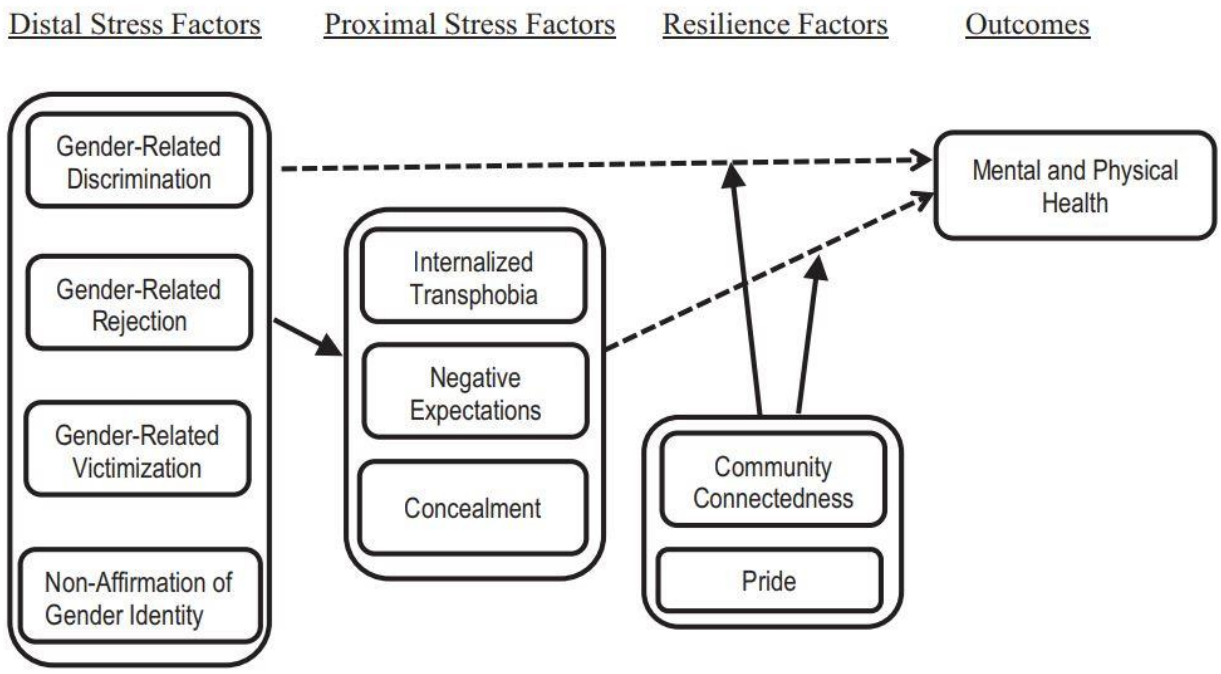
covert (or proximal) instances, whereby the individual experiences internal stressors for not conforming to expected societal norms.

Gender Minority Stress

The Gender Minority Stress and Resilience (GMSR) model was developed as an adaptation of Meyer's MSM that was made more applicable to trans populations (Figure 1) (Testa et al., 2015). When developing this model, the authors highlight similarities experienced by both sexual minority groups and gender minority groups, but also provide insight into the additional stressors that trans people face. For example, while instances of discrimination, harassment, rejection, and violence are experienced by both groups, Testa et al. reported that trans people may experience further external stressors. Examples include discrimination when accessing medical care, inability to access or change legal documents with regards to sex and name, and inability to safely access public bathrooms. Moreover, the authors outline a further distal stressor which they termed "non-affirmation" which involves instances where trans people are misgendered (such as a trans women being referred to as "sir" or "him"), called by their dead name (the name assigned to them at birth that is no longer their name), or where non-binary individuals are placed in binary situations) (Testa et al., 2015).

Figure 1

Minority stress and resilience factors in transgender and gender non-conforming people. Dashed line indicates inverse relationships.



Note: Reproduced by permission of Testa et al. (2015, p. 67).

Proximal stressors outlined by Testa et al. that share similarities with LBG populations include internalised transphobia, heightened anticipation and fear of future negative experiences, and potential concealment of one's minority status to avoid such experiences. However, the notion of concealment is different for trans populations compared to LGB cisgender populations since gender is typically perceived by others through physical signals such as clothing, hair style, body size, voice, and secondary sexual characteristics. This can create great difficulty for "out" trans folk and concealment can be reliant on other factors such as accessing gender affirming health care, or the stage of their transition (Testa et al., 2015). This comes with its own set of implications, as this may be a determining factor for many trans people to not undertake gender affirming care for fear that they will have to begin living as a fully "out" trans person. This also interplays with the component of the minority stress model which explains that coping with stress occurs through being a part of a minority community and having shared commonality. As Hendricks and Testa point out, "group members typically are able to access these resources (social support) when they clearly and openly identify as a member of the group" (2012, p. 462). Thus, trans people who conceal their gender identity full time (rather than situationally) are at a further disadvantage due to not being able to access group membership and associated social support. Finally, the last proximal stressor that Testa et al. (2015) identify as unique to trans individuals, relates to those who do decide to seek gender affirming care, and the decision they face around disclosure throughout their gender affirmation:

> For example, a trans man initially living and/or appearing to those around him as a woman would be tasked with deciding whether, when, or how to disclose that his gender identity is a trans man. Later in life, this individual may live and appear to those around him as a man. He would then be tasked with judging whether, when, or how to disclose that he was not assigned the sex of male at birth. (p. 67).

Relevant Research

Testa et al. (2017) examined the GMSR model and the interpersonal-psychological theory of suicide (IPTS) to explain high rates of suicidal ideation within trans populations. Factors from the GMSR model included external stressors (discrimination, victimisation, rejection, and non-affirmation), and internal stressors (nondisclosure, expectation of negative experiences, and internalised transphobia). Factors from the IPTS model include perceived burdensomeness and thwarted belongingness. Authors designed the Trans Health survey, of which 816 participants responded. This survey comprised of three measures: the GMSR measure (developed alongside the GMSR model), the Interpersonal Needs Questionnaire - to evaluate IPTS factors, and the Suicidal

Ideation Scale. Findings conveyed that both GMSR and IPTS factors were related to suicidal ideation.

Another study qualitatively explored the impacts of the MSM proximal stressor - *expectations of rejection* for trans participants (Rood et al., 2016). Analysis indicated that this proximal stressor is frequently experienced and has a significant impact on trans individuals. Participants identified multiple types of feelings and thoughts accompanied with expecting rejection such as feeling anxious, stressed, angry, hyperaware, wary of safety, rejected, ignored, disappointed, and physically exhausted (Rood et al., 2016). Findings also highlighted the pervasiveness of this proximal stressor, as participants noted that they expected rejection to occur across an array of social situations such as grocery stores, restaurants, bathrooms, health care settings, workplaces, in crowds and in unfamiliar environments. Moreover, participants also talked to the maladaptive coping strategies that they used to try and cope with this stressor, such as avoidances of social situations like going to the doctor or the gym, substance use, and rumination or minimisation of the situation. Findings from this study showcase how pervasive, impactful, and severe just one of the proximal stressors from the MSM can be.

Another study used the same data focussing on the proximal stressor of *concealment* in trans people (Rood et al., 2017). A number of factors associated with concealment were identified. Identity concealment was described as a source of stress causing participants to feel nervous or anxious about their safety, to feel inauthentic - like they are lying to themselves and to others, to feel frustration and anger about having to hide, and to feel self-loathing and sadness. Participants concealed their identity to avoid making others feel uncomfortable, and commented that it was a mentally exhausting task. This finding alone indicates the varied and compounding impact that this proximal stressor can have. The authors also discuss the different contexts that participants would choose to conceal their identity, that concealment also served to affirm participant's true gender, and the nuances around "passing" or "blending" (Rood et al., 2017). Findings emphasised how concealment for trans people can be more intricate and complex compared for LGB people, due to concealment for trans people can sometimes being seen as a positive or affirming act. Nonetheless, findings from this study further emphasises the negative psychological impacts that this proximal stressor can have for trans people.

Kelleher (2009) explored the impact of minority stress among LGBTQ+ youth in Ireland and found that youth with higher expectations of discrimination and societal rejection, reported symptoms of suicidal ideation, depression and anxiety more often. Further, a qualitative study in the

UK looked at LGBT youth's understandings and explanations of their relationship to self-harm (McDermott et al., 2015). Two significant themes towards the understanding of what contributes to self-harm were highlighted. One being experiences of homophobia and transphobia from others, and the other being feelings of self-hatred, fear, and shame. Another theme emphasised that youth regarded self-harm as unrelated to sexual orientation and gender identity (McDermott et al., 2015). While this study was not explicitly linked to the minority stress model, the participants' perceptions of why they engaged in self-harm can be compared to instances of both distal and proximal stress as outlined by the model.

Losty and O'Connor (2018) studied non-binary trans individuals in Ireland and identified three themes. The first theme outlines the positive experiences of non-binary participants of discovering their gender identity, and how learning about non-binary gender identities resulted in an alleviation of confusion and hostility that they had experienced from others, and from within themselves due to the non-conformity to their sex assigned at birth. Second, a theme of correct and incorrect language – with the use of correct they/them pronouns being important in affirming gender identity and assisting with their overall wellbeing. The third theme underlies the idea of being seen and unseen, with participants discussing their close family members not acknowledging their gender identity and seeing their non-binary identity as a "phase" for a "full" transition into trans men or trans women. Invalidation was associated with this theme, where participants described that when family members invalidated their gender, they experienced heightened distress and poorer mental health. While also not strictly related to the GMSR model, this concept of invalidation shows robust similarities to the notion of *Non-affirmation of Gender Identity* – one of the distal stressors of the GMSR model.

Social Support and Minority Stress

Literature on the minority stress and gender minority stress models also explains that individuals who have social support or feel part of a minority group can experience group solidarity and develop instances of coping or resilience which can serve as a protective factor against discrimination, thus moderating possible negative outcomes (American Psychological Association, 2015; Hendricks & Testa, 2012; I. Meyer, 2003). While using the MSM as a basis for measuring the relationship between mental health and experiences of discrimination, Bockting et al. (2013) recruited 1093 trans men and trans women to complete an online survey which assessed potential links between experiences of stigma and mental health as well as potential mitigating factors such as notions of pride, and peer and family support. It was found that experiences of stigma were positively associated with instances of mental distress such as depression and anxiety, but support

from peers and family was negatively correlated with depression and anxiety. Thus, indicating that social support can mitigate the negative impacts of stigma and discrimination.

Further studies conducted in the United States of America have also found a significant relationship between higher levels of family support and less instances of suicidality, self-harm, depression, poor self-esteem, physical ill-health, and homelessness (James et al., 2016; Katz-Wise et al., 2018; Travers et al., 2012; Weinhardt et al., 2019). In Aotearoa, respondents to the survey *Counting Ourselves*, who reported that most of their family were unsupportive of their gender were almost twice as likely to have attempted suicide (17%) in the past year, compared to those who reported support from at least half of their family (9%) (Veale et al., 2019). Thus, these findings reinforce the important role that social support, particularly family support, can play in lessening the impacts of minority stress.

Unfortunately, however, limited social support by way of rejection from family and friends, as well as limited support in the workplace is common. (Aparicio-García et al., 2018; Hendricks & Testa, 2012). One study looking into discrimination experiences of trans people noted that 31% of their 350 participants had families who did not support their gender identity (Bradford et al., 2013), and Brewster et al. (2014) found that less than half of their participants felt supported by some of their colleagues during transition.

Numerous other studies have also indicated that large percentages of trans people receive suboptimal levels of social support. For example, one study in Chicago analysed the varying levels of interpersonal support available to a group of LGBTQ+ youth and organised these levels of support into three clusters: *low support*, *non-family support*, and *high support* (McConnell et al., 2015). Although only 10% of participants identified with a binary trans identity, and none identified as non-binary, the results of levels of support appear similar to other findings. 21.6% of participants fell in the *low support* cluster, 34.5% were categorised into the *non-family support* cluster, and 44% were placed in the *high-support* cluster which was characterised by high levels of family, peer, and significant other support (McConnell et al., 2015). Although the *high-support* cluster overall had the highest percentage of participants, over half of the participants in this study were receiving low levels of support from their families with almost a quarter also receiving low levels of support from their peers. Similarly, in Ontario, a survey was distributed to 433 trans people to collect information on measures of psychosocial issues, health and sexual health, experiences accessing health care, and parental support (Travers et al., 2012). From this survey, it was found that out of the participants

who were open with their parents about their trans identity, 34% described their parents as 'very supportive', 25% as 'somewhat supportive', and 42% as 'not very supportive' or 'not at all'.

The *Counting Ourselves* survey also found that 19% of respondents quit their employment because of how they were treated as a trans person and 10% were denied use of the correct workplace bathroom. Just over half (51%) of respondents indicated they felt they were treated fairly within their workplace, with 30% indicating they transitioned with support from their workplace (Veale et al., 2019). With regards to family support from this same survey, 81% of respondents reported at least one of their family members knew they were trans. From this 81%, only 57% reported that all or most of their family were supportive. Furthermore, 26% of participants reported that at least one close family member stopped speaking to them or ended the relationship because of their gender. Additionally, 30% of participants reported they felt lonely all or most of the time, which was found to be significantly higher compared to 7% of the general population (Veale et al., 2019).

Therefore, research supports the Minority Stress Model with regards to the importance of social support in moderating minority stress. However, research also shows that this level of support is often not available for trans people across multiple domains of support – familial, workplaces, and peers.

Critiques of the Minority Stress Model

While being able to explain the adverse psychosocial issues that trans people face through the interplay of distal and proximal experiences of discrimination, this model has still come under criticism. Namely, that the model places the onus of experiencing stress onto the individuals themselves rather than placing the onus onto the oppressive society that enacts such stress (Kelleher, 2009; Riggs & Treharne, 2017). In other words, Meyer is critiqued for implying that it is up to the individual to react in either a stressed or non-stressed manner towards discrimination, and for seeking support from their social circle to mitigate stress, rather than it being up to society to not place interpersonal and institutional stress onto that individual. Riggs and Treharne proposed an alternative theory, the decompensation framework, which views individuals with minority identities as being a "product of institutionalised stressors" (2017, p. 595). The authors theorise how ideologies and privilege can contribute towards experiencing stress. Through social norms, identities can become compartmentalised, resulting in certain ideologies being attributed to different identities. These ideologies can be oppressive in nature for anyone who does not fall within the

"ideological norms" that societies create for these certain identities, and, moreover, such ideologies can also privilege those who conform to such norms (Riggs & Treharne, 2017).

Additionally, these authors noted the lack of recognition within the minority stress model regarding intersectional identities. Although the minority stress model proposes that being part of a minority group in and of itself can act as a protective factor towards stress due to group solidarity, it fails to acknowledge that those with a particular minority identity may have other identities that privilege or disadvantage them over others, resulting then in further mitigating or perpetuating the amount of stress society places on them (Riggs & Treharne, 2017). Intersectionality addresses the fact that people will hold multiple marginalised or minority identities at once and therefore experience different types of discrimination (Crenshaw, 1990). Intersectionality is important when considering how stress impacts trans individuals as not everyone will have the same identities. For example, a trans man who is white and middle class will be subjected to different levels of societal oppression compared to a trans woman of a lower socio-economic status and minority ethnic identity (Riggs & Treharne, 2017). Therefore, it is not just group solidarity that can mitigate stress but also the multiple intersecting features of a person's identity, and the way in which society reacts to such intersecting identities.

Importantly, Riggs and Treharne note that "the intent of an intersectional approach is not to rank oppressions. Rather it is to recognise how ideologies differently shape our experiences." (2017, p. 597). For example, the norm or ideology with regards to gender is still a binary construct, so even though trans men and trans women are "othered' by society for not being cisgender, their gender can still fall within the comfort of a gender binary. They can buy either men's or women's clothing, be included within common language such as 'ladies and gentlemen' or 'sir and ma'am' and have access to binary bathrooms. Thus, our societal and language constructs have been developed around this ideology that gender is classified, perceived, and performed within the binary constraints of man and woman. However, for non-binary, gender queer, agender, and gender fluid people, the gender binary is a construct that can result in distress due to feelings of exclusion, omission, and non-affirmation. Such ideologies may then shape non-binary trans people's experiences in different ways to how they may shape trans men and trans women's experiences.

Aparicio-Garcia et al, defined social support as "the set of contributions of an emotional, material, informational, or company type that people perceive or receive from different members of their social network" (2018, p. 2). That is, social support isn't just generated from close relationships that individuals hold with their family and peers (although that level of support is

beneficial in moderating well-being). Social support casts a wide net, extending further than familial and interpersonal relationships towards notions of feeling like a contributing member of a wider community, feeling appreciated by others, and feeling supported within wider society through representation and institutional acceptance. Therefore, not simply receiving support from others, but also perceiving that you are supported and appreciated by wider society is an important factor of social support that the minority stress model overlooks. Thus, this incorporation of multiple factors of social support further highlights the argument that social support should not be depended on by familial and peer support alone, but also on to greater society across an institutional level.

While the minority stress model is still useful to consider, critiques of the model emphasise the importance of acknowledging the interplay of intersectionality when looking at stressors, making the important distinction on who is responsible for the stress experienced, and understanding where the onus of generating social support is placed.

Summary

The Minority Stress Model (MSM) was developed to explain why members of LGB communities experience higher rates of mental health compared to heterosexual people. The Gender Minority Stress and Resilience Model (GMSR) was adapted from the minority stress model to better apply the specific stressors that trans people experience. Both models highlight the important role social support can play in reducing the impact societal stressors have on psychological distress. Critiques of the MSM have highlighted Meyer's oversight and failure to include the role that social norms and institutional structures play in causing stress for minority identities, as well as the lack of an intersectional approach. Therefore, the GMSR model is considered to be more useful when assessing health and mental health disparities within trans populations, while also accounting for and considering nuances such as intersectionality, institutionalised stressors, and ideological norms as explained within the decompensation framework.

Chapter Five: Gender Affirming Health Care – A History

Gender affirming health care refers to several types of gender affirmation procedures including hormone therapy, surgeries such as chest reconstruction/breast removal and breast augmentation (top surgery), genital surgery (bottom surgery), other surgeries such as hysterectomies and orchiectomies, facial feminisation procedures, voice therapy, and laser hair removal (Gender Minorities Aotearoa, 2017). It is important to note that not everyone in trans communities' experiences distress around their gender incongruence nor are they seeking gender affirming health care (Coleman et al., 2012; Oliphant et al., 2018). However, those who are, seek it in the hope of physically changing aspects of their body that are incongruent with their identity, and many are doing so in order to alleviate the distress this causes. This chapter provides a brief overview of the history of gender affirming health care, including GAHT, as well as insight into the different types of barriers in accessing this care. Further this chapter explores the recent shift in Aotearoa towards the informed consent model for prescribing GAHT.

Beginnings of Gender Affirming Health Care

Historical developments of gender affirming health care practices varied greatly across countries and centuries, with practices in Europe appearing well before those in the United States of America. Any practices in the USA that could be attributed to such developments involve medical procedures such as genital plastic surgeries, which were performed on intersex people as early as the 1840's (Stryker, 2016). However, in Europe surgical procedures for trans people, as opposed to intersex people, were recorded as early as 1906 (Stryker, 2016). In 1912, Eugen Steinach began extensive research on sex hormones in Vienna, removing the testicles from infant male guinea pigs and inserting ovaries and vice versa for infant female guinea pigs (Benjamin, 1945; Ostertag, 2016). Results from this research not only provided support for the hypothesis that the male and female sex hormones were secreted in the testicles and ovaries respectively, but also influenced the research and practice of German physician Magnus Hirschfeld, who became a prominent figure in the advancement of gender affirming care in the early twentieth century (Ostertag, 2016; Rodrigues et al., 2021). By 1919 Hirschfeld established the Institute for Sexual Sciences in Germany, where both gender affirming hormones and surgeries were provided for trans people seeking to make their bodies more congruent with their identity (Clarke et al., 2010; Stryker, 2016). It was at this institution, that the world's first gender affirming genital surgery was performed in 1931 under Hirschfeld's supervision (Clarke et al., 2010; Mancini, 2010).

Contemporaneously with Steinach and Hirschfeld, most medical procedures in this area in the USA continued to progress with the intention of "treating" only intersex people excluding trans

people from their research and practices. However, there are some historical examples of trans people seeking surgeries to affirm their gender around this time. For example, Dr Alan L. Hart is known as the first person in the USA to receive a hysterectomy in order to better align with his gender identity (Stryker, 2016). Dr Hart, who was also known as the first "woman" to graduate from the University of Oregon medical school, underwent this surgery in 1917, shortly after his graduation, in order to become more aligned with his "natural male instincts" (Manion, 2020, p. 296). It is noted that Dr Hart made use of the argument for eugenics in order to be granted this procedure, arguing that "sexual inverts" should be prohibited from reproducing, and therefore he himself should undergo sterilization. Following his procedure, Dr Hart began living as a man and went on to legally marry a woman (Manion, 2020; Stryker, 2016).

Eventually, influence from Steinach and Hirschfeld's work as well as the publicity generated from Christine Jorgensen - who was the first trans woman to become widely known in the USA for having gender affirming genital surgery in Denmark in 1952 – resulted in a slight increase in research and availability of gender affirming health care in the United States in the 1950's (Clarke et al., 2010; Mancini, 2010; Stryker, 2016). In 1966 the USA established its first surgical sex-reassignment clinic at Johns Hopkins, with the first gender affirming genital surgery being performed over thirty years after the first in Europe (Stryker, 2016).

The Development of Standards of Care and the Issue of Gatekeeping

Alongside this increase in the availability of and demand for gender affirming heath care has been the creation of standards of care and clinical guidelines for medical practitioners to consult when seeking guidance for best practice and determining pathways for care (Clarke et al., 2010; Prunas, 2019). As with many developments in medicine, some of these historical standards of care have come under criticism in recent times and have since been changed. For example, American sexologist Harry Benjamin is well known for popularising the term "transsexual" and used this term for patients who sought gender affirming surgery, in particular bottom surgery. Benjamin proposed the Sex Orientation Scale (S.O.S) in 1966 as a measure to categorise trans people into types. Depending on what "type" a person was indicated whether they were suitable for GAHT and surgery (Prunas, 2019; Rodrigues et al., 2021). The types who were considered more suitable were "primary or "true transsexuals" who had a distinct binary gender identity (trans man or trans woman) and who identified solely as heterosexual (being attracted to members of the opposite gender to their gender identity). Therefore "secondary transsexuals", those who those who did not fit binary gender norms and/or those who did not identify as heterosexual were routinely denied access to gender affirming health care (Prunas, 2019).

Medical and mental health practitioners developed further categorisations to aid their practice such as “early-onset” and “late-onset transsexuals” with a tendency to provide gender affirming health care to those categorised as early-onset. This included people who had determined their gender identity and sought health care from an early age, and who had not lived “successfully” as the sex assigned to them at birth (Prunas, 2019; Zucker et al., 2016). In contrast, trans women, in particular, who had spent the majority of their adult life presenting as male, had married women, and had children were viewed as “late-onset” and were considered unviable candidates for hormones and surgery (Zucker et al., 2016).

One explanation for the development of these clinical guidelines is that clinicians feared that people with a “late-onset”, without a strong binary identity, and who were LGB would regret having surgery, as they may find the transition process more challenging than those with an “early-onset”, binary identity and heterosexual attraction. Alternatively, it has been inferred that these guidelines were established by hetero- cis- normative medical professionals as a discriminatory measure, denying access to those who did not conform to societal expectations of femininity or masculinity (Prunas, 2019; Serano, 2016). Hence, these categorisations resulted in backlash from members and advocates of trans communities as they argued that these classifications were unnecessarily gatekeeping many from receiving life changing health care.

Moreover, what resulted from these guidelines and restrictions was a narrative that many trans people learnt to adopt during these assessments to ensure they were granted access to gender affirming health care (Prunas, 2019). Such narratives include a hyperbolised embodiment and presentation of either femininity or masculinity, being heterosexual, and having a clear, definitive, and binary understanding of gender identity from a young age (“I always knew I was trapped in the wrong body ever since I can remember”). These categorisations of transsexuals into types and onsets (also known as “gatekeeping requirements”), and the homogenised narratives that came about as a necessity to meet such requirements resulted in a perpetuating cycle by which trans people felt forced to provide a story that corresponded with the clinical requirements at the time, and in turn, practitioners were “reinforced in their assumptions that their profile was actually typical of the “true transsexual” (Prunas, 2019, p. 57). In addition, this perpetuating cycle has potentially contributed to the routine exclusion of non-binary and other diverse gender identities, sexualities, and experiences observed within areas of literature, medicine, research, and media (Prunas, 2019).

These standards of care and categorisations have since come under scrutiny, and over the past two decades, attitudes and understanding towards varying gender identities and experiences, as

well as the need for improving trans health care, has become more prevalent in both public and medical spheres (Keuroghlian et al., 2017). Specialised services and centres have become more prevalent and have adopted more culturally considered approaches, including hiring specially trained staff, or using up to date research to train staff, as well as providing increased access to gender affirming health care for all trans identities (Reisner et al., 2015). Additionally, clinical guidelines for best practice and standards of care for trans people have been continuously updated and published in different countries and disseminated nationally (Keuroghlian et al., 2017). For example, The World Professional Association for Transgender Health (WPATH) publishes updated Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People (SOC), with the most recent Version 8 (SOC 8) published in 2022 (Coleman et al., 2022). In Aotearoa, practice is guided by standards known as The Guidelines for Gender Affirming Health Care in Aotearoa (Oliphant et al., 2018).

Other Barriers to Care

While continued updating of standards of care and guidelines have been influential in progressing access of gender affirming care for trans people, there are still many other barriers experienced within this area. For example, a position statement released by the Royal Australian and New Zealand College of Psychiatrists in 2022 "Recognising and addressing the mental health needs of people experiencing Gender Dysphoria/Gender Incongruence" has been used to argue in support for conversion therapy in Aotearoa and in the U.S for proposed legislation supporting the prohibition of trans health care for youth (Zwickl et al., 2022). Moreover, lack of access to health care and experiences of discrimination within health care settings is a prominent issue for members of trans communities. These issues contribute significantly to the question of why there are such high health and mental health disparities overall within these populations.

The USTS by James et al. (2016) had 27,715 respondents coming from all fifty states as well as countries nearby such as American Samoa and Puerto Rico and includes participants from U.S military bases overseas. Findings from this report state that a quarter of participants were either denied insurance coverage for gender affirming care or for simple routine health care due to being transgender. 55% of participants who sought insurance coverage for gender affirming surgery were denied, and a quarter who sought coverage for gender affirming hormones were denied. Additionally, 33% of respondents who visited a health care provider within the last year reported negative experiences to do with being trans such as being verbally abused, physically or sexually assaulted, being refused treatment, or having to educate their health care providers in order to

receive adequate care. These rates were found to be higher for trans people of colour or with disabilities (James et al., 2016).

Similarly, research conducted in Virginia looking at transgender related discrimination found that out of 350 participants, 27% had experienced discrimination while accessing health care, with 20% of participants needing to educate their health practitioners about their transgender specific health needs, and 15% feeling unable to discuss their health needs with their practitioner due to discomfort (Bradford et al., 2013). Aside from health care providers' creating barriers to health care, wait times for trans-specific health care was also found to be a common barrier with over 25% of participants waiting longer than 12 months to receive treatment. A survey analysis conducted by Austin and Goodman (2018) in Atlanta had comparable findings. Respondents were asked questions regarding their experiences with accessing gender affirming care. Out of the 65 participants 81% had difficulty finding either an appropriate endocrinologist or a supportive endocrinologist. One third of participants could not find a surgeon with trans-specific expertise. Fifty-three percent reported being able to easily find a GP with trans-specific knowledge, however 53% reported difficulties finding a GP that they felt were supportive of their identity and community.

When looking into the effects of not receiving gender inclusive health care, a study conducted in Colorado found that participants with trans inclusive health care had current depression rates of 37.8% compared with 53.7% of their counterparts without such health care (Kattari et al., 2016). Additionally, 28.8% of those receiving inclusive health care had experienced suicidal thoughts in the last 12 months compared to 47.6% of participants who did not receive health care that was responsive and comprehensive to their needs.

It appears that within many healthcare services there is a lack of education surrounding trans health care, adept treatment, and cultural sensitivity. Carabez et al. (2015) interviewed 268 nurses in San Francisco about the inclusion of multiple gender identities on intake forms at their practices. Findings showed 37% of nurses did not understand the meaning of the question or the need for gender inclusivity, and 14% mistook gender identity for sexual orientation. Only 5% of nurses stated the forms were gender inclusive. Not only did most practices not have gender inclusive forms to be able to identify trans patients, but their staff were also not equipped with the language or knowledge to discuss transgender related health care (Carabez et al., 2015). Further, a survey commissioned by Stonewall to asses LGBTQ+ issues in health and social care facilities, (Somerville, 2015), found 72% of patient facing staff had not received any training on the health

needs of LGBTQ+ patients, nor any education on the use of inclusive language and practices for LGBTQ+ people. A quarter of staff stated that they did not feel they would be able to adequately respond to the specific needs of trans service users and patients.

Further, barriers to healthcare can be seen to be occurring at institutional and national levels in countries such as the US. During its four years in office, the Trump administration passed a number of bills and laws that have made trans people's access to health care more difficult. For example, bills have been passed that allow health professionals to refuse health care to trans people based on their own religious beliefs and biases (National Center for Transgender Equality, 2020). This administration also eliminated protections put in place for trans people who are experiencing discrimination within healthcare settings such as refusal for care, or experiencing discrimination from their insurances companies for refusal to fund affirming health care (National Center for Transgender Equality, 2020). These barriers have been explicitly put in place to prevent trans people's rights to access health care.

With regards to non-binary trans specific barriers, a qualitative study sought to assess the experiences of eight non-binary people aged over 18 seeking gender affirming medical care at a gender identity clinic in the UK (Taylor et al., 2019). This study ran two focus groups from which five themes were established. With regards to seeking medical interventions, common rhetoric arose around the fact that medical options for gender affirmation still sat within the gender binary and therefore indecision often arose to take medication due to these binary effects hormones can have on the body and the reluctance for participants to have their bodies change too much from one binary to another. Additionally, other treatments such as laser hair removal were not funded for participants who identified as non-binary (they had to identify as "male-to-female" to qualify) (Taylor et al., 2019).

Within Aotearoa, gender affirming health care can be found to be lacking in many parts of the country, as well as having long waitlists due to inadequate public funding. Prior to July 2022, national health care in Aotearoa was organised into District Health Boards (DHB) based on geographical region. The DHB's have since been merged into a unified health care system called Te Whatu Ora. However, I will continue to refer to DHB's throughout this thesis as that was the structure during the time of research design and during most of this write up.

Research looking into the different gender affirming health care pathways throughout DHB's in Aotearoa (Oliphant, 2019) found that many DHB's fail to have clear pathways (either within the DHB itself or in primary healthcare) for gender affirming care, such as Hawkes Bay,

Waikato, Taupo, Rotorua, and Whangarei. Further, many of these DHB's also did not have a DHB advisory group with trans members to advise on best practices for gender affirming care (Oliphant, 2019). An online survey looking at LGBTQ+ people's experiences with accessing health and mental health support in Aotearoa found that the average wait time between trans people being referred for access to hormone therapy and then receiving their prescription was 47 weeks (Fraser et al., 2019)**.** However, recently, wait times for accessing hormone therapy have been decreasing in cities such as Wellington due to increases in health care providers and pathways other than the DHB (Oliphant, 2019). Results from another study by Fraser (2019a) show that barriers to accessing mental health care (not just health care) are also prominent for trans people in Aotearoa. Almost 50% of respondents who had sought mental health support stated that their therapist assumed they were straight or cisgender, over 20% of respondents reported their therapist needed education around sex and gender diversity, and sexuality, and less than 20% of respondents' therapists were apt at using culturally sensitive language and procedures such as asking about pronouns and disclosing pronouns (Fraser, 2019a). Further, only 30% of therapists were reported to have LGBTQ+ friendly visuals in their offices to indicate support, and 20% of respondents stated their therapists used participants gender identity or sexual orientation as a reason to explain why they were experiencing mental health difficulties (Fraser, 2019a). This study highlighted that many members of LGBTQ+ communities have faced micro aggressions from therapists when they were already in an incredibly vulnerable place - seeking mental health support. Such experiences would likely create barriers for people seeking further mental health support.

Informed Consent

Although standards of care have been updated and improved and some barriers to accessing gender affirming care have decreased, there is still ongoing debate and controversy around the use of mental health professionals when making a referral for gender affirming health care, specifically GAHT. In Aotearoa a psychosocial assessment and diagnosis of Gender Dysphoria was considered a requirement for patients to gain access to care such as GAHT and referrals for both top and bottom surgeries. Although this requirement has shifted to a less stigmatising diagnosis of ICD-11's Gender Incongruence, this psychosocial assessment, typically performed by a mental health professional, often a psychologist, is still the current practise for many trans people wishing to access gender affirming health care. Because of this, mental health professionals are still viewed by many as gatekeepers (Zucker et al., 2016). Many trans people feel they have to play along with the outdated yet dominant narrative to prove they are "trans enough" in order to access care (Fraser et al., 2021; Ker et al., 2021). In response to this, the informed consent model has been proposed,

whereby an assessment and prescription for GAHT is undertaken within a primary care setting with a general practitioner (GP) instead of being referred a secondary care setting (Schulz, 2018; Spanos et al., 2021).

The informed consent model ensures that prior to receiving treatment GPs are required to discuss potential side effects of the treatment so the patient understands the physical and psychological risks and benefits of receiving medication prior to consenting to treatment (Coleman et al., 2012; Schulz, 2018). The application of the informed consent model for accessing GAHT was introduced in the early 2000's as an attempt not only to reduce the stigmatising and gatekeeping notions of requiring a diagnosis from a mental health practitioner, but also to reduce other barriers to care such as lengthy wait times for specialists (Fraser et al., 2019; Spanos et al., 2021). Within this model, a multidisciplinary team within a primary health care setting determines the individual's cognitive ability to make an informed decision about their health care based on the information provided, thus the process assumes a more collaborative approach, with the primary decision maker being the patient (Ker et al., 2021; Schulz, 2018; Spanos et al., 2021). This can not only result in a more accessible and diverse levels of support and care for the individual, but also allows primary health care providers to perform a basic mental health screen rather than a more thorough psychosocial assessment (Ker et al., 2021). Further, GPs can then make referrals to metal health professionals if there are more serious mental health concerns, or if an individual is seeking support alongside receiving GAHT (Spanos et al., 2021).

However, there is some global confusion around what the informed consent model for gender affirming health care should entail. There is also contention between trans communities and medical professionals within this area. Moreover, many guidelines for care include both the informed consent model as well as mental health assessment within its recommendations. For example, "The Guidelines for Gender Affirming Health Care in Aotearoa" advises that a screen for current or acute mental health concerns be undertaken alongside the assessment for gender affirming care, incorporating the informed consent. For example:

> An informed consent process involves several conversations between the person and clinician(s) before they start treatments that have an irreversible component to increase certainty that they are adequately prepared and are making a fully informed decision. (Oliphant et al., 2018, p. 26).

These guidelines emphasise that trans individuals with mental or medical health concerns should still be able to access gender affirming health care, providing capacity to consent is not

affected, and that any significant needs are addressed concurrently (Oliphant et al., 2018). Reporting that either a mental health professional or a prescribing medical provider can make such an assessment as long as they are "competent and experienced at working with trans people" (Oliphant et al., 2018, p. 31). Unfortunately, very few primary health care practitioners deem themselves sufficiently competent and experienced to work with trans people. With trans people in Aotearoa reporting extensive gaps in the knowledge of their primary health care providers around trans health care, but also simply around basic understandings of diverse gender identities (Wi-Hongi et al., 2017). For example, doctors suggesting to trans people that they would be less depressed if they tried not being trans, doctors not knowing what the term transgender means, and non-binary trans people pretending to have a binary trans identity in order to be referred for care (Wi-Hongi et al., 2017). Further, *Counting Ourselves* found that 63% of non-binary trans participants reported they would be uncomfortable discussing their gender with their GP, compared to 36% of trans women and 37% of trans men participants who were asked the same question (Veale et al., 2019).

Two recent publications from the same study in Australia compare characteristics of trans people who were either assessed for GAHT by a GP at a trans specialised primary health centre using the informed consent model (GP-assessed group) or assessed for GAHT by a mental health professional (MH-referred group) (Solanki et al., 2022; Spanos et al., 2021). The study found that the GP-assessed group started GAHT at a median of 0.9 months compared to a median of 3.1 months from the MH-referred group (Spanos et al., 2021). There were more non-binary trans patients identified in the GP-assessed group (27%) compared to the MH-referred group (15%), however non-binary trans patients in the GP-assessed group had more assessment sessions compared to the binary trans patients in that group (Solanki et al., 2022). Lastly, when surveyed on their satisfaction of overall care, the majority of both groups were satisfied with their process of receiving GAHT, however a higher proportion of the GP-assessed group were extremely satisfied compared to the MH-referred group (Spanos et al., 2021). Of note, 80% of participants in the GP-assessed group went on to seek mental health support by choice (Spanos et al., 2021). Findings from these studies support continued efforts in promoting the informed consent model as the preferential pathway for accessing GAHT.

Application of the Informed Consent Model in Aotearoa

In 2018 Mauri Ora, a primary health care centre in Aotearoa, established a clinic providing GAHT to its service users. Mauri Ora is a Student Health and Counselling centre at Victoria University in Wellington (Ker et al., 2020). The clinic was established following international guidelines and was

developed with the input of the clinical staff, community advisors, Wellington's Capital and Coast DHB endocrine department as well as their Sex and Gender Diverse Working Group (Ker et al., 2020). This clinic had a multidisciplinary approach whereby service users attended between two and four sessions with a GP to evaluate whether there were any physical or psychosocial health issues that needed to be addressed prior to commencing GAHT. Services users also attended approximately five sessions with a counsellor, and if needed addressed any mental health concerns during these sessions. Followed by one final appointment with an endocrinologist and a GP to provide their informed consent, and receive a GAHT prescription (Ker et al., 2020). On average, it took four months for service users to access GAHT from the point of the initial GP assessment, service users were also offered three follow-up appointments with their GP as well as further counselling support. Both service users and health professionals were interviewed to evaluate their experiences with this clinic. From interviews, many positive themes were developed such as, services users found that the accessibility of the clinic (being on campus at their university) as well as the familiarity of the location and the health professionals relieved some stress in seeking GAHT, which made it easier for them to make an informed choice about starting GAHT. Further, service users found staff at the clinic to be affirming of their gender identity which resulted in them feeling less pressure to perform the "trans narrative" in order to access GAHT. Instead, service users reported that they felt health professionals worked collaboratively with them to support their choice and helped them in accessing the most appropriate care (Ker et al., 2020).

From the health professionals' perspective, one deemed the primary care setting as more suitable than a secondary care setting as GPs have a more effective operation in terms of support staff and greater engagement with the environment (Ker et al., 2020). Health professionals also commented on the clinic being easy to establish within their practice and reported that it would be easily adapted to suit other primary health care centres with multidisciplinary teams such as student health and community health centres. Although the informed consent model was applied in this setting, mental health assessments and support were also still implemented. This was received with mixed results, as some service users were appreciative of the counselling sessions and the mental health support received, while others viewed this with caution, believing that if they were too honest, they may be denied access to GAHT, further some service users found the number of sessions with the counsellor unnecessary (Ker et al., 2020). These results highlight the continued issue around providing access to gender affirming care to trans people in a way that is empowering and collaborative, while also addressing the needs of a diverse community who typically experience higher rates of psychosocial distress compared to the general population.

Summary

Gender affirming health care has come a long way since it is beginnings in the early 20th Century. Despite ongoing attempts to improve discourses on the gatekeeping nature that mental health and health professionals have in providing access to care, research around trans experiences in accessing care showcase that there are still barriers. These barriers include financial, institutional barriers, as well as practitioner ignorance and incompetence, and have been shown to have negative impacts on mental health. Encouragingly, specialised primary health care settings that incorporate educated health professionals as well as the informed consent model have shown to reduce some of these barriers such as lengthy wait times, service users feeling more comfortable reporting a non-binary trans identity, and a decrease in the perception of having to provide a stereotyped narrative in order to feel affirmed in their gender. Although this is a step in the right direction, many primary healthcare centres and GPs in Aotearoa still do not feel confident in providing gender affirming health care, especially in a way that is culturally considered and appropriate. Therefore, more training, support and experience in this area is needed to ensure that prescribing medical providers are competent and experienced at working with trans people, as is in line with an informed consent model. Moreover, increases in funding and accessibility for services is also needed.

Chapter Six: Gender Affirming Hormone Therapy (GAHT)

Chapter five outlined the historical and current developments of accessing gender affirming health care including Gender Affirming Hormone Therapy (GAHT). This chapter focusses specifically on GAHT, explaining why it is often the first step for many seeking gender affirming health care. It also provides an overview of the known effects of both feminising (E-GAHT) and masculinising (T-GAHT) hormone therapy. Followed by a literature review of the current research on the outcomes, impacts, and effectiveness of E-GAHT and T-GAHT for trans people. This chapter concludes with an outline of the current study.

GAHT as the First Port of Call

At the time of writing, there were 20 District Health Boards (DHBs) across Aotearoa which were responsible for allocating funding and delivering public health care services to their designated region (Ministry of Health, 2021). For someone seeking publicly funded gender affirming health care in Aotearoa, GAHT is often the only possible option as it is the most funded and available service. Of note, international literature outlines that other health care such as gender affirming surgeries (both top and bottom surgeries), tracheal shaves, voice training, and facial hair removal either have limited or no subsidies allocated to them and for many, accessing these services privately is unaffordable and hence not an option (Austin & Goodman, 2018; Costantino et al., 2013).

One study in Aotearoa contacted all DHB's using the Official Information Act to determine which types of gender affirming healthcare was publicly funded in each district (Fraser et al., 2019). GAHT was the most publicly funded and available service with 15 out of the 20 DHB's offering it. At two DHB's it was unavailable, but patients were able to be referred to a DHB where it was, at another two DHB's there was no dedicated funding, but it could be provided on a case-by-case basis, and at one DHB it was unavailable with no clear alternate pathway (Fraser et al., 2019). With regards to top surgeries, creation of a male chest (mastectomy) was available at six DHB's, and at one DHB it was unavailable, but patients were able to be referred to a DHB where it was. At three DHB's funding could be provided on a case-by-case basis, and at 10 DHB's it was unavailable with no clear alternative pathway. Further, creation of a female chest (breast augmentation) was available at one DHB, and at one other DHB it was unavailable, but patients could be referred to the DHB where it was. At five DHB's there was no dedicated funding but, it could be provided on a case-by-case basis, and it was unavailable at 13 DHB's. Voice training was available at seven DHB's, was unavailable but available for referral at three DHB's, had no dedicated funding but could be provided on a case-by-case basis at one DHB, and was unavailable at nine DHB's. For

facial hair removal, 19 out of 20 DHB's did not offer a pathway, with only one DHB having no direct funding, but potentially offering the service on a case-by-case basis (Fraser et al., 2019). Lastly with regards to bottom surgeries, hysterectomies and orchidectomies were the two surgeries available at that time (due to no surgeon being trained for gender affirming genital surgery at the time of the study). Hysterectomies were available at eight DHB's, were available at three DHB's via referral to a DHB that offered them, had no dedicated funding at two DHB's, but could be provided on a case-by-case basis, and were unavailable at seven DHB's. Lastly, orchidectomies were available at three DHB's, were unavailable, but could be referred at three DHB's, had no dedicated funding but could be provided on a case-by-case basis at five DHB's, and were unavailable at nine DHB's (Fraser et al., 2019). Thus, often procedures are unfunded or unavailable without referral to a different DHB, which would then require travel to another part of the country to complete the procedure. Therefore, GAHT is the most accessible form of gender affirming health care in Aotearoa.

Moreover, there has been a recent trend in Aotearoa and overseas, of more people presenting to services for GAHT. For example, one Aotearoa study found that from the years 2000 and 2007, between eight to 15 trans people presented at the Wellington Endocrine Service following a referral for GAHT. However, by 2016 this increased to 92 people per year (Delahuntet al., 2018). Additionally, findings from Cheung et al. (2018) show that referrals for gender affirming services in Australia have increased more than 10 times from 2011 to 2016. Similar findings in Spain (Gómez-Gil et al., 2009) and the USA have been reported (Chen et al., 2016). Such results indicate that there is growing need for increased allocations of funding for GAHT as well as increased accessibility for GAHT prescriptions across primary health care services. Further, findings suggest that an increase in subsidies for other gender affirming health care, such as surgeries, facial hair removal, and voice therapy would result in an increase in referrals. In 2019 the Professional Association for Transgender Health Aotearoa (PATHA) was established to advocate for the equitable treatment of trans people and promote their health and wellbeing, such as standardising DHB pathways to all gender affirming health care across the country, reducing wait times, and increasing accessibility of all services nationally. Nonetheless, because GAHT is still currently the most commonly received form of gender affirming health care in Aotearoa, research exploring the physical, emotional, and social effects of GAHT in isolation of other gender affirming care is crucial in further understanding its impact on individuals' overall well-being.

Effects of GAHT

Many people who take GAHT refer to it as their "second puberty". The physical and emotional changes and side effects of taking GAHT can vary from person to person depending on a multitude of characteristics such as age, diet, genetics, and fitness levels. Also, like puberty, not everyone develops the same changes in a uniform, linear fashion.

E-GAHT.

For people undergoing oestrogen based hormone therapy (E-GAHT) in Aotearoa, the predominant hormone used is Oestradiol valerate (oestrogen). Because oestrogen alone can be insufficient at suppressing the production of testosterone, oestradiol valerate is often used in combination with an anti-androgen, either Spironolactone or Cyproterone (Bultynck et al., 2017; Oliphant et al., 2018). Additionally, some people choose not to take an anti-androgen if this is not in line with their desired pathway for gender affirmation. An anti-androgen is no longer required if the individual undergoes an orchiectomy or gender affirming genital surgery. Aotearoa guidelines suggest that a low dose of Oestradiol is used to begin with (1mg a day) and then increased every 6 months depending on its side effects to reach a maintenance dose of 2-6mg daily (Oliphant et al., 2018). In Aotearoa, Oestradiol can be taken either as a pill or transdermal patch depending on the individual's needs (Oliphant et al., 2018). Changes with Oestradiol and anti-androgen are displayed in table 1:

Table 1

Physical changes with E-GAHT

Physical change	Expected onset	Expected maximum effect	Reversibility of change if medication is ceased
Body fat redistribution (increased body fat around hips and thighs/curvier body shape)	3-6 months	2-3 years	Likely
Decreased muscle mass and strength	3-6 months	1-2 years	Likely
Decreased libido	1-3 months	3-6 months	Likely
Decreased spontaneous erections and/or erectile dysfunction	1-3 months	3-6 months	Likely
Softening of skin	3-6 months	unknown	Likely
Decreased oiliness of skin and acne	3-6 months	unknown	Likely
Mood changes	variable	variable	Likely

Breast growth	3-6 months	2-3 years	Not reversible
Slowed growth of body and facial hair	6-12 months	>3 years	Possibly reversible
Decreased testicular volume	3-6 months	2-3 years	Unknown
Decreased sperm production	unknown	>3 years	Unknown

Note: sourced from Cundill (2020) and Oliphant et al. (2018)

No changes to voice occur with Oestradiol and an anti-androgen, therefore voice feminisation speech therapy is required if this is desired. Also, although facial and body hair can become thinner, laser treatment is required for complete removal of hair (Cundill, 2020; Oliphant et al., 2018).

Other side effects of E-GAHT are similar to that of the oral contraceptive pill such as possible nausea, weight gain and deep vein thrombosis. Other potential side effects include gallstones, liver impairment, and infertility. Fertility options such as preserving sperm are always discussed as part of informed consent. Side effects of anti-androgens may include feeling tired or having less energy, as well as low blood pressure, high potassium, and diuresis (Cundill, 2020).

T-GAHT.

For testosterone based hormone therapy (T-GAHT) a low dose is also recommended to start, which is then titrated over time to allow the individual to get use to the effects (Oliphant et al., 2018). Testosterone is typically taken as an injection, however there is the option for a patch which may be helpful for those with needle phobias (Cundill, 2020; Oliphant et al., 2018). Changes are displayed in table 2:

Table 2

Physical changes with T-GAHT

Physical Change	Expected onset	Expected maximum effect	Reversibility of change if medication is ceased
Body fat redistribution	1-6 months	2-5 years	Likely
Increased muscle mass	6-12 months	2-5 years	Likely
Increased libido	variable	variable	Likely
Cessation of periods	1-6 months	N/A	Likely
Increased oiliness of skin and acne	1-6 months	1-2 years	Likely

Changes in mood	variable	variable	Likely
Deepening of voice	6-12 months	1-2 years	Not reversible
Growth of facial and body hair	6-12 months	4-5 years	Unlikely
Hair loss on scalp	6-12 months	variable	Dependent on genetics and age – unlikely
Increased clitoral size	1-6 months	1-2 years	Unlikely
Vaginal atrophy	1-6 months	1-2 years	Can receive medication to prevent this if wanted – unlikely

Note: sourced from Cundill (2020) and Oliphant et al. (2018)

Other side effects of T-GAHT may include weight gain, sleep apnoea, high red blood cell count which can lead to thrombosis, and abnormal lipid levels (Cundill, 2020; Oliphant et al., 2018). Additionally, other risks of taking T-GAHT are insulin resistance, cardiovascular disease, liver dysfunction, endometrial hyperplasia, and osteoporosis, however these risks are considered to be small (Oliphant et al., 2018). Moreover, fertility options are also discussed with people taking T-GAHT, such as freezing egg cells. However, this is potentially unnecessary as menstruation commonly resumes once T-GAHT is ceased, and people who stop T-GAHT are able to ovulate and can become pregnant (Cundill, 2020).

The changes GAHT produces in the body are often referred to as "secondary sex characteristics", which are viewed as the common physical cues that society uses to categorize people into a gender (Serano, 2016). For clarification, primary sex characteristics refer to things that cannot be easily seen, such as reproductive organs, and genitalia. While GAHT can be the first port of call due to its accessibility, it has also been noted to be sufficient enough for many trans people as it provides them with the opportunity to "pass" in society more easily as their identified gender (Serano, 2016). Therefore, the effectiveness of GAHT is explored in this next section.

Effectiveness of GAHT

Of all the physical changes that occur through GAHT, one study found that the most desired changes that trans people anticipate for T-GAHT is the cessation of periods and a deepened voice, and for E-GAHT breast development and fat redistribution (Masumori et al., 2021). And while it is known that these physical changes do occur with GAHT, it is still important to explore whether these changes have an overall positive impact on a person's feelings of congruence between their gender identity, their physical appearance, and their psychosocial wellbeing.

Associations with Improved Mental Health and Increased Quality of Life.

Because GAHT is hypothesised to improve not only feelings of physical congruence but also aspects of mental health and wellbeing, there are a number of studies measuring outcomes such as depression and anxiety, while other studies incorporate measures of quality of life, life satisfaction, and general wellbeing. Many studies have found instances where GAHT has decreased psychological distress and improved quality of life. In fact, a meta-analysis including 20 studies reported that GAHT was associated with increased quality of life, decreased anxiety and decreased depression, however association with suicidality could not be conclusively determined (Baker et al., 2021). Baker et al., noted that common limitations from these studies include small sample sizes, lack of diversity within participants, and difficulty isolating the effects of GAHT. More details of studies discussing the impacts of GAHT appear below and this research excludes gender affirming surgeries such as top or bottom surgeries, unless otherwise noted.

With regards to mental health, one study from the USA examined associations of puberty suppression and/or GAHT in association with quality of life and depression in 50 transgender youth (Achille et al., 2020). Findings showed mean depression scores and suicidal ideation decreased while quality of life increased over time. Another USA study gave two questionnaires to 47 trans youths (age 13-19) prior to starting GAHT and at least three months after starting GAHT to assess their levels of suicidality and general wellbeing (Allen et al., 2019). Results showed a significant decrease in suicidality as well as a significant increase in wellbeing from pre to post test scores. The study also found no differences between gender and scores on wellbeing and suicidality, indicating that regardless of gender identity, participants experienced increased overall wellbeing with GAHT (Allen et al., 2019). Researchers in Italy used both clinician rated and self-rated anxiety and depression scales to determine instances of major mental disorders and functional impairment as well as self-reported depression and anxiety amongst 118 participants prior to- and approximately 12 months after starting GAHT (Colizzi et al., 2014). Findings showed that psychological distress and functional impairment significantly decreased in participants following one year of GAHT.

Another USA study looked at the specific effects that gender affirming health care has on mental health (Davis & Colton Meier, 2014). This study included trans men as well as participants who were AFAB but identified as non-binary and gender non-conforming. Prospective participants responded to a questionnaire that comprised of surveys measuring depression, anxiety, anger, body dissatisfaction, mood and sexuality as well as questions asking whether they had received any form of gender affirming care (T-GAHT and/or surgeries), what types of care, and for how long. From survey responses, 208 participants were placed into one of four groups – those receiving no gender

affirming care (n = 78), those having had top surgery only (n = 12), those receiving T-GAHT only (n = 46), and those who had both undergone top surgery and were receiving T-GAHT (n = 72) (Davis & Colton Meier, 2014). Participants who reported T-GAHT use had fewer symptoms of depression, anxiety, and anger than the participants receiving no gender affirming care. Furthermore, participants who had top surgery as well as receiving T-GAHT conveyed less body dissatisfaction compared to both the T-GAHT only group and the group receiving no care. Due to small sample size, participants who had undergone top surgery only were excluded from the analysis. Overall, findings from his study indicate an association between T-GAHT and improved emotional and mental health, while also indicating that top surgery may play a more crucial role in improving body dissatisfaction within AFAB trans individuals (Davis & Colton Meier, 2014). A further American study also looking into the effects of T-GAHT on psychological functioning used the Minnesota Multiphasic Personality Inventory to assess psychological distress at baseline prior to receiving T-GAHT and then also at a three month follow up. Participants from this study were trans men exclusively, with their results being compared to both male and female cisgender controls (Keo-Meier et al., 2015). Findings indicated a positive effect of T-GAHT on psychological functioning relative to cisgender controls at three month follow up.

Moreover, other international research has shown associations between GAHT and decreases in scores on depression such as one Italian study which used the Beck Depression Inventory (BDI-II) as a measure for 54 trans men and trans women participants taking GAHT (Fisher et al., 2016). Findings showed a significant decrease in mean scores on the BDI-II for both groups between baseline and a two year follow up. This finding is important as it shows positive effects from GAHT following a longer period compared to other longitudinal studies. Another study using the BDI-II for 23 binary trans youth (both trans boys and trans girls) in Spain, found that mean BDI-II scores decreased significantly from time zero (prior to GAHT) to time one (one year on GAHT) (de Lara et al., 2020). This research also included the State-Trait Anxiety Inventory (STAI) as a measure for anxiety, which showcased a significant decrease in mean scores from time zero to time one. Thus, indicating improvements with both depression and anxiety for participants following one year of administration of GAHT. Further, 30 cisgender controls were also included in the de Lara et al. study. Comparisons with controls showed a significant difference between the binary trans participants and controls for the BDI-II and STAI at time zero, however binary trans participants scores matched those of the control group after one year on GAHT. Also, researchers in Switzerland and Germany found a decrease in mean scores on the BDI-II for trans men participants during one year follow up on T-GAHT (Metzger & Boettger, 2019).

In the U.K, trans women were found to have reduced median scores for depression on the Hospital Anxiety and Depression Scale (HADS) following one year of E-GAHT, however no significant change in scores occurred for trans men. Further, median anxiety scores did not change significantly following one year of GAHT for either trans men or trans women (Defreyne et al., 2018). A further U.K study assessed scores of anxiety and depression as well as social support and socio-demographic status in 178 participants (95 AMAB and 83 AFAB) prior to and 18 months following GAHT (Aldridge et al., 2021). Scores in depression significantly decreased, while anxiety scores showed no significant change. Moreover, scores on the social support measure also predicted a reduction in depression following GAHT. A qualitative study from Australia used semi structured interviews and thematic analysis to provide insight into trans women's psychological and physiosexual experiences resulting from E-GAHT (Rosenberg et al., 2019). Out of the 10 trans women interviewed, eight described experiencing noticeable positive changes in their wellbeing following E-GAHT such as, feeling a sense of liberation, and relief from depressive and anxious symptoms.

When looking at associations between T-GAHT and quality of life, one study in Italy found that mean scores on a visual analogue scale (VAS) for general life satisfaction increased significantly for all 45 of their participants over a 12 month period (Pelusi et al., 2014). Similarly, another Italian study incorporating a general life satisfaction VAS into its analysis, recorded responses from 50 trans men prior to starting T-GAHT, as well as a one year and five year follow up (Gava et al., 2018). Mean scores for life satisfaction increased significantly over time. Notably however, by the five year follow up, 72% of participants had undergone a form of GAS. While findings from the Gava et al. study imply positive outcomes remain consistent over a long period of time, findings also show that other types of gender affirmation (in this case, surgeries) may also contribute towards a sustained increase in life satisfaction. Further Italian research on the association between GAHT and quality of life found that their trans women participants (n = 56) reported a statistically significant increase in mean scores on the WHO Quality of Life questionnaire, indicating improved quality of life (Fisher et al., 2014). Scores were taken at baseline prior to starting E-GAHT and then at a one year follow up. For the trans men in this study (n = 27) taking T-GAHT, no statistically significant change was found between baseline and one year follow up scores on the same questionnaire. Colizzi et al. (2013) found significant reductions in cortisol levels and significantly lower levels of self-reported stress when comparing baseline results to a 12 month follow up of GAHT administration in both their trans men and trans women participants (n = 70) in Italy.

A recent Australian study involving 42 participants taking T-GAHT and 35 taking E-GAHT as well as a comparison group of 53 cisgender men and 50 cisgender women, looked at the outcomes of gender dysphoria (GD) as well as quality of life following GAHT (Foster Skewis et al., 2021). To assess GD, this study used the Gender Preoccupation and Stability Questionnaire, and the RAND Short-Form 36 Health survey was used to assess quality of life. Scores were taken at baseline prior to GAHT, and at a three month and six month follow up. Participants taking T-GAHT displayed a decrease in GD as well as an increase in the social functioning and emotional wellbeing subsets of the RAND relative to the cisgender female comparison group. For participants taking E-GAHT, no significant differences were observed across the RAND implying no change to quality of life, however a decrease in GD was observed.

Other studies have assessed specific aspects of psychological distress often linked to gender incongruence (GI) (voice perception, disordered eating, and body related distress). When looking exclusively at participants' self-perception of their voice, Bultynck et al. (2017) administered the Transexual Voice Questionnaire (TVQ) to 80 trans men and 103 trans women at baseline (prior to GAHT), and at a three and 12 month follow up after receiving GAHT. For trans men, T-GAHT was associated with an improvement in self-perception of voice, however for trans women taking E-GAHT this was not the case, suggesting that trans women whose voices have already dropped, have less satisfaction with their voice than trans men due to the irreversible effects of testosterone (Bultynck et al., 2017).

Eating disorders and disordered eating can commonly occur alongside gender incongruence, with 22% of trans youth survey respondents in Australia being diagnosed with an eating disorder (Strauss et al., 2017). This serves as a function for either hiding certain aspects of the body that are not congruent with a person's gender, or perhaps to accentuate parts of the body that might be perceived as more congruent e.g., restricting food intake to appear thinner and "feminine", or to reduce curves and shape and appear more "masculine", or overeating to gain weight and appear more curvaceous. One study using interviews to explore the association of gender affirming health care on trans participants disordered eating in Finland found that overall, gender affirming health care lessened symptoms of disordered eating (Ålgars et al., 2012). Although this study consisted of participants undergoing multiple types of gender affirming health care such as surgeries as well as GAHT, some participants interviewed commented on the specific impacts of GAHT. For example, two trans men found that once they started taking T-GAHT, they ceased to partake in weight controlling behaviours such as restrictive eating and constantly weighing themselves despite gaining weight. They both deduced this to the weight being redistributed in more masculine parts of

their body as well as increased muscle mass which decreased their distress and anxiety around weight gain. Two other participants commented on unwanted weight gain after starting E-GAHT and how this increased their experiences of distress (Ålgars et al., 2012). Thus, indicating that there may be some discrepancies between the effects of T-GAHT and E-GAHT on body image.

In Italy, Fisher et al. (2014) used the Body Uneasiness Test (BUT) to explore body related distress in 125 trans men and trans women prior to and following GAHT compared to a control group not taking GAHT. From this study, trans women reported significantly less body uneasiness than the control group following E-GAHT. However, no significant differences were observed between trans men taking T-GAHT and the control group. Conclusions drawn from this study imply that E-GAHT may be successful on its own in ameliorating feelings of body incongruence for those AMAB. However, for those taking T-GAHT who are AFAB, surgical intervention by way of top surgery may be beneficial in conjunction with T-GAHT in reducing body uneasiness considering the fact that no change in scores was observed for the trans men participants (Fisher et al., 2014). Another study also used the BUT to analyse body uneasiness in 37 trans men in Turkey (Turan et al., 2018). Participant's scores were taken at baseline and 6 months following T-GAHT, baseline scores were also compared to a control group of 40 cisgender women. Additionally, the Symptom Check List-90 Revised (SCL-90-R) assessed psychological function at baseline and follow up. Results showed that at baseline, scores on the BUT as well as general psychopathological symptoms were higher in the trans men participants compared to the cisgender female control group. Following six months on T-GAHT, participant's psychopathological symptoms and body uneasiness had decreased with significant difference between baseline and follow-up scores. Lastly, a recent American study examined the baseline presentations of body dissatisfaction, anxiety, and depression symptoms in 123 trans youth and compared that to scores in the same measures a year following GAHT (Kuper et al., 2020). Following one year of GAHT, participants reported a significant decrease in body dissatisfaction on the Body Image Scale. Significant decrease in depressive symptoms were also found as well as in anxiety symptoms.

No Changes to Mental Health or Quality of Life.

While research largely documents the positive effects that GAHT has, some research shows mixed outcomes depending on the type of GAHT: either T-GAHT or E-GAHT. However, there is also research indicating that GAHT resulted in no change in scores on depression, anxiety and/or quality of life over time (Costantino et al., 2013; Motta et al., 2018). Moreover, Fisher et al. (2014) also found no differences between groups on mental health measures following GAHT. The authors note that at baseline, participants overall scored low on the SCL-90-R implying low levels of

psychopathology making it difficult for scores to "improve" in the first place. For research conducted in Italy, the BDI-II was used to measure instances of depression for those taking E-GAHT (Gava et al., 2016). Although no significant differences were found between baseline scores and one-year follow up, mean scores on both occasions were low and fell within the 0-9 band indicating no instances of depression. Therefore, similarly to the Fisher et al. study, there was little room for scores to show an "improvement" in mental health following GAHT.

Associations with Poor Mental Health and Decreased Quality of Life.

Conversely, some research has found associations between GAHT and negative outcomes in trans people lives. A study conducted in Austria found that T-GAHT significantly increased serotonin reuptake transporter (SERT) binding for trans men, but that E-GAHT had the opposite effect for trans women following four months of GAHT (Kranz et al., 2015). The authors commented on the effects that serotonin has on depression and postulated that the increase in SERT binding following T-GAHT could result in lower levels of depression for trans men but that the decrease in SERT binding following E-GAHT could result in higher levels of depression for trans women. Furthermore, two longitudinal studies conducted by Asscheman et al. (2011) and Dhejne et al. (2011) both found higher rates of suicide (particularly with trans women), psychiatric morbidity and drug abuse in trans individuals after gender affirming treatment. This implies that some psychosocial issues are still prevalent within some trans populations after gender affirming treatment. It is important to reiterate here that being trans does not inherently result in higher rates of poor mental health and suicidality, rather it is likely attributable to experiences of gender minority stress. It is also important to note, that participants from these two studies were looking at GAS in conjunction with GAHT. Further, both studies were completed prior to 2010. Therefore, important to keep in mind that over the past decade, much has changed with regards to trans health care, and with regards to social and political attitudes and awareness of trans people.

Summary

Because GAHT is the most prevalent form of gender affirming health care, research into its impacts on physical incongruence and psychosocial wellbeing for trans people is important and has been the subject of considerable research over the last decade. Although some data is inconsistent, GAHT appears overall to have a positive impact on psychological and emotional wellbeing or, at the very least, little negative impact. Research to date has shown that GAHT can reduce symptoms of depression and anxiety, improve psychological functioning, improve quality of life, and reduce feelings of body dissatisfaction or physical incongruence. Moreover, some findings indicate that participants may require further gender affirming care such as surgeries to improve and maintain

psychological functioning, quality of life, and body satisfaction. Some studies which resulted in no change to psychological wellbeing were due to baseline scores already showcasing a high level of psychological wellbeing to begin with, and therefore indicating that participants were not distressed going into these studies, and that GAHT did not have a negative impact on their psychological wellbeing. Furthermore, while non-binary trans participants have been included in some studies, research looking specifically into the impacts of GAHT for non-binary trans people is still lacking.

The Current Study

Trans communities experience inequalities in health, mental health, and social inclusion compared with cisgender populations. Such disparities can occur due to the feelings of incongruence experienced between their gender identity and physical bodies, but also from the way in which society has ostracised, abused, and ridiculed trans populations. Many trans people seek gender affirming care to reduce feelings of gender incongruence and associated distress, but also to socially "pass" and avoid being stigmatised by society. The road to seeking gender affirming care has comprised of pathologising and stigmatising restrictions which have created both systemic and internalised barriers for trans people seeking care.

Fortunately, access to affirming care has increased in recent years with GAHT being the most widespread and accessible. Although there have been some inconsistencies, overall, recent research has shown that long term use of GAHT is associated with improvements in feelings of congruence between identity and body, as well as improvements with mental health, life satisfaction and overall wellbeing. While this is a promising start, there is currently no longitudinal data on the impacts of GAHT on psychosocial wellbeing and gender incongruence within Aotearoa, and while non-binary trans participants have been included in some research, studies looking specifically into the impacts of GAHT for non-binary people is still lacking. These absences led to the development of this study which aims to explore the longitudinal impacts of GAHT on gender incongruence as well as psychosocial wellbeing through a mixed-methods design.

Study One

The first study was a quantitative approach, using a repeated measures ANOVA to look at the significant differences between survey responses from participants at baseline (prior to starting GAHT), and then again at 6 months and 12 months following GAHT. Study one recruited participants from the Endocrine Department at Wellington Hospital and included all trans identities together in its analysis to assess the overall impacts of GAHT. These surveys aimed to assess any significant improvements for participants following GAHT in the areas of depression, anxiety, and

somatic symptomologies, using the the Patient Health Questionnaire (PHQ-SADs) (Kroenke et al., 2010), as well as satisfaction with life using the Personal Wellbeing Index (PWI) (Tomyn et al., 2013), and also gender incongruence using the Transgender Congruence Scale (TCS (Kozee et al., 2012).Additionally, participants' personalised goals were also recorded, with subjective progress towards these goals measured across time following GAHT to assess if participants most desired personal goals for GAHT were reached. This was recorded using a modified version of the Goals Tracking Form (GTF) (Ronan et al., 2016).

Research Questions for Study One:

1) Does somatic symptomology improve with GAHT?
2) Does depressive symptomology improve with GAHT?
3) Does anxious symptomology improve with GAHT?
4) Does subjective wellbeing improve with GAHT?
5) Does gender incongruence improve with GAHT?
6) Do participants achieve their individual goals with GAHT?

Hypotheses.

Hypothesis 1:

- HA: Scores on the PHQ15 will significantly decrease following one year of GAHT
- HO: Scores on the PHQ15 will not change following on year of GAHT

Hypothesis 2:

- HA: Scores on the GAD7 will significantly decrease following one year of GAHT
- HO: Scores on the GAD7 will not change following on year of GAHT

Hypothesis 3:

- HA: Scores on the PHQ9 will significantly decrease following one year of GAHT
- HO: Scores on the PHQ9 will not change following on year of GAHT

Hypothesis 4:

- HA: Scores on the PWI will significantly increase following one year of GAHT
- HO: Scores on the PWI will not change following on year of GAHT

Hypothesis 5:

- HA: Scores on the TCS will significantly increase following one year of GAHT

- HO: Scores on the TCS will not change following on year of GAHT

Hypothesis 6:

- HA: Scores on the GTF will significantly increase following one year of GAHT
  HO: Scores on the GTF will not change following on year of GAHT

Study Two

The second study was a qualitative study, using semi structured interviews and Reflexive Thematic Analysis (Clarke & Braun, 2021). Participants for this study were recruited from study one. Study two was designed to explore participants' perspectives and experiences of their journey with GAHT, the relationship between GAHT and experiences of social discrimination, as well as what other gender affirming care they thought may be needed alongside GAHT. Within study two, perspectives from trans women, trans men, AFAB non-binary people, and AMAB non-binary people were sought to potentially highlight the nuances of these experiences and the differences between T-GAHT and E-GAHT.

Research Questions for Study Two:

1) What are the important factors for trans people seeking GAHT (including physical, emotional, social, and functional specificities)?
2) How has GAHT addressed these issues?
3) How has GAHT not addressed these issues?
4) What should other trans people know about GAHT?
5) What additional supports can be put in place to assist trans people who are seeking GAHT (including medical, social, peer, therapeutic, and public support)?
6) Open space for participants to discuss any other important points related to GAHT and being trans.

Section Two: Study One Method and Results

Chapter Seven: Study One Method

This chapter outlines how the research for study one was implemented by describing the participants, the recruitment processes, surveys used, and the procedure of the study. This chapter also outlines ethical considerations for study one as well as its research design and data analysis.

Participants

Recruitment.

Participants from this study were recruited from a convenience sample from all services users who presented at the Endocrinology Department at Wellington Regional Hospital due to their desire to begin GAHT. The participants had all attended a psychosocial assessment with a senior clinical psychologist, as part of a multi-disciplinary service provided by the Endocrinology Department. Expressions of interest to participate in a study occurred from June 2018 until March 2019, and recruitment occurred between March 2019 until November 2019. Participants were invited to take part in the study in two ways. Either prior to their psychosocial assessment, with invitations being sent out by way of information sheet and consent form (see Appendix B and C) for them to consider at the same time they received information about their upcoming assessment. Alternatively, participants were directly invited by phone call after their assessment and emailed an information sheet and consent form to consider. Potential participants were given time to ask any questions and to seek further clarification from the senior clinical psychologist prior to making their decision. Of note, it was made clear on both the information sheet and during the assessment that choosing to not take part or withdrawing from the study would have no impact on the individual's eligibility to receive GAHT or any other services within the Endocrine Department.

Eligibility.

Any person 18 years or older who attended a psychosocial assessment at the Endocrinology Department to begin GAHT was considered eligible to participate. From this cohort, those who were then prescribed hormones following their referral from the psychosocial assessment were invited to take part in the study.

People who had previously taken GAHT, either prescribed or non-prescribed, were excluded from the study as they may have previously obtained desired permanent body changes from previous hormone use and therefore were considered to not be at the same baseline as other participants. Individuals who did not begin GAHT following their referral were also excluded.

Sample Size and Attrition.

Initially, 41 participants completed the baseline questionnaire between June 2018 and November 2019. This number reduced to 35 by the time the last follow up questionnaire was administered and returned in April 2022. Reasons for attrition included: 'decided to not begin hormones due to not being the right time (n = 2), 'not responding to the follow up questionnaire' (n = 2), 'asked to be removed from study' (n = 1), and 'not taking GAHT due to mental health (n = 1) difficulties.

Demographics.

All participants lived in either the Hutt Valley (HvDHB) or Capital and Coast District Health Board (CCDHB) area, which encapsulates the greater Wellington region. The 35 participants were aged between 18 and 59 years (m = 27.5). Participants described their ethnicity as: New Zealand European (n = 21), Pakeha (n = 4), European (n = 4), Māori/New Zealand European (n = 2), Canadian (n = 1), Taiwanese (n = 1), Cambodian (n = 1), and Southeast Asian (n = 1). It was decided that gender identity would not be officially documented or categorised in this study due to the multiple, nuanced, and varied identities expressed by participants, however 63% of participants were taking E-GAHT (n = 22) and 37% were taking T-GAHT (n = 13).

Measures

Demographic data was collected from the psychology reports which were written following participants' psychosocial assessments. It was not possible to determine the exact start date of GAHT commencement for each participant, therefore participant's start dates of GAHT were estimated from endocrinologist's clinic letters as these letters document the date the prescription was given to the participant. It was assumed that most participants would start GAHT shortly thereafter.

In order to determine the impact of GAHT over time on participants' wellbeing and feelings of gender congruence, four questionnaires were collated into one survey. The survey was administered at the time of the psychosocial assessment (baseline), six months after GAHT had first been prescribed, and one year after GAHT had first been prescribed. Due to some participants not completing surveys on time, some responses were not returned at the exact 6 month and 12 month point. The four questionnaires were: the Patient Health Questionnaire ([PHQ-SADs], (Kroenke et al., 2010)), the Personal Wellbeing Index ([PWI], (Tomyn et al., 2013)), the Transgender Congruence Scale ([TCS], (Kozee et al., 2012)), and a modified version of the Goals Tracking Form (GTF) (Ronan et al., 2016)). See Appendix D for an example of each questionnaire.

PHQ-SADS.

The PHQ-SADs is comprised of three subscales that measure Somatic (PHQ-15), Generalised Anxiety Disorder (GAD-7), and Depressive (PHQ-9) symptoms. This measure is often used in primary care settings due to the commonality at which these symptom clusters present and the frequency at which these overlap (Kroenke et al., 2010). All three measures have been well-validated and have shown good specificity and sensitivity (Kroenke et al., 2010), as well as construct validity (Spitzer et al., 1999).

Scores for the *Patient Health Questionnaire-15* (PHQ-15), *Patient Health Questionnaire-9* (PHQ-9), and *General Anxiety Scale-7* (GAD-7) are obtained by summing all item responses for each questionnaire. There is no overall combined score for all three measures. Scores range from 0-30 for the PHQ-15, 0-27 for the PHQ-9, and 0-21 for the GAD-7. With higher scores denoting higher severity of symptoms, see table 3 for cut off scores (Kroenke et al., 2010).

Table 3

Cut off scores for the Patient Health Questionnaire-15 (PHQ-15), General Anxiety Disorder-7(GAD-7), and Patient Health Questionnaire-9 (PHQ-9)

Measure					
PHQ-15	0-5 = mild	6-10 = moderate	11-30 = severe		
GAD-7	0-4 = minimal	5-9 = mild	10-14 = moderate	15-21 = severe	
PHQ-9	0-4 = none	5-9 = mild	10-14 = moderate	15-19 = moderately severe	20-27 = severe

PWI.

The PWI was developed from the Comprehensive Quality of Life Scale and measures a person's subjective wellbeing and satisfaction with their life, both overall and within specific domains (e.g., Personal Relationships and Future Security). Items are rated from 0-10, with scores of 10 denoting the highest level of satisfaction and wellbeing (Tomyn et al., 2013). The PWI demonstrates construct validity, reliability, and good test-retest reliability as well as sensitivity (International Wellbeing Group, 2013).

The first question on the *Personal Wellbeing Index* (PWI) is a construct validity item which is not included in scoring: *"Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole?"* (International Wellbeing Group, 2013). For scoring the PWI, the mean of the remaining eight items is calculated. It is important to note that the eighth item, *"How satisfied are you with your spirituality or religion?"* is designed to be optional for respondents. Those who choose not to respond to the item have their wellbeing score calculated as the mean of the other seven items, as per the guidelines of the *Personal Wellbeing Index Manual* (International Wellbeing Group, 2013). While there is no official cut off scores for this measure, extensive normative data has been collected for the PWI (The Australian Centre on Quality of Life, N.D.). A recent report using normative data from 65,722 Australian adults showed a mean score of 7.5 (Khor et al., 2020). Moreover, suggested guidelines for score interpretation have been developed based on a study by Tomyn et al. (2015). From this, a score of 7 or above indicates "normal" levels of subjective wellbeing, scores between 5 - 6.9 indicate "compromised" levels, and a score of 4.9 or less indicates "challenged" levels.

TCS.

The TCS was formulated by Kozee et al. (2012) as a specific scale to measure gender incongruence in trans people. The TCS was constructed with contribution from a trans panel of advisors. Other gender congruent scales and studies assessing body dysphoria have used adaptations of body dysphoria scales that were not specifically catered to the experiences of trans individuals, thus creators of this scale included questions on body dysphoria specifically for trans experiences. The TCS has been found to have high internal consistency and good construct validity (Kozee et al., 2012). It can also be divided into two subtests, the *Appearance Congruence* subtest, and the *Gender Identity Acceptance* subtest. Appearance congruence measures individuals' perceptions of whether their external appearance is reflective of their gender identity. Gender identity acceptance measures individuals' level of acceptance and pride in their identity.

For the *Transgender Congruence Scale* (TCS) three out of the 12 items are reverse scored (Kozee et al., 2012). Mean scores are calculated for the TCS as a whole and also for the two subtests. Scores range from 0-5 with higher scores indicating a higher degree of congruence and/or gender identity acceptance.

GTF.

The GTF is a visual analogue scale that has been adapted from a study by Ronan et al. (2016), which used the GTF to establish and monitor family centered clinical goals for behaviour and

emotional problems in youth with conduct disorder. Visual analogue scales have frequently been used to measure people's subjective perceptions of change within themselves (Crichton, 2001). While no testing has been conducted for this specific measure, other visual analogue scales have previously shown good sensitivity, reliability and validity across a number of studies (Abend et al., 2014; Miller & Ferris, 1993). In this study, participants classified three personal goals they hoped to achieve from GAHT. These goals varied greatly, for example: "will no longer be misgendered as a man", "will feel comfortable talking on the phone", and "will have facial hair". Participants then rated on a scale of 0-10 how far they think they are currently towards this goal, with scores of zero indicating no change and scores of 10 indicating that the goal has been fully reached. See Appendix E for a collection of examples of the goals tracking form from participants. An omnibus score for each respondent's *Goals Tracking Form* (GTF) was calculated by summing the scores. Scores ranged from zero, indicating no goals reached, to 30, indicating all three goals were fully reached.

Data Collection

Capturing of baseline data occurred at the Endocrinology Department of Wellington Hospital, as this was the most efficient way to administer the questionnaires. The six month and twelve month follow up questionnaires were initially administered either via email or post, depending on what each participant was most comfortable with. Following the nationwide COVID-19 Level Four Lockdown in 2020, surveys were transferred from paper to an online form via the Massey University approved survey software, Qualtrics. Participants then filled out the survey on a digital device of their choice, for example their personal computer or smart phone.

Procedure

Prior to their psychosocial assessment for GAHT, participants who were directly invited were given an information sheet which outlined the study, its aims, and their rights as participants as they arrived for their psychosocial assessment. Following their assessment, the individuals being referred to an endocrinologist for GAHT were asked by the senior clinical psychologist if they had any questions about the study and were invited to take part. Individuals wanting to participate signed the consent form, and were informed that the principal researcher would be in touch six months' after they started GAHT to send out the first round of follow up questionnaires. Only once study one was ethically approved, participants who had made a prior expression of interest to the senior clinical psychologist, but had not yet been taking GAHT for six months, were then retrospectively approached by the principal researcher and emailed an information sheet and consent form to consider participating in the study. Once they signed the consent form, the principle researcher was

then able to access their file information and questionnaires completed as part of clinical practice, to use as baseline data.

The principal researcher devised an Excel spreadsheet with anonymised codes for each participant and the date they were seen for their psychosocial assessment. Once participants had completed their assessment with an endocrinologist, and had been prescribed GAHT, this start date was also recorded as well as the type of GAHT they had been prescribed (T-GAHT or E-GAHT). Participants were contacted either via phone call, txt, or email on the 6 month mark of them being prescribed GAHT and were asked if they were still interested in taking part in the study. Once confirmed, participants were then asked for their preferred method of receiving the questionnaires (either by post or email). Questionnaires were sent to participants along with weekly reminders until the questionnaires had been returned. The same process was completed again once participants had reached their one-year anniversary of being prescribed GAHT.

Ethical Considerations

Study one was approved by the Health and Disability Ethics Committee on March 15th, 2019, reference number: 19/CEN/9. Ethical approval and locality sign off within Wellington Hospital was also obtained for this study by Capital Coast and District Health (CCDHB). CCDHB special staff status was granted to the principal researcher to enable them to access participants' information in their data base. This study also received endorsement from the CCDHB Māori Partnership Board Research Advisory Group. A COVID-19 Amendment was made to The Health and Disability Ethics Committee to gain approval for changing survey distribution to an online format via Qualtrics survey software, this was approved on April 24th, 2020, reference number: 19/CEN/9/AM02.

Additionally, this study conformed with the principles of the Declaration of Helsinki, the Code of Ethics for Psychologists Working in Aotearoa/New Zealand Good Clinical Practice (GCP), while also working within the guidelines of the Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons (Hembree et al., 2017) and The World Professional Association for Transgender Health standards of care guidelines (Coleman et al., 2012).

Identity of participants remained strictly confidential. Participant files were locked in a filing cabinet only accessible to study staff within the Endocrine Department. Coding of data from these files was entered into a password protected Excel spreadsheet stored on a password protected CCDHB account. Any information used away from the Endocrine Department, was coded with a

special (de-identified) number. Only those individuals involved in the research study knew how to connect the participants name to their de-identified number.

There was potential risk for participants to become emotionally triggered by some questions within the questionnaire. However, participants were notified of this on the information sheet and informed that they could withdraw from the study at any time with no impact on receiving gender affirming health care from the Endocrine Department and were advised they could seek support from members of the clinical research team, as well as be provided with options for accessing additional support after the assessment. However, the types of questions that were asked in the survey were similar to what was asked during the psychosocial assessment interview, and minimal additional support was required.

Research Design

The design of this study is a cross-sectional, non-experimental, within-subject design and an observational longitudinal cohort study. This is due to; GAHT already being administered regardless of the study occurring (no intervention), the effects are being observed in the same group of participants at three different points over time (longitudinal). Additionally, the participants are members of a population who share the commonality of being trans and seeking GAHT, therefore are from the same cohort.

Data Analysis

Data was analysed using the Statistical Package for the Social Sciences Software (SPSS). Data was coded and entered into the SPSS database. Descriptive characteristics were captured at baseline and included: age, ethnicity, sex assigned at birth, and gender identity, and type of GAHT prescribed (E-GAHT or T-GAHT). Individual responses and mean responses to the four questionnaires were analysed at baseline, six months, and 12 months. A repeated measures ANOVA was performed to compare the effect of GAHT at baseline, six month, and 12 months on participants scores on the questionnaire.

Power Analysis

Power analyses were conducted using Faul's G*Power software – Version 3.1.9.6. A power analysis for the ANOVA: Repeated measures, within factors was performed to determine the sample size that would be required to detect both a moderate effect size (F = 0.25) and a small effect size (F = 0.1). Other parameters used in the analysis were as follows: $\alpha = .05$; Power ($1 - \beta$ err prob) = 0.95; ε (non sphericity correction) = 1.0. This analysis revealed that a sample size of at

least 36 would be required to detect a moderate effect size and a sample size of at least 216 would be required to detect a small effect size.

Summary

This chapter outlined how the research for study one was implemented by describing the participants, the recruitment processes, surveys used, and the procedure of the study. This chapter also outlined ethical considerations for study one as well as its research design and data analysis.

Chapter Eight: Study One Results

This chapter presents the quantitative findings beginning with an account of the methods used to prepare the data for analysis, including survey responses and data clean up processes such as the imputation method used for missing data, and the test for determining normally distributed data. Subsequently, the results are a series of repeated measures ANOVA's undertaken for evaluating each of the six hypotheses. Lastly, post hoc testing was undertaken for additional exploration of the results that showed statistical significance.

Preparing the Data for Analysis

Survey Responses.

IBM SPSS Statistics 28.0.1.1 was used for all quantitative analyses. Overall, 103 questionnaires were collected including 37 collected at baseline (T1), 31 collected at the six-month follow up (T2), and then 35 collected at the 12 month follow up (T3). Two participants who answered surveys at T1 did not respond at either of the follow up points, and four participants who answered surveys at T1, did not respond at T2, but did respond at T3.

It should be noted that not all respondent's data was collected at the same intervals. T1 data were gathered from participants prior to being prescribed GAHT (ranging from 10 months to 11 days prior to being prescribed GAHT). T2 data was gathered at approximately six months after being prescribed GAHT (ranging from 5 months 4 weeks to 8 months 4 weeks). And T3 data was gathered at approximately 12 months following GAHT prescription (ranging from 11 months, 4 weeks to two years, two months). An outlier analysis, using Shapiro-Wilk normative distribution test (goodness of fit procedure), was conducted using the data from the 37 T1 surveys. No outlier data were identified, and Shapiro-Wilk testing found that the data set was not normally distributed, therefore non-parametric testing was undertaken.

Calculating Survey Scores and Missing Values.

Raw data from each individual questionnaire question was input into an excel spreadsheet. Responses were initially input manually and then automatically uploaded to the excel spreadsheet once the survey delivery changed to an online format using Qualtrics Survey Software. From here, the data set was transferred to SPSS for clean-up and preparation.

Scores for the *Patient Health Questionnaire-15* (PHQ-15), *Patient Health Questionnaire-9* (PHQ-9), and *General Anxiety Scale-7* (GAD-7) were obtained by summing all item responses for each questionnaire (Kroenke et al., 2010). Missing values on these surveys can either be left blank or can be replaced by the mean score of the completed values, so long as fewer than one third of the

values are missing (Kroenke et al., 2010; Teymoori et al., 2020). Kroenke et al. state that while mean substitution is a less conservative approach, it also results in a lower risk of overlooking those who may be experiencing somatisation, anxiety, or depression. For this study, less than one third of missing values occurred for the PHQ-15, GAD-7, and PHQ-9, therefore ordinary mean substitution was used.

For the *Personal Wellbeing Index* (PWI) there were no missing values across any survey responses. Scores range from 0-10, with higher scores indicating higher instances of subjective wellbeing.

For the *Transgender Congruence Scale* (TCS) mean scores were calculated for all three scales. Scores range from 0-5 with higher scores indicating a higher degree of congruence and/or gender identity acceptance. There was one missing value across all TCS survey responses, mean substitution was used for this missing value.

An omnibus score for each respondent's *Goals Tracking Form* (GTF) was calculated by summing the scores. Scores ranged from zero, indicating no goals reached, to 30, indicating all three goals were fully reached. There were no missing values. It is important to note however, that one respondent provided only two goals instead of three. For this, the overall average of all other GTF values was sampled and used as the third value point in calculating that respondent's omnibus score. To exemplify, all other GTF values at T1 were averaged to impute this respondent's missing third vale at T1, and same again for T2, and T3.

Imputation Method for Data Attrition.

Once surveys items had been scored, a subset of data was used which excluded the raw survey data and contained only the calculated scores for each survey as mentioned above. This subset included both the respondents who completed surveys on all three occasions and those who completed the surveys at T1 and T3 (the two respondents who only answered surveys at T1 were excluded from this analysis). Respondents who completed T1 and T3 surveys only, had their scores estimated for T2 to be included in the analysis. The imputation method used for this was the Last Value Carried Forward (LVCF) approach, carrying forward the values from the first survey to the second. Rational for using the LVCF method is that it is suitable to use for longitudinal data, and is a conservative approach, thereby reducing the risk of Type 1 error (Twisk & de Vente, 2002).

Repeated Measures ANOVA

A series of repeated measures ANOVA's were performed to determine if there were statistically significant differences in questionnaire scores on the six measured constructs between the three time points, T1, T2, and T3. As an overview, see table 4 for means and standard deviations for all measures across the three time points.

Table 4

Means and standard deviations for all measures across the three time points

Measure	Mean (SD) at T1	Mean (SD) at T2	Mean (SD) at T3
PHQ-15	3.86 (4.03)	4.80 (3.26)	5.37 (4.55)
GAD-7	4.80 (4.33)	5.17 (4.47)	4.54 (3.22)
PHQ-9	6.00 (5.57)	6.69 (5.27)	6.02 (4.51)
PWI	6.67 (1.57)	6.40 (1.65)	6.72 (1.60)
TCS	2.24 (0.40)	2.96 (0.96)	3.64 (0.95)
TCS Appearance Congruence	1.61 (0.48)	2.58 (1.05)	3.37 (1.06)
TCS Gender Identity Acceptance	4.13 (0.75)	4.07 (1.09)	4.46 (0.93)
GTF	4.09 (3.39)	14.47 (7.22)	20.88 (5.71)

PHQ-15.

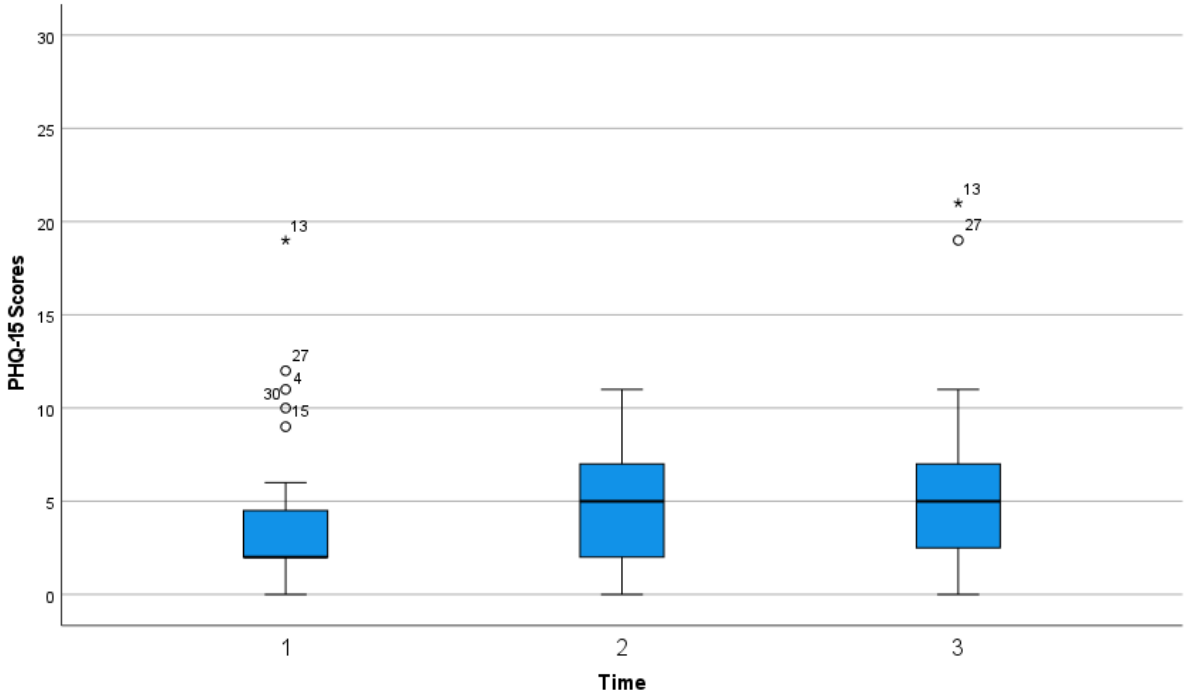
Mauchly's Test of Sphericity indicated that the assumption of sphericity was met, $\chi 2(2) = 1.598$, $p = 0.450$. Test of within-subjects' effects indicated no statistically significant difference in PHQ-15 scores between time points, $F(2,68) = 3.019$, $p = 0.055$. Null hypothesis cannot be rejected; no difference in scores of somatic symptomologies following one year of GAHT were found.

Figure 2 showcases the distributional characteristics of participants scores on the PHQ-15 across all three time points. The small interquartile range indicates less dispersed scores, seen across all three plots. The upper quartile shows that 75% of participants scores fell within the mild to moderate cut off range for somatic symptoms at T1, T2, and T3. Also, the upper 25% of scores at T1 were all well below the cut off for moderate symptoms. At T2 and T3 participants'

symptomology scores increased from T1, with some scores creeping into the severe cut off range. SPSS divides outliers into two categories, the circle indicating mild outliers and the star indicating extreme outliers. There were more outliers at T1 than at T2 and T3.

Figure 2

Box and whisker plot of PHQ-15 at T1, T2, and T3



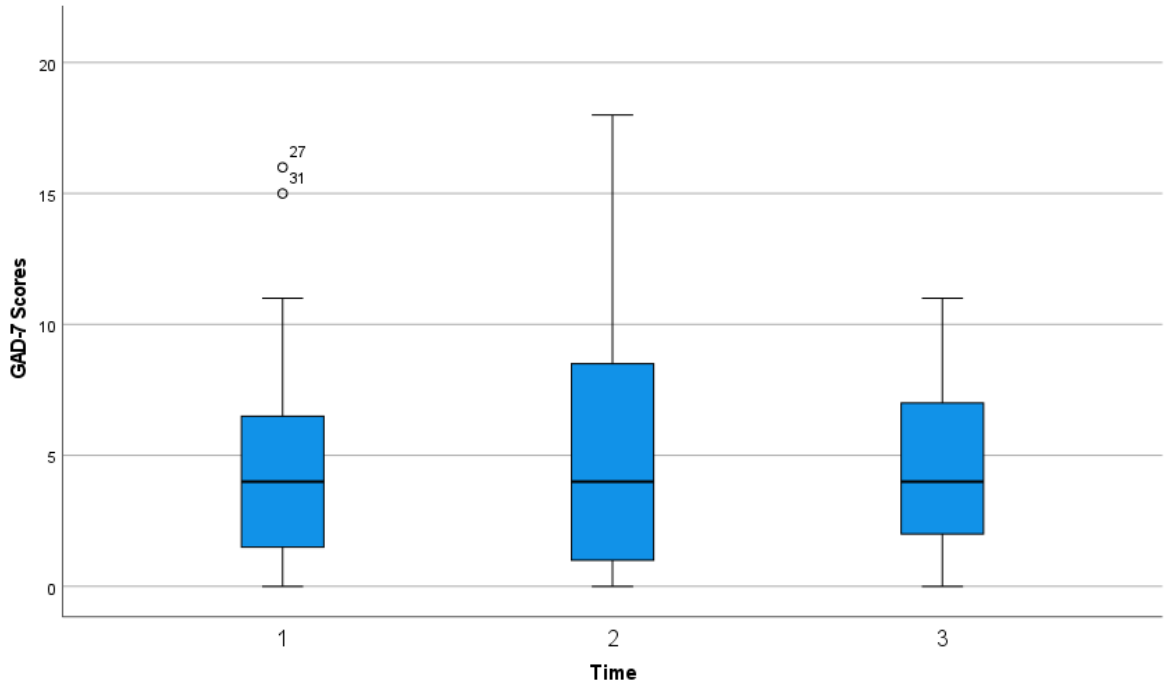
GAD-7.

Mauchly's Test of Sphericity indicated a violation of the sphericity assumption, $\chi 2(2) = 9.344$, $p = 0.009$. Thus, Greenhouse-Geisser Epsilon was used, $\varepsilon = 0.802$ which indicated violation of sphericity ($\varepsilon > 0.75$). Therefore, Huynh-Feldt corrected results are reported. Test of within-subjects' effects indicated no statistically significant difference in GAD-7 scores between time points, $F(1.672,56.835) = 0.454$, $p = 0.602$. Null hypothesis cannot be rejected; no differences in scores of anxiety symptomologies following one year of GAHT were found.

Figure 3 showcases the dispersion of scores on the GAD-7 across all three time points. The upper quartile shows that 75% of scores fell within the minimal to mild cut off range for somatic symptoms at T1, T2, and T3. The distribution of scores at T1 and T3 show a similar range, with the median score being slightly lower at T3 than T1, and with two outliers at T1 only. At T2, almost 25% of participants scores were either at the moderate or severe cut off. However, this dropped back to mild-moderate by T3.

Figure 3

Box and whisker plot of GAD-7 at T1, T2, and T3



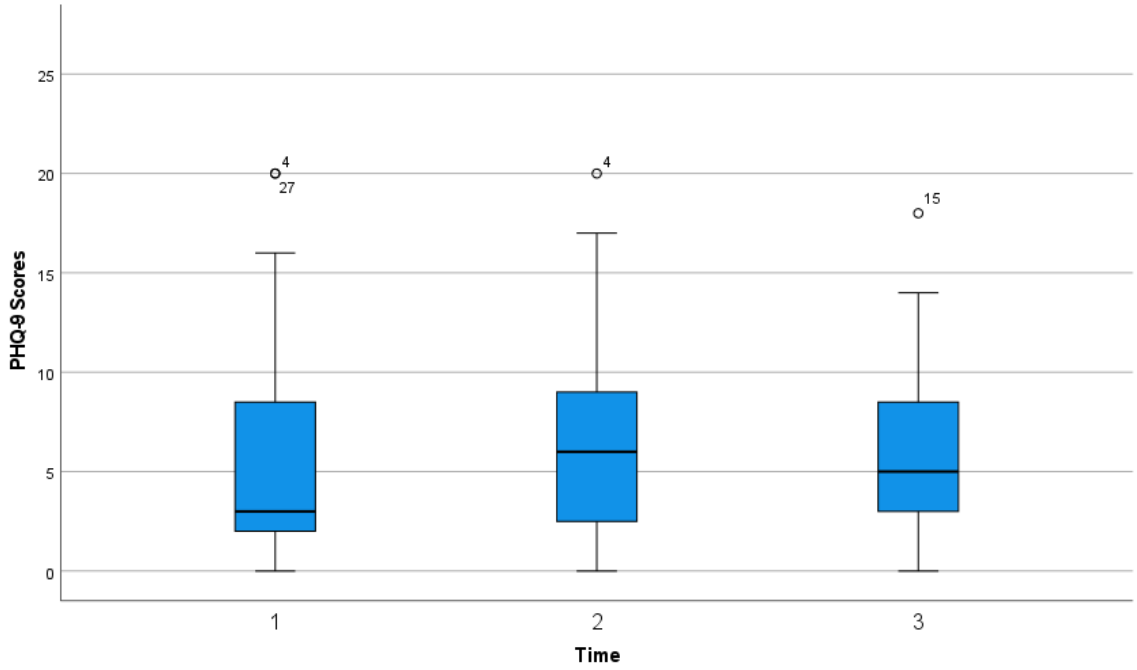
PHQ-9.

Mauchly's Test of Sphericity indicated that the assumption of sphericity was met, *χ2(2) = 0.834, p = 0.659.* Test of within-subjects' effects indicated no statistically significant difference in PHQ-9 scores between time points, *F(2,68) = 0.458, p = 0.635*. Null hypothesis cannot be rejected; no differences in scores of depression symptomologies following one year of GAHT were found.

Figure 4 showcases the spread of scores on the PHQ-9 across all three time points. The upper quartile shows that 75% of scores fell within the none to mild cut off range for somatic symptoms at T1, T2, and T3. At T3, the max of the upper whisker fell below the moderate severe cut off range, with one outlier in the moderate severe range. Moreover, at T1 and T2 the max of the upper whiskers fell into the moderately severe range, with outliers in the severe range. Although not significant, comparing these distributions show a decrease in moderately severe and severe scoring for depressive symptoms on the PHQ-9 from T1 and T2 to T3.

Figure 4

Box and Whisker plot of PHQ-9 scores at T1, T2, and T3



Furthermore, when looking at the cut off ranges for the PHQ-15, GAD-7 and PHQ-9 on table 3, scores between 0-5 indicate mild somatic symptoms for the PHQ-15, scores between 0-4 indicate minimal anxiety symptoms for the GAD-7, scores between 0-4 indicate no symptoms of depression and scores from 5-9 indicate mild symptoms. When looking at the participants' mean baseline scores and standard deviations for these same measures on table 4, we can see that prior to starting GAHT, participants were reporting mild and minimal symptoms of somatic, anxious, and depressive symptomology on average. When looking at the distribution of responses on these measures at baseline (figures 3, 4 and 5), we see the interquartile range clustering around the mild range for all three measures. Thus, the majority of participants were not experiencing moderate or severe symptomology for somatic and mental health complaints at baseline, and as a result, allowing little room for improvement or change in scores following one year on GAHT.

PWI.

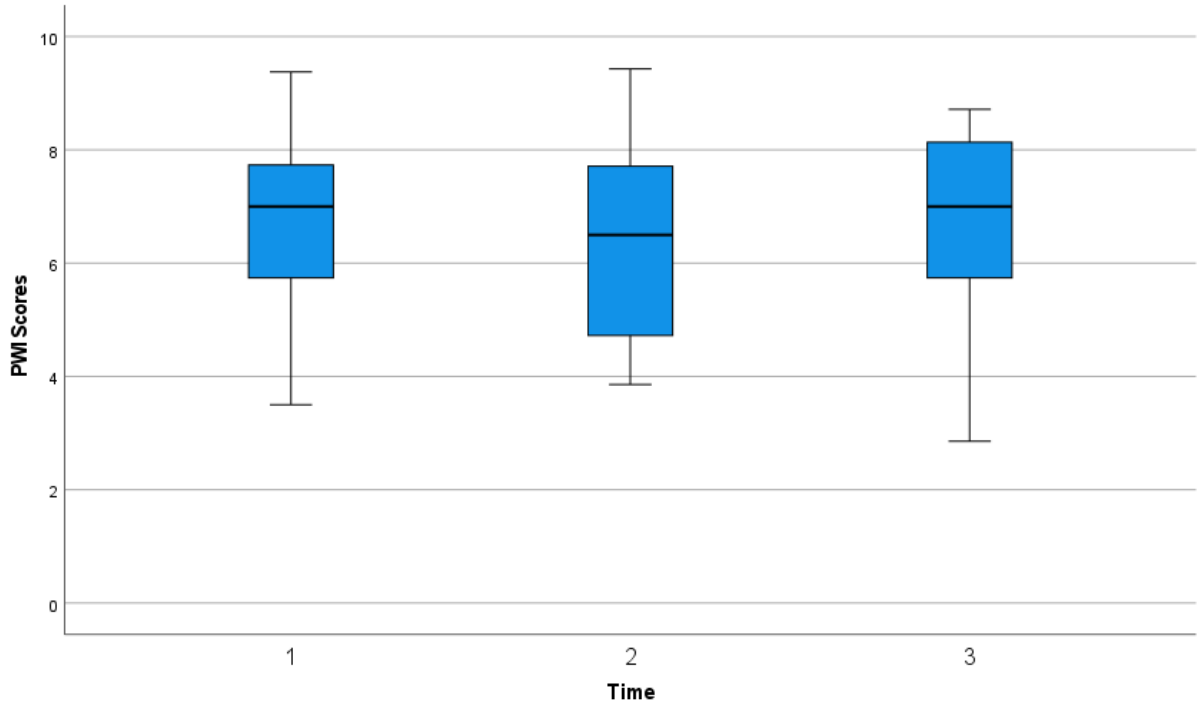
Mauchly's Test of Sphericity indicated that the assumption of sphericity was met, $\chi 2(2) = 2.492$, $p = 0.288$. Test of within-subjects; effects indicate no statistically significant difference in PWI scores

between time points, *F(2,68) = 0.982, p = 0.380*. Null hypothesis cannot be rejected; no differences in scores of subjective wellbeing following one year of GAHT were found.

Figure 5 showcases the distributional characteristics of scores on the PWI across all three time points. The lower quartile shows that 75% of scores fell above a score of 5 for T1 and T3, however dropped just below a score of 5 at T2 (although not significant). Thus, at T1 and T3 75% of participants scored 'normal' or 'compromised' subjective wellbeing, with 25% scoring 'challenged' levels of subjective wellbeing. Also, there were no outliers at any time for this measure. When looking at mean scores across time points from table 4, T1 scores are 6.67, T2 scores are 6.40, and T3 scores are 6.72. Thus, the mean score from this measure at T1 was in the upper end of the cut off for 'compromised' levels of subjective wellbeing, with no significant change occurring by T3.

Figure 5

Box and whisker plot of PWI scores at T1, T2, and T3



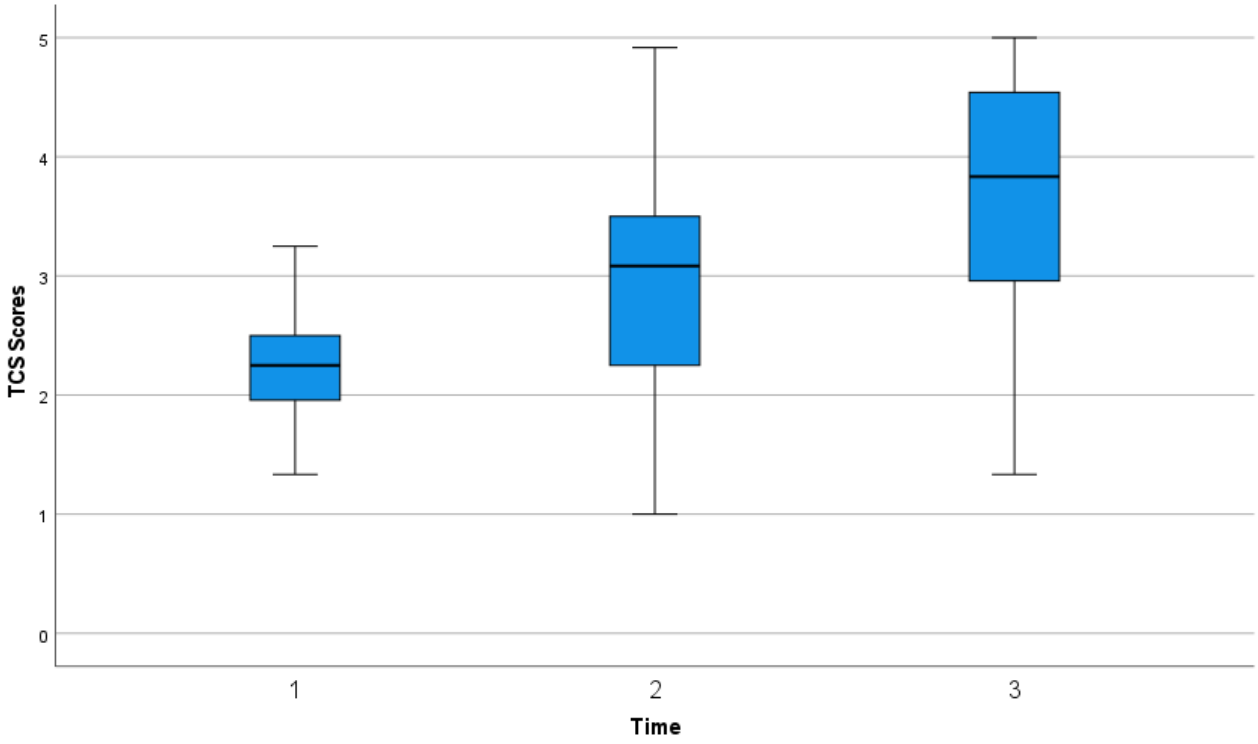
TCS.

Mauchly's Test of Sphericity indicated that the assumption of sphericity was met, *χ2(2) = 0.853, p = 0.653.* Testing of within-subjects effects indicate statistically significant differences in TCS between at least two time points, *F(2,68)= 57.04, p = <0.001*. Therefore, significant differences in scores of transgender congruence following one year of GAHT were found. Post Hoc tests determined direction of difference and confirmed the alternate hypothesis, they are described below.

Figure 6 showcases the distribution of participants scores on the TCS across all three time points. The median of T2 lies outside of the interquartile range of T1, as does the median of T3 compared the interquartile range of T2, indicating a likely difference between all three groups, as supported by the repeated measures ANOVA. At T1, the space between the lower quartile and the max shows that 75% of participants were scoring between 2/5 and 3.3/5 for feelings of gender congruence. At T3, 75% of participants were scoring between 3/5 and 5/5 for feelings of gender congruence. Thus, the lower quartile score for T3 was similar to the max score for T1. Also, by T3 some participants were reporting full scores for gender congruence.

Figure 6

Box and whisker plot of TCS scores at T1, T2, and T3



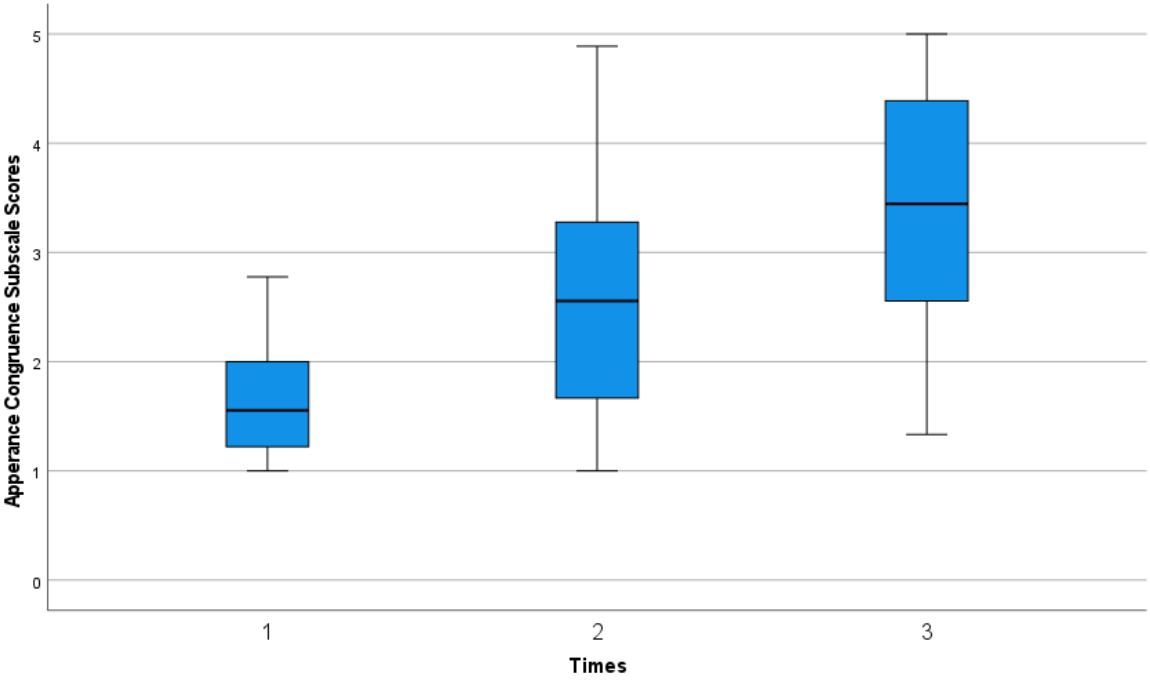
TCS subscales

For the *Appearance Congruence* subscale, Mauchly's Test of Sphericity indicated that the assumption of sphericity was met, $\chi 2(2) = 0.674$, $p = 0.714$. Test of within-subjects' effects indicated statistically significant differences in the *Appearance Congruence* subscale between at least two time points, $F(2,68) = 61.151$, $p = <0.001$. Figure 7 shows distribution of participants scores on the *Appearance Congruence* subscale across all three time points. Similar to the TCS overall, the median of T2 on the *Appearance Congruence* subscale lies outside of the interquartile range of T1, as does the median of T3 compared to the interquartile range of T2, indicating a likely

difference between all three groups, as supported by the repeated measures ANOVA. At T1, the space between the lower quartile and the max shows that 75% of participants were scoring between 1.2/5 and 2.8/5 for appearance congruence. At T3, 75% of participants were scoring between 3.5/5 and 5/5 for appearance congruence.

Figure 7

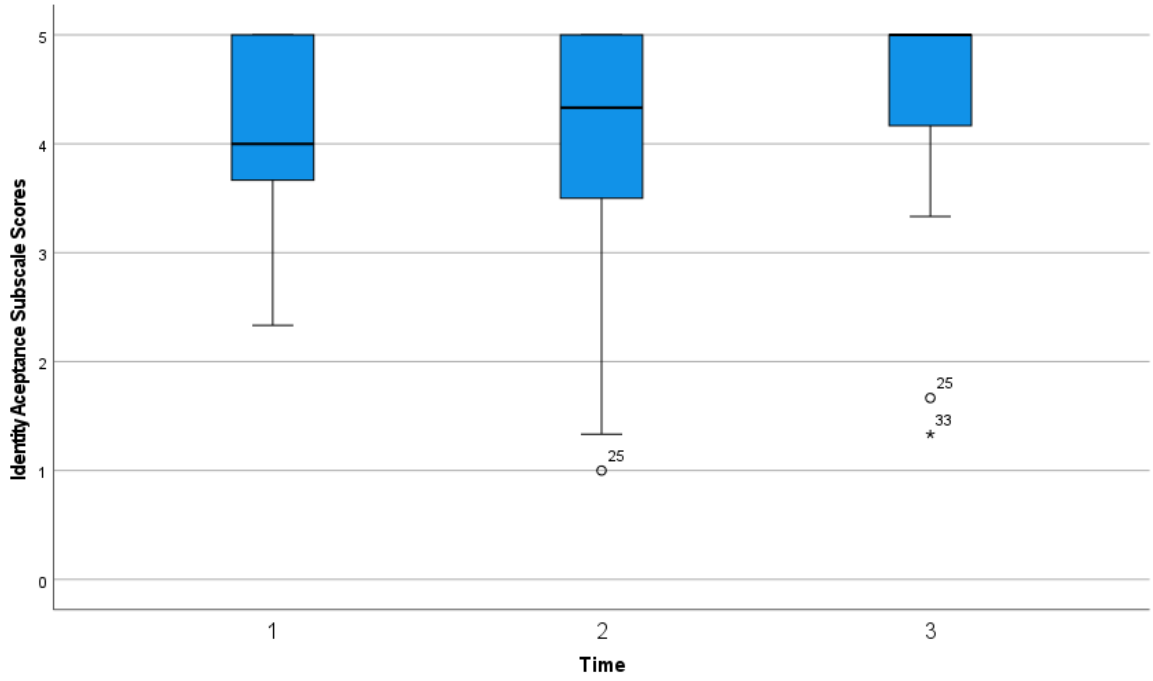
Box and whisker plot of Appearance Congruence subscale scores at T1, T2, and T3



For the *Gender Identity Acceptance* subscale, Mauchly's Test of Sphericity indicated that the assumption of sphericity was met, $\chi 2(2) = 0.356$, $p = 0.837$. Test of within-subjects' effects indicated statistically significant differences in the mean scores of the *Gender Identity Acceptance* subscale between at least two time points, $F(2,68) = 4.995$, $p = <0.001$. See figure 8 for distribution of scores on the *Identity Acceptance* subscale across all three time points. At T1 75% of participants were scoring between 3.8/5 and 5/5 for identity acceptance, by T3, 75% of participants were scoring between 4.1/5 and 5/5, with median score being the max scoring of 5.

Figure 8

Box and whisker plot of Identity acceptance subscale scores at T1, T2, and T3



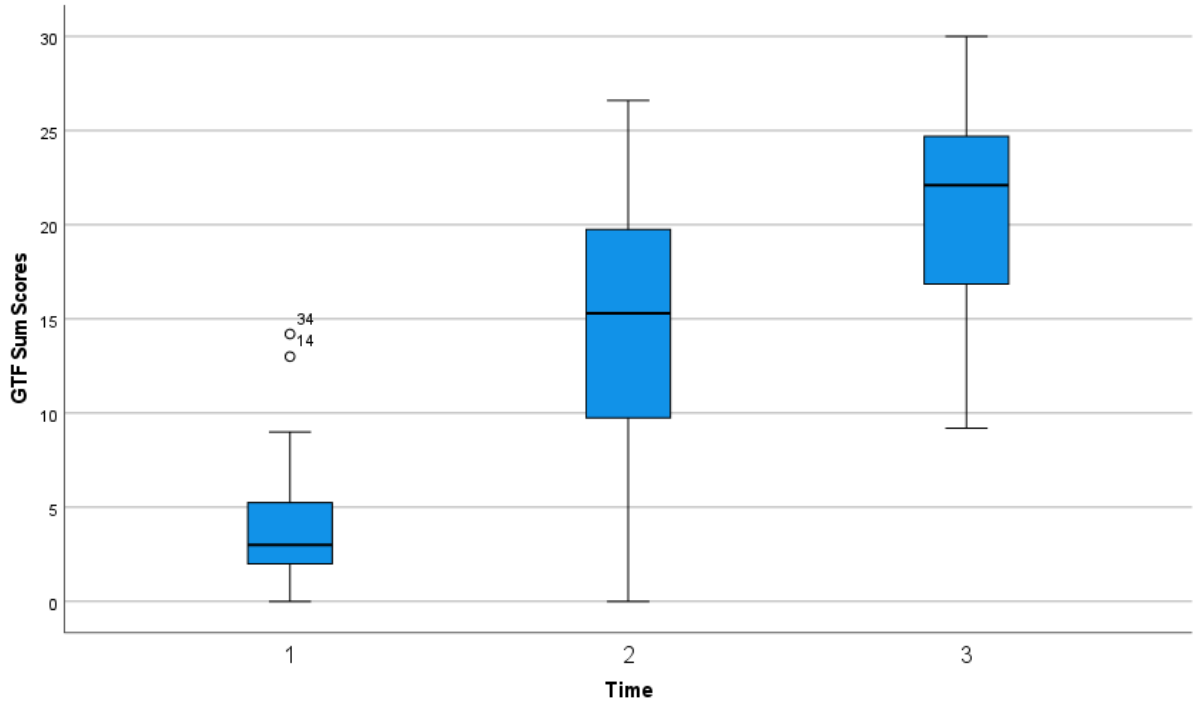
GTF.

Mauchly's Test of Sphericity indicated that the assumption of sphericity was met, *χ2(2) = 1.091, p = 0.580*. Test of within-subjects; effects indicate statistically significant differences in GTF scores between at least two time points, *F(2,68) = 135.960, p = <0.001*. Therefore, significant differences in scores on goals following one year of GAHT were found. Post Hoc tests determined direction of difference and confirmed the alternative hypothesis, they are described below.

Figure 9 shows the spread of scores on the GTF across all three time points. The median of T2 lies outside of the interquartile range of T1, as does the median of T3 compared the interquartile range of T2, indicating a significant difference between all three groups, as supported by the repeated measures ANOVA. When comparing the minimum and maximum range of scores at T1 and T3, participants rated between 0/30 to 9/30 on how close they felt towards achieving their goals at T1. By T3, participants minimum score was the same as the maximum score at T1 with a range of 9/30 to 30/30.

Figure 9

Box and whisker plot of GTF sum scores at T1, T2, and T3



POST HOC Pairwise Exploratory Analysis

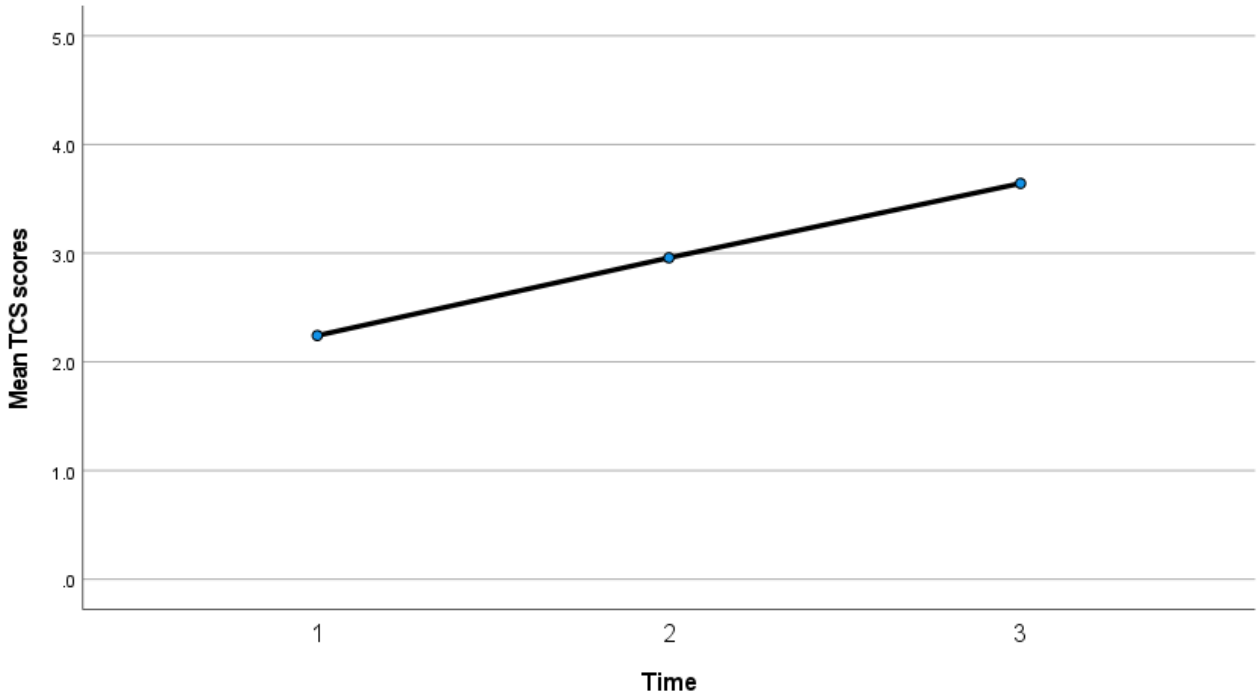
The Bonferroni test was used for a pairwise comparison of the means to determine which means were significantly different. The Bonferroni test was chosen as it can be used on non-parametric data.

TCS.

Post hoc analysis with a Bonferroni adjustment revealed that mean scores on TCS scores statistically significantly increased from T1 to T2 (-0.715 (95% CI, -1.042 to -0.389), p <0.001), from T1 to T3 (-1.400 (95% CI, -1.754 to -1.046), p <0.001), and from T2 to T3 (-0.685 (95% CI, -0.993 to -0.376), p <0.001). Thus, Bonferroni pairwise comparisons for the TCS found all mean scores among the three time points were statistically significantly different *p = <0.001*. Mean score for T1 was 2.24, mean score for T2 was 2.95, and mean score for T3 was 3.643, showcasing a positive linear direction (see figure 10). Thus, the alternate hypothesis *"Scores on the TCS will significantly increase following one year of GAHT"* was supported.

Figure 10

Linear graph of TCS mean scores across T1, T2, and T3

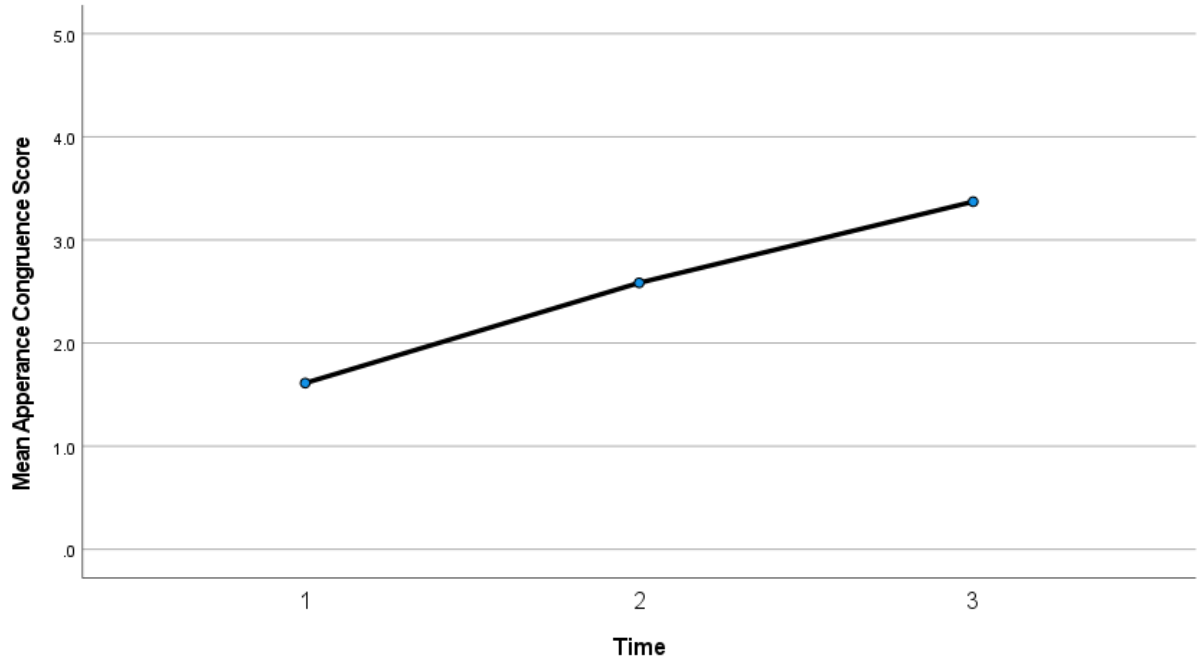


TCS subscales.

Post hoc analysis with a Bonferroni adjustment revealed that mean scores on the *Appearance Congruence* subscale scores statistically significantly increased from T1 to T2 (-0.972 (95% CI, -1.363 to -0.580), p <0.001), from T1 to T3 (-1.759 (95% CI, -2.187 to -1.330), p <0.001), and from T2 to T3 (-0.787 (95% CI, -1.169 to -0.405), p <0.001). Thus, Bonferroni pairwise comparisons for the *Appearance Congruence* subscale found all mean scores among the three time points were statistically significantly different *p = <0.001*. Mean Score for T1 was 1.613, T2 was 2.584, and T3 was 3.371, showcasing a positive linear direction (see figure 11). Therefore, scores on the *Appearance Congruence* subscale increased significantly from T1, to T2, and then gain from T2, to T3.

Figure 11

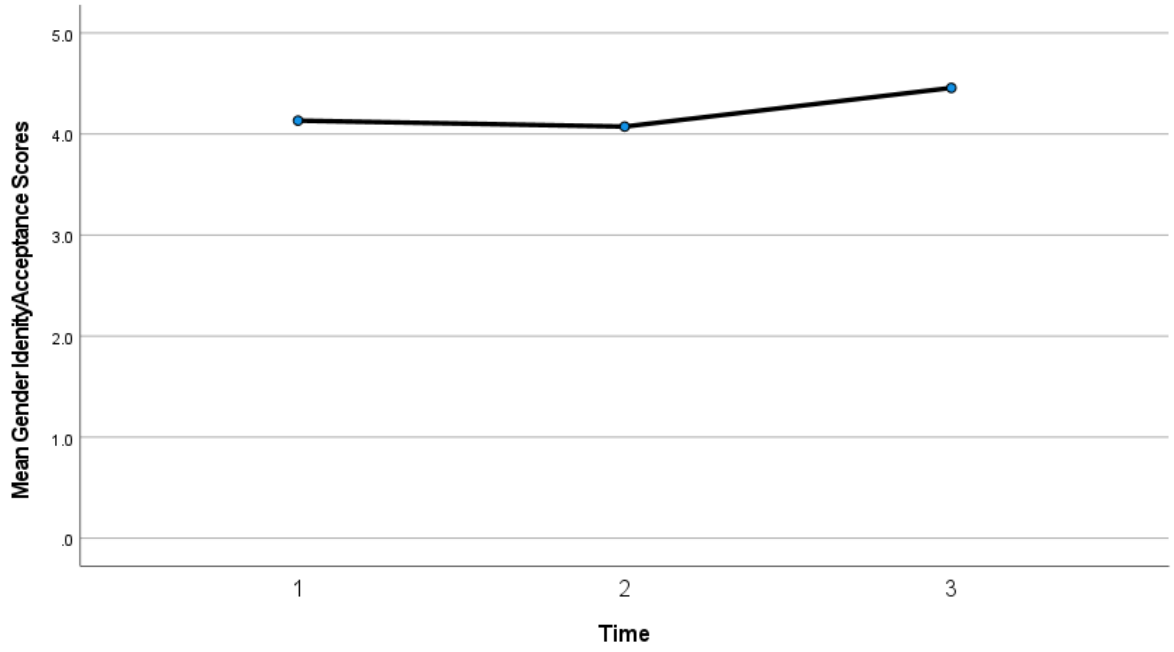
Linear graph of Appearance Congruence subscale scores across T1, T2, and T3



Post hoc analysis with a Bonferroni adjustment revealed that the *Gender Identity Acceptance* subscale mean scores statistically significantly increased from T2 to T3 (-0.383 (95% CI, -0.695 to -0.071), p = 0.012), but not from T1 to T2 (-0.059 (95% CI, -0.272 to 0.390), p = 1.00), and not from T1 to T3 (-0.324 (95% CI, -0.665 to 0.018), p = 0.068). Thus, Bonferroni pairwise comparisons for the *Gender Identity Acceptance* subscale found a statistically significant difference between means scores from T2 to T3 only. Mean score for T1 was 4.13, T2 was 4.07, and mean score for T3 was 4.46 showcasing a positive linear direction from T2 to T3 (see figure 12). Note that although not statistically significant, mean scores dropped slightly from T1 to T2 and then increased significantly from T2 to T3. Thus, mean scores on the *Gender Identity Acceptance* subscale increased significantly from T2 to T3 only.

Figure 12

Linear graph of Gender Identity Acceptance subscale scores across T1, T2, and T3

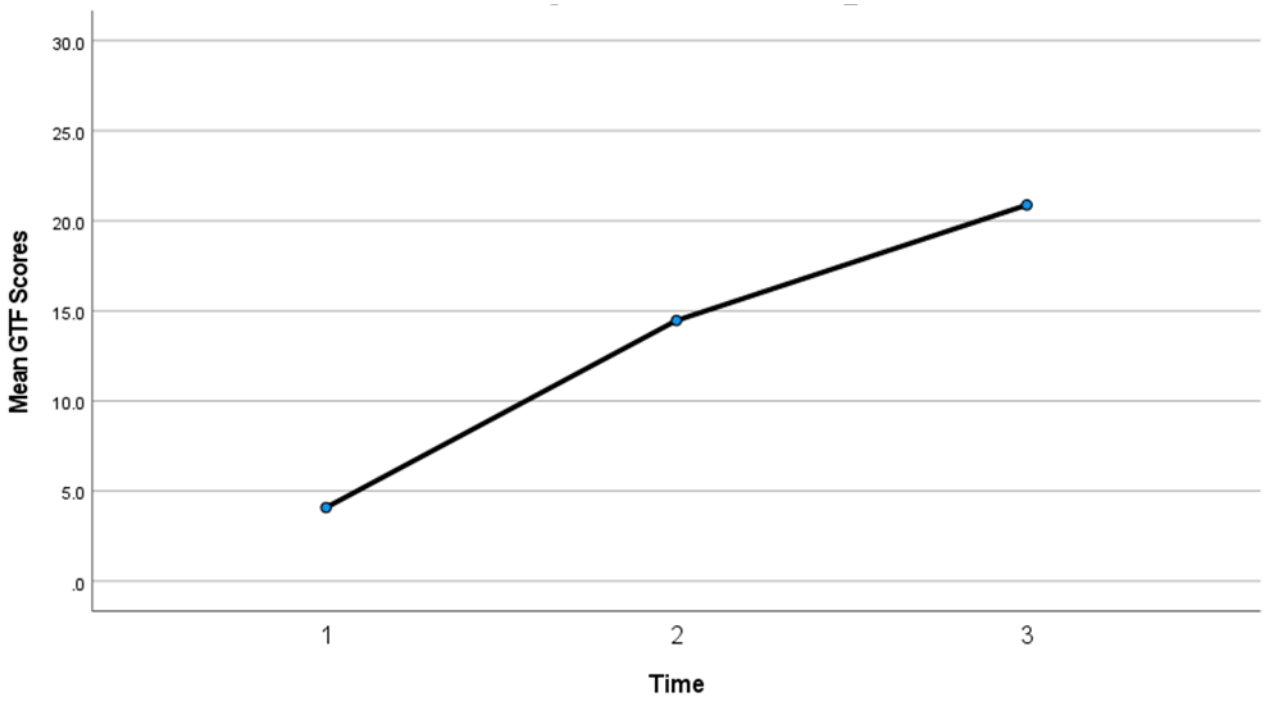


GTF.

Post hoc analysis with a Bonferroni adjustment revealed that GTF mean scores statistically significantly increased from T1 to T2 (-10.383 (95% CI, -13.194 to -7.571), p <0.001), from T1 to T3 (-16.794 (95% CI, -19.245 to -14.344), p <0.001), and from T2 to T3 (-6.411 (95% CI, -8.900 to -3.923), p <0.001). Thus, Bonferroni pairwise comparisons for the GTF found all means scores among the three time points were statistically significantly different *p = <0.001*. Mean score for T1 was 4.086, mean score for T2 was 14.469, and mean score for T3 was 20.880, showcasing a positive linear direction (see figure 13). Thus, the alternate hypothesis "*Scores on the GTF will significantly increase following one year of GAHT"* was supported.

Figure 13

Linear graph of Goals Tracking Form scores across T1, T2, and T3



Summary

Repeated measures ANOVA was used to analyse any significant differences between each questionnaire score among the three different time points. No statistically significant differences were found for the PHQ-15, PHQ-9, GAD-7 or the PWI across any of the time points. Therefore, scores did not change significantly over time, and the null hypotheses 1, 2, 3, and 4 could not be rejected. Repeated measures ANOVA found significant differences between scores for the TCS and the GTF as well as the two TCS subscales. Post hoc analysis with a Bonferroni pairwise comparison's found significant increases in scores for TCS, the two TCS subscales and the GTF across all three time points, thus alternate hypotheses 5 and 6 were supported.

Section Three: Study Two Method and Results

Chapter Nine: Study Two Method

This chapter outlines how the research for study two was considered and implemented. Processes for implementing this study begins with a discussion of my position as a researcher, my justifications for using reflexive thematic analysis (TA), description of the ontological and epistemological approaches I drew upon to underpin my considerations for data collection and data analysis, as well as processes for ensuring credibility and trustworthiness of the study. Additionally, I provide a description of the participants, recruitment processes, and procedures for conducting interviews. This chapter also outlines ethical considerations for this study, including research design, and processes for data analysis.

Positioning Myself Within this Research

> The multiple identities a researcher possesses can cause them to be perceived as an insider and outsider simultaneously, which can play a significant role in shaping the interaction between the interviewer and interviewee. (Couture et al., 2012, p. 87)

Initially, I believed I held a solely outsider position as a cisgender woman conducting research on GAHT and transgender wellbeing. I viewed my own identity and the identity of my participants as dichotomous, placed within a rigid gender binary; a transgender-cisgender binary. During my honours year I studied Kaupapa Māori research and saw the immense value in research being conducted for the community, by the community. Although I felt I had done enough background research and consultation to conduct a study that was considerate of the potential implications for trans people taking GAHT, acknowledging that I am not part of the trans community, nor do I have personal experience with GAHT, led me to feel like a fraud, and asking myself, "who am I to be doing this research?" and "will I even do it justice?".

Through continued reading and thoughtful engagement on intersectionality, as well as conducting interviews with my participants, I was able to let go - to a certain degree - of that feeling of being a complete outsider, and that questioning around my suitability to be doing this research. I was able to see the ways in which I connected with or held similarities with my participants across an array of intersecting identities. An intersectional approach to the insider/outsider perspective in qualitative research helped me to recognise that the researcher "is not confined to being an insider or an outsider" due to the multiple group memberships, societal roles, statuses, and experiences that all individuals hold (Couture et al., 2012, p. 92). Literature on this topic has highlighted the different advantages and disadvantages for being an outsider and an insider. Holding an insider

position makes room for the researcher to better build rapport, understand participants lived experiences, or gather more data due to participants feeling like they can be more open (Couture et al., 2012). However, researchers with an insider position may have difficulty recognising or confronting their own personal biases within the research, find it challenging to separate participants' experiences from their own, may not see the need to seek further clarification or analysis for certain topics due to inherent insider knowledge, or have issues with confidentiality within their community (Kerstetter, 2012). Researchers holding an outsider position may be better able to distance themselves from their participant's experiences and provide more clarity in their data collection due to not having the assumed knowledge of an insider (Couture et al., 2012; Kerstetter, 2012). However, they may also have a hard time generating rich data from participants, who may view them as an outsider and be less open with their answers. Additionally, other barriers such as socioeconomic status, higher education, race, and gender may result in power dynamics that result in the researcher being perceived as a privileged outsider, creating further barriers for rapport and collaboration (Kerstetter, 2012). Because it is virtually impossible for a researcher to be either a true insider or a true outsider, this insider-outsider duality has been commonly referred to as "the space between" (Dwyer & Buckle, 2009, p. 60).

Thus, when developing my method for study two and looking to understand what makes me an outsider and an insider, what between spaces I am occupying, and where my biases, points of connections, and blind spots might be, reflexive TA was an obvious choice:

> A reflexive researcher is someone who is thoughtful and (self) questioning, identifying and then interrogating their positions, values, choices and practices within the research process, and the influence of these on knowledge generated. (Clarke & Braun, 2021, p. 15)

Braun and Clark's (2021), guide to reflexive TA acknowledges that a reflexive approach cannot occur without subjectivity, and without acknowledging the personal and disciplinary perspectives, as well as identities, that the researcher brings to the research.

Personally, while I have held many positions of privilege; white, cisgender, high level of education, middle class upbringing, and able bodied, I have also held positions of marginality; female, child of divorce, bisexual/pansexual, and broke postgraduate student with no additional funding, who oftentimes had to decide between spending her last $20 for the week on either groceries or a visit to the doctor. With regards to my sexuality, I properly "came out" to others as bisexual when I was about 28 (even though I had known for a long time before that). The limited

exposures I had to bisexual women growing up were either fetishized (making me believe that my attraction towards women was inherently to please men) or were perceived by others to be attention seeking. Bisexual women had also been ridiculed by friends, family, and the media as being confused or confusing, being unable to "make up their mind", or as going through a "phase". Therefore, it was easier for me to pretend to be straight and pursue heterosexual relationships during my 20's to avoid being perceived in such ways. While sexual orientation and gender identity are different, my confusion around my sexual orientation and my hesitancy to come out until I was older (once being queer was more widely accepted and visible within society, and when I encountered more queer role models within my friendship and peer circles), allowed me to better understand participant's stories who faced similar barriers to understanding and accepting their gender identity. During analysis, I noticed myself latching on to these particular narratives, and found the coding and initial theme generation and development phases for these ideas to come relatively easy because of this. Additionally, sharing my sexual orientation with participants facilitated talk around their own sexuality, and furthered discussions on queer issues which helped build rapport.

Disciplinarily, I was drawn to clinical psychology to make a difference in people's lives, and I was particularly drawn to the advocacy and social justice aspect within this type of work, due to my upbringing in socialist ideals and left-wing politics. My undergraduate education was mostly based in humanities, social justice, feminist, and decolonising theories as I found myself interested in topics such as social anthropology, social psychology, gender studies, and social work. These topics encouraged me to question societal norms and harmful systemic structures, and to pushback against the status quo. My educational background and ideologies also facilitated conversations with participants, where we realised we shared similar political and theoretical views, which further helped establish rapport during interviews.

Thus, I was drawn to this research in particular as I am passionate about LGBTQ+ rights from a personal, professional, and political perspective and could see the disparity between the progress that has been made for LGB visibility and rights and how lacking it has been for trans visibility and rights. However, because of this strong conviction I hold for advocacy, and my struggle with feelings of inadequacy for holding an outsider position as a cisgender researcher researching transgender issues, I had to be mindful and reflexive of certain biases. I caught myself overcompensating at times for my outsider position and my desire for advocacy, by angling my literature review and my analysis in ways to best serve the trans community which closed me off to differing and perhaps more balanced perspectives, outlooks, and explanations.

To explore such biases, and as part of my reflexivity processes, I kept a reflexive journal on the subjects that caught my attention, and the moments where I felt myself switch between the duality of insider and outsider. For example, I found myself becoming overly preoccupied by the ways in which some participants spoke about their womanhood and femininity, particularly how these resonated with what made them feel like a woman. As well, when some participants described instances of harassment or discrimination, but caveated these by acknowledging that other women (presumably cis women) also shared similar experiences. I spent time on the subject of 'womanhood', both academically while forming my themes, and in terms of my own experiences as a cis woman. It was beneficial while undertaking my data analysis to think about participants' experiences with not finding clothes that fit them due to women's mainstream fashion industry not catering to bigger sizes; feeling like they had to "hyper perform" femininity to be taken seriously as a woman – spending time and money on their hair, makeup, and clothing; and experiencing sexual harassment in public spaces. These experiences related to my own experiences and related to some of the academic fields I had been educated within (e.g., gender studies). I noticed during the interviews feeling more connected with these participants and feeling more like an insider. In retrospect, the duration of these interviews tended to be longer than I anticipated, perhaps due to my personal or biased investment on these particular topics. I also questioned afterwards whether participants would have equated their own personal difficulties with that of cis women if the researcher had been trans? Or did my "cisness" result in participants feeling like they would offend me by not acknowledging that all women struggle with these issues?

In hindsight, I spent much time trying to include and incorporate some of these ideas into my themes, and after taking a step back, realised they did not offer enough on their own to address the study's research questions. I realised I had become overly attached to these ideas due to my own personal biases placing importance onto them, rather than acknowledging that these ideas were situated within participants' experiences. Therefore, while I found it helpful to reflect on the topic of womanhood for understanding myself as a woman, using the reflexive journal provided me with a platform to critique my attachment to such ideas and their usefulness Thus, the use of reflexive TA assisted with my understanding and critiquing of the insider, the outsider, and the between spaces that I occupied throughout this research journey.

Ontology and Epistemology

When thinking about my method and theoretical approaches for this study, reflexive TA also offered the flexibility and reflexibility required to allow me to draw on my own positioning and identity as a researcher, yet still prioritise participants perspectives, views, and meanings of their

experiences with GAHT. Initially, because of my beliefs that I was an inherent outsider to the research (and as this is my first time conducting qualitative research), I naively wanted to be "left out" of the research, and just "give an objective voice" to the participants. However, I soon realised that this is impossible as I am the one interpreting, finding patterns, and making meaning from the data. A broad experiential orientation in my research allowed me to address my concerns around being an outside researcher, while still acknowledging my role and contribution to this research. While I knew I would continue to look at and analyse the data through my own lenses and perspectives, the experiential approach served as a reminder and point of focus to "make sense of how the world is seen, understood, and experienced from the person's [participants] perspective" (Clarke & Braun, 2013, p. 24), rather than prioritising my own interpretations through a more critical framework.

Locating reflexive TA within theoretical frameworks, I adopted a predominantly critical realism and contextualism approach. A critical realist framework not only felt in line with my own beliefs and educational background around knowledge production, but also aligned with my approach to developing themes from interviews. While acknowledging there is no one inherent and objective truth that can be understood by everyone when discussing trans wellbeing and experiences with healthcare, it is also important to acknowledge the purpose of research – to attempt to produce useful or applicable knowledge. Within that scope, therefore, we need to assert that genuine or 'authentic' truths can exist in order to continue to make meaningful contributions to knowledge production (Clarke & Braun, 2013). Therefore, under a critical realist approach, the knowledge produced from participants' truths do not hold a sole universal singular reality, but rather convey multiple perspectives and realities shaped by participants own differences in understanding and interpreting themselves, their environment and their contexts. The experiences discussed by participants in this study, therefore, are real, valid, and true, but are also shaped by their experiences, culture, and social, historical, and political backgrounds – their context.

Thus, a contextualist perspective was also employed within this research in order to navigate and understand the varied truths spoken within this study. Contextualism argues that "while no single method can get to the truth, knowledge *will* be true (valid) in certain contexts" (Clarke & Braun, 2013, p. 31). So, there is a truth or reality out there, but this truth is multifaceted, and how we can ever understand or know this truth is through attempting to understand our own and others' experiences through differing perspectives, interpretations and representations of that reality, using contexts such as language, social structure, historical influences, and current political and environmental factors.

Credibility and Trustworthiness

Qualitative research has historically been viewed as lacking the same level of robustness as quantitative research. However, within qualitative analysis, multiple frameworks and criteria have been established to ensure its credibility and trustworthiness. Using the framework outlined by Cope (2014), I instilled many such strategies to ensure this. For example, triangulation was used within this study as evidence by my embarking on a wide range of information gathering for my literature review (reading not only journal articles and literature based in psychology, but reading across academic disciplines, historical accounts of trans experiences and health care, relevant media articles, as well as academic essays and personal blogs written by trans authors). This allowed for an expansive understanding of not only the issues directly related to gender affirming health care but the wider contexts that surround this. I also used triangulation in way of conducting a mixed methods study, whereby my qualitative analysis is complemented alongside the results from the quantitative component of this research. Moreover, discussing my initial interpretations of the qualitative data with my supervisors for their feedback and thoughts, further triangulated my understanding of the data and ensured that any biases or oversights were addressed.

Cope (2014) also discusses the importance of prolonged engagement, persistent observation, and reflexivity when conducting qualitative research. Consideration of these factors help to bolster the credibility, confirmability, transferability, and authenticity of analysis. With prolonged engagement, I took time during participant interviews to build trust and rapport by introducing myself in a more informal manner and explaining why I was motivated to undertake this research, I also gave participants the opportunity to introduce themselves which allowed for trust between myself and the participants to be established. I was lenient with the amount of time interviews took, and was mindful of not rushing through to the next question, creating space for participants to speak freely about their experiences rather than feeling like they were partaking in a formal interview, or feeling like that had to answer in a prescribed way. This also afforded the opportunity for persistent observation, whereby I attended to the differing emotions that came about during the interviews, allowing for more authentic understanding and description of quotes used within the analysis. Moreover, as stated above, a reflexive journal was utilised to reflect and guide my understanding of participant interviews and to ensure that reflexivity around my own biases and interpretations was considered and accounted for.

Participants

Recruitment.

Participants were selected from those recruited for study one. When agreeing to take part in study one, participants signed the consent form which stated that they may also be contacted and invited to take part in study two (See Appendix G). Participants whose 12 month follow up questionnaires were collected between August 2020 and November 2020 were invited to take part in the follow-up interview.

Participants were recruited either by phone or email and were emailed an information sheet and consent form (see Appendix F and G) to consider before deciding to take part. Consideration of potential participants was based on even distribution of those identifying as trans men, trans women as well as non-binary and gender fluid individuals AFAB and AMAB. Recruitment stopped once 10 people had agreed to take part in the study. Those who had not yet completed their one-year follow up survey at the time of recruitment were not considered eligible.

Demographics.

Demographics are predominantly presented in an aggregated manner to uphold participant confidentiality; however, table 5 provides participants pseudonyms, gender as described by them, and the amount of time on GAHT. At time of interviews, ages ranged between 21 and 45, with average age being 30. Five participants were taking T-GAHT and five participants were taking E-GAHT. Most participants identified as NZ European or Pakeha (n = 7), one participant identified as Māori/Pakeha, one as Canadian, and one as Southeast Asian. All lived in the greater Wellington region.

Table 5

List of participant pseudonyms, gender, and amount of time on GAHT at interview

Pseudonym	Gender (pronouns)	Amount of time on GAHT
Alex	Transgender male (he/him)	One year, two months (T-GAHT)
Avery	Non-binary, null, or “no, thank you” (they/them)	One year, three months (E-GAHT)
Blake	Male (he/him)	One year, three months (T-GAHT)
Donna	Wahine, woman, or wahine irawhiti (she/her)	One year, three months (E-GAHT)
James	Male (he/him)	Two years, 10 days (T-GAHT)
Jo	None or agender (they/them)	One year, two months (T-GAHT)
Lavender	Agender (they/them)	One year, one month (E-GAHT)

Olivia	Female (she/her)	One year, seven months (E-GAHT)
Quinn	Non-binary or agender (they/them)	One year, six months (T-GAHT)
Taylor	Trans woman (she/her)	Two years, 11 days (E-GAHT)

Interviews

Data was obtained through one-on-one semi-structured interviews. An interview scheduled was developed by me in consultation with my supervisors, as well as consultation with a trans advisor from The Professional Association for Transgender Health Aotearoa (see Appendix H). The open-ended interview questions were created to prompt the interview and elicit discussion from the participants. These questions were designed to explore the thoughts and experiences that participants had prior to their decision to start GAHT, to gain their insight into their perceptions of- or their satisfaction with GAHT, and to see what other services and support could be helpful to receive alongside GAHT. Lastly, participants were asked about any experiences of discrimination from others they may have received and whether these experiences changed since taking GAHT. This last question was incorporated as a means of exploring a potential relationship between gender minority stress and outcomes of GAHT.

Location

Location of interviews was determined on a case-by-case basis depending on what each participant was most comfortable with. Most interviews took place at my office in a private room at Massey University, two interviews took place in a private study room at Massey University's Library, and two interviews took place at the participant's home as this was more convenient for them.

Procedure

All interviews were completed in one sitting and were face to face. Interview length ranged from 27 minutes to 202 minutes. Interviews took place between November and December 2020. Prior to starting the interview, I introduced myself and my interests in this research area, and asked participants general questions to build rapport and place the participants at ease. Snacks and beverages were also offered to the participants at this time.

Participants were told about the main objectives of the interview and how their answers to the questions will be used for the study. Additionally, participants were informed that some questions could result in them feeling upset or uncomfortable and were reminded that if this were to happen, that they could pause the interview at any time to take a break, change the topic of conversation, move on to the next question, or stop the interview entirely. Participants were then

asked if they had any questions about the information sheet or consent form, and then signed the consent form prior to the first interview question being asked. Questions from the interview schedule were used to begin the interview as well as to direct focus and keep participant's and myself on track. Additionally, exploratory questions were asked to elicit further information and to ensure deeper understanding and clarification of what was being discussed. At the end of each interview, participants were also given an open space to talk about anything that they felt was important to say about their experiences with GAHT that had not come up throughout the interview. Participants were provided with a $30 supermarket voucher as a koha for their participation.

All interviews were audio recorded and transcribed verbatim (using Express Scribe version 9.11; NCH Software) by me with identifying information anonymised. In some instances, certain utterances were omitted from the transcription, for example, overuse of the word "like". A copy of the transcript was then emailed to each participant for their review. Some participants requested that certain information be removed from the transcripts, some made grammatical and spelling changes to the transcripts, however most information within the transcripts remained unchanged. Audio files and transcriptions were stored on a password-protected drive and de-identified codes were used to identify participants.

Ethical Considerations

Study two was approved as an addition to study one by the Health and Disability Ethics Committee on April 30th, 2020, reference number: 19/CEN/9/AM01.

There was potential for participants to become distressed during the recount of their journey. In anticipation of such potential distress, specific safety protocols were developed through consultation with the supervision team prior to the interviews. This resulted in me reminding clients that they could stop the interview at any time, allowing time after the interview to check in with participants to discuss any feelings that may have come up, providing a list of numbers for various help lines such as Lifeline and 1737 should they be needed, and developing a safety plan with participants should there be cause for concern. Despite discussing difficult subject matters, no participants chose to end the interview early, nor did they require additional support following the interview.

Data Analysis

I used the six phases of Reflective Thematic Analysis to guide my data analysis process (Braun & Clarke, 2006; Clarke & Braun, 2021). I adopted a predominantly experiential approach to my thematic analysis but was also influenced at times by inductive TA (with analysis being generated

from the data rather than being shaped by existing theory), while also adopting a deductive approach at times, particularly with regards to my interview questions around experiences of discrimination and the gender minority stress model.

The familiarisation process officially began while transcribing participant's interviews, however, unofficially, I had made a mental note of some similarities in discourse and experiences from participants during the interviews themselves. After transcribing my third interview, I began to feel more excited as I noticed patterns and similarities between interviews. At this stage I made a word document to collate insights and ideas for possible codes and the interview exerts that corresponded with them. I then printed off each interview and read through these transcripts highlighting any data items of interest.

I then created a table for each participant which placed the specific segments of data from the interview into one column, and potential code labels for the data into the other column. I then reread participant's transcripts and coded each data segment. At this stage I noticed that some codes were more surface level with multiple examples across the data such as "advice for GAHT" or "negative experiences" while other codes felt more specific and held more opportunity for analysis such as "being seen/unseen" or "what it means to be a woman". At this stage Excel and the find command on word became my best friends as I collated all codes onto one spreadsheet, color coding, amalgamating, and separating some codes as necessary, coming to a total of 108 codes.

I organised code clusters by taking myself away from the computer and working with the codes manually on cut up paper. My very good friend who is well versed in qualitative research had to spend some time convincing me that this was the best way forward after my many failed attempts to complete this phase on the computer, due to my new found love for Excel. From here, I identified my first candidate theme pretty quickly "the road to GAHT" and I could see clearly which codes could be categorized under different components of this theme. I repeated this process for all candidate themes.

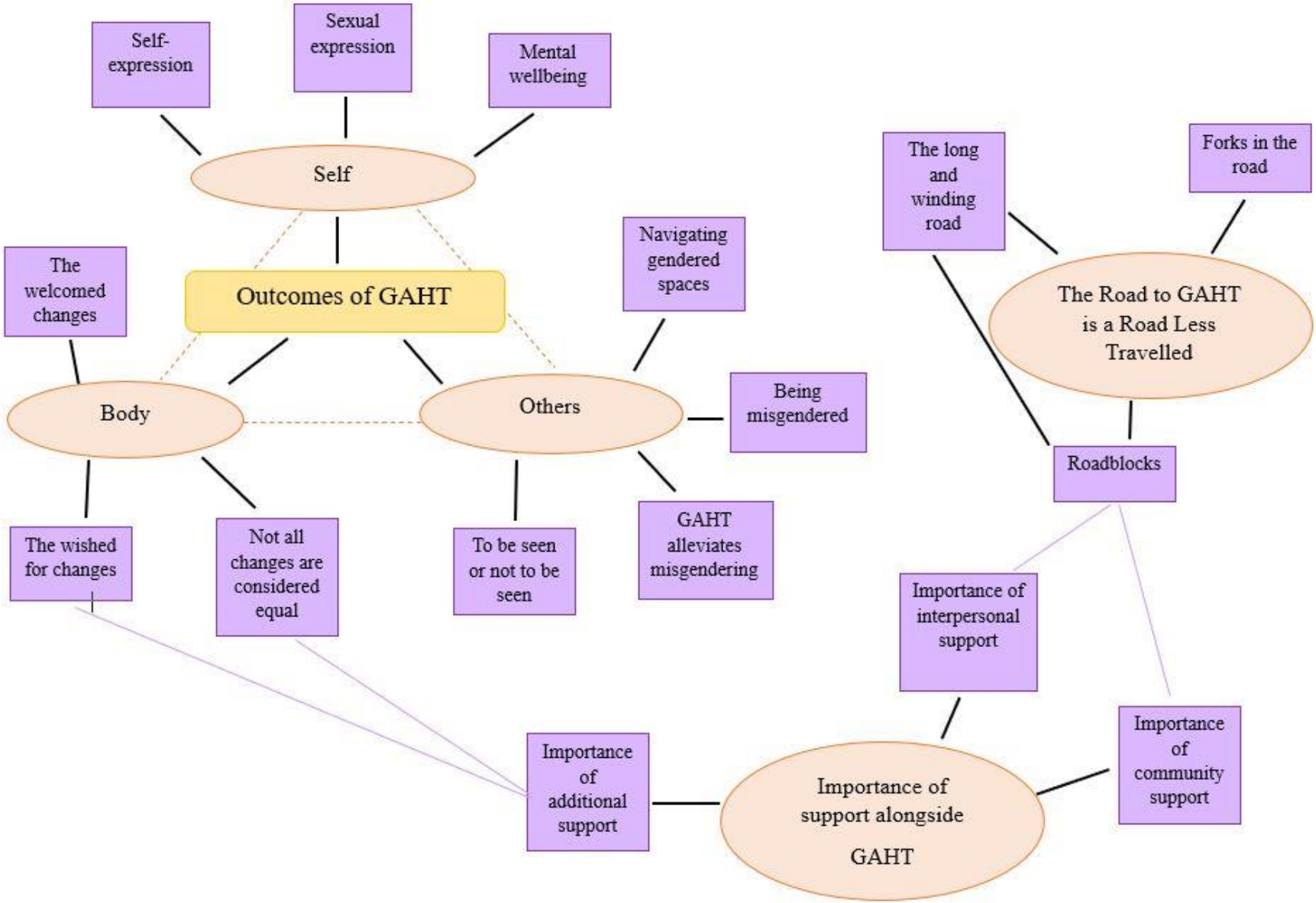
While developing and reviewing themes I created another Excel spreadsheet which placed all themes at the top. I then re-read through my full dataset and coded extracts and placed certain extracts under each potential theme to get a sense of how many extracts I had in relation to each theme, and whether these extracts made sense to their corresponding themes. At this point I was able to see where some candidate themes could be further combined, and where some were unnecessary.

Refining, defining, and naming themes was easier for some themes than others. The story and core centralising concept for theme one came easily, and the defining and naming process was immensely enjoyable. Other themes did not come as easily, and I often opted to try and write up my analysis and play around with my thoughts and ideas within these themes – sending them off to my supervisors for feedback and then continuing to refine, define, and name. Flitting back and forth between the last two phases as well as dipping my toe back into phase four and three at times. Reflexive TA was useful throughout this process as it allowed me the space and opportunity to pause, reflect, and question my own personal attachments to some themes, and to identify areas where I may be 'stuck' holding on to certain themes that didn't actually serve the purpose of this research. It also aided in understanding why I may be coding or analysing certain data extracts in certain ways rather than others and helped me to feel more comfortable with the process of identifying codes and developing themes during those times where I felt solely like and 'outsider'.

From the analysis, five final themes were developed. Figure 14 presents the thematic map of the five themes with their subthemes. The first theme: *The Road to GAHT is a Road Less Travelled* explores the many different factors that come in to play for people deciding to undertake GAHT. The second, third, and fourth themes: *Outcomes of GAHT: Body, Self, and Others* explore the different effects that GAHT had across these three domains and their implications. The final theme: *The Importance of Support Alongside GAHT* highlights the different types of supports participants found integral to their journey with GAHT, as well as the supports they wish they had received.

Figure 14

Thematic map of the five themes and their corresponding subthemes



Summary

Upon reflection, the process of qualitative analysis began well before I had even written up an interview schedule or submitted an ethics application for study two. It began when I started considering who I was as a researcher and what my role within this research was. Once I was able to navigate this push pull struggle I had with my insider/outside positioning (thanks to reading about this topic and to Reflexive TA!). It created opportunities for me to reflect on my own biases and assumptions as well as allowing me to continue to acknowledge and place myself as the researcher into this study rather than pretending or thinking that I am wholeheartedly representing the voices, thoughts, or experiences from my participants in an unbiased and objective way. Reflexive TA also afforded me the opportunity to adopt an experiential approach to my analysis with the underpinning practice, understanding and awareness that I am accessing participant's realities which are situated in a greater societal reality which has been shaped by cultural, historical, environmental, and societal contexts. Engaging with participants during interviews was an incredibly rewarding and meaningful experience for me – generating much more depth and nuance on the outcomes of GAHT than I could have achieved from study one alone. Moreover, generating analysis around these themes in a reflexive way not only elucidated which themes served the research aims and which did not, but also enabled me to reflect on my own inner workings, beliefs, and biases, creating valuable opportunities for self-questioning and critique.

Chapter Ten: Theme One - The Road to GAHT is a Road Less Travelled

Theme one uses the metaphor of a road trip on a road less travelled to encompass the multiple factors participants experienced on their journey towards GAHT. When asked "what experiences made you seek hormone therapy?" almost all participants answered this question with lengthy stories that were fraught with confusion, self-questioning, lack of information, indecision, and denial. Their stories depicted slow and winding journeys with many detours along the way - highlighted by the subtheme 'the long and winding road'. Their stories also outlined many barriers that prevented them from starting GAHT sooner - showcased by the subtheme 'roadblocks'. And participants also identified different factors that helped influence their final decision to start GAHT - conveyed by the subtheme 'forks in the road'. I used the phrase 'the road less travelled' because, oftentimes, participants had to navigate much of their journey alone as there were no roadmaps or role models to look in comparison to the road that many cisgender people take to understanding their gender. It is an established and paved road, clearly signposted, with many road maps, and many people who have travelled it before to look to for guidance.

The Long and Winding Road

For almost all participants, deciding to 'come out' as trans and to start GAHT was not a quick or linear journey. For example, James spoke of knowing that something wasn't quite right, but not being able to figure it out for a long time. He reminisced of desperately trying to have all the answers figured out for himself before talking to his parents:

> **James** (21): *It took me a long time to figure anything out, as I said I was quite indecisive, and I flitted back and forth between, oh maybe this style will make me happy. […] I was very confused about why I wanted to lean away from sort of like, girly emo and more [toward] masc stuff and I thought 'oh god, maybe this means I'm gay'[…] I was determined not to be a lesbian for some reason, and um yeah then I just though ok 'tomboy, tomboy, I can do that, that's fine'. But you know my parents were just sort of watching all this and thinking 'what on earth are you doing? Just be yourself', and I'm like 'I don't know how! Somethings wrong.'*

Although many participants discussed the lengthy journey it took for them to get to GAHT, James' extract underlines just how confusing and distressing this experience can be, filled with uncertainty and confusion. While James was busy trying out all other possible facets of his identity to figure out what was going on, Jo was doubling down and trying their best to conform to the gender assigned to them at birth:

> **Jo** (30): *When I was a kid, I definitely didn't realise that everyone thought I was a girl, for the longest time. I knew about girls and boys and all of this kind of thing but that all was very academic knowledge for other people. I knew all about puberty, but definitely that was*

> *something that happened to other people. Then it happened to me, which was horrifying. Um and so when I was maybe 15/16 I tried to actually be feminine and do all of that kind of thing and it didn't really work, I was bad at it, so bad at it, and I kind of fell into just doing whatever and just felt like a failure as a woman, very insufficiently feminine.*

For Jo, it was not until their early twenties while at university when they began to figure out they were agender. Like many others, this process spanned many years, beginning around their teenage years and taking shape towards their early twenties. Like James, Jo evokes a sense of struggle during this time, of trying and failing to be something they were not while at the same time feeling "insufficient" and confused about their sense of self and identity. Jo's use of the term "horrifying" when they went through female puberty, highlights how unwanted these physical changes were. Despite how horrifying this was for Jo, they still tried to be feminine, because they weren't sure what else they could do at that point. Most participants spent their teens and early twenties trying to live as the sex and gender assigned to them at birth and struggling through this period while also trying to make sense of their gender and how they fit in the world, further highlighting just how slow, painful, and confusing this journey can be.

Olivia described her gender identity journey as "gradual and evolving", with realisations beginning in her late teens, and becoming a bit clearer in her early twenties. She reflected on her psychosocial assessment at the Endocrine Department, stating it was difficult for her to pinpoint the exact times which she 'realised' she was trans, stating:

> **Olivia** (45): *I couldn't do all the prerequisite, you know, 'bingo moments' or things like that, it was just a default setting.*

Olivia talked about having lived socially as a trans woman for many years before deciding to take hormones. She used the phrase 'bingo moments' to explain that there was no one definitive point in which she suddenly 'knew' she wanted to start GAHT, rather the journey towards this decision was made in smaller increments. Like Olivia, Donna also indicated that there was no one definitive moment where she suddenly decided to start GAHT:

> **Donna** (26): *I didn't really feel like I went *claps hands* 'hormones', it was just kind of like 'okay we're here and we've moved from here, and what's the next thing?' And then that was the next thing and I looked into it, and it felt right.*

Instead, recounting her journey as moving from one step to the next, filled with research and contemplation about whether it "felt right". Similarly, Lavender described their journey towards seeking GAHT as a process that took many months to uncover, stating "I sort of let myself get use to the idea before I commit to it".

These processes of moving one step, seeing if it felt right, before committing to the next step, were also exemplified by many binary trans participants who used a non-binary identity or they/them pronouns as a means of 'testing out' or 'easing into' the idea that they were trans before taking the next step towards a binary trans identity. In this instance, participants outlined that a non-binary identity functioned in a way that gave them space to explore and question their gender without having to commit to anything before they were ready. James used the phrase "ease through it" to imply that he was trying to make the process of coming out as trans smoother for himself and his parents. Olivia reported hesitancy around "planting a flag" into a trans woman identity too soon, instead identifying as non-binary until she felt more entitled to be a woman. And lastly Taylor felt safest identifying as non-binary until she had accessed hormones and began her medical transition. A non-binary identity served as a steppingstone or pit stop, affording participants time and space to further contemplate their gender before eventually realising they felt more comfortable with a binary trans identity.

Therefore, the way participants described events leading up to starting GAHT, and to realising and understanding themselves and their gender, depict long, complicated, confusing, and distressing roads. Many participants spent countless hours or even years being indecisive or being in denial about taking the next step. They encountered difficulties not only with understanding their gender, but also difficulties and complexities of navigating their teenage years, puberty, sexual orientation, relationships, and understandings of the world. Participants stories in the lead up to considering starting GAHT showed slow, purposeful, and considered processes that were not typified by a single moment of clarity, or a snap decision to start GAHT out of the blue.

Roadblocks

Many participants also talked to the barriers that came up during their journey which hindered their progress towards understanding their gender identity and towards seeking GAHT. These barriers, or roadblocks, are integral in providing a deeper understanding to the first subtheme as they further explain why participant's journey's towards GAHT were so long and difficult. Examples of roadblocks included: lack of exposure to trans people growing up, negative portrayals of trans people within society, and anticipating negative outcomes if they were to come out as trans and begin their social and medical gender affirmation.

For many participants, the idea of being trans just simply wasn't an option to them when they were younger due to lack of awareness and exposure of trans identities within mainstream society. Avery alludes to how different their life could have been if trans visibility existed a decade ago:

> **Avery** (34)**:** *I guess just that kind of awareness thing, knowing it's an option, […] if there was more trans awareness and acceptance normalising it 10 years ago then I could be much further along by now, could have spent a lot longer, maybe I wouldn't have spent the last 10 years an alcoholic, maybe I still would have, but I'd be an alcoholic with breasts, that would have been better *laughs*.*

This barrier not only resulted in Avery prolonging their journey towards starting GAHT, but also resulted in frustration felt due to a decade of lost opportunities and struggles with alcoholism. Avery acknowledged they could have been further along on their journey with GAHT had mainstream society began to normalise trans identities much earlier on in their life. Similarly, Olivia talks about a society that, in the past, had a lack of information and options for trans people:

> **Olivia** (45): *If I think back to my 20s, I think the one thing is that lack of information. And I think awareness of the options wasn't there, necessarily. I mean there was, it was all in the library. And I read probably everything I could get my hands on, there was only a few kinds of books at the time.*

Here, Olivia discusses that she was aware of her trans identity throughout her early 20's, but that society hadn't caught up, as indicated by the dearth of information, resources, and options for trans people during that time. These extracts highlight two key barriers: firstly, not being aware that being trans was an option, and secondly being aware that it is an option, but not being able to find further information or options to guide you because there weren't any available.

Another participant, Quinn, indicated that there were no options for being trans that were apparent to them growing up:

> **Quinn** (28): *As a teenager I do remember having experiences of hearing people refer to me in front of me as like 'she/her' and thinking that sounds real incorrect and thinking that it's just like not really understanding that feeling, it wasn't the same as it is now, it's like more intense now, I think, but like um because I didn't really think there was any other options but I remember hearing it and being like it sounds like I'm being called the wrong name or something.*

Quinn uses the term 'option' to indicate that even the idea that there could possibly be other genders beyond the male-female cisgender binary simply didn't exist in their world. This lack of options within Quinn's world created a barrier for them to be able to fully comprehend why being misgendered felt incorrect. It wasn't until more recently that Quinn was better able to experience and understand their feelings when being misgendered, due to trans identities becoming more visible. Quinn discussed that being misgendered was their main driver for seeking GAHT, therefore this understanding of what being misgendered was and how that made them feel was an important

roadblock to traverse on their journey towards GAHT, while simultaneously serving as a motivating force to seek GAHT once the roadblock had been identified and realised.

Moreover, Jo recounted reading blogs online and discovering the term 'Agender' and exclaiming "holy shit, that's an option" as they realised, they did not have to subscribe to a binary trans gender but could in fact have no gender at all. It became apparent throughout interviews that the internet, and its more recent expansion was integral in alleviating such roadblocks as lack of visibility and lack of information:

> **James** (21): *And then things that really got me was, noticing the pronouns after I'd been learning that there were other options. I'd never considered they/them until I started seeing posts, or like following celebrities who used them and seeing it sort of accepted and used by their fans and followers and like; 'oh wow, people actually do that if you ask them to, that's crazy*.

Many participants talked about the use of the internet and, social media in particular, as a means of accessing more knowledge about trans people. Within this subtheme arose a dichotomy of experiences between participants who were above the age of 30 during their interviews, and those who were younger. Those who lived their teenage years predominantly without the internet, or with the early internet, came to realise at a much later stage of life that they were trans, and did not seek GAHT until their late 20's, 30's and 40's. Compared to those who started GAHT in their early to mid-20's, due to increased awareness of gender diversity and access to GAHT from a younger age.

However, even with the increase of visibility and education of trans identities, there was still an underlying perception from participants that actually going through with the journey of transitioning both socially and medically would be arduous. Multiple participants received implicit as well as explicit messaging from media and wider society that being trans would result in a difficult life, thus creating further roadblocks:

> **Blake** (30): *[...] a lot of the media I had consumed and a lot of the things I knew about being trans and out in the world were really, really negative. And I was so ashamed of this thing that I really deep down knew about myself. And I couldn't imagine being employable or having the strength to verbally come out to people. I just had all this shame.*

Although Blake received messages that he *could* live his life in a way that was true to himself and his gender, he also received messages from the media that this would be a life that would be scary and difficult, that he would not be employable, that he would be rejected by others, and that it was shameful to be trans. This sentiment was also shared by James, stating that even though he knew he was trans and he was seeing more trans representation in the media, he was hesitant to talk to his parents about it because being trans looked "really tough and scary". Other messaging that

participants received from society was that being trans was inherently ‘wrong’, ‘off putting towards others’, or a ‘joke’:

> **Avery** (34): *When I was 10, trans people did not exist in my world, when I was 18 they existed as a category on porn sites or a joke, and as a category on porn sites it was ‘dirty perverted porn that's not for you, gross people look at this’.*

Both Avery and Taylor discussed different types of media outlets portraying trans people, more specifically trans women, as a source of humour or as a niche and deviant fetish. Understandably, neither of them felt compelled to be open about their gender identities during their 20’s for fear they would be judged by others in this same way. Taylor also explained that her sexual attraction toward women resulted in further roadblocks for her to be able to live as a woman:

> **Taylor** (35): *I had this idea formed from the media that like trans women who are attracted to men are kind of pathetic, but kind of fine. Whereas trans women who are attracted to women were, like, serial killers, or predatory. And that came both through things like the silence of the lambs and this idea of ‘cross dressing serial killers’ in the media. […] if I was gonna, like, come out as a trans woman but I still wanted to date women, that really wasn’t gonna work. And on top of that I wasn’t going to succeed professionally, and I wasn’t going to succeed creatively, and men wouldn’t really want to be my friend, and women would only want to be my friend if I was trans woman who dated men. So, it was kind of socially going to be isolating if I had tried to come out […] so I made this decision [to pretend to be a man] when I was 19.*

The messaging Taylor received from the media, was that she would be perceived as a threat and would be socially isolated if she lived as a trans woman who was attracted to other women. Both Blake and Taylor knew for a long time that they were trans, however neither of them felt safe to be ‘out’ as their gender or present in the way they wanted to, and so continued to live as their genders assigned to them at birth. Taylor talked about this being an active choice for her, as she spent a lot of time weighing up her options, and her life goals, and thinking about what would work best for her. Ultimately, she made the decision to spend her 20’s pretending to be a guy in order to survive, before seeking GAHT in her 30’s, as she believed at the time that it would be easier to pretend to be a cisgender man than go against the cis- hetero- societal norms and risk rejection from society. Blake on the other hand refers to this time as a period of ‘denial’ rather than an active choice. Like Taylor, Blake was also driven by a need to stay safe and protect himself from a life that he believed would be filled with dire outcomes, and therefore took a long time to come to terms with his gender and to seek GAHT.

Moreover, what also came up for participants, wasn’t just the fear that their life would be difficult, and they would be socially rejected, it was also about a matter of life or death:

> **Taylor** (35): *So, this was 2004, and I was living in *NZ town. If I had made that decision (to come out as trans woman), I don't think I would be alive today, and I had a friend who, shortly after, came out as a trans man, and I was so proud watching him and very envious. He was living in Wellington, and I came up to Wellington a couple of years later and he was living as a trans man, to a certain extent non-binary, and I was quite envious of him, but just really happy that he was doing it. And then he killed himself and I was like 'well I guess that proves me right, that sucks but it also demonstrates that I made the right choice to hide who I really was and pretend to be a guy.'*

The fear that one's life would be so harrowing that it might result in suicide would be enough to deter anyone from living outside the constraints of our hetero- and cis- normative society. These heavy realities came about for participants either through the actions of other trans people, or from general knowledge of the dire mental health statistics for people within the queer community, especially the trans community, as explained by Donna:

> **Donna** (26): *But yeah, every trans person knows that statistically speaking we are more likely to be mentally ill, to self-harm, to use drugs, so we're aware of that. And you kind of have to not let that be a part of your story. Because it's very insidious how much, like 'I'm trans so being suicidal and mentally ill is a part of it.' And it's like, that is a dangerous story to tell yourself, because then the whole, like, being trans is suffering, every trans person goes through that, because it's uncomfortable and gross and society just does not make you feel very welcome a lot of the time.*

The lack of positive representations of trans people living happy, successful, and 'normal' lives was a significant barrier for participants on their journey towards GAHT. Instead, because participants were shown representations of trans people that were 'pathetic', 'perverted', 'predatory', mentally unwell, and overall disenfranchised they believed that they themselves would be socially ostracised, mentally unwell, and financially and romantically unsuccessful if they came out about their trans identity. This highlights the need for more inclusive, positive, or even simply normalised and balanced representations of trans identities and communities within media and greater society.

The last roadblock identified was to do with location. Throughout interviews, multiple participants made a point to acknowledge Wellington as a preferable place to live as a trans person and to start their medical gender affirmation compared with other places in Aotearoa. Many participants felt better able to live openly as trans once they moved to Wellington, like Taylor:

> **Taylor** (35)**:** *…anyway, I went to university, and it was a very heterosexual culture, very like dude bro-ey and jockey-ey […] I didn't really like it, started growing facial hair, realised that it wasn't going to be good for me to be feminine. But then I came to Wellington after I graduated in 2007 and then about four years later came out as non-binary.*

Wellington is known as a more liberal and accepting city with regards to the rainbow community. Thus, moving to Wellington enabled many participants to feel more comfortable with expressing

and exploring their gender identity as they were better able to tap into trans communities and organisations that were not available or as easily accessible in other parts of the country.

> **Lavender** (26): [on deciding to take GAHT] *No, I've just always had friends that have been of diverse gender and sexualities, so environment wasn't a problem.*
>
> **Emma**: *Nice. And that was also in *Hometown as well?*
>
> **Lavender** (26): *Noooo, that was after I left *Hometown. *Hometown is not a very accepting place.*

Other participants realised that not only was access to trans communities and organisations easier in Wellington, but access to GAHT itself was too:

> **Alex** (28): *I looked at the chart of different DHB's around New Zealand and there was a lot of tick boxes for the Wellington DHB and that's when I realised just how easy it was to access HRT [GAHT].*

Prior to looking at this chart, Alex had presumed it would be too difficult for him to start GAHT due to the messages he was receiving from other sources of international media around accessing gender affirming health care. Thus, living outside of Wellington was also considered a roadblock for many on their journey, highlighting the important role that physical location also plays for other trans people seeking GAHT.

All participants from this study experienced at least one roadblock along their journey towards seeking GAHT, with most facing multiple. Some of these barriers were invisible, as participants weren't even aware they had any other options or answers to the questioning of their gender. Other times these barriers were pervasive, and resulted in participants feeling stuck and lonely, believing they would endure extreme hardships if they came out as trans. Other times these barriers were more structural or environmental and were overcome with more practical solutions such as moving town.

Forks in the Road

The previous two subthemes tell an overall story of confusion, denial, and awareness that something is different about you compared to others, but then facing the roadblock of not realising what it is, due to lack of trans visibility, lack of education, and lack of awareness of options for being anything other than cisgender. Then, moving through this block by coming to understand that trans identities exist and realising that is who you are, but then facing another roadblock as you realise that a trans life is stereotypically filled with shame, stigma, isolation, and struggles with mental health. Once again if you are able to work through this to decide to live openly as you are, there is yet another roadblock of not feeling safe in your immediate environment due to social stigma, lack of trans

communities, organisations, and health care. Thus, having to overcome this roadblock by physically shifting yourself to a location where you can access these things and feel emotionally and physically safer doing so. Once participants reached this point in their journey, they talked about the different factors that helped them to face the fork in the road and decide to take the path towards GAHT. Examples of different forks in the road included: lining up their transition alongside a 'fresh start in life', realising they had nothing to lose, and weighing up all the permanent changes from GAHT. The idea of a fresh start when beginning GAHT is highlighted here by Alex:

> **Alex** (28): *I suppose I've only changed jobs once, so in my last workplace, most of them probably already knew [that he was trans], but that was before I started HRT [GAHT], so it was a good time for me to start the therapy [GAHT] when I switched to the next job as well, so it was like a fresh start.*

This type of phrase was used by many participants, and the concept seemed important as it acted as a way to begin medical transitioning at a time in their lives where they wouldn't have to worry about introducing their new names, new pronouns etc to a large group of people who had initially met them under a different physical presentation. Donna also talks to this:

> **Donna** (26): *But yeah, I came to hormones first year of study because […] it was a fresh chapter […]and I think it was the coming into study that was the first time I was open from day one, like it was from that day I was like "she/her pronouns, wahine, boom". Because I was in a new setting, a new group, it was a new chapter, and I think that's what gave me- I was more confident in who I was and what these feelings were and what the dysphoria was, and I think that's what it was.*

Here Donna exemplifies the power that a fresh start can have as it helped bolster her confidence in being open with her classmates from the first day. The fresh start allows for no additional complications from others being confused or having to adjust to using different pronouns or a different name.

Some participants weighed up their unhappiness and struggles whilst not on GAHT with the fears and trepidations of the unknown outcomes of GAHT. They used this reasoning as a launching point to rationalise that their circumstances couldn't get much worse, and therefore they may as well venture into that unknown:

> **Taylor** (35): *And I was like 'I guess I don't have anything to lose then, so I will be honest.' It was like 'well, if the reason I don't feel like I can go on with my life, is that I'm not being totally honest about who I am then it no longer seems so scary,' so it's kind of like I had to confront that decision and be like 'it's either: keep going on with your life and be completely honest about who you are; or die'.*

Taylor knew that if she didn't come out to her partner and family about who she was and begin the process of perusing GAHT she would attempt suicide. The fork in the road for her was literally life or death and therefore "having nothing to lose". Once she realised this, the prospect of starting GAHT and moving more towards living in a way that was honest and authentic to herself seemed far less terrifying than the alternative. Donna, discussed having doubts and fears about medically transitioning after she started GAHT, and used a similar thought process to navigate and overcome this:

> **Donna** (26): *I kept thinking maybe I could come off the hormones for a while, and then I just kept thinking, 'I'm doing this out of fear, I'm stopping because I'm afraid, not because I think it's the right decision' […] I was like 'I'm going to be miserable either way so I may as well just take a chance and keep going.'*

Similarly, James talked to some concerns about the permanence of his voice changing on T-GAHT and whether he would like his new voice or not. He then reasoned this by saying "how could it be worse?":

> **James** (21): *I thought, you know, 'what if it changes and I don't like it?' And then I thought 'well what's the point I've never liked my voice as it is I've been trying to lower it for three years by myself and that's not doing anything, so you know how could it be worse?'*

Although worded slightly differently: 'how could it be worse?', 'I don't have anything to lose', and 'I'm going to be miserable either way, so I may as well' these iterations communicate a similar type of justification: although participants felt damned either way, they also felt that their situation couldn't get much worse and therefore decided to take GAHT in the hopes to improve their lives. Moreover, not only do these excerpts highlight just how damaging and impactful the roadblocks on their journey had been for them, they also highlight the amount of deliberation taken by participants to get to this point, and the weight of their is decision. These decisions were not made lightly and without complexity and great consideration.

One more factor that contributed to the decision-making process of starting GAHT for some participants was spending time thinking about the permanent changes that occur with GAHT:

> **Avery** (34): *Which again, is also the fear initially like 'am I just doing this to be cool, or do I really need this? Is this a mistake? Am I making permanent changes to my body that I won't actually like?'*

Avery talks to the fear or hesitation that comes with those changes being irreversible and the possibility of making a mistake or regretting her decision, or even questioning if she is seeking GAHT for the right reasons. Other participants reported working through this even more by

weighing up all the changes and deciding whether they could live with them if it transpired that they didn't like them, like James:

> **James** (21): *And eventually I came to the conclusion that I wanted to try hormones because the longer I looked at the checklist of everything it changed biologically, it was less like: 'oh I suppose I could put up with this if it gives me this.' It was more: 'well actually yeah I would quite like some facial hair, and a deeper voice, and a shift in muscle tone." Rather than: 'ooo that's quite a scary change.' It was: 'oh that would be a lovely change.'.*

James outlines that he initially engaged in bargaining with himself about what changes he could deal with if it meant he could have other changes. However, by the time he weighed up all the possible changes and which ones he wanted and didn't want, his thinking had shifted towards feeling positive rather than fearful about all the physical changes of T-GAHT. These types of internal dialogues and questioning when faced with the fork in the road was common among many participants, showing that these were not decisions made lightly, but made with serious contemplation, while facing their fears, and considering whether they can go on living as they are without GAHT or not.

Summary

These themes identify some of the important factors for participants leading up to them starting GAHT. Participants were clear that, ultimately, there is no road map for being trans. The pathways and role models that society has laid out for how to be a 'girl' or a 'boy' cannot be easily transposed for young trans people, because cisgender norms and expectations don't fit or make sense. Therefore, for what little information was available, participants were tasked with finding this out on their own. This resulted in a long, arduous, and at times lonely journey as they navigated biological, psychological, social, and physical landscapes that were novel, confusing, and non-mainstream. A journey filled with uncertainty, trial and error, and fear that their lives might be worse off, but simultaneously that their lives couldn't get much worse. Participants talked about how the media and greater society made them feel unwelcomed, wrong, isolated, and scared about being different, which created further complications and barriers.

These themes also outlined that participants did not make snap judgements or spur of the moment decisions to start GAHT. This process was greatly considered, and for some participants, they tried for a long time to pretend to be cisgender or lived in denial before finally making the decision, due to understandable reservations. These themes show that by the time participants had entered into their GPs office seeking a referral for GAHT, they had full and complete back stories, experiences, and justifications for why GAHT was the best choice for them.

These themes sadly allude to the lack of support available to participants during such a critical time in their lives, resulting in many navigating this journey on their own, with an absence of helpful with very little education information or guidelines to better understanding themselves, with a society that was feeding them negative, harmful, damaging messages. They were working through this journey the best they could with what was available to them at the time.

Chapter Eleven: Theme Two - Outcomes of GAHT: The Body

When asked "what have you noticed since taking GAHT?" participants talked about a number of changes that occurred for them physically, within themselves, and also socially. It is acknowledged that people's views of themselves are intricately woven in and around their experiences with their physical bodies and their interactions with others. The body, the self, and our experiences with others are interconnected. However, for analysis, I separate these concepts out across three themes and three chapters.

Thus, with theme two, *Outcomes of GAHT: the body*, I provide analysis around the physical changes following GAHT, divided into three subthemes. First, participants talked enthusiastically about the positive changes that occurred – which is highlighted in the subtheme 'the welcomed changes'. Second, participants talked about the changes they knew would not happen from taking GAHT, but how much they wished for these changes to still occur – discussed in the subtheme of 'the wished for changes'. And third, participants talked to the discrepancies in changes between T-GAHT and E-GAHT – conveyed by the subtheme 'not all changes are considered equal'.

The Welcomed Changes

Overall, participants reported many positive and affirming physical outcomes from GAHT. For those participants taking T-GAHT, all five commented positively on their voice dropping. For some the main motive for seeking T-GAHT was so their voice would drop and they would stop being misgendered as female as was the case for Quinn:

> **Quinn** (28): *My voice dropped within a couple of months and at that point people just started gendering me as male um, so it happened really fast.*

Not only was Quinn's main objective with seeking T-GAHT achieved, but it was also achieved quickly. For most participants taking T-GAHT, this was one of the most significant and impactful change. Not only was their deepening voice a welcomed change to alleviate their dysphoria around hearing their own voice, but it also alleviated their anxiety around speaking to others, for example:

> **James** (21): *I'm a little bit better at talking to people on the phone, or at least I pick up the phone now. I used to do vocal exercises before making important phone calls to try and lower my voice […] People would call me and say, 'hello is this, *James?' and I go *lowered voice* 'Yes' *laughs*. I don't worry about that anymore.*

Others also experienced anxiety that people would hear them speak and misgender them prior to T-GAHT. This was severe enough that they would avoid speaking. As James explains he would do vocal exercises to try and lower his voice for phone calls, but, also, he would just often not answer

the phone. Alex also reported he would intentionally lower his voice when speaking at work and recalled how uncomfortable this was for him, causing damage to his throat in the process:

> **Alex** (28): *Because I realised that I tried to speak really low and sometimes it was really uncomfortable and I could taste, like, blood sometimes, so that wasn't great. Um especially when it started impacting on work and I didn't speak very much in the office.*

Vocal changes increasing their ability to speak and contribute more to social situations such as their work, highlights how impactful this physical change with T-GAHT is. James also explained the impact that T-GAHT had on his ability to sing in a lower vocal range, describing this newly accessed ability as "one of my most favourite and affirming things to do."

Almost all participants taking T-GAHT also mentioned facial and/or body hair when asked what physical changes they enjoyed, such as:

> **Quinn** (28): *I do like the changes in my body, most of them, umm it feels like kind of exciting to have new things happening in your body. Um and so like I like that I'm getting a little facial hair.*

Most participants taking T-GAHT talked about expecting their body and/or facial hair to grow faster and thicker than it did. For some, like Blake, this was frustrating as they desperately wanted to grow a moustache, and after a year on T-GAHT it was still sparse. For others, such as James, this was a relief as they were uncertain if they wanted facial hair as they thought it would be "messy and annoying" and were pleased with the small amount they had grown. Being agender, Jo was hesitant about growing facial hair and body hair as this was a change they felt would not personally align with their gender. Jo was able to talk to their endocrinologist about starting on a smaller dose than would typically by prescribed to someone who aligns more towards a male or masculine gender:

> **Jo** (30): *And mostly what I notice now is just body hair starting to happen. It's all been very slow because I'm only on a third of a millilitre over a period of 20 days. So, every 20 days a third of a ml. So even though it's been a year, I guess I probably only look like someone that's been on (testosterone) a couple of months. Which is exactly what I wanted.*

Even though Jo is starting to develop some body hair, the lower dose of T-GAHT made the progress much slower. This allowed them time to adjust to these changes and resulted in them being, overall, pleased with their hair growth. This illustrates how T-GAHT can be helpful for non-binary trans as well as binary trans people.

With regards to welcomed changes for participants taking E-GAHT, all five participants taking E-GAHT commented positively on breast growth. Such as Avery who recounted how affirming their breast growth was:

> **Avery** (34)**:** *And then yeah there are physical changes, main one being some breast growth, they're small but they are there, and I love it, it's so good and it seems kind of silly but it's absurd how much joy I get from looking at my tits *laughs*.*

This sentiment was echoed by both Donna and Taylor who reported that they were happy with the size of their breasts and wouldn't want anything much larger than an A or B cup. Lavender also discussed the positive impact that breast growth had on their body by stating that their breasts have "taken the masculine edge off". Taylor also commented on breast growth being a welcomed change as it resulted in her being misgendered less:

> **Taylor** (35): *It's only recently that people have started to immediately read me as woman, even if I'm wearing a t-shirt and jeans. Just because I have breasts and my face is kind of feminine. I have more woman tells than I have man tells.*

My reading of this is that Taylor used the qualifier, "even if I'm wearing a t-shirt and jeans" to imply that she does not need to be wearing overly feminine clothing in order for others to see her the way she sees herself. Like that of voice changes with T-GAHT, the physical changes of E-GAHT, such as breast growth in this instance, were a welcomed change not only to alleviate dysphoria around their chest, but also to alleviate anxiety around the potential of being misgendered.

Changes to muscle mass and fat redistribution were received positively by participants taking both T-GAHT and E-GAHT. Almost all participants mentioned the positive changes that T-GAHT made to their physical build and increased muscle mass in some form or another. For example, Alex reporting that "it's nice to see a change in muscle distribution". And Jo stated that the impact this change had on their weightlifting was a change they "probably enjoyed the most". James stated:

> **James** (21): *Um prior to taking hormones, […] I wasted a good wee portion of my life just staring at myself in the mirror and trying to think myself into a different shape […] and yeah post transition the hormones have really helped me feel more confident in um my torso shape sort of minimising my curves around my hips, and the extra body hair has actually been quite helpful in fighting dysphoria.*

T-GAHT allowed James to no longer spend 'wasted" hours looking in the mirror and hoping to see a different body. He described being "overly harsh" about aspects of himself that he "couldn't change". Thankfully, T-GAHT changed certain aspects about his physical build and allowed James to experience increased confidence in his body.

Likewise, some participants taking E-GAHT commented positively on their fat redistribution and the impact this has had on their physical shape and feelings of affirmation within their body. Some participants used words like "rounder" and "soft" when describing their new bodies, like Donna:

> **Donna** *(26): Um, my shoulders, I've got my broad Māori shoulders, yay, but they've kind of rounded and softened, things like my arms just the muscles have kind of […] just shifted that little bit rounder or smoother or softer. Always had a booty but just got that little bit more, and it's kind of shifted shape. […] Um like things like waist, I've lost a bit of weight around here *points to waist* and it's shifted around the hips.*

Therefore, the fat redistribution from E-GAHT resulted in participants experiencing their bodies as smooth, round, and soft which was associated with increased feelings of femininity. Taylor and Lavender commented on the noticed decrease in their strength following E-GAHT. Taylor described this shift as "interesting" and sounded almost in disbelief about how much testosterone blockers and oestrogen affected her ability to perform the same amount of push ups as she used to prior to starting GAHT. Lavender described this change, as "unfortunate" as they wanted to retain their strength. Therefore, although participants taking E-GAHT welcomed most bodily changes such as fat redistribution, some found the decrease in their muscle mass to be disappointing. However, the overall welcomed changes that occurred from E-GAHT far outweighed the more 'unwelcomed'.

Participants taking E-GAHT and T-GAHT also talked about changes that occurred to their skin. These changes were described differently depending on which type of hormone was being taken. Taylor, Donna, and Olivia talked about the welcomed changes that E-GAHT had for their skin as it became softer and smoother:

> **Olivia** (45): *So, I'll tell you the physical because that's much more quantifiable in some ways. That's good stuff. I like it. I like the fact that my legs are just incredibly smooth for some reason. And my partner's is like sandpaper *laughs* but mine, I don't even have to shave them anymore. And that's great. A lot of bio women don't have that, so I don't know how I lucked out on that. It's like freshly shaved legs half the time, it's so good. But without having to shave. But yeah, all the all the physical changes are really nice, and I guess the word is affirming sort of thing.*

Here, Olivia insinuated how affirming this physical change was by comparing her leg hair to that of her partners, who is a cisgender woman and also by her comment "a lot of bio women don't have that, so I don't know how I lucked out on that". Because women are stereotypically expected to be smooth and free of body hair, Olivia is implying that by having this stereotypical trait she felt more affirmed as a woman.

Conversely, Quinn, James, and Blake all commented on the impact that T-GAHT had on their skin with regards to increasing oiliness and acne. For Quinn in particular this was something that they explicitly stated they did not "enjoy". However, similarly to those participants taking E-GAHT who commented on their loss of muscle mass as a more 'unwelcomed' change, participants who

experienced acne were able to weigh up the welcomed changes in their body from T-GAHT, overall, and determined that this was a minor inconvenience in the greater scheme of things.

Two participants taking T-GAHT also commented on the cessation of menstruation as a welcomed physical change. Although there was a period of time where his menstruation came back before he increased his dose of T-GAHT, Alex commented that this change was "a huge load off my back". When asked about the impact that menstruation had on his life before it stopped:

> **Alex** (28): *Yeah, um so it was huge. So, before I got hormone therapy, every time it happened it was just very stressful, very very stressful. Because I've had nightmares about bleeding in public and things like that […] It affected a lot of what I could or could not do, like water sports, running, and then being able to access public bathrooms to check and things like that.*

Alex outlines that having periods impacted him both psychologically and functionally. Not only did he experience nightmares and feel anxious whenever he bled, but it also prevented him from engaging in activities or using the men's bathroom due to the lack of sanitary bins. James commented on feeling much luckier than others taking T-GAHT who have unfortunately not had similar results:

> **James** (21): *I think one of the hardest things about hormones for me has been learning how genetically lucky I am that it hasn't impacted my weight and it's stopped my menstruation cycle within a matter of weeks. And I know people who are still feeling awful and mixed levels of energy and their weights changed and they still bleed after like two years of T [testosterone] and it's, um, crazy.*

This subtheme highlighted the welcomed changes that occurred for participants taking either T-GAHT or E-GAHT, with a nod to few of the 'unwelcomed' changes. It is apparent that the welcomed physical changes from GAHT varied greatly depending on whether participants were taking E-GAHT or T-GAHT, but that many of the actual impacts of these changes were similar, for example being misgendered less and alleviating feelings of gender incongruence. However, I interpret James' extract above to highlight an important consideration that sometimes, there are also differences within people taking the same type of GAHT. Although most participants taking T-GAHT experience changes after one year, this extract highlights that not everybody's experiences will be the same even when they are taking the same type of GAHT. Understanding that two people are alike, so no two journeys with GAHT will be alike is an important consideration for people wishing to commence GAHT. This medication impacts individuals differently based on a myriad of reasons, and sometimes looking externally towards others as an indicator of what changes will occur within your own body is not always the best indicator.

The Wished For Changes

Prior to starting GAHT, participants were informed on what physical changes would occur and would not occur. Despite stating in interview that they knew which changes were not going to happen following GAHT, participants still commented on their wish for these changes (irrespective of GAHT), at times expressing frustration at not being able to obtain them.

For participants taking E-GAHT, one of the main wished for changes was a feminisation of their voice. Like, James, Donna and Taylor use their voices regularly for singing and acting. Donna recalled that her voice was the "thing I have most dysphoria about". She stated she knew it wasn't going to happen, but still held on to some hope that E-GAHT would have a small impact on feminising her voice, expressing disappointed when it didn't change.

> **Donna** (26): *I think I was hoping for - and then when I talked to *Psychologist I was like "oh of course that makes sense"- is shifting my voice more. Because that's one thing, especially cause I love singing and I'm an actor, so using my voice is a part of my career. That's one thing that I've just had to deal with.*

Olivia and Taylor also talked about the impact that their voices had on their own feelings of gender incongruence and dysphoria, with Olivia stating:

> **Olivia** (45): *So, when it happens (being gendered correctly) it's nice, and then I talk and ruin it all cos they hear my voice.*

I interpret Olivia's use of the term "ruin it all", to indicate that she feels she has made progress with E-GAHT as she is now experiencing instances of being gendered correctly and how good that feels for her, but that her voice ends up "ruining" such progress. Similarly, when talking about her voice, Taylor stated that it's "the last thing I have to figure out", implying that she has progressed to a satisfactory level through all other changes with E-GAHT, and that her voice is the only one left behind. Taylor also discussed that modulating her voice for singing was particularly difficult due to her low "bass/baritone" singing range. She outlined her thought processes which resulted in her achieving a level of acceptance for her low singing voice. Although she was able to come to terms with having a lower singing voice, she was not, able to come to terms with having a lower speaking voice. She expressed a desire to seek out voice therapy to try and address this, whilst also expressed concern around whether or not this would be funded for her, or if she would have to pay out of pocket.

While E-GAHT can make body hair and facial hair softer, it does not cease the growth of facial and body hair. Therefore, this was another wished for change that all participants taking E-GAHT knew

wouldn't change but were still wishing for these changes and trying to make the steps to action them.

To emphasise how much of an issue having facial hair was, Taylor stated that "facial hair removal is, like, the single most important thing that hormones [E-GAHT] don't do." While Lavender expressed wish and intent to get their body hair lasered off due to it being a "source of dysphoria". While some participants were undertaking hair removal treatments, such as laser hair removal, in order to cope with these feelings of dysphoria, not everyone was at a point of being able to access it. For example, Avery, who was using a laser hair removal device that was supplied by Gender Minorities Aotearoa. Although this was not the most effective means of removing their facial hair, it was their best option.

> **Avery** (34): *It's not as good as actually going to a place or whatever but for $20 instead of a couple of $100 a session or whatever it is […] It's one of the things that there's no funding for either.*

A wished for change that participant's taking T-GAHT talked about, was creation of a masculine chest, as T-GAHT does not result in chest [breast] reduction. Top surgery is the only intervention to create a masculine chest. This change was desired by most participants on T-GAHT. As evidenced by two participants who had privately funded top surgery at time of their interview, like Blake:

> **Blake** (29): *Yeah, I am just so lucky in that I came into some money which I was able to use for top surgery. And if I hadn't, I'm like, an artist, it would have taken me years to save up this amount. And it just wouldn't have happened. And people kill themselves. When I thought I would never have the strength or the means to get access to surgery, I experienced that. […] it's actually a matter of life and death for so many people.*

For both James and Blake this was a life changing surgery that allowed them further confidence and comfort within their bodies that T-GAHT was not able to provide. Blake emphasised just how life changing this surgery was for him, with the phrase "it's actually a matter of life and death", commenting that he experienced feelings of suicidality at times when he thought he would not be able to access it. Unfortunately for Alex and Jo, they were not at the stage during interview where they could access top surgery for themselves, but this was something they both wanted. Jo stated, "I would like very much to not experience chest dysphoria", and Alex reported that he would "definitely get top surgery if it was cheaper", indicating that, similar to laser hair therapy, and voice therapy, this is a much-needed physical intervention that GAHT does not address, that not everyone has access to funding for.

Changes to actual bone structure/skeleton was another wished for change that participant's taking both T-GAHT and E-GAHT commented on. In fact, Taylor explained that she had an "abnormally

large" nose which she associated with a more 'masculine' face. For her it was a personal prerequisite to have a rhinoplasty prior to starting E-GAHT as she knew E-GAHT would not change the size of her nose, and she did not want to transition without having made it smaller. Unfortunately, unlike Taylor, most participants are not able to change certain parts of their skeletal structure to feel more gender affirmed. Such as James and Jo, who wished to be taller, however having gone through female puberty prior to starting T-GAHT, knew this would not be a possibility. Moreover, Lavender commented on E-GAHT:

> **Lavender** (26): *Like, it's [E-GAHT] not going to change like broad shoulders, all those established physical traits due to the ol' testosterone puberty.*

Both Lavender and Jo mentioned going through a puberty during their teenage years that was not the puberty they wanted. This, in turn, not only resulted in their body developing a skeletal structure that they did not want, but one that they cannot change. Blake also talked about wished for changes:

> **Blake** (29): *Yeah, I think something I didn't talk about in that question about like, negative stuff is like, experiencing dysphoria. You know, I wish I had a dick, sometimes, an optional. Yeah. And I wish I had a bigger frame and all of that shit.*

Even though Blake has welcomed and enjoyed the physical changes from T-GAHT, he acknowledged that he still experiences dysphoria around certain parts of his body that T-GAHT has no impact on. This highlights that GAHT, has its limitations and cannot change all of the physical traits or characteristics that cause people's feelings of incongruence or dysphoria. Regardless of these limitations it is important to stress that the effects of GAHT do provide bodily outcomes that are dysphoria reducing and gender affirming.

Not all Changes are Considered Equal

When comparing the welcomed and wished for changes with E-GAHT to the welcomed and wished for changes with T-GAHT, I developed an insight into a perceived disparity between the two. With T-GAHT, participants experienced drop in voice, growth of facial and body hair, and increase in muscle mass. Their main wished for change that T-GAHT does not offer is reduction in chest size. For E-GAHT, participants experienced breast growth, fat redistribution, and softer skin. Their main wished for changes that E-GAHT does not offer are changes to voice, and removal of facial and body hair. As outlined by Taylor:

> **Taylor** (35): *I think that basically the three things that are irreversible, breast growth, facial hair, and voice dropping, and this is why trans men, when they take hormones, it doesn't get rid of their breasts, but it does make their facial hair grow and it does make their voice drop, so great! Um for trans women, it does make our breasts grow, but it doesn't get rid of our facial hair, it doesn't make our voice change.*

Here, Taylor is expressing her frustration by comparing these irreversible secondary sex characteristics that develop from puberty, that GAHT has no impact on – breast growth for those assigned female at birth, and voice and facial/body hair for those assigned male at birth. From my reading of this, Taylor's comparison is showing an imbalance between the physical changes as T-GAHT has no impact on one main wished for change, whereas E-GAHT has no impact on two main wished for changes. Thus, a common rhetoric was that those taking E-GAHT had a harder time transitioning than those taking T-GAHT. This is further highlighted by Olivia:

> **Oliva** (45): *I think I'd done enough research to know that it wasn't gonna happen [change in voice]. And I knew that it does happen for guys. Lucky Bastards.*

Here Olivia is commenting that although she wanted her voice to sound more feminine, she knew that E-GAHT wasn't going to have that effect. Her reference to 'guys' here, is about those taking T-GAHT and how lucky they are to experience a change in their voice. I interpreted this comment "lucky bastards" as imbuing a sense of envy or unfairness towards how quickly and impactfully voices drop with T-GAHT, compared to no changes at all in voice with E-GAHT. These sentiments and levels of comparison are also reflected more explicitly by Donna:

> **Donna** (26): *It's not that I think my voice is bad, I think that it's wrong. Because it's more low and more resonant, which is fine, I wouldn't want to change it too much, but yeah that was one thing I was hoping for and when I found out that it just does not change at all I was like *sighs* 'of course men have it easier'.*
>
> **Emma:** *You mean like trans men have it easier, because?*
>
> **Donna** (26): *Yeah, they get a whole beautiful - my friend *Dylan within the first four months [of taking testosterone], beautiful resonant base voice and I was like 'yeah fuck you too dude, that's fine, I'm over here struggling, doing [vocal] exercises every day.'*

Similarly, James also commented on a conversation he had with his friend who had been taking E-GAHT:

> **James** (21): *One of my friends is MtF and, you know, we can compare stories and I'll talk about: 'oh yeah I'm growing hair everywhere and she's like well my voice is never going to change as much as yours and I have to make peace with that.' And I'm like: 'oh that's right, you have a really rough time with that and I'm just over here just sailing through'.*

These two excerpts clearly identify this disparity and sense of unfairness or inequality by the wording used by both Donna and James – struggling and sailing. Donna recalls aspects of her transition with E-GAHT as a 'struggle', as she is having to do vocal exercises every day to try and feminise her voice, while her friend's voice dropped within the first four months of taking T-

GAHT. Similarly, James' conversation with his friend taking E-GAHT and their comparisons of changes made him realise that he's had an easier transition and has been "sailing through".

The main reasons why such emphasis is placed on these three wished for changes is that they are most often viewed as the physical characteristics that wider society uses to discern gender. For example, Alex noted that, prior to taking T-GAHT, but while he was socially transitioning, he would often notice co-workers glancing down at his chest as if to determine whether he had breasts or not in order to classify his gender. And as highlighted above, Olivia talked to the fact that her voice is one of the main reasons that "ruin" it when people gender her, as she noticed that people may initially gender her correctly as female, but then misgender her when they hear her speak in a lower pitch.

Therefore, across participants taking both T-GAHT and E-GAHT there was an understanding of inequity between the physical outcomes, and the resulting impacts that these had. Those taking T-GAHT experienced physical changes that resulted in more noticeable changes, thus resulted in them being misgendered less, or having less anxiety towards the prospect of misgendering. Whereas there was the perception that because the physical changes from E-GAHT were less 'obvious', this was more of a struggle for those taking E-GAHT.

Summary

Although the physical changes from GAHT were affirming, or at the very least manageable, there are certain physical attributes that do not change with GAHT that were still wished for. These desired changes greatly impacted participant's lives and were still changes that many participants were hoping to achieve at some point. While most of these wished for changes can occur with additional interventions such as surgery, vocal therapy, and permanent hair removal, there are still many barriers to accessing these services. Such as additional referrals and long wait lists, means tested funding or having to pay privately. Theme two also highlights how the physical changes experienced (or not experienced) from T-GAHT and E-GAHT resulted in a perceived disparity between the two groups. Due to the nature and pace of these physical changes, the process of undergoing E-GAHT was believed to be more of a struggle than for those undergoing T-GAHT.

Chapter Twelve: Theme Three - Outcomes of GAHT: The Self

The physical changes in the body, were not the only affirming changes that occurred following GAHT. These physical changes provided a launching point for many participants to experience different facets of themselves as well as experiencing and navigating social interactions and environments in new and interesting ways. Throughout theme three, *Outcomes of GAHT: The Self*, I provide analysis of the changes that occurred with GAHT in relation to participants' views of themselves. I included the three most commonly mentioned changes, which have been organised around three subthemes: 'self-expression', 'sexual expression', and 'mental wellbeing'.

Self-Expression

Self-expression can manifest in a variety of ways, such as clothing, creative expression, and engagement with others. For many participants, GAHT had a positive impact on improving many forms of self-expression, for example:

> **Lavender** (26): *I mean I'm definitely happier with how I look. Even if I can't tell you exactly why. I got a little bit more confidence and that gave me some wriggle room to play around with my appearance, with my clothes and what not.*

The physical changes that Lavender experienced increased their level of confidence in themselves and allowed new opportunities to expressing themselves with clothing they would not have felt comfortable wearing prior. This was also true for James, who is an actor, and did not feel comfortable acting in "silly" or "campy" roles prior to starting T-GAHT. This lack of confidence arose from him feeling uncomfortable in his body, which spilled over into him feeling uncomfortable or insecure about the ways he expressed himself, restricting himself to only performing more masculine parts on and off the stage:

> **James** (21): *Umm I'm much more comfortable with playing silly roles, or villains and things, I'm just more confident in myself and especially in my body and I'm just more capable of laughing at myself, or physicalising a silly character for the stage. […] Whereas pre transition I would have been all self-conscious and worried about […] trying to be more masc than just *playing the part.*

Like James, other participants also spoke of instances where they policed their forms of self-expression in order to feel more comfortable in their own skin prior to GAHT. This is referring to when participants felt as though they needed to 'hyper-perform' a specific binary gender presentation. Such as trans women dressing and behaving as overly effeminate and trans men dressing and behaving as overly masculine, for example:

> **Donna** (26): *I use to police myself a lot more, I guess I'm just more sure of myself now, where I don't second guess as much. […] I definitely use to; I definitely use to be like "I am*

> *visible and so I have to be a 'good trans girl' and act the part and be socially acceptable" But I'm just not socially acceptable as a person.*

Here Donna is referring to being a 'good trans girl' as wearing makeup, dresses, and heels, speaking softly, shaving her legs and acting demure. As her journey with E-GAHT continued, Donna felt surer of herself, and relinquished her internal concerns around how others would perceive her. This resulted in an increase in confidence for Donna to express herself in a more 'androgynous' way and not feel as if her sense of self-worth as a woman was being threatened. Prior to GAHT, participant's policing of their self-expression not only served as a function to convince themselves that they 'deserved' to be the gender that they are, but also to convince or "prove" to others:

> **Taylor** (35): *Before I started hormone's I kind of felt like I had to perform femininity in order to convince people I was a trans woman, it's like I had to convince people that I was genuinely a trans woman otherwise they wouldn't believe, and I don't really feel that way anymore because I am a woman, I feel like a woman. I look more womanly and I feel emotionally like a woman. Because of that I don't feel like I have to perform femininity, it's just what I am.*

For Taylor and many other participants GAHT supported her to feel internally affirmed in her gender and therefore have less need to seek external affirmations from others or be concerned about others who may show doubt. GAHT enhanced participant's self-assuredness, which enabled them to not only feel comfortable and confident within their bodies but comfortable and confident with expressing their unique selves and breaking away from more prescribed notions of gender expression.

Therefore, GAHT increased participants' ability to express themselves more fully. The ways in which participants were able to express themselves varied from person to person however they all resulted in a similar outcome increased confidence to explore themselves and creating a physical alignment with their psychological self.

Sexual Expression

Over half of participants commented on the changes that GAHT had either to their genitals or their libido and the impacts this had on their sexual experiences. This was overall discussed positively, or at least neutrally. For both Donna and Avery, changes to their sexuality following E-GAHT were expressed extremely positively. For Donna especially, this change was particularly affirming as it resulted in her feeling more in line with her gender. And it also increased her ability to feel more comfortable with her body in sexual situations, stating:

> **Donna** (26): *Oh, like, sex changes, orgasms change. Female orgasms, oh my god, just so much better, so much better! Didn't know that was going to be a thing! … I definitely enjoy sex and am more comfortable with sex now. Not as much as I could be, like it's still*

> *uncomfortable and it's still a lot of mental stuff going on there. But those were small changes that made me feel like I wasn't where I wanted to be, but I wasn't where I was, so it's better.*

Donna discussed her desire for gender affirming genital surgery (GAgS), and her feelings of disappointment and hopelessness about the long wait list for it. She reported that the wait for publicly funded surgery was approximately "50 years" and discussed how pointless this wait list was because she would be in her 60's or 70's by that time unless she could come up with the money to fund it privately. Therefore, the impact of this outcome from E-GAHT was helpful for Donna as it served as a consolation for a larger issue. Even though she described it as a small change, it still eased her sense of frustration and disappointment with the lack of funding and long wait times for GAgS.

Alex also noticed a change in his level of comfort with expressing himself sexually as his libido increased with T-GAHT. He reported feeling less shame around masturbating and watching pornography:

> **Alex** (28): *Libido was definitely one thing, and I think less shame in indulging with that for some reason *chuckles* just because it's expected that like guys think about sex more often. But yeah.*

As Alex's body continued to change physically towards a more masculine build, and as T-GAHT increased his libido, the more comfortable Alex felt exploring his sexuality from a masculine viewpoint. Because Alex believed this behaviour was stereotypically more acceptable for men, this was more acceptable and affirming for himself as a transgender male. For Taylor, taking E-GAHT resulted in a decrease in her libido, however she framed this in a somewhat positive way:

> **Taylor** (35): *Oh, I definitely lost my sex drive, umm I don't really mind that because, like, sex drives can be annoying.*

Like, Alex Jo also experienced an increase in libido; however, this was concerning for them as they anticipated that it might also change their sexual orientation:

> **Jo** (30): *So, I'm also asexual and I was really worried that starting testosterone was going to change my orientation and, like, make me some kind of sexual which was disturbing for me because I'm sex repulsed. And it did change in the fact that I actually have a libido now, but I'm not attracted to any gender still, so that's actually been a lot easier to deal with than I had feared. Yeah, so I was quite worried about that before starting but it hasn't eventuated into anything.*

Although T-GAHT did have an impact on Jo's libido, their asexuality remained the same. Therefore, this was less of a positive change for Jo and more of a neutral or slightly inconvenient

change that took some adjusting to. Similarly, for Blake changes to his genitals from T-GAHT resulted in a change with his sexual experiences that required some adjusting to:

> **Blake** (29): *And even one of the first changes was like my 'bits', it gets, it's just like bigger and really sensitive. Which was fucking annoying to be honest. But again, that change is like fine and manageable and wanted.*

Although the sensitivity of 'bottom growth' [clitoral enlargement] was annoying for Blake, him describing it as a wanted change indicates that this was still an affirming experience for him. Similarly, to Jo, this change for Blake was also described as something that was manageable. Therefore, while changes to sexuality and sexual expression were well received and provided affirming experiences, like many big life changes, these also took some adjusting to.

Mental Wellbeing

Within the concept of the self, is also mental wellbeing which can be described as a combination of how we feel and how we function. This subtheme refers to analysis in relation to the changes that GAHT has on participant's emotions, mental health, and substance use. With regards to emotions:

> **Jo** (30): *I noticed a few small mood things, like, for me it was less about becoming more confident which is what everyone talks about, and more that it was much easier for me to cope with anxiety. I have quite a bit of anxiety, and after I started testosterone, I found I was exactly as anxious, but it was much easier to just carry on anyway. So that was very interesting […] it makes it easier to deal with, like, if my boss is upset with me, it's easier to put it out of my mind, you know, that kind of stuff.*

Like Jo, Alex also recounted struggling with anxiety, and the positive impact that T-GAHT had on making this easier to deal with, especially when experiencing stressors at work. They both talked about still being able to feel and experience their emotions but were also able to approach complicated situations more effectively with emotional regulation and gain clarity. Taylor also discussed the positive impact that E-GAHT had on her emotions, reporting that she feels much less angry now, and has become calmer:

> **Taylor** (35): *Even if there were no physical changes whatsoever, it [E-GAHT] would still be worthwhile jut for the fact that it's chilled me out and made me a much nicer person.*

She goes on to explain that her ability to feel emotions has not specifically changed, but her ability to behave or respond to her emotions has. Prior to E-GAHT, Taylor reported that she used to experience a lot of anger which placed a strain on her mental health and her social relationships. Therefore, E-GAHT resulted in Taylor reacting to difficult emotions in a more measured way. Although Donna initially experienced emotions that were "really chaotic and really intense" at the

beginning of E-GAHT, and was filled with feelings of depression and tearfulness, she found that with time this subsided:

> **Donna** (26): *Um yeah, the emotionality, I as a person have definitely shifted. I'm so much calmer, I'm a lot more grounded and a lot calmer. I couldn't tell you exactly the way my brains shifted, but it definitely has shifted.*

It is important to note, that not everyone described a wholly positive change to their experiences with emotions, following GAHT. For Blake, taking T-GAHT resulted in an increase in feelings of irritability and frustration, both in intensity and reaction time. He described this as overwhelming and similar to a heat wave. However, for Blake, the positive experiences overall from T-GAHT far outweighed any negative experiences, and he approached this change proactively, seeking support from others:

> **Blake** (29): *Yep. Yeah, literally, I'll just get a wave of really intense frustration, and part of it is just literally who I am as a person. Like, I'm just stubborn and not super patient. But definitely the intensity of it, and the accompanying physical sensation is very new. Yeah, I still deal with it. I said to my trans mate "this sucks, when can I expect this to stop?" and he was like "it kind of doesn't go away, it just gets more manageable" so that's kind of what's happening.*

This extract highlights that, like many big life changes, changes with GAHT sometimes take time to adjust and adapt. Even though some changes with GAHT were challenging, participants were able to adapt to them, shifting their expectations, and acclimating, and did not perceive them as entirely negative.

Moreover, three participants in particular discussed their substance misuse and the function this had on helping them to cope while they were still struggling with their gender:

> **Avery** (34): *Also, I guess it was never really a conscious thing, but it doesn't feel like it's a coincidence that I stopped drinking and started more actively transitioning around the same time. I think there is a big crossover in those two things being possible and being available and yeah, I wasn't consciously drinking to avoid or to cope but I definitely don't need to drink to cope now.*

For Avery, they also commented on how E-GAHT has had a much more positive impact on their mental health compared to the "years of antidepressants and years of alcoholism" that they partook in prior to starting GAHT. Like Avery, Blake also commented on the direct link that alcohol had on his ability to cope with being trans prior to coming out:

> **Blake** (29): *Yeah, it's [substance use] absolutely direct yeah. Because I'd been, depressed for so long and so uncomfortable in my body and didn't have the awareness or language to explain what was happening. Alcohol, as a young person, was the first real relief I ever*

> *experienced. Yeah. And continued to do that. And it was an avalanche. Like, I came out as trans while I was still drinking. And then being honest with yourself is like a little bit of a chain reaction. So yeah, in lots and lots of ways I just started fixing my life a little bit and quitting alcohol was an essential part of that.*

Alcohol was a way for Blake to "feel relief" or to numb his level of discomfort that he was feeling about his body, and his feelings of shame around his gender identity. During interview, he also talked about the severe consequences that his substance misuse had, as he attempted suicide multiple times whilst intoxicated. Here Blake also discusses "being honest" with himself as a chain reaction. When looking back at his journey leading up to T-GAHT, he stated that he was in denial for a long time before coming out as trans. Once he came out as trans, this act of being honest with himself in his gender resulted in a domino effect for him being honest about other aspects of his life, including his substance use.

Taylor also described trying to "block" her dysphoria and her "yearning to be a woman" by drinking alcohol and smoking cannabis. She found that after starting E-GAHT, her alcohol and cannabis consumption decreased drastically:

> **Taylor** (35): *What's happened since I started taking hormones is that I basically just immediately stopped smoking weed. I think in the almost two years since I started blockers, and probably like, a year and three quarters, 21 months, I guess, since I started oestrogen, I've smoked weed maybe, like, three times. Between the ages of 16 and 32 I was probably smoking at least once every two days and drinking a lot as well. […] Basically, once I started taking oestrogen that just, I, I just didn't need it anymore.*

Participants reflected on the need to use substances as a way to deal with their unhappiness, shame, or denial about who they were. However, participants also reflected on how becoming more honest with themselves about their gender identity as well as starting GAHT resulted in them no longer needing to depend on alcohol or marijuana to cope as they became more affirmed in their gender.

Summary

GAHT resulted in many different changes to participants' internal experiences such as shifts in their mental health and coping mechanisms, shifts in their confidence and self-expression, changes in the way the feel and experience emotions, and changes and confidence in their sexual expressions and experiences.

Chapter Thirteen: Theme Four - Outcomes of GAHT: Others

The last of the 'Outcomes of GAHT' series, theme four, looks into participants' perceptions of changed social interactions following their commencement of GAHT and the impact these have had. Divided into four subthemes: 'navigating gendered spaces', 'being misgendered', 'GAHT alleviates misgendering', and 'to be seen or not to be seen'.

Navigating Gendered Spaces

This subtheme pertains to the new gendered spaces that participants started navigating following GAHT, and their perceptions of how others may view or respond to them in that space. The phrase 'spaces' here refers to both physical spaces such as bathrooms, as well as more abstract spaces such as gender roles and norms. This theme outlines the complexities and nuances behind participants thought processes and their realisations of what it means to access- or belong to such spaces. For example, James's description of using the men's bathroom:

> ***James*** (21): *Every time I go to a public bathroom, I just wish they'd play music […] Because I still get very self-conscious about peeing in the presence of other people. And generally, just sort of walking into a men's bathroom and going straight past the urinals and into the cubicles and I think that's a bit of a silly thing to worry about, but I still do.*

Although he commented that he knows nobody is doing a 'double take' when he walks into the men's bathroom and he feels it's "safe" to do so now due to the physical changes from T-GAHT, he still experiences trepidation and is overly self-aware when others are in there due to how they may perceive him. This type of nervousness was common across other participant narratives, for example, Taylor who described the turning point on her journey with E-GAHT where she realised she would have to commit to using the women's bathroom when her physical changes became more pronounced. She talked to her hesitations around this:

> **Taylor** (35): *Is someone going to freak out at me cos they don't think I should be in this bathroom?*

Taylor's concern about how others may respond towards her when she uses the women's bathroom suggests she is fearful that others will react in a way that indicates she doesn't belong in that space. Thus, part of participants navigating this space goes beyond feeling trepidation that others will perceive them as trans and moves into fears that others will actively deny and decline their right to use that space. Olivia echoed similar sentiments to Taylor, and outlined why there is often this feeling of hesitancy for trans people (particularly trans women) when trying to use the appropriate bathroom:

> **Olivia** (45): *[…] so much of the vitriol at the moment that's out there, is about space being invaded, and all these kinds of things, and I'm not interested in invading anyone's space. I'm genuinely one of those people that just wants to get on and do her own thing. I mean, if there's a family changing room at the pools, God knows I'm going to that one. I don't want to make things complicated. Yeah, I just want to get on with things. And that idea of trans activism as this hoard that's trying to claim things that aren't ours and all those kinds of things, and it's just so off from the reality.*

Here Olivia is disputing a common anti-trans rhetoric that many anti-trans groups use in attempts to prevent trans people from being able to access their correct gendered spaces. It is often argued that trans people (in particular trans women) want access to women's bathrooms for malicious or predatory reasons, alluding to this as an 'invasion' of women's safe spaces. Thus, making trans women feel uneasy and uncomfortable when using the women's bathroom for fear they will be viewed this way.

However, it was apparent from interviews, that this was far from the case. Participants showed considered and respectful approaches for accessing such spaces. For example, Donna discussed a trip she took to a Marae[1] with her university class and the conversation she has with the other women in her class:

> **Donna** (26): *We went to the Marae […] and I had a quick korero with the other girls and I was just like 'I just want to check in, obviously I'm going to be using the wahine bathrooms with the showers and everything, I just want to make sure you're all comfortable with that, if you're not, that will be a little bit heart-breaking, but I'll understand, there's a non-binary bathroom, I can use that one.' And I was also very nervous, it was first year, I didn't know these people very well […] And all the girls were fine with it, and they really appreciated that I took the time to do that, especially because I hadn't started transition at that point – not that that really matters. I can see how someone might perceive my [then] male body in their space and feel a bit uncomfortable without that being strictly transphobic.*

By having that conversation, Donna wanted to convey that she did not inherently feel entitled to- nor was she trying to 'invade' this space. She wanted to show the other women that she respected them and respected the space she was hoping she would be welcomed in to and feel safe in. It was important for her to have that conversation, not only to address her own anxieties about being perceived negatively by others and about being denied use of that space, but also to show that she understood what it meant to have the privilege of entry into such privately gendered spaces. Therefore, Donna chose to navigate her use of this gendered space and her anxieties around using it by having a conversation with the others she was sharing this space with. While this worked out positively for Donna, this is not an everyday solution to the issue.

[1] For readers outside of Aotearoa: Marae are meeting grounds that belong to iwi (tribes) and hapū (sub-tribe), and korero means to speak or talk.

From within a non-binary perspective, navigating gendered spaces can have another level of complexity as gender neutral spaces are not always an option. For example, Jo commented that sometimes they feel like a "freak" because "the world is just literally not set up for non-binary people". They reported they were "super lucky" as there was a non-binary bathroom for them at work, however they had to access it with a key down multiple flights of stairs. In public they often had to make a compromise about which bathroom to use. Jo's experiences highlight how navigating gendered spaces is particularly difficult for non-binary people as often there is no space for them, and they are caught choosing between one binary or the other.

Gendered bathrooms and changing rooms were not the only gendered spaces that were discussed. Being privy to different gender norms were also new terrain to be navigated by participants following GAHT. Many participants taking E-GAHT discussed how they came to understand components of what it means to be a woman by providing examples of negative issues they believed were just for trans feminine people but were actually issues experienced by many cis women also. Taylor recounted spending a significant amount of her 20's preventing herself from living as a trans woman because she felt she would never be 'attractive enough' to 'pass' as a woman and so didn't see the point. It wasn't until she began talking to her cis woman friends that she realised this feeling of never being 'attractive enough' based on societies expectations was common for many women, both cis and trans:

> **Taylor** (35): *And so, a lot of trans women that I talk to over the internet have this idea: 'well if I'm not an attractive woman, then I've failed and I should just go back to being a guy, and that's because I'm a trans woman that that happens, and these are only things that happen to trans women'. And I'm like 'no, no, no, no, no, that means you've succeeded – if you feel like that – that means you're actually succeeding at being a woman, like, feeling like you're not attractive enough or you're not feminine enough, that's what it's like (you know, from what I'm told) that that's what it's like for all women, that's what you're taught as a child. And so, if you have that feeling, it doesn't mean that you've failed to become a woman, that means you've, in a way, succeeded to become a woman. Because you wouldn't feel like that if you weren't a woman.*

Similarly, for Avery they struggled to find feminine clothing that fit them, at first believing it was due to them being trans and not having a 'feminine enough build'. They then realised that mainstream fashion for women typically offers clothes up to a size 14 only, whereby the average size for women in Aotearoa is reported to be a size 14-16. They stated:

> **Avery** (34): *they are not making clothes small to be mean to trans people they're doing it to be mean to women generally.*

Thus, 'they' - the mainstream fashion industry- are discriminating against all women who do not have a smaller build and are contributing towards the harmful stereotype that women are expected

to fit a certain size range. Although these experiences were difficult for participants, it was, in turn, a validating experience to realise they were now sharing and working through similar struggles with social norms and expectations that many other women also faced. This highlights the perverse logic of what experiencing damaging generalised gender norms can often mean: to be a part of the group by suffering alongside the group and welcoming that suffering because it legitimises your place within that space.

Lastly, with regards to gender roles, Donna described how she navigated traditional gendered roles within Te Ao Maori for her trip to the Marae. First, she talked to the complexities of identifying as wahine, but not being able to karanga as part of the powhiri process[2]:

> **Donna** (26): *But like, it wouldn't be proper tikanga for me to learn how to karanga. Which is a really weird thing, because it's definitely within the sphere of, being wahine, but technically you're only supposed to learn that if you've given birth or if you're older because it's where the karanga comes from, it's the cry of childbirth. And they already kind of bend tikanga to be like 'if you're female bodied then it's kind of okay'. But even then, a lot of iwi are like "until you've had kids, nah, you don't karanga you don't know what you're doing." Some iwi are a bit more relaxed and let you learn it and do it with the older women, but I would be right out there on the edge. […] I would be riiiight at the end, and now we're in the male/masculine territory.*

Although part of Donna wanted to learn and practice karanga due to a desire to perform a uniquely wahine role within the powhiri, she also understood why this would be against tikanga and therefore wanted to abide. She then went on to discuss the role she took on for the powhiri instead, and how she was able to work around in making sure this role was not only in line with tikanga, but also affirming of her gender.

> **Donna** (26): *Like, we had our marae trip and I learned whaikorero which technically men are supposed to do more, but you can be wahine and do it. And that was really weird because I was allowed to do that, because it can kind of be for anyone, and because I'm male bodied there's no tikanga against me doing it. But because I wasn't allowed to karanga and because I was one of the only Māori people in that class, I kinda felt like I had to take that role, and because it is a traditionally more masculine role it was like 'mm cool so I have to make a choice to like negotiate around that and frame it as like 'well then I need to reach out to my marae'. Which is why I reached out to my marae, to ask whether traditionally wāhine speak in whaikorero. And they were like 'yeah, we have a lot of Wāhine Toa, we're all about that, that's fine, as long as you do it properly.' […] and then I was like 'okay cool well then I can do this within my own culture as a wahine, that's fine.'*

[2] For readers outside of Aotearoa: Karanga is a ceremonial call, powhiri is a welcoming ceremony, tikanga are specific Māori customs and practices, whaikorero is a formal speech, and wahine/ wāhine is woman/women.

Donna referred to this process as "negotiating" with herself, trying to find balance between what would be acceptable for others within her culture and customs, and what would be acceptable within herself:

> **Donna** (26): *Mm, there's a lot of negotiation there, especially because you don't just want to go 'well I'm me, you have to now erase a bunch of culture to make me fit'. Rather than having that negotiation, which is stressful, and weird, and uncomfortable, but finding how you can actually fit in organically without losing anything or taking anything away from anyone.*

I think Donna's phrase - "how you can actually fit in organically without losing anything or taking away from anyone" provides a beautiful example of just how much trans people have considered how to navigate their world and how to authentically be themselves, whilst being so conscious, considerate and respectful of others and how others may perceive them. This is something that I, as a cisgender woman, have never really given too much thought to, and have definitely taken for granted. The world is designed for me to exist in it without me having to question my belonging within it if I don't want to. Accompanying the changes of GAHT is this extra task of figuring out how to walk through the world and how to engage with others in a way that works not just for the individual, but for everyone. Rather than society making accommodations to help trans people better access the world, trans people are the ones accommodating with the hopes of mitigating the amount of minority stress they receive.

Thus, with this new access to spaces comes a navigation full of trepidations, complications, and comparisons of old spaces with new spaces. Participants had to put in work either mentally and/or practically to overcome their fears and to negotiate their right to these spaces whilst still being respectful and considerate of others in order to avoid the possibility of negative backlash.

Being Misgendered

When participants were asked what negative experiences they experienced as a result of being trans and whether GAHT helped alleviate this, being misgendered was mentioned the most. Even though participants could acknowledge that often times it was not an intentionally hurtful act, that didn't change the level of embarrassment, shame, or anger they felt, for example:

> **Olivia** (45): *Well, I go red, and get a sinking feeling. And then a grrr gritting of teeth. It's quite physiological. But yeah, there's definitely that sinking feeling and that embarrassment, it's embarrassing. And if it's at the checkout, and it happens, I get that sinking feeling, then, embarrassed and then, a darkening of my expression, because that person suddenly becomes my worst enemy and I can't get away from them soon enough. So, yeah, it's not nice.*

Olivia described a series of very physical and emotional responses after being misgendered. She outlines feelings of devastation - "sinking feeling" - followed by embarrassment, then anger. Olivia's extract also highlights the potential frequency and unexpectedness of when one might be misgendered. Participants descriptions of times they were misgendered were often when they were carrying out day to day tasks in public. Indicating that it would be impossible to predict or prepare for a time when someone might misgender them. When Blake discussed being misgendered and why it was so impactful he also described it as "devastating" and reported that it was because it serves as a reminder to him that his "body does not match" who he is. Therefore, my reading of this is that being misgendered can serve as a reminder that the way you feel about and perceive yourself is not in fact how others perceive you.

Participants demonstrated an awareness about how small or insignificant the act of misgendering might seem to cisgender people but stressed that this "small" action has a disproportionately large impact. For example:

> **Quinn** (28): *It seems like such a small thing, but it feels so intense, and it's kind of hard to explain to people for that reason.*
>
> **Olivia** (45): *It feels like it should be something that you can brush off, because all it is, is this tiny little word, just for that brief moment […] So that's the funniness - the disproportionate nature of how effective it can be.*

Moreover, Alex explained that his mum still misgenders him, and when he tries to correct her is met with the response: "oh you shouldn't feel bad if someone misgenders you, it doesn't matter." This dismissal showcases how being privileged in any way can result in oblivious and ignorant attitudes towards those who are marginalised in that same way. If a cisgender person is misgendered they may not see it as a big deal due to the fact that their gender is congruent to the sex assigned to them at birth and therefore their pronouns and external gender presentation are a taken for granted privilege. Further, cisgender people likely do not get misgendered. Therefore, many cisgender people might not realise the importance of asking what people's pronouns are and making concerted efforts to use them. as. To really hit home how impactful correct pronoun use is, Blake stated that an increase in public literacy around pronoun use and trans identities is "suicide prevention". On this note, participants who use non-binary pronouns commented on how difficult it is for the public to understand and use these pronouns correctly. Resulting in those with non-binary identities being misgendered frequently with binary pronouns. For example:

> **Jo** (30): […] *getting people to use they/them pronouns is just exhausting. So they all [colleagues] kind of have just settled on whatever, umm, and I have, like, some workmates*

> *who call me 'he' and some workmates who call me 'she' um and they all just, like, get really confused if they are ever in the same group together and it's very funny.*

Although Jo was able to find humour in this it was also apparent how much this misgendering affected them and how they had resigned themselves to accepting that they will continue to get misgendered as a binary gender by strangers and acquaintances. Thus, further indicating the need for increased pronoun literacy within the public.

Finally, when it comes to being misgendered, participants discussed not only the emotional impacts but also the toll it took on having to figure out how to react or respond. Often, participants would try and correct people when they could or if they felt safe enough to do so. But other times the frequency and unpredictability of the misgendering or the nature of how it happened made this task too burdensome. Blake recounted that he feels "lucky" because he works and socialises in predominantly queer spaces, so only encounters misgendering when he is working with heterosexual, cisgender people. When asked if he corrects people in these spaces, he stated:

> **Blake** (29): *It's just such a drama. Yeah, it's so hard to do, it's so hard to do. I'm just so, you know, out and proud, but in straight spaces I just reverse into this person I once was. And also, of all the times where I'd feel most capable of correcting someone, it's not immediately after I've been misgendered, it just fucks you up, you know?*

Blake explained that being in predominantly straight spaces resulted in him feeling less comfortable and confident to assert himself and correct misgendering. Blake talked about the mental arithmetic that it can take to decide whether correcting this person will result in a safe and positive outcome. For example, he asks himself questions such as: *Do I believe this person will handle it well? Do I have someone else around me who can support me if it doesn't go well?* Additionally, Blakes extract also highlights how exhausting it can be to correct someone while also trying to manage the emotional fallback of being misgendered in the first place. Taylor also talked about how tiresome correcting people is but stated she has made the commitment to do it at her workplace because if she doesn't "they'll keep doing it and it'll get worse". Taylor talked through her process of how she handles this situation:

> **Taylor** (35): *But I guess just trying to do it in a way that isn't, like, I'm blaming you. Like 'you made a mistake, that's cool' so just kind of correcting people, like 'ahh she/her not he/him' and they're like 'oh sorry!' and I'm like 'that's cool.' Um yeah, trying to remember it would be much easier if I'm chill about it, firm, but chill, I think is the best way.*

My main takeaway from this extract was how much Taylor considers other people's feelings when correcting them. Making sure that she doesn't come across as if she's blaming them and trying to remain "chill" so as not to upset the other person. This approach, while effective, reflects how

exhausting this can be. Taking on responsibility for another person's emotions is tiring at the best of times, let alone when you yourself are the person who has just been humiliated and invalidated. Taylor is describing a process of having to carry out emotional labour for cisgender people by managing her own emotions and reactions to prevent others from feeling bad about their mistakes. Once again showcasing the mental arithmetic involved in correcting others. For Jo, the mental arithmetic and navigation of this emotional minefield is often deemed not worth it:

> **Jo** (30): *Yeah, just the constant low level, I mean every single time someone says something, I know I'm not going to say anything because I've pretty much already decided to myself that this is just way too hard for random strangers but you kind of do have to make the decision every time 'am I going to say something?' 'Am I going to correct them?' 'Am I going to like be the allay correcting them' like "oh hey, the cool new thing is to do this." Right? You know like, it's a whole little process that has to happen, and it happens so many times every day that it just takes a toll.*

When describing the impact that misgendering has, many participants referred to it as embarrassing or humiliating even when they knew it wasn't intentional. They also described it as a seemingly small action; however, this small action had a large impact on their mental wellbeing. Lastly, participants talked about the various considerations, techniques, and strategies they adopted when they were misgendered and how emotionally exhausting this was.

GAHT Alleviates Misgendering

After taking GAHT, some participants noticed that members of the public began gendering them correctly more often, with some participants noticing not only a change in pronouns but also a change in the types of gendered language used. For example, Olivia noticed that she gets "ma'amed" more often, and her and her partner get "ladied" together now, which she noted happened less frequently before E-GAHT. Blake noticed an increase in the use of "dude" and "bro" from strangers following T-GAHT as did Quinn, who gets called "mate", "buddy", and "bro" more often now.

For non-binary participants, many discussed that although they were still being misgendered as a binary gender, GAHT resulted in them being misgendered with the 'more preferable' binary gender. Such as Avery:

> **Avery** (34): *I definitely prefer to be misgendered as a woman than as a man because I was assigned male at birth, and it feels more like winning the passing game if they think I'm a woman.*

Many people are not adept at using they/them pronouns, hence participants, like Avery, discussed how being misgendered towards the opposite end of the gender binary than their sex assigned at

birth, while still not correct, was better than the alternative. For Quinn, the main reason they sought T-GAHT was to reduce the number of times they got misgendered as a woman:

> **Emma**: *Did taking testosterone reduce any of your experiences of receiving discrimination?*
>
> **Quinn** (28): *Um * pause* hmm, I think yes, because I think that I am now less likely, to get - this is like a projection into the future - but I don't think I'm gonna have to fight with people to not gender me as female anymore, because everyone defaults to male now and it doesn't bother me.*

Both excerpts show that being misgendered by the opposite gender to that assigned to them at birth was seen as the lesser of two evils. Quinn described being misgendered as female as "dysphoria inducing", whereas being misgendered as male did not evoke the same amount of distress. Therefore, although non-binary participants still experienced misgendering, GAHT had an impact on reducing participants misgendering for the most distressing binary pronoun. Alex recounted that he gets misgendered more frequently by his family now, than by people who don't know him:

> **Alex** (28): *During my brother's wedding, he misgendered me with the waitress, but like she gendered me correctly, so she obviously read me as a cisgender man, but then thought my brother just didn't know the difference between 'she' and 'he' so, I sort of try to point that out sometimes to them. I'll be like "did you know that in public people read me as 'he' so if you misgender me, they might just think that you're the one not knowing the difference, and that your English is bad" *laughs*.*

This extract, while highlighting the positive impacts that GAHT can have on misgendering, as Alex is now gendered correctly by people who don't know him. It also shows that sometimes it is difficult for family members to adjust to these changes. Alex's family were unable to 'see' Alex how the rest of the world now sees him. Either due to old habits dying hard and difficulties with letting go of the past Alex, or wilful ignorance about the detrimental impacts that misgendering has and laziness to make the effort to change such habits.

To be Seen or not to be Seen

With regards to GAHT alleviating misgendering, some participants talked about the fact that GAHT had allowed them to go "stealth" but made them 'invisible' as a trans person, and the implications that arose from that. While others discussed how GAHT had made them more visibly trans to others, and the implications of this increased visibility. Thus, being seen as a trans person, or not being seen as a trans person ties into the notion of 'passing' or not 'passing'. This notion is complicated and nuanced and in this subtheme, I highlight some of the different narrative's pertaining to this. Such as whether one should want to pass or not, what it means to pass or go 'stealth', and what it means to not pass and walk through the world as a visibly trans person.

For example, Alex mentioned that after just over a year on T-GAHT, when he tells people he is trans they are usually surprised. He referred to this as a "passing privilege", and that this awareness that he passes tends to alleviate his social anxiety, as he used to live in fearful anticipation that others would eventually "pick up on what I could be". Although Alex referred to passing as a "privilege" he also referred to the notion of the "passing privilege" as "problematic". It is viewed as problematic for many reasons, one of which was outlined by Blake:

> **Blake** (29): *It was a huge part of why I didn't come out for so long. Because I was like "what is even the point? I will never pass. And that's the point. That must be the point. That's what I want." And you know it takes a long time to get rid of that prejudice out of your system and just somehow be proud to be like a visibly genderqueer person.*

Blake described that, in the past, he didn't want to transition unless he could "pass" as he didn't want to be a "visibly genderqueer person". This notion of passing is a problematic concept as it can deter many trans people from socially and medically transitioning for fear that they will never be able to 'pass'. Wanting to 'pass' also feeds into the damaging norms that our cisnormative society imposes and which serve to marginalise those with diverse gender identities. Cisgender is not best, however the 'passing privilege' can result in many trans people still desiring to go stealth - to be assumed to be cisgender.

Although the notion of 'passing' can be seen as problematic, participants, particularly those taking E-GAHT, expressed why becoming more visible as trans or not being able to 'pass' can also have problematic consequences:

> **Donna** (26): *[…] walking home alone at night is more and more terrifying the more visible you are, the less cis you look, or the less straight cis person you look, the more vulnerable you are, and the more people are going to target you.' And knowing that, and -oh my god- first day of hormones to now? That fear kind of grew and then I was like 'it's fine, you can't live in fear, you just have to be smart, like everyone else, don't be overly afraid.'*
>
> **Taylor** (35): *Yeah, I presume I'm going to experience more prejudice now that I'm not hiding who I am at all.*

For Donna and Taylor, increased visibility of being trans was associated with potential for increased experiences of prejudice and harassment from others. Although Donna's fear increased the more 'visibly trans' she became with E-GAHT, she realised that ultimately, she had to continue, as living in fear was not an option, and neither was reverting back to 'pretending to be a cisgender male'. Ultimately, if mainstream society was more accepting and accommodating of trans identities, the need or desire to 'pass' would probably become less of a priority or focus for many, as expressed by Jo:

> **Jo** (30): *I think that you should be able to perform whatever you want to be seen as, and I think people should be receptive to that message. By people accepting your cues and running with it, you could alleviate quite a lot of distress.*

Summary

All these themes, while highlighting many different concepts, are also thread together with a common overarching theme. That is, most participants' social experiences and interactions were recounted with an underlying notion of acute or heightened perception or awareness of how others may perceive and treat them. Increased awareness of their either newly gained gender privilege or newly lost gender privilege, awareness of their access to gendered spaces, awareness of how they may or may not need external sources of affirmation anymore, and an awareness of their visibility or invisibility and how society may feel towards them.

Being misgendered was the most common negative experience. This was explained as an action that caused humiliation and served as a reminder that the world did not see them the way they wanted to be seen. It was also not an easily resolved problem for participants as the act of having to correct someone was fraught with logistical, emotional, and social complexities, making it burdensome. Although GAHT did increase the amount that participants were gendered correctly by others, some non-binary participants still had to settle for being misgendered with the 'more preferred' yet still wrong binary gender.

Chapter Fourteen: Theme Five – The Importance of Support Alongside GAHT

I centred theme five's analysis around the different types of supports that participant's either had access to and valued or wished they had access to throughout their journey with GAHT. Such supports included close interpersonal social support from family and friends as evidenced by the subtheme: 'the importance of interpersonal support'. Support from broader structures such as community support groups and places of work which falls under the subtheme 'the importance of community support'. And support from primary and secondary health care providers and the need for additional support to access more gender affirming services – 'the importance of additional support'.

The Importance of Interpersonal Support

For participants who had support from their families this was viewed as immensely positive and powerful. As indicated by this extract from Donna:

> **Donna** (26): *If my mother, the woman who gave me life and raised me as a single mum, if she's out here going like 'you're a wahine' stamp of approval – not that I need that stamp of approval- but if she's out here, and she's got my back and that connection is there, it really doesn't matter what anyone else says.*

For Donna, her mother's support, affirmation, and acceptance of her as a wahine meant that she did not need affirmation from anyone else. This emphasises the importance of parental support which can help to mitigate negative mental and physical health outcomes as outlined in the Gender Minority Stress Model. Both Jo and James also reported that they were "privileged" and "lucky" to have supportive parents who were accepting of their gender identity. For some participants, like Taylor, the fear of possible rejection from their family was a further deterrent for them coming out and starting GAHT:

> **Taylor** (35): *I was in a really dark place, and I did consider, for the only time in my life, I really considered ending my life. I was gonna do it, I was gonna kill myself, and I was like 'well I don't really wanna die, I just don't feel like I can be honest with people' and particularly I didn't feel like I could be honest with my mother and my sister about who I was.*

Thankfully, Taylor was honest with her mother and sister, and they responded positively. However, this fear of the potential for family rejection further emphasised the importance that many participants placed on family support. Not all participants had support from their families. Such as Blake, who became estranged from his family prior to coming out as trans. He attributed this estrangement, in part, to the fact that he knew he would not be accepted or supported by his family

if he had come out to them. For those participants whose parents were less supportive they often conveyed a sense of indifference about this lack of support:

> **Alex** (28): *I mean I think I approach it in the sense that's like 'oh yeah, that's me, that's it, I don't really care if you [family] accept me or not, because if you don't then I don't really care' *chuckles* because I don't really see them often.*

Like Alex, other participants also responded to the lack of familial support with nonchalance, indicating indifference to this lack of support. Although this genuinely might be the case, my reading of this indifference is that it served as a protective mechanism or a necessary reframe to alleviate potential distress from not receiving such support. These instances of indifference didn't convey sadness but more so defensiveness towards those family members who did not show their support.

In instances where families did not support them; many participants instead prioritised the importance of social support from their friends or chosen family. Such as Lavender and Alex:

> **Lavender** (26): *My dad doesn't know I'm autistic, my mum does, they don't know anything else [about Lavender being agender and taking E-GAHT]. But either they will accept it, or they will never hear from me again. And to be honest I'm fine with that, more of a blood of the covenant kind of person [referring to picking their own family].*
>
> **Alex** (28): *It's a bit harsh, but it was sort of like, all my friends and work are accepting me and seeing me as a 'he', if you don't keep up you will be left behind *laughs*.*

Both Alex and Lavender describe an ultimatum towards their family if they do not support their gender identity and their journey with GAHT – 'they will never hear from me again' and 'they will be left behind'. This ultimatum of leaving family behind while being paired with having supportive friends shows the importance of friendship support when family support is unavailable. This further indicates another instance of protective mechanisms that participants used to cope with the lack of family support. Overall, these extracts indicate the importance of social support.

When understanding what, specifically, social support provided for participants, Avery discussed that for them, having supportive friends who are also trans helped them realise that they were non-binary and helped to facilitate discussions on the topic so they could generate a more meaningful understanding about themselves. For Blake, support from his friends, who he described as "super gay", meant that he knew he would "always be backed up by the other people around me and I'm super, super lucky", referring specifically to instances where he was misgendered and knew he would be supported by his friends. James talked about how he realised it was particularly important to determine who his support network was prior to starting GAHT due to that need for support

when undergoing GAHT's changes. Therefore, close social support from both family and friends functioned in many ways for participants; to feel encouraged, accepted and validated, to feel safe in emotionally challenging situations, to feel backed up when having to navigate unpleasant social encounters, and to provide a steady foundation while experiencing the multitude of emotional, physical, and social changes from undergoing GAHT.

The Importance of Community Support

Being part of a supportive wider community was also important, including being part of LGBTQ+ support groups at work or online, for example:

> **Lavender** (26): *Um well just, what we do at *peer support group for LGBTQ people, it's just a place where all the struggles are valid and you can be accepted for just who you are, no one will question your gender or sexuality or anything like that, pronouns are a given, they're part of introducing ourselves, it's just a place where you don't have to really hide anything, which is nice, and you can talk about your struggles and your journey and have people who have possibly even undergone the same thing.*

And being involved with Wellington based nationwide transgender organisation – Gender Minorities Aotearoa:

> **Jo** (30): *Until Covid lockdown hit, I was going to the Gender Minorities meet up and that's something I would absolutely recommend. I hadn't had very many queer friends, and I'd had zero trans friends that I knew of […] so being in a room full of people where it was just super normal, like you know, everyone knows how to use they/them pronouns already and is used to it and whatever name you give that's cool, and you can talk about all of the, like, you can make trans jokes and it's funny and everyone gets it. And it's just so affirming, and it just makes you feel like a normal person and not like a weirdo.*

These extracts outline why being part of a supportive wider community is so important. Inclusion in these groups can provide an environment that is inherently understanding and welcoming of anyone who is trans. Feeling secure and confident that people within this group will know how to ask and use pronouns correctly, that the chances of being misgendered are small, and the chances of receiving any form of discrimination are minimal. This is especially important when considering participants earlier narratives outlined in theme one; of growing up in a society that had routinely discriminated against and ostracised trans people, and provided damaging and discouraging messages about trans identities and what it means to be trans. These wider social groups served to create environments where participants were able to exist authentically and were celebrated and encouraged to be themselves, rather than hiding parts of themselves for fear of not being 'normal'. Furthermore, these groups provided space for participants to connect with others and build friendships with people who have a shared sense of understanding and experiences.

The Importance of Additional Support

Most participants commented positively on their experiences with various health care practitioners when seeking GAHT. Specifically, some participants mentioned that their general practitioners (GPs) had a special interest in trans health care and how beneficial this was:

> **Blake** (29): *I have a pretty good GP, especially when it comes to trans stuff […] it's been really dreamy having someone with access to that information.*

While others felt that the services provided to them by both the psychologist conducting the psychosocial assessments and the endocrinologist at Wellington Hospital was overall beneficial and supportive:

> **Alex** (28): *I feel like I was informed really well both from friends and through the DHB and things like that about what I should expect. And I felt good that they were keeping track of my T levels and making sure that I was safe enough. Because at the start I had a lot of hot flushes, and it felt almost like flu like symptoms, so I was quite concerned.*

The importance of having health care practitioners that are well informed and know when to refer to specialists was emphasised by those who did not receive such care, for example, Olivia:

> **Olivia** (45): *But I think one of the things that going through a medical system shows you is that sometimes doctors don't know what they're talking about. Their knowledge is only as good as what they've read or their preconceptions and this sort of thing and that sort of thing. So not everything is empirical. And I had my GP misread my T (testosterone) levels and say I had really high T, and then when *endocrinologist looked at them, they were really low.*

Such experiences resulted in loss of confidence and trust in their GPs. These experiences also highlight the need to address such knowledge gaps within primary health care settings by increasing education and awareness of the specific processes and issues for those seeking GAHT.

From within a non-binary perspective, Jo mentioned that they felt relieved that they did not have to 'lie' and say they had a binary transgender identity in order to received T-GAHT. They commented on how this isn't necessarily the case in other countries, where knowledge of non-binary identities is lacking. Moreover, Jo felt particularly supported by their endocrinologist due to the collaborative relationship they developed when determining T-GAHT goals and dosage levels. However, Jo also acknowledged that they would have felt more supported if practitioners demonstrated an understanding that GAHT is still a medicine that ultimately falls within a sex binary, and therefore for non-binary people "there is no good option":

> **Jo** (30): *I think it's really important that health care providers really do understand when they're treating non-binary people, that there is no good option. Especially for a lot of people who are very gender neutral or feeling very much like androgyny is for them […] it's*

> *just really hard to *sighs* to accept the fact that medicine can't actually fix it […] If I had known, and it had been a thing in the 90's and I had been able to get blockers and all of that kind of stuff, like modern trans kids are able to do I still would have had to choose a puberty. Like, you don't get to not choose. And while I've had health care that has been affirming of the fact that I am non-binary, and that was fine, and they were like 'yep you can start, you can stop, and you can do whatever you like' the awareness that none of it is actually fully correct, but it's just sort of the lesser evil, I think is something that really needs to penetrate into the health care providers.*

Jo highlights the notion that non-binary people are regularly placed into binary constraints, having to frequently choose between two options, neither of which is ideal. Although Jo acknowledges that within medicine there is no way around it, they felt that these feelings of frustration and disappointed could have been lessened had more health practitioners acknowledged this shortcoming of GAHT. Thus, practitioners being informed on the specific and nuanced underpinnings of what it means for some non-binary people having to still pick a puberty may improve such health care experiences.

With regards to a need for additional support, all participants taking T-GAHT discussed how they needed assistance with their injections. Alex, James, and Blake were still seeing a nurse to get their testosterone administered. And both James and Blake discussed how unpleasant this experience is for them. Although an unpleasant experience, James commented on how beneficial the support from the nurses is with regards to his anxiety with needles:

> **James** (21): *They [nurses] quickly got used to me and would just talk to me and remind me to breathe while I was furiously playing Tetris on my phone while they did the shots. And yeah, they really really supported me through that.*

For participants who administered their shots at home, they still required support from others to do this. Quinn stated they had a flatmate who is a doctor who does it for them. They were very thankful for this as they were unable to do it themselves. Jo recounted an unfortunate experience when they first received their prescription for the testosterone injection, showcasing just how important it is for clinicians to be aware that their patients may require additional support in this area:

> **Jo** (30): *Umm, one very specific thing, nobody taught me how to do an injection. At any point in time. Like, I went to my endocrinologist and got the script and he was like "cool, your GP will show you how to do that" or I think he assumed that I'd go in and get it done at the nurses office or whatever, and then I went to my GP […] he, like, rewrote my script and gave me it and then […] he just handed me a mit full of needles and syringes and I looked at the size of the needle and thought 'what have I gotten myself in to?' And then I left and went to the pharmacy, and she didn't ask me any questions like 'have you used the medication before? do you know what you're doing?' And then I got it, went home, opened*

> *it, and it was a full glass ampoule, which I'd never encountered before, I was imagining the rubber top and it wasn't, and I didn't know how to get into it, and I had no idea where to inject myself and I had no idea what I was supposed to be doing […] so you have to go and learn from somebody, but I didn't really know where to go, so my flatmate and I YouTubed it, and now he does my injections.*

When recounting this experience, it was clear that Jo had felt confused, anxious, and unsupported by their health care practitioners at every step of this process. They felt let down that no one had asked them if they knew how to administer their own shot, and felt they were not in a caring and supportive enough environment to ask for help. From this experience, Jo noted how helpful it would have been if education around administering the injection was a part of standard health care protocol for those on T-GAHT. Although this practice might be routine for many primary health care practitioners, Jo's experience shows that there are still instances where people are falling through the cracks and not receiving the appropriate level of support and care. Furthermore, like Quinn, Jo, reported they were fortunate their flat mate was trained in biological sciences and was able to administer their shot for them, thus highlighting a gap where more support is needed with teaching T-GAHT administration. Practical support for administering injections was not the only type of support that was mentioned by participants taking T-GAHT, financial support was also discussed for those having to pay a nurse every time to get the injections administered. For example, Alex commented on the cost of the nurses' visits, reporting that he felt fortunate to be in a privileged enough position to be able to afford it, saying:

> **Alex** (28): *"I can't imagine for someone who doesn't quite have that resource to be able to, like even going to a nurse to get administered, like 20 bucks per session."*

Therefore, support for T-GAHT injections was not only mentioned on a practical level, but also on a financial level.

Other areas of support raised by participants were laser hair removal, voice therapy, and top surgery. As noted in theme two, the participants who had acquired top surgery for creation of a male chest had done so privately as this was their only option. Thus, top surgery is an unobtainable goal for many. While there is some access to funding for laser hair removal, these are means tested and not available to everyone, making this a costly endeavour and further reducing accessibility for those who are ineligible for funding. To get around some of these costs, Avery visits Gender Minorities Aotearoa to use an intense pulsed light (IPL) hair removal device which has been crowd sourced:

> **Avery** (34): *Yes, it's a nominal fee of $20 *laughs* It's not as good as actually going to a place or whatever but for $20 instead of a couple of $100 a session or whatever it is, I*

> *haven't looked at it for a while. It's one of the things that there's no funding for either, which is kind of silly.*

Avery also raised the point that permanent hair removal for many trans people is not for a "cosmetic" reason. Such services are necessary for ameliorating feelings of gender incongruence and decreasing levels of distress, reinforcing why these services are so greatly needed. Besides the cost barrier, Donna mentioned that finding information about additional services was also difficult, noting that the DHB had limited information on their website about accessing voice therapy, as well as permanent hair removal services that are trans friendly and well versed in removing facial hair. Donna advocated for the need for such information like this to be easily located in one place. Through her experiences with accessing laser hair removal, Taylor found that it "varies from therapist to therapist on how well they understand trans issues and how comfortable they are with it." Highlighting the need for an increase in culturally informed, trans friendly services.

Moreover, another support service that many participants either found helpful, or wanted but were unable to obtain, was mental health support. Because Quinn was attending university at the time, they felt fortunate that they had access to the university counsellor for support. Donna also felt "lucky" that she had found her therapist, but noted how difficult this process was, stating that it is "impossible" knowing how to access mental health support, let alone finding a counsellor. The importance of increased funding and access for mental health support was further emphasised by Blake:

> **Blake** (29): *And then in terms of others [other support], like, fuck all, man. I've been trying to get counselling for so long. And because I'm 29 it's really difficult for me to get a Community Services Card and I'm a freelancer so I don't have anything through a job. But yeah, I'm a recovering addict, and a pretty freshly out transgender person and neither of those things […] I can't, I can't get anything, it's really fucked.*

Due to his age and type of employment, Blake was unable to obtain funding for mental health support. He emphasised his disbelief about the lack of support available by noting that he belongs to multiple high-risk groups that would require such support. Because Blake was aware of the lack of mental health funding and support within Aotearoa, he suggested a bare minimum alternative - funding for a gym membership and personal trainer who is culturally versed in trans issues:

> **Blake** (29): *Honestly, a gym membership, at the very least. Because your body is going through such dramatic changes, and the best way to deal with anger and frustration is exercise. Or whatever, even if it's just stretching. And yeah, also as people who have a bunch of trauma about their bodies, a process of really important connection and self-care - which I didn't know how to do before receiving personal training sessions – like, how to just be with your body, how to listen to your body, how to show a little bit of love to your body*

by doing something that's good for it. That would be something so simple and it was super important for me. It doesn't seem necessary, but like, it's cheaper than a therapist.

My analysis within this subtheme showcases how support is needed beyond the interpersonal and community for those undertaking GAHT. There are a multitude of ways that participants could have received additional supports such as culturally informed practitioners, practical support with learning how to administer testosterone shots, financial support for other gender affirming procedures and mental health support.

Summary

Overall, social support was incredibly important for all participants. Those who received a deep level of support from their parents/caregivers/siblings emphasised how special this was and also noted how privileged they felt to have this, knowing this is not always the case for everyone. Those who did not receive this type of support, often displayed a sense of indifference about this, commenting instead on the importance of the support from their friends or chosen family instead. No matter what form it came in, close interpersonal support served to provide participants with the confidence to live more genuinely as themselves, to undertake GAHT, and to handle the social challenges that can often arise from living in a society that it not always accepting of trans people. Participants also emphasised the importance of wider community support, and how connecting with larger groups of trans people enabled them to not only feel encouraged and celebrated for being themselves, but also to simply normalise being trans.

When it came to accessing GAHT, most participants recounted positive experiences with their GPs. Those who did not have such positive encounters felt, at least, supported and cared for by the specialists within the Endocrine Department. Although experiences were overall positive, there were still instances where both primary and secondary health care providers could have improved their level of cultural competency and understanding of the different issues faced by those undergoing GAHT. Namely, showing an understanding and empathetic approach of the shortcomings of GAHT with regards to what this means for non-binary people, who still have to choose between a hormone binary. And ensuring that those taking T-GAHT have received comprehensive education, guidance, and support on self-administering, or provide the option to teach a close social support on how to administer injections.

Furthermore, additional services were desperately needed but were at large unavailable for most participants such as laser hair removal, voice therapy, top surgery, and mental health support. Signalling a need for increased funding in these areas, as well as an increase in information for how

people can access such services, and where they can go to receive care from people who are well informed on trans specific needs.

Section Four: Discussion

Chapter Fifteen: Bringing it all Together

In this chapter, I discuss the results as they pertain to the specific research aims of study one and study two. Findings from both studies are synthesised and I provide in-depth discussion highlighting how themes from study two can elaborate and enhance findings from study one. Lastly, I link specific results from both studies to the Gender Minority Stress and Resilience (GMSR) model.

Summary of Findings Relating to the Research Questions

As access to GAHT has increased in recent years an increasing number of studies have been undertaken to understand its long-term outcomes. Within psychology, recent research has shown long term use of GAHT is associated with improvements in mental health, increased feelings of congruence between identity and body, improvements with life satisfaction and overall wellbeing. At present, longitudinal research on the outcomes of GAHT has only been conducted internationally, therefore there is no longitudinal data of this nature within Aotearoa. There is also a paucity of studies providing qualitative analysis within this field of research. This study aimed to address this dearth by exploring the longitudinal impacts of GAHT on gender incongruence and psychosocial wellbeing through a mixed-methods design.

Study One

With regards to study one, six research questions were developed corresponding to the different surveys that were administered at baseline, then at six and twelve month follow up. These were:

1) Does somatic symptomology improve following one year on GAHT?
2) Does depressive symptomology improve following one year on GAHT?
3) Does anxious symptomology improve following one year on GAHT?
4) Does subjective wellbeing improve following one year on GAHT?
5) Does gender incongruence improve following one year on GAHT?
6) Do participants achieve their individual goals following one year on GAHT?

Results showed no statistically significant changes in scores over time for somatic, depressive and anxious symptomology, as well as no significant changes in survey scores in subjective wellbeing. Thus, the answer for the first four questions of this study is that these factors did not improve following one year on GAHT.

Participants' mean baseline scores and as well as distributional characteristics for the measures of somatic, depressive, and anxious symptomology prior to starting GAHT were within the minimal and mild ranges. Thus, most participants were not reporting moderate or severe symptomology prior to starting GAHT, as a result, this allowed little room for improvement following one year on GAHT. Therefore, another conclusion drawn from this particular finding is that physical and mental health were not severe in the majority of participants prior to starting GAHT, and these symptoms did not worsen over time.

With regards to the gender congruence (TCS) and goal achievement (GTF) measures, scores did increase over time. Therefore, for questions five and six, gender congruence improved, and participants got closer to achieving their personal goals following one year on GAHT. Specifically, participants' feelings of gender congruence and gender identity acceptance significantly increased from 2.24 out of 5 (45%) at baseline to 3.64 out of 5 (73%) at 12 month follow up. The *appearance congruence* subscale measured participants' perceptions of whether their external appearance is reflective of their gender identity and the *gender identity acceptance* subscale measured participants' level of acceptance and pride in their identity. And for the GTF, participants' indications of how far along they felt they were to achieving their goals fell, on average, at 14% prior to starting GAHT, and increased to 67% at 12 month follow up.

These two findings are important as they highlight two key positive long-term outcomes of GAHT for trans people. First, they show that people taking GAHT experience an increase in feelings of gender congruence, thus indicating how effective GAHT can be. Secondly, findings from the GTF show participants' satisfaction with GAHT as it helped them move closer towards reaching their goals with regards to their gender.

Study Two

For study two, six research questions were developed. These questions were:

1) What are the important factors for people seeking GAHT (including physical, emotional, social, and functional specificities)?
2) How has GAHT addressed these issues?
3) How has GAHT not addressed these issues?
4) What should other trans people know about GAHT?
5) What additional supports can be put in place to assist people who are seeking GAHT (including medical, social, peer, therapeutic, and public support)?

6) Open space for participants to discuss any other important points related to GAHT and being trans.

The five themes developed from study two were loosely guided by these research questions due to their impact on guiding the interview schedule. However, theme development was also strongly shaped by participants talk.

Theme one *The Road to GAHT is a Road Less Travelled* highlighted the long, difficult, confusing and oftentimes lonely journey that many participants talked about as they recounted the important factors and experiences that preluded them seeking GAHT. In the lead up to deciding to start GAHT, participants had spent years coming to terms with their gender identity, often explaining this process as gradual, taking small steps, adjusting to those changes, before taking further steps. Or trying to supress their gender identity and 'pretend' to be cisgender for many years to no avail. They also discussed multiple setbacks that delayed their decision to start GAHT sooner, such as lack of trans role models, lack of information about trans identities to gain understanding from, negative messaging about trans identities from the media and wider society which deterred them from coming out to family and friends, and the belief that if they came out as trans, their lives would be more difficult. Participants also identified specific thought processes used when making the decision to begin their transition journey. Thus, once participants had gotten to the point of wanting to start GAHT, the decision was not made lightly and had been a long time in the making. These decisions were well considered with many barriers and deterrents to overcome, and many of the pros and cons taken into consideration prior.

When I wrote the first research question for this study, I initially thought that the possible participant answers surrounding the important factors for them leading up to GAHT would be more to do with specific outcomes and changes they were hoping to achieve with GAHT. Instead, I was provided with a much different narrative around participants' life journeys in the lead up to them realising their gender identity, the struggles they endured with this, and the difficulties in the decision-making process around starting GAHT. Upon reflection, the specific goals that participants identified on their GTFs was a more concrete and direct way of answering question one. Further analysis of the specific goals that each participant provided would be worthwhile to complete at a later time, however this was beyond the scope of the current research and is recommended for further research.

I organised themes two, three and four around participants' responses to the changes they reported following GAHT. These changes were changes to the body, changes to the self, and

changes from others. Thus, theme two *Outcomes of GAHT: the body*, is organised around the physical changes following GAHT. Participants were pleased with the physical changes that occurred, such as deepening of voice and growth of facial and body hair for those taking T-GAHT, and breast growth and fat redistribution for those taking E-GAHT. I placed this analysis under the subtheme: "the welcomed changes" based on how positively participants discussed them. Although participants were well informed about what parts of their bodies would and would not change following GAHT, many longed for certain changes they knew GAHT would have no effect on. When discussing these changes, I used the subtheme "the wished for changes", as oftentimes these desired changes were not feasible to obtain due to financial barriers, lack of funded gender affirming surgeries, or by being confined by skeletal structure. Lastly, when talking about the changes to their bodies, I noticed a pattern of comparisons that participants made between the physical outcomes of T-GAHT and the physical outcomes of E-GAHT, which I analysed under the subtheme "not all changes are considered equal". With some participants highlighting that the physical changes with T-GAHT as more obvious than the physical changes with E-GAHT. The disparity of these changes was often conveyed by participants who stated that those taking T-GAHT are misgendered less due to the deepening of their voice and growth of facial hair, whereas those taking E-GAHT continued to experience dysphoria or be misgendered by others due to their voice remaining deeper and having to continue to remove their facial hair. The first subtheme talks to one way in which GAHT had addressed some issues for participants, however the last two subthemes highlight they ways in which GAHT does not address certain issues and provides useful information for discussing implications from this research, which will be addressed below.

For theme three, *Outcomes of GAHT: the self*, I organised analysis under subthemes of "self-expression", "sexual expression", and "mental wellbeing". Overall participants noticed positive changes within these domains such as increases in confidence, noticing less internal pressure to wear stereotypically gendered clothes, or perform in specific gendered ways, increased comfort with their sexual expression and in sexual experiences, shifts in the way they experienced emotions, and improvements in their mental health and coping mechanisms. Of note, analysis from this last subtheme poses a contradiction to findings from study one. Repeated measures ANOVA of scores from the GAD-7 and PHQ-9 showed no significant changes in anxious or depressive symptomology following one year of GAHT. However, participant's accounts of GAHT outcomes on their mental wellbeing included being better able to cope with their anxiety, regulate their emotions easier, and no longer require the use of substances to cope with their dysphoria.

In *Outcomes of GAHT: others*, four subthemes demonstrated how GAHT had changed the way participants viewed social situations and environments and changes in the ways others treated them. The first subtheme "navigating gendered spaces" talks to both physical and metaphorical spaces that participants began occupying or becoming more aware of during their journey with GAHT. For example, realising that they had to begin using a different bathroom and the different thought processes and approaches to this: fear and anxiety about being 'outed' as trans and told they don't belong, having conversations with others who also occupy such spaces to make sure they are included and welcomed, or realising that binary bathrooms are no longer appropriate spaces to occupy, but also realising that there is a lack of gender-neutral spaces for non-binary folk. Moreover, participants described coming to terms with new gendered social norms and negotiating new gender roles and expectations. The subtheme "being misgendered" talks to the most prominent example participants noted when asked about negative experiences they had as a result of being trans. Being misgendered by others resulted in participants feeling angry, disappointed, and humiliated. It was also described by many as an action that was seemingly insignificant on the surface to others, but which had a significant negative impact on their day-to-day functioning and wellbeing. Encouragingly, many participants noted that GAHT alleviated instances of being misgendered. However, this was a somewhat complicated change for non-binary participants, as they noticed a shift from being misgendered from one binary identity towards the other binary, rather than being gendered correctly with they/them pronouns or in a gender-neutral way. This was a specific issue for non-binary people, as many participants noted how difficult it was for others to adopt gender neutral language. It appears that mainstream society struggles with non-binary identities. The use of gendered language is so embedded within our society that it can be difficult for people to break away from those ingrained habits.

Stemming from discussions around the impact that GAHT had on being misgendered, I developed a subtheme titled "to be seen or not to be seen" which analysed the dichotomy of GAHT on participants' perceived 'visibility' as a trans person in society. Some participants felt that GAHT had enabled them to become 'less visibly' trans as the physical changes resulted in them 'passing', being noted by one participant as a "passing privilege". Whereas others found that the physical changes from GAHT had made them 'more visibly' trans; this brought about fears and expectations around experiencing increased prejudice from others. This highlighted a variance of preference and attitudes found amongst participants as some were proud to be visibly trans while others preferred to be less so.

Themes two, three and four can also be seen to provide answers to the research questions two, three and four as they underline the ways in which GAHT has and has not addressed specific factors that participants were hoping for. As well as providing insights into the ways in which these changes have impacted on certain parts of their self-concept and how they relate in their wider environment.

Lastly, with theme five, I clustered data around the idea of support and varied types of supports participants found helpful, wished they had more of, or were lacking altogether. This theme relates to the fifth research question about what sorts of supports are useful for those undergoing GAHT. Participants highlighted how important support from their families, friends, chosen families, and community can be. Community supports created environments where participants were able to exist authentically, fully, and comfortably as themselves, due to being in the company of other trans and queer people; thus not feeling like they had to hide parts of themselves for fear of being judged or ostracised. With regards to support from health care practitioners, participants recounted this, overall, positively. However, some noted instances where this fell short such as clinicians failing to demonstrate an understanding of the difficulty around how 'binary' GAHT is, and the implications this can have for someone that may not be seeking full feminisation or masculinisation. Participants also outlined a number of additional supports they felt would have been helpful for their journeys with GAHT, such as funding for laser hair removal, voice therapy, and top surgery as well as funding for mental health support.

Synthesising Study One and Study Two

There are a number of reasons that explain the disparity in findings of mental health outcomes between quantitative and qualitative analysis. The first relating to past experiences and common beliefs held by trans communities that if they present as 'too mentally unwell' they will be denied access to GAHT. This is due to continuing developments and upgrades to the Standards of Care for the Health of Transgender and Gender Diverse People, whereby the previous standards of care had a requirement that significant mental health conditions must be "reasonably well-controlled" in order to meet criteria to access GAHT (Coleman et al., 2012, p. 187). This often resulted in people being denied access to GAHT and being required to seek therapy first. However, the majority of the causes for their mental health was due to feelings of gender incongruence or gender dysphoria, as well as the possible confusion of coming to terms with being trans and the anticipated stigma of being out as trans. Although standards of care have been updated since then to accommodate for this shortcoming, this was only in late 2022 (Coleman et al., 2022), and many people are still wary of this requirement when seeking GAHT. Therefore, it is likely that participants were 'faking good'

on the baseline questionnaire prior to being referred for GAHT, resulting in baseline scores being lower. Participants may have felt more comfortable discussing their mental health during interviews because they did not perceive their access to GAHT to be at stake. As I will discuss below, this is also a limitation of the research, and timing of administration of baseline surveys will be crucial to consider for future research.

Another possible reason for the disparity is that the questions asked during interviews were more in depth and were better able to elicit participants' experience with mental health than the survey questions. Perhaps participants felt more at ease discussing their mental health in an interview setting once rapport had been established, but had been less inclined to mark it down on a survey. Moreover, the nature of the interviews meant that participants had more time to reflect and be retrospective on their whole journey with coming to terms with their gender identity, seeking GAHT, and what their mental health was like prior. The re-remembering of their circumstances and how they were feeling during that period, potentially allowed for more in-depth reflections and stark comparisons from where they were with their mental health to where they are now, realising how much change had occurred. This was, in comparison to the surveys which ask respondents to think about their symptomology (not related to gender) over the last two weeks, which is a somewhat arbitrary snapshot.

When looking at how findings from study one and study two relate, we can look to the two surveys that showed significant changes - the Transgender Congruence Scale (TCS) and the Goals Tracking Form (GTF). Although the differences between baseline and 12 month follow up scores significantly increased, participants' recording, on average, still did not reach full scoring of 100% on either of these two measures by 12 months. When looking at questions on the TCS such as "my physical body represents my gender identity" many participants scored two, three, or four for these questions rather than scoring a five of "strongly agree". When understanding why this may be the case, we can use the detailed findings from study two to further shed light on the survey results, such as the subtheme from theme two, 'the wished for changes'. While participants noted many of the positive outcomes they experienced with their bodies following GAHT, it was still important for them to convey the other physical changes they were either still hoping to change one day or knew they would never be able to change, such as their chest, voice, and facial and body hair. Because of these 'wished for changes' it is possible that some participants may never be able to score "strongly agree" for such questions due to the limitations of GAHT and limitations of and poor access to gender affirming surgery.

Similarly, for the TCS question, "I am generally comfortable with how others perceive my gender identity when they look at me", a number of participants scored two, three, or four rather than scoring a five of "strongly agree" at 12 month follow up. Furthermore, when looking at some of the specific goals people wrote on their GTF's, many participants included a social component which did not get scored at a 10/10 for having reached the goal by 12 months. For example, one participant identified a goal of: "more confident in society, and relationships etc" – this participant, scored their progress towards this goal at baseline as a 2/10, then a 5/10 at six month follow up, and then a 6/10 at the 12 month follow up. Another participant established a goal of: "gendered correctly in public more", scoring a 3/10 at baseline, a 4/10 at six months, and a 4/10 again at 12months. This showed either no change or only slight improvement towards reaching this goal. Another participant wrote: "decrease in anxiety about how people see me", scoring a 2/10 at baseline, an 8.5/10 at six months, and then a 4.2/10 at 12 months. Once again, when looking at the qualitative findings, subthemes within theme four such as, *navigating gendered spaces, GAHT alleviates misgendering*, and *to be seen or not to seen* can fill in the gaps to explain these occurrences. Within *navigating gendered spaces*, participants discussed how they had increased access to new spaces, such as bathrooms, however they also discussed many fears and hesitations around this based on their perceptions of how others may view them, and whether they would be judged or threatened in those spaces. Moreover, in the subtheme, *to be seen or not to be seen*, some participants taking E-GAHT noted that they became more 'visible' as a trans women, anticipating and an increase in instances of harassment and prejudice from others such as Taylor's quote: "I presume I'm going to experience more prejudice now that I'm not hiding who I am at all." Lastly, non-binary participants noticed a shift in how they were gendered following GAHT; but they were still often misgendered due to people continuing to use binary pronouns and gender labels rather than gender neutral ones.

This finding highlights an important observation. Even though changes and progress with GAHT occurred, there was still a social impact with regards to how others perceived or reacted to the participants that GAHT could not account for. The Gender Minority Stress and Resilience Model can be used to further understand these findings.

Linking to Gender Minority Stress

The Gender Minority Stress and Resilience (GMSR) model outlines four Distal Stress Factors that can be experienced by transgender people: gender-related discrimination, gender-related rejection, gender-related victimisation, and non-affirmation of gender identity (Testa et al., 2015). These distal stress factors are external stressors that people have no control over as they are stressors

coming from other individuals or society at large. From this model, experiences of distal stress factors are shown to have a direct effect on the three Proximal Stress Factors: internalised transphobia, negative expectations, and concealment. Both distal and proximal stress factors are then shown to have detrimental impact on mental and physical health.

Looking to the findings from study two, the main distal stress factor that was identified was 'non-affirmation of gender identity'. Examples include: being misgendered, being called the wrong name (dead name), and non-binary individuals being placed in binary situations (Testa et al., 2015). Subthemes within theme five provide explicit examples of non-affirmation occurring. Being misgendered evoked strong emotional reactions for many who experienced feelings of devastation, embarrassment, and anger. Moreover, comments from non-binary participants provided examples of them being placed in binary situations, such as workmates and family members failing to use gender neutral language, not having access to a gender-neutral bathroom, or being forced to wear gendered uniforms – basically having to continue to exist in a mainstream society that operates within a gender binary. Experiences with non-affirmation also resulted in many participants having to continually make a conscious and challenging decision on how best to respond whenever it happened; this takes an emotional toll on them. Although some participants did notice a decrease in how often they were misgendered by others following GAHT, most non-binary participants were still misgendered with binary pronouns and still faced the challenge of not having access to the appropriate bathroom. Moreover, while some participants noticed strangers misgendering them less, they still experienced misgendering and being called by their deadname from family members who were not fully supportive of their gender and transition journey.

When looking at the other distal stress factors, such examples include being unable to access public bathrooms, being unable to change legal documents, and experiences of discrimination when accessing medical care (Testa et al., 2015). While participant quotes within theme five did not explicitly state experiences of being rejected from accessing public bathrooms, or an increase in discrimination, it did highlight that participants were apprehensive that such events could occur. The participants did experience the proximal stress factor of 'negative expectations' as a result of having experienced distal stress factors in the past, or at the very least being aware that such distal stress factors are a heightened possibility, thus, exemplifying the relationship between distal and proximal stress factors.

The proximal stress factor of 'concealment' is explained by Testa et al. as "identity nondisclosure" (2015, p. 67) and while the choice to disclose is dependent on a person's

experiences of distal stress factors, it can also be dependent on other variables such as choice to transition, access to medical care, genetics, or age at time of transition. For those seeking gender affirming care, such as GAHT, Testa et al. highlight that the notion of disclosure or nondisclosure can change throughout the journey of their transition. For example, a person may initially conceal that they are trans and continue to present and live as the sex assigned to them at birth. At this stage they can choose when to disclose to others, or not. But after taking steps towards transitioning, they may no longer be able to conceal their trans identity; having that choice taken away from them. In some cases, they may reach a point during their transition where they "pass", so once again can choose to disclose their gender identity to others or not.

Such complexities around concealment are underlined within theme five. Alex noticed that after one year on GAHT, people were surprised when he told them that he was a trans male. He stated that his "passing privilege" alleviated his social anxiety, as he used to live in fearful anticipation that others would eventually "pick up on what I could be". Alex felt relieved to, once again, have the choice of whether to disclose to others or not, but also to be able to live and be seen by others as male. Whereas Blake noted having to move past the proximal stressor of concealment and the fear of not being able to conceal his identity, to being "proud to be a visibly genderqueer person" in order to begin his journey with GAHT. And lastly referring back to Taylor's quote of no longer "hiding who I am at all" she acknowledged that she was no longer concealing her identity, having, in the past, relied on being able to "pretend to be a guy" when she deemed it necessary or safe to. For example, being able to pick which bathroom to use based on how she chose to present herself that day, but then realising she could no longer do that once GAHT began to change her appearance.

This model underscores the important role that social interactions play in causing negative mental and physical health outcomes from distal factors. However, it also highlights the role that positive social connections can play in mitigating some outcomes. When referring back to Blake's comment about being "proud to be a visibly genderqueer person", he also described how important it was that he met other trans people and found a close community to be a part of. This enabled him to "change within myself and within the world around me" giving him the strength to move forward with his journey. The role social support played for participants was discussed throughout theme five. In particular, how support from loved ones was integral to lessen the effects of certain distal stressors and how community supports created safe and affirming environments for participants to simply exist without fear of rejection, discrimination, or non-affirmation. As outlined in chapter four, many studies highlight the role that social support plays on mitigating adverse mental health

outcomes within transgender communities (Bockting et al., 2013; Katz-Wise et al., 2018; Kelleher, 2009; McDermott et al., 2015; Weinhardt et al., 2019).

Summary

The fact that participants mean scores on the TCS and GTF were not higher at follow up could be due to a myriad of reasons. However, the analysis from study two offers insight into why this may have been the case. Furthermore, when using the GMSR in conjunction with certain themes, this provides an even deeper understanding as to why participants did not score highly on some of the measures after one year on GAHT; namely the role that society plays on transgender individuals' wellbeing. When looking at the current study's findings using the GMSM, there may also be an opportunity to make inferences as to why significant changes on the physical, mental health, and wellbeing measures did not occur. Despite there being little room for change to occur in this current study, variations in mental health outcomes in other studies likely indicate the ramifications of living in a society that is often times unwelcoming, unaccommodating, and unaccepting of trans people. Thus, impacting on participants' responses on the PHQ-15, GAD-7, PHQ-9, and PWI. It is important to stress however, that this is speculation; further research looking into the relationship between gender minority stress and outcomes of GAHT on mental health would be of benefit.

Chapter Sixteen: Contributions to existing literature

This chapter provides an overview of the consistencies and inconsistencies of the current study's findings in relation to previous literature. It also talks to the novel contributions that findings make to this literature.

Mental Health and Wellbeing

Findings from study one showed no significant changes in scores on the physical and mental health measures (PHQ-15, GAD-7, and PHQ-9), nor on the wellbeing measure (PWI). These findings are in line with some other studies but are also in opposition to others. For the studies with similar findings to the current study, one study found no changes on mood measures for those taking T-GAHT between baseline and one year (Costantino et al., 2013). Another study, comparing differences in a number of measures (including the BDI-II) at baseline and 12 month follow up for participants taking E-GAHT, also found no significant changes in the BDI-II at follow up (Gava et al., 2016). Furthermore, results from this study show that at baseline, mean scores on the BDI-II fell within the 0-13 range indicating *minimal* depression prior to starting GAHT, thus allowing little room for improvement at follow up. In addition to this, another study also found no differences in psychological function (using the Symptom Checklist-90 Revised [SCL-90-R]) between trans participants taking GAHT and a control group of trans participants (Fisher et al., 2014). The authors from this study noted, that overall, all participants scored low on the SCL-90-R, implying low levels of psychopathology across both groups to begin with and therefore making it difficult for significant variances to be observed. These last two findings in particular are comparable to the current findings from study one where mean scores for the PHQ-15, PHQ-9, and GAD-7 fell within the *minimal-mild* range at baseline and did not change over time.

Some existing quantitative literature offers findings whereby the type of GAHT (T-GAHT or E-GAHT) yielded differing results. For example, one study looking at quality-of-life questionnaire at one year follow up found that participants taking E-GAHT reported a significant increase in scores, indicating improved quality of life, however no significant changes in scores were found for those taking T-GAHT (Fisher et al., 2014). Another study also found discrepancies in outcomes between those taking E-GAHT and those taking T-GAHT, whereby participants taking E-GAHT were found to have reduced median scores for depression following one year of GAHT, however no significant changes occurred for those taking T-GAHT (Defreyne et al., 2018). From this same study, authors found no changes to median scores in anxiety for both groups. Also, one further study found depression significantly decreased following GAHT, however no significant changes occurred for anxiety (Aldridge et al., 2021). Another study found participants taking T-

GAHT experienced an increase in quality of life after six months, however those taking E-GAHT experienced no change (Foster Skewis et al., 2021). These findings show similarities to the current study in the instances where no changes were found. Moreover, these studies measured mental health and wellbeing outcomes separately for those taking T-GAHT and those taking E-GAHT, finding discrepancies between the groups, which the current study did not do due to small sample size. Therefore, another recommendation for future research is larger sample size, which I will elaborate on later.

With regards to quantitative studies outlining inconsistencies with study one's findings, a handful of repeated measures design studies have shown that participants experienced an improvement in mental health following GAHT (Achille et al., 2020; Allen et al., 2019; Colizzi et al., 2014; de Lara et al., 2020; Kuper et al., 2020; Metzger & Boettger, 2019). One particular study conducted by Fisher et al., (2016) found a decrease in depression on the BDI-II; the follow up time for this study was two years, which is longer than most other longitudinal studies of this nature which are either six months to one year. One study using between subject's design, also found improvements to mental health following GAHT. Keo-Meier et al., (2015) assessed psychological distress in participants receiving T-GAHT and compared this to female cisgender controls after three months of GAHT: findings indicated a positive effect of T-GAHT on psychological distress. Some literature also shows improvements to quality of life and wellbeing following GAHT which differs from the current study (Achille et al., 2020; Pelusi et al., 2014). Conversely, one study found associations between GAHT and negative outcomes in mental health (Kranz et al., 2015), once again differing to quantitative findings from the current study.

Of note, other longitudinal studies that used the same mental health and wellbeing measures as used for the current study were not found. Other studies used standardised measures such as the BDI-II, BAI-II, and STAI or questionnaires such as the HADS or QOLQ. The reason for using the PHQ-15, GAD-7, PHQ-9, and PWI was that these psychometrics were already being routinely administered as part of the psychosocial assessment at the Endocrine department in Wellington Regional Hospital, are free to administer in a public health system, and are often used in primary health care settings nationally.

Gender Incongruence

With regards to gender incongruence, the current study found that following GAHT, participants' scores on the Transgender Congruence Scale significantly increased, indicating an increase in gender congruence. This finding is similar to previous literature, such as one Australian study where

participants experienced a decrease in gender dysphoria at a six-month follow up (Foster Skewis et al., 2021). Kuper et al., (2020) found that after one year of GAHT, participants reported a significant decrease in body dissatisfaction on the Body Image Scale. Another study used the Body Uneasiness Test (BUT) to analyse body related distress in 37 trans men in Turkey at baseline and six months follow up from T-GAHT (Turan et al., 2018); by follow up, participants' scores on the BUT had decreased compared to baseline.

Another study also used the BUT for both trans men and trans women following GAHT, with scores being compared against control groups of trans men and women not taking GAHT (Fisher et al., 2014). From this study, trans women reported significantly less body uneasiness than their control group following E-GAHT. However, no significant differences were observed between trans men taking T-GAHT and their control group. Conclusions drawn from this study imply that E-GAHT may be successful on its own in ameliorating feelings of body incongruence for those AMAB. However, for those taking T-GAHT who are AFAB, surgical intervention by way of top surgery would be beneficial in conjunction with T-GAHT to reduce body uneasiness. In support for this conclusion, one other study found that participants taking T-GAHT who had also received top surgery conveyed less body dissatisfaction compared to a T-GAHT only group and a group receiving no care (Davis & Colton Meier, 2014). The conclusions within these findings show similar conclusions drawn within the current study based on qualitative findings within theme two, namely the 'wished for changes', where many participants taking T-GAHT were still wanting top surgery, emphasising that T-GAHT had no impact on this physical change.

When looking exclusively at participants' self-perception of their voice, Bultynck et al. (2017) administered the Transexual Voice Questionnaire to 80 trans men and 103 trans women at baseline, and at a three and 12 month follow up after receiving GAHT. Findings show that T-GAHT was associated with an improvement in self-perception of voice, however for E-GAHT this was not the case. This suggests that trans women whose voices have already dropped, have less satisfaction with their voice than trans men due to the irreversible effects of testosterone due to their sex assigned at birth. This finding alludes to the more in depth and nuanced findings from the thematic analysis, namely the subtheme of "not all changes are considered equal" where some participants taking E-GAHT commented on the unfairness in how those taking T-GAHT experience a change to their voice.

Therefore, the current study's noteworthy finding that GAHT results in positive outcomes for gender congruence, is supported by other studies of a similar nature. However, the current study

and previous literature indicates that the desired bodily changes that do not occur with GAHT will continue to contribute to feelings of gender incongruence or body dissatisfaction. For this reason, other gender affirming services such as top surgery, voice therapy, and laser hair removal are essential services to improve gender congruence. These services, surgeries in particular, continue to be difficult to access nationally in Aotearoa, but are desperately required to further improve outcomes for trans people, I discuss this further in the next chapter.

Goals Tracking Form

The current study also incorporated a more personal approach towards quantitative data collection, by asking participants for three goals they hoped to achieve from GAHT and tracking this over time. This is believed to be novel data collection in this field of research as no other study, to date, has included tracking of participants' individual goals with GAHT. Findings show that regardless of psychosocial outcomes from the study's questionnaires, participants experienced positive changes following GAHT with regards to reaching their goals. The GTF also allowed for participants to include their own unique and meaningful goals for GAHT based on what gender congruence meant to them, and what they specifically were hoping to achieve. This form allowed space for the variability and expansiveness of gender unlike any other prescribed survey could have done. Findings from the GTF provide a platform for similar methodology to be used for future research. Suggestions for ways in which the GTF could be used in future analysis include categorising of similar types of goals (such as physical based goals, emotional based goals, and social goals), frequency analysis of these types of goals, and comparison of progress on these goals based on category to see which types of goals are more likely to be achieved following GAHT.

Qualitative Literature

A recent metasynthesis outlines findings from 28 qualitative studies that examined trans people's experiences with GAHT (Fowler et al., 2023). Overall, findings identified that the experiences with GAHT can be incredibly varied from person-to-person across the psychological, physical, sexual, and social domains – with both negative and positive experiences. For example, some studies noted GAHT to have negative impacts on mental health initially before getting better, whereby others felt positive changes to their mental health immediately. Some findings indicated negative experiences with side effects, such as weight gain or joint pain, while others experienced no negative side effects.

Some more specific themes from the Fowler et al., metasynthesis include a theme titled "shifting privilege" described as "negotiating a new social position that encompasses shifting societal

privilege through the experiences of gender roles" (Fowler et al., 2023, p. 17). This is similar to the current study's subtheme: 'navigating gendered spaces' from theme four of this study. Another theme from Fowler et al., titled "the power of affirmation", is similar to the current research, with findings iterating how affirmation from others helped participants to feel more confident to navigate their social worlds.

Looking into individual studies, one qualitative study also looked into decision-making with GAHT, from both adolescents' seeking GAHT and their parents (Daley et al., 2019). This shows a similar concept to the subtheme 'forks in the road' from theme one. Namely, weighing up of the permanent outcomes and side effects, consideration of the social impacts of starting GAHT and transitioning, and then deciding that the benefits of treatment outweigh the potential negatives. Authors from this study likened the decision-making process to "stepping stones", in which the process happened gradually over time with information gathering, multiple conversations and considerations (Daley et al., 2019, p. 278). This finding is consistent with the analysis from theme one of the current study, showcasing that it is common for people to spend time researching and considering their options, and seriously thinking about the outcomes and the permanent changes of GAHT as part of their decision-making process, rather than acting impulsively or haphazardly.

With regards to positives outcomes of sexual expression, a qualitative study in Australia used thematic analysis to provide insight into trans women's psychosexual and physiosexual changes after at least one year on GAHT (Rosenberg et al., 2019). Positive changes from participants' narratives included shifts in orgasm experiences, heightened sensitivity and increase of erogenous zones, and feeling more confident and comfortable with their bodies due to physical changes, such as softening of skin and breast growth. However, some participants also experienced decrease in their libido and ability to orgasm. These findings mirror some of the narratives discussed by participants taking E-GAHT for the current study, particularly around changes to sex drive and orgasm intensity. Rosenberg et al. state that there is a dearth of knowledge around sexual heath following GAHT, and findings from the subtheme 'sexual expression' from theme two of the current study contribute towards this dearth. More research in this area is important as many trans people struggle with impaired sexual wellbeing, often limiting, restricting, or avoiding sexual intimacy and experiences due distress from unwanted body parts (Prunas, 2019). Additionally, during the informed consent process, impacts on sexual functioning is a commonly mentioned side effect of GAHT. Therefore, research that explores the varied ways in which GAHT may enhance, detract, or just simply change sexual expression is imperative to providing a more robust informed consent process.

Findings from study two also contribute towards the body of research around non-binary experiences, specifically, providing further insight into what it can be like to live in a binary oriented world. For example, non-binary participants being placed in the gender binary by others who struggle to use gender neutral terms, having to decide on a changing room or bathroom to use, or having to wear gender specific uniforms. Also, findings from this study highlighted that GAHT itself is divided into a binary of predominantly masculinising or feminising effects, and although doses can be lowered to hopefully limit the intensity of outcomes, this is not always guaranteed, and non-binary people often have to choose between two binary outcomes. Moreover, some non-binary participants spoke of GAHT alleviating misgendering somewhat, however they ended up being misgendered towards the other binary gender which was seen as the "lesser of two evils". This particular finding evokes a question of how one could transition in a way to 'look' non-binary in order to then be perceived by others as non-binary. Interestingly, a qualitative study interviewed both binary and non-binary trans participants to analyse the similarities and differences experienced by both groups (Fiani & Han, 2019). From this study, one such theme was the notion of 'passing' as your gender and the lack of societal understanding, assumption, or knowledge of what it means to 'pass' as a non-binary person. Conversely, however a trans woman or trans man can be perceived by some to have transitioned 'successfully' once they 'pass' as a man or a woman. For non-binary people in this study, the passing 'goal' described by some participants was to simply not look cisgender (Fiani & Han, 2019). This point then comes with its own complications and implications for what it means to 'successfully' transition from a social point of view, considering that non-binary people are not trying to transition from one gender to another but rather to transition to either both male and female, neither, or something in between. Of note, a recent study looking into new strategies for individualising GAHT for non-binary people has suggested the incorporation of non-hormonal medications alongside GAHT to moderate some of its effects (Cocchetti et al., 2020). While this type of treatment is yet to be standardised, this shows a promising start.

The current study also contributes novel themes, by way of talking to the "wished for changes" that participants were not able to achieve via GAHT, addressing the discrepancies between changes discussed by those taking E-GAHT and those taking T-GAHT, and by providing unique analysis from one participant navigating specific gender roles within Te Ao Maori, and how she went about doing this.

Overall, analysis from study two offers breadth of multiple different factors associated with GAHT – the journey leading up to it, physical outcomes, personal outcomes, social outcomes, and experiences with support. Some findings showed consistencies with other qualitative studies, some

provided novel discussion particularly around the perceived inequality between T-GAHT and E-GAHT, negotiation of new gendered roles and spaces, and the wished for changes that GAHT cannot offer.

Summary

While some literature has outlined that GAHT is associated with improvements in mental health and quality of life, other studies have found either mixed outcomes or no significant changes. The current quantitative findings are more in line with those particular studies that found no change to mental health or wellbeing following GAHT, but also in line with the studies in which participants had scored low on mental health measure at baseline, allowing minimal room for improvement. Overall studies looking at changes to gender congruence or body satisfaction following GAHT, show an increase in these domains which was mirrored by the findings of the current study. Also, findings from the GTF can be seen to further bolster this finding, as well as further demonstrate the positive outcomes of GAHT for trans people.

The qualitative findings add contextual insights into the more complex, nuanced, and unique experiences that individuals have when undergoing GAHT, contributing towards existing themes as well as offering new perspectives across physical, personal, and social factors, as well as experiences with receiving social support as well as health care support.

Chapter Seventeen: Implications, Limitations, and Future Research

This chapter considers the implications the current study with respect to changes in clinical practice, policy changes, and the need for societal changes. This chapter also emphasizes the study's strengths, identifies its limitations and provides recommendations for future research.

Implications of the Study

First, the results from theme one underlines that participant's decisions to start GAHT were well considered. These decisions were not made rashly or on a whim. Participants had contemplated the pros and cons for taking GAHT, considering both the physical changes and long-term side effects, as well the potential social implications. Many had completed research online and had talked to others who had undertaken the same journey. Therefore, an important implication is the need for the informed consent model to be more widely adopted and accurately utilised within clinical practice.

As it stands, many primary healthcare services have the professional qualifications and skills to provide gender affirming health care. As per the most recently published standards of care for health of transgender and gender diverse people (SOC-8) (Coleman et al., 2022), there is no longer a requirement for a person to have a mental health assessment to access GAHT, and there is encouragement for this to be prescribed in primary health care. Unfortunately, however, most primary health care practices are not incorporating this into their service, instead referring on to specialised secondary services when a patient presents with this request. Many physicians who are able to assess and prescribe are not aware of the recent updates in the SOC-8 and so continue to refer patients on to obtain a psychological assessment before starting GAHT. This should only occur if there were queries around the patient's capacity to consent (due to instances such as age, intellectual disability, or active psychosis) or if there was a concern that gender incongruence was not the primary presentation (for example, uneasiness with body or genitals due to history of sexual assault). Standard referrals to secondary health services for GAHT are creating major wait times and, as a result placing strains on services, causing further detriment to many trans people's mental health and wellbeing. Such assessments can also result in further problematic outcomes, for example, one Aotearoa study found that participant's experiences of having to see a psychologist to undergo a psychosocial assessment prior to starting GAHT were predominately negative (Fraser et al., 2021). They felt that these assessments were designed to prove they were "trans enough", and generated feelings of pressure to conform to a specific and prescribed "transgender narrative" in order to access the health care they needed. Therefore, not only is the validity of such an assessment affected, but if the outcome continues be in the person's favour (as most attend well informed), or if they conceal mental health issues that wouldn't affect capacity anyway, then they don't get to

discuss or address their specific questions, concerns and needs. Making a specialist assessment now (according to the 2022 SOC-8) an unnecessary requirement and stigmatising, rather than a helpful process.

Two recent studies compared characteristics of trans people who were either assessed for GAHT by a GP at a trans specialised primary health centre using the informed consent model (GP-assessed group) or assessed for GAHT by a mental health professional (MH-referred group) (Solanki et al., 2022; Spanos et al., 2021). Findings indicated that the GP-assessed group started GAHT at a median of 0.9 months compared to a median of 3.1 months from the MH-referred group. Additionally, when surveyed on their satisfaction of overall care, the majority of both groups were satisfied with their process of receiving GAHT, however a higher proportion of the GP-assessed group were extremely satisfied compared to the MH-referred group (Spanos et al., 2021). Of note, the wait time to start GAHT in the MH-referred group was significantly less than the current wait time for referral to secondary services in the Wellington region, which at the time of writing was estimated to be 14 months. Findings from these studies and the current study, support the need to promote accessible and destigmatising services via primary health care as the standard pathway for accessing GAHT.

Promisingly, in 2023 the *Primary Care Gender Affirming Hormone Therapy Initiation Guidelines: Aotearoa New Zealand guidelines for commencing GAHT for adults in primary care* was published by Carroll et al., (2023). This publication was produced to encourage and support GPs in providing gender affirming health care to adults within their primary care setting, and only referring for mental health assessment if there is concern for the individual's capacity to provide informed consent.

Although GAHT resulted in many positive physical outcomes for participants, there were still some physical changes that participants viewed as important that GAHT has no impact on. Many of these changes can be obtained through additional services such as surgeries, voice therapies and laser hair removal. However, for many these were unobtainable due to financial barriers and lack of resources. This signals a need for increased funding and accessibility for other gender affirming services alongside GAHT. For example, in Wellington, Willis Street Physiotherapy offers fully subsidised gender affirming services within its practice by way of support with chest binding, correcting posture that has been affected by hunching to cover up certain body parts, and post gender affirming surgery recovery (Willis Street Physiotherapy, N.D).

Many other services could offer similar types of assistance to trans communities such as gyms, laser hair removal clinics, and cosmetic stores.

While GAHT resulted in many positive changes for participants, it did not have a widespread impact on the way others interacted with and treated them, highlighting societal acceptance and attitudes as a wider systemic issue that impacts the wellbeing of trans people. These findings not only bolster the GMSR model, but also reinforce conclusions from previous literature which states how important it is for trans people to live in a supportive society (Aldridge et al., 2021). It is important to note that social support goes beyond the interpersonal, and also includes support by wider society. Implications from this research challenge the current make up of our society, pointing out that we can do better, and that it is our responsibility to do so. The media, policy, funding allocations, educational institutions, and society in general needs to continue creating environments that are educated, accepting, and responsive towards diverse gender identities (particularly targeting areas where this is overtly lacking). With focus on increasing gender-neutral public facilities and spaces, increasing positive representations of trans people in mainstream public, and actively working to ensure that hate speech and transphobia is not tolerated on any public platforms. Our current societal structures and systems are cisnormative, cissexist, and biased and therefore designed to advantage cisgender people over transgender people, and those with binary genders over those who are non-binary.

However, there are some positive steps occurring in Aotearoa aimed towards increasing education and awareness. For example, the Ministry of Education has released information and resources for inclusive education (Ministry of Education, 2022), as well as developing strategies and programmes for implementing inclusive curriculums and fostering inclusivity in classrooms for years one to eight (Inclusive Education, N.D). Unfortunately, these advances have been criticised by groups such as Family First, who have released their own resources in response, referring to such education as ‘indoctrination’ and transgender identities as a ‘trend’ (Family First New Zealand, 2020).

Alongside educational settings, many workplaces are developing Rainbow networks and are also updating inclusive polices. Organisations such as InsideOUT offer education and training for workplaces to better foster rainbow inclusivity and support their LGBTQ+ employees and colleagues (InsideOUT, 2021). Organisations in Aotearoa can also apply to get certified with a ‘Rainbow Tick’, whereby they are evaluated on their level of LGBTQ+ inclusivity across areas such as: policy, staff engagement and support, staff training, external engagement, and monitoring

(Rainbow Tick, 2019). Pink Shirt Day is celebrated across the world annually as a day to raise awareness against bullying and to promote kindness, inclusivity, and diversity. The Aotearoa contingent of Pink Shirt Day provides information for workplaces and schools encouraging and educating allies of LGBTQ+ communities on how to stand up against homophobia and transphobia (Pink Shirt Day, 2023). Within politics, Aotearoa has the highest percentage of openly LGBTQ+ members within Parliament compared to the rest of the world (Bull, 2020). Moreover, some political parties are also putting forth campaign policies in support of promoting LGBTQ+ rights such as Labour and the Greens.

Strengths, Limitations, and Future Research

One of the strengths of this study was its mixed methods approach which allowed for more depth, detail, and contextual insights than that of a sole quantitative study. The longitudinal design within subjects also provided greater detail of information compared to a cross-sectional study design. The implementation of the Goals Tracking Form provided a more personal approach to quantitative analysis that was adapted to be unique to each participant, rather than only using prescribed surveys. This allowed participants to determine what congruence meant to them, and what was important for them with regards to their GAHT journey.

This study was also a first of its kind in the country, therefore providing a unique and much-needed contribution to transgender health literature in Aotearoa. Moreover, findings provide Aotearoa based evidence of generally positive outcomes for those undergoing GAHT. This is important due to the international and national push for GAHT to be prescribed at the primary health care level. Therefore, this current study contributes to the benefits of GAHT for GPs in Aotearoa, many of whom, are currently still too hesitant to prescribe.

Because this study is the first of its kind in Aotearoa, it has also created a platform for more studies that will need to be implemented to contribute to these findings, to explore different constructs, and analyse different factors which this study was unable to do. Therefore, like every study, this study also has its limitations and recommendations for future research.

Research Design and Collaboration.

One limitation of the overall study was the sparse involvement of the trans community during the development of research questions and research design. When conducting research for under-served and marginalized populations, community-based research provides opportunity for collaboration between the researcher, community members, and/or organisational representatives throughout the study design, implementation, and analysis processes (Israel et al., 1998). Implementing

community-based research has many benefits and rationales. Of note is its ability to bring together multiple collaborators with varied, distinct, and specialised skillsets and lived experiences. Such a range of perspectives can improve the quality of the study design by ensuring the research is designed in a way that will more adequately address and respond to the specific complexities of the community, while also doing its best to reduce the impacts of marginalisation and inequities within such communities (Israel et al., 1998). Community-based research is also seen as an impactful way of addressing power imbalances between the researcher and the community, changing the dynamic of the community being researched 'upon' as the subject, to the community becoming an active and influential voice (Wallerstein & Duran, 2010).

During different stages of research design and implementation, I consulted some executive committee members of the Professional Association for Transgender Health Aotearoa (PATHA). I sought their advice and contribution towards my ethics application as well as the development of questions for my interview schedule. Their advice and guidance were invaluable, as they provided input not only as representatives of a collective organisation but also through their lived experiences with GAHT. However, when looking to research in similar areas, particularly within Aotearoa, other studies have included multiple community organisations and groups in partnership during all phases of the study: decision-making around research design, interview questions, recruitment, and analysis of findings (Fraser, 2019b). Thus, a recommendation for future studies would be to incorporate a community-based collaborative approach throughout all stages of research design and implementation. Collaboration with multiple community groups and organisational representatives will ensure that differing and varied considerations are incorporated, lessening the chances of biased or blinded perspectives and overall giving power and voice to a community that has routinely been marginalised.

Participant Recruitment and Data Collection.

Another limitation can be seen in participant recruitment. For study one, this was the relatively small sample size of participants. For the study overall, this also included the lack of diversity in participant recruitment such as recruiting participants from the Wellington region only, as well as the majority of participants identifying as New Zealand European or Pakeha, 71% in study one and 70% in study two.

Sample size and lack of participant diversity is a common problem within this field of research (Baker et al., 2021). While I tried to recruit as many people who presented to the Endocrinology Department as possible by drawing out my recruitment phase for as long as possible,

I was still only able to recruit an initial total of 41 participants which reduced to 35 participants by the end of data collection. Power analysis indicated that a sample size of 36 would be required to detect a moderate effect size, and sample size of 216 would be required to detect a small effect size. Therefore, statistical power of this study was low. The limitations around sample size for this study also meant that I did not have a powerful enough data set to compare differences between participant groups. Moreover, there was an imbalance between the number of participants taking E-GAHT (63%) and the number taking T-GAHT (37%). Recruiting a larger number of participants and ensuring a more even distribution of the type of GAHT being taken would enable future researchers to analyse differences in outcomes between binary trans participants and non-binary trans participants, or between those taking T-GAHT and those taking E-GAHT. Thankfully, findings from my qualitative study were able to tease apart some of these discrepancies that I was not able to within study one. A larger sample size in the future could provide quantitative evidence to further support some these findings. For this reason, one recommendation for future research it to include recruitment from multiple health services that provide access to GAHT; hopefully this will include recruitment from primary health care services also.

Also, because participants were recruited from within the Wellington region, it makes it difficult for these results to be generalised out to other parts of the country. Wellington is well known for being a LGBTQ+ friendly city, incorporating a rainbow crossing on one of its popular open air shopping street Cuba St, and using the silhouette of an iconic Aotearoa drag queen and activist, Carmen Rupe, as a walk signal for pedestrian crossing lights. Moreover, some participants noted that they specifically moved to Wellington due to its more accepting culture – noting other parts of Aotearoa, particularly rural areas, to be less accepting of trans people and queer identities. Furthermore, while the centralising of the public health system away from the twenty district health boards towards Te Whatu Ora – Health New Zealand, is a promising start for centralising and streamlining pathways to GAHT, the current pathways still differ between regions resulting in a national disparity between availability, procedural requirements, and wait times. Thus, it is important that future research incorporates the recruitment of people from all over the country. Prior research supports this notion, as findings highlight increased discrimination, health disparities and barriers in accessing gender affirming health care for trans people who live in rural locations (Renner et al., 2021).

Moreover, another recommendation for future research is the incorporation and analysis of other diverse groups and minorities within Aotearoa's trans communities. Using an intersectional approach by recruiting people with differing disabilities, ethnicities, religions and other cultural and

socio-economic backgrounds not only acknowledges that experiences within trans communities are not homogenous, but it also seeks to further reduce the impacts of marginalisation and inequities within such communities. Increasing the diversity of recruitment across multiple factors would not only ensure that findings could be generalizable to Aotearoa as a whole, but would likely present with differing outcomes, narratives and theme development, perhaps showcasing more nuanced and less homogenised findings.

It is important to also bear in mind that, in general, trans communities represent a vulnerable subset of the population, and those who are seeking GAHT may often feel that their fate is in the hands of the clinician who decides whether or not they have access. Therefore, participants were possibly concerned that they would be denied access to GAHT if they presented as "too mentally unwell" if they answered honestly on the mental health surveys at baseline. This highlights an important limitation of the research, and a necessary recommendation for future research in this area. Timing of baseline survey administration should be carefully considered, potentially being administered after the participant has received their prescription for GAHT, but before they have started taking it, ideally at the time they are given their prescription for GAHT, but before taking their first dose. Additionally, it is important to note that there was a disparity across wait times for participants undergoing their psychosocial assessment to receive GAHT and then receiving their prescription for GAHT. This was due to admin and processing errors within the Endocrinology services that has since been corrected. It is acknowledged that prolonged wait time for receiving health care can result in a decline in mental health, therefore it can be speculated that this delay may have impacted on participants' distress. Participants survey responses at baseline, therefore, may have changed in the lead up to them receiving GAHT if their wait time had been particularly long. This limitation further reinforces the recommendation for baseline surveys to be administered at the same time as receiving GAHT rather than prior.

One other limitation with survey administration was that participants start time of GAHT was not accurately recorded. The date that GAHT was prescribed was used as the benchmark for timing the six month and 12 month follow up survey's as this was easily located on participant's files. Recommendations for future research would be to ask participants what date they actually started taking GAHT rather than the date it was prescribed to them.

Moreover, with regards to surveys, the goals tracking form (GTF) has had limited use within research. While visual analogue scales are a common and routinely used measure and have been shown to have good sensitivity, reliability and validity across a number of studies (Abend, et al.,

2014; Miller & Ferris, 1993), the GTF, specifically, has not yet been validated. Therefore, the novel use of this measure is a limitation.

Length of Follow-up.

A common limitation in longitudinal research is the difficulty in getting survey responses back in a timely fashion. For this study, many surveys were received outside of the six month and 12 month time point for a myriad of reasons. For example, COVID lockdowns resulted in the altering and delaying of survey distribution, there was also some difficulty in getting participants to complete surveys on time, and, at times, general life circumstances interrupted the researcher's ability to send surveys out within the necessary time frames.

Another limitation with regards to follow up times is that many physical changes from GAHT do not reach their maximum expected effects until after the first year, often at the two-to-three-year mark, such as redistribution of body fat, breast growth, thinning and slowed growth of facial and body hair, increase of facial and body hair growth, and increased muscle mass (Oliphant et al., 2018). Therefore, the one year follow up time of the current study likely fell short of many of these changes having full effect for participants, and therefore the full implications of GAHT on psychosocial wellbeing were not captured. It would be beneficial for future research to establish a longer follow up period for data collection.

Keeping Track of Other Gender Affirming Procedures.

One other limitation of this study is that it did not account for the variable of participants seeking other types of gender affirming care throughout. As noted during study two, some participants taking T-GAHT had also undergone chest surgery for creation of a male chest during their first year on hormones, and some taking E-GAHT were also completing laser hair therapy alongside. I did not include a question in my questionnaire for study one about asking participants what other types of gender affirming procedures they had implemented since starting GAHT, therefore I cannot guarantee that the findings from study one are solely due to the impacts of GAHT in isolation. Thus, future research that controls for this variable would ensure more accurate findings and conclusions around the outcomes of GAHT.

Incorporating Impacts of External Social Factors.

While I included some analysis around the social factors that may be contributing towards continued negative wellbeing and/or gender incongruence, this study did not provide concrete analysis or testing for the impact social factors may have on the effectiveness of GAHT. Future research looking specifically at the impacts that external social factors, or distal stressors may have

on effectiveness of GAHT is important. For example, a study that includes the Gender Minority Stress and Resilience Measure (Testa et al., 2015) as part of its questionnaire set would be beneficial, as it uses a 5-point scale to measure issues related directly to gender minority stress. Questions from the measure cover areas such as gender-related discrimination and rejection, non-affirmation of gender identity, and internalised transphobia. For example, "*I have to repeatedly explain my gender identity to people or correct the pronouns people use*" and "*I have had difficulty finding a partner or have had a relationship end because of my gender identity expression*" (Testa et al., 2015, p. 76).

Summary

Despite its limitations, this study contributes important and unique research to an increasing body of literature on gender affirming hormone therapy, providing the first study of its kind within Aotearoa. This study not only provides a platform for future research to take place within this country but also provides useful implications for health care, enhancing access to other gender affirming services, and societal changes.

Closing Reflections

When I began this research, in 2019, the social climate towards trans people seemed less polarising, at least within New Zealand. I felt I was part of a rising wave where trans people, discourses around trans issues, and media coverage, was becoming more widely represented and celebrated rather than damning and discriminatory – think RuPaul's Drag Race contestants coming out as trans on public television, conversion practices becoming banned in New Zealand, Laverne Cox's documentary - *Disclosure* on Netflix, and countless new positive trans influencers popping up on social media.

Recently, however, it feels as if society has taken a step backwards as pejorative rhetoric against queer communities has risen in backlash. The Disinformation Project (an independent research group reporting on disinformation and misinformation in Aotearoa) released a working paper in May 2023 documenting a recent rise in hate and harm towards trans people in Aotearoa, and a rise in far-right activity that perpetuates hateful attitudes towards trans people and/or denies their existence, attributing much of this to recent overseas influence. They reported that "the type of language and imagery we're seeing is significantly more violent, including repeated use of language that denies that trans people exist, or that they should be allowed to exist" (The Disinformation Project, 2023).

Having spent the last four and half years extensively researching the long standing history of trans people, mental health and health disparities experienced within these communities, the benefits of increased access to gender affirming care, and the important role that society plays in mitigating adverse outcomes, it is so disheartening to read news like this, and to see the increase in anti-trans media coverage and attitudes in my own country. I've learnt that even when I've done all this research, have spoken with so many trans people about gender, have critiqued the notion of gendered norms, roles, and expectations, no matter how much I try and explain this to someone else, if they are not open to wanting to understand and show compassion, or if they are not willing to change their minds – they won't.

Doing this research has affirmed and validated my assumptions that I was helping members of the trans community and contributing to a body of knowledge that is so desperately needed. What I didn't realise is just how frustrating and heart-breaking it can be to have this level of knowledge and understanding and still not be able to change the minds of those who continue to be hateful, judgemental, and afraid of diversity. As my wise supervisor has continually pointed out, there is so much more advocacy and sustained effort needed within this area to continue to instil

even the smallest of changes. Thus, my passion for advocacy and for continuing to educate others who may be ignorant of the importance of trans rights will continue.

Having only done an honours research project prior, I had no actual idea what I was in for when undertaking this doctoral research. No one could have prepared me for how painstaking and all-consuming this process is. Halfway through this research, prior to having conducted my interviews, I wanted to drop the qualitative aspect of this research as I realised I was not going to complete this doctorate within the expected timeframe. After much contemplation, many discussions, a few tears, and a couple of extensions, I persevered. I am so thankful I did. The interviews with those 10 participants ended up being one of the most rewarding and significant parts of my entire project, and reinvigorated my motivation and enthusiasm about the research I was doing. I walked away from many interviews hugging participants, having them invite me to shows they were performing in, and emailing me books and resources they thought would be helpful for my study. I talked previously about my conflicts around my insider/outsider stance within this area, and I would not have been able to get to a level of comfort with that had I not approached part of this research from a reflective and qualitative standpoint.

Additionally, this research has also proven to be beneficial for me beyond an academic scope. When starting this thesis, I was a student learning how poorly trans people had been treated historically by medical and mental health professionals and systems. Since completing my training, I am now working in this sphere as a psychologist undertaking supporting trans people seeking GAHT and writing letters of support for those seeking gender affirming surgeries. Many of my clients have been on a wait list for over six months to access GAHT and a letter for surgery, with me being the only barrier in their way. What I am able to bring to my new role is a deeper understanding of how frustrating and unfair this can feel. I am able to acknowledge this with clients and am able to work more compassionately and respectfully alongside clients because of this research. Moreover, I am able to use my knowledge, and anecdotes from participants in this study to explain to clients how some of the changes with GAHT can be experienced. This research has helped me to better serve the trans community within Aotearoa.

When doing this research, I found it difficult to not get caught up in the negatives, the ways in which the health care system is still failing, and the ways in which society needs to do better. So, I'd like to end with this quote from one of the participants as a reminder to keep looking forward and to focus on how we can move away from deficit focused stories to ones that are positive.

How do you tell a transgender story positively? Because not only is it a thing that's needed, but also truly my transition has been one of absolute fucking joy. It's been amazing. And I really didn't know that was a possibility. I thought I was inviting my life to be harder and worse, where it was really the opposite. – Blake

References

Abend, R., Dan, O., Maoz, K., Raz, S., & Bar-Haim, Y. (2014). Reliability, validity and sensitivity of a computerized visual analog scale measuring state anxiety. *Journal of Behavior Therapy and Experimental Psychiatry, 45*(4), 447-453. https://doi.org/10.1016/j.jbtep.2014.06.004

Achille, C., Taggart, T., Eaton, N. R., Osipoff, J., Tafuri, K., Lane, A., & Wilson, T. A. (2020). Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths: preliminary results. *International Journal of Pediatric Endocrinology, 2020*(1), 1-5. https://doi.org/10.1186/s13633-020-00078-2

Adams, M. A. (2015). Traversing the transcape: A brief historical etymology of trans* terminology. *Transgender communication studies: Histories, trends, and trajectories*, 173-185.

Aldridge, Z., Patel, S., Guo, B., Nixon, E., Pierre Bouman, W., Witcomb, G. L., & Arcelus, J. (2021). Long-term effect of gender-affirming hormone treatment on depression and anxiety symptoms in transgender people: A prospective cohort study. *Andrology, 9*(6), 1808-1816. https://doi.org/10.1111/andr.12884

Ålgars, M., Alanko, K., Santtila, P., & Sandnabba, N. K. (2012). Disordered eating and gender identity disorder: a qualitative study. *Eating Disorders, 20*(4), 300-311. https://doi.org/10.1080/10640266.2012.668482

Allen, L. R., Watson, L. B., Egan, A. M., & Moser, C. N. (2019). Well-being and suicidality among transgender youth after gender-affirming hormones. *Clinical Practice in Pediatric Psychology, 7*(3), 302. https://doi.org/10.1037/cpp0000288

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5®)*. Arlington, VA: American Psychiatric Pub.

American Psychiatric Association. (2018). *Position Statement on Conversion Therapy and LGBTQ Patients*.

American Psychological Association. (2015). Guidelines for psychological practice with transgender and gender nonconforming people. *American Psychologist, 70*(9), 832-864. doi.org/10.1037/a0039906

Aparicio-García, M. E., Díaz-Ramiro, E. M., Rubio-Valdehita, S., López-Núñez, M. I., & García-Nieto, I. (2018). Health and well-being of cisgender, transgender and non-binary young people. *International Journal of Environmental Research and Public Health, 15*(10), 2133. https://doi.org/10.3390/ijerph15102133

Asscheman, H., Giltay, E. J., Megens, J. A., van Trotsenburg, M. A., & Gooren, L. J. (2011). A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex

hormones. *European Journal of Endocrinology, 164*(4), 635-642. https://doi.org/10.1530/EJE-10-1038

Atteberry-Ash, B., Walls, N. E., Kattari, S. K., Peitzmeier, S. M., Kattari, L., & Langenderfer-Magruder, L. (2020). Forced sex among youth: accrual of risk by gender identity, sexual orientation, mental health and bullying. *Journal of LGBT Youth, 17*(2), 193-213. https://doi.org/10.1080/19361653.2019.1614131

Ault, A., & Brzuzy, S. (2009). Removing gender identity disorder from the" diagnostic and statistical manual of mental disorders": A call for action. *Social Work, 54*(2), 187-189. http://www.jstor.org/stable/23719302

Austin, A., & Goodman, R. (2018). Perceptions of transition-related health and mental health services among transgender adults. *Journal of Gay & Lesbian Social Services, 30*(1), 17-32. https://doi.org/10.1080/10538720.2017.1408515

Baker, K. E., Wilson, L. M., Sharma, R., Dukhanin, V., McArthur, K., & Robinson, K. A. (2021). Hormone therapy, mental health, and quality of life among transgender people: a systematic review. *Journal of the Endocrine Society, 5*(4), bvab011. https://doi.org/10.1210/jendso/bvab011

Benjamin, H. (1945). Eugen Steinach, 1861-1944: a life of research. *The Scientific Monthly, 61*(6), 427-442. http://www.jstor.org/stable/18371

Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. *American Journal of Public Health, 103*(5), 943-951. doi:10.2105/AJPH.2013.301241

Bouman, W. P., Davey, A., Meyer, C., Witcomb, G. L., & Arcelus, J. (2016). Predictors of psychological well-being among treatment seeking transgender individuals. *Sexual and Relationship Therapy, 31*(3), 359-375. https://doi.org/10.1080/14681994.2016.1184754

Bowling, J., Baldwin, A., & Schnarrs, P. W. (2019). Influences of health care access on resilience building among transgender and gender non-binary individuals. *International Journal of Transgenderism, 20*(2-3), 205-217.

Bradford, J., Reisner, S. L., Honnold, J. A., & Xavier, J. (2013). Experiences of transgender-related discrimination and implications for health: results from the Virginia Transgender Health Initiative Study. *American Journal of Public Health, 103*(10), 1820-1829. https://doi.org/10.2105/AJPH.2012.300796

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Brewster, M. E., Velez, B. L., Mennicke, A., & Tebbe, E. (2014). Voices from beyond: A thematic content analysis of transgender employees' workplace experiences. *Psychology of Sexual Orientation and Gender Diversity, 1*(2), 159. http://dx.doi.org/10.1037/sgd0000030

Bull, J. (2020). New Zealand now has the queerest Parliament in the world. https://www.newshub.co.nz/home/politics/2020/10/new-zealand-now-has-the-gayest-parliament-in-the-world.html

Bultynck, C., Pas, C., Defreyne, J., Cosyns, M., den Heijer, M., & T'Sjoen, G. (2017). Self-perception of voice in transgender persons during cross-sex hormone therapy. *The Laryngoscope, 127*(12), 2796-2804. https://doi.org/10.1002/lary.26716

Byne, W. (2016). Regulations restrict practice of conversion therapy. *LGBT Health, 3*(2), 97-99. https://doi.org/10.1089/lgbt.2016.0015

Carabez, R., Pellegrini, M., Mankovitz, A., Eliason, M., & Scott, M. (2015). Does your organization use gender inclusive forms? Nurses' confusion about trans* terminology. *Journal of Clinical Nursing, 24*(21-22), 3306-3317. https://doi.org/10.1111/jocn.12942

Carroll, R., Nicholls, R., Carroll, R., Bullock, J., Reid, D., Shields, J., . . . Veale, J. (2023). *Primary Care Gender Affirming Hormone Therapy Initiation Guidelines: Aotearoa New Zealand guidelines for commencing GAHT for adults in primary care*.

Cavanaugh, T., Hopwood, R., Gonzalez, A., & Thompson, J. (2015). The medical care of transgender persons. In F. Health (Ed.). Boston, MA: Fenway Health.

Chen, M., Fuqua, J., & Eugster, E. A. (2016). Characteristics of referrals for gender dysphoria over a 13-year period. *Journal of Adolescent Health, 58*(3), 369-371. https://doi.org/10.1016/j.jadohealth.2015.11.010

Cheung, A. S., Ooi, O., Leemaqz, S., Cundill, P., Silberstein, N., Bretherton, I., . . . Zajac, J. D. (2018). Sociodemographic and clinical characteristics of transgender adults in Australia. *Transgender Health, 3*(1), 229-238. http://doi.org/10.1089/trgh.2018.0019

Clark, T. C., Lucassen, M. F., Bullen, P., Denny, S. J., Fleming, T. M., Robinson, E. M., & Rossen, F. V. (2014). The health and well-being of transgender high school students: results from the New Zealand adolescent health survey (Youth'12). *Journal of Adolescent Health, 55*(1), 93-99. https://doi.org/10.1016/j.jadohealth.2013.11.008

Clarke, V., & Braun, V. (2013). Successful qualitative research: A practical guide for beginners. *Successful Qualitative Research*, 1-400.

Clarke, V., & Braun, V. (2021). *Thematic analysis: a practical guide*. London: UK: SAGE Publications Ltd.

Clarke, V., Ellis, S. J., Peel, E., & Riggs, D. W. (2010). *Lesbian, gay, bisexual, trans and queer psychology: An introduction*: Cambridge University Press.

Cocchetti, C., Ristori, J., Romani, A., Maggi, M., & Fisher, A. D. (2020). Hormonal treatment strategies tailored to non-binary transgender individuals. *Journal of Clinical Medicine, 9*(6), 1609. https://doi.org/10.3390/jcm9061609

Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J., . . . Meyer, W. J. (2012). Standards of care for the health of transsexual, transgender, and gender-nonconforming people, version 7. *International Journal of Transgenderism, 13*(4), 165-232. https://doi.org/10.1080/15532739.2011.700873

Coleman, E., Radix, A., Bouman, W., Brown, G., De Vries, A., Deutsch, M., . . . Green, J. (2022). Standards of care for the health of transgender and gender diverse people, version 8. *International Journal of Transgender Health, 23*(sup1), S1-S259. https://doi.org/10.1080/26895269.2022.2100644

Colizzi, M., Costa, R., Pace, V., & Todarello, O. (2013). Hormonal treatment reduces psychobiological distress in gender identity disorder, independently of the attachment style. *The Journal of Sexual Medicine, 10*(12), 3049-3058. https://doi.org/10.1111/jsm.12155

Colizzi, M., Costa, R., & Todarello, O. (2014). Transsexual patients' psychiatric comorbidity and positive effect of cross-sex hormonal treatment on mental health: results from a longitudinal study. *Psychoneuroendocrinology, 39*, 65-73. https://doi.org/10.1016/j.psyneuen.2013.09.029

Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum, 41*(1), 89-91. 10.1188/14.ONF.89-91

Costantino, A., Cerpolini, S., Alvisi, S., Morselli, P. G., Venturoli, S., & Meriggiola, M. C. (2013). A prospective study on sexual function and mood in female-to-male transsexuals during testosterone administration and after sex reassignment surgery. *Journal of Sex & Marital Therapy, 39*(4), 321-335. https://doi.org/10.1080/0092623X.2012.736920

Couture, A. L., Zaidi, A. U., & Maticka-Tyndale, E. (2012). Reflexive accounts: An intersectional approach to exploring the fluidity of insider/outsider status and the researcher's impact on culturally sensitive post-positivist qualitative research. *Qualitative Sociology Review, 8*(1) https://doi.org/10.18778/1733-8077.8.1.05

Crenshaw, K. (1990). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stan. L. Rev., 43*, 1241.

Crichton, N. (2001). Visual analogue scale (VAS). *Journal of Clinical Nursing, 10*(5), 706-706.

Cundill, P. (2020). Hormone therapy for trans and gender diverse patients in the general practice setting. *Australian Journal of General Practice, 49*(7), 385-390.https://search.informit.org/doi/10.3316/informit.305506215375899

Daley, T., Grossoehme, D., McGuire, J. K., Corathers, S., Conard, L. A., & Lipstein, E. A. (2019). "I couldn't see a downside": decision-making about gender-affirming hormone therapy. *Journal of Adolescent Health, 65*(2), 274-279. https://doi.org/10.1016/j.jadohealth.2019.02.018

Darlington Statement (2017, March 10). *Darlington Statement: Joint consensus statement from the intersex community retreat in Darlington*. https://darlington.org.au/statement/

Davey, A., Bouman, W. P., Meyer, C., & Arcelus, J. (2015). Interpersonal functioning among treatment-seeking trans individuals. *Journal of Clinical Psychology, 71*(12), 1173-1185. https://doi.org/10.1002/jclp.22209

Davis, S. A., & Colton Meier, S. (2014). Effects of testosterone treatment and chest reconstruction surgery on mental health and sexuality in female-to-male transgender people. *International Journal of Sexual Health, 26*(2), 113-128. https://doi.org/10.1080/19317611.2013.833152

de Lara, D. L., Rodríguez, O. P., Flores, I. C., Masa, J. L. P., Campos-Muñoz, L., Hernández, M. C., & Amador, J. T. R. (2020). *Evaluación psicosocial en adolescentes transgénero.* Paper presented at the Anales de Pediatría. https://doi.org/10.1016/j.anpedi.2020.01.019

Defreyne, J., T'sjoen, G., Bouman, W. P., Brewin, N., & Arcelus, J. (2018). Prospective evaluation of self-reported aggression in transgender persons. *The Journal of Sexual Medicine, 15*(5), 768-776. https://doi.org/10.1016/j.jsxm.2018.03.079

Delahunt, J. W., Denison, H. J., Sim, D. A., Bullock, J. J., & Krebs, J. D. (2018). Increasing rates of people identifying as transgender presenting to Endocrine Services in the Wellington region. *The New Zealand Medical Journal (Online), 131*(1468), 33-42.

Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A. L., Långström, N., & Landén, M. (2011). Long-term follow-up of transsexual persons undergoing sex reassignment surgery: cohort study in Sweden. *PloS one, 6*(2), e16885. https://doi.org/10.1371/journal.pone.0016885

Dhejne, C., Van Vlerken, R., Heylens, G., & Arcelus, J. (2016). Mental health and gender dysphoria: A review of the literature. *International Review of Psychiatry, 28*(1), 44-57. DOI: 10.3109/09540261.2015.1115753

Drescher, J. (2014). Controversies in gender diagnoses. *LGBT Health*, 1, 10–14. https://doi.org/10.1089/lgbt.2013.1500

Drescher, J. (2015). Out of DSM: Depathologizing homosexuality. *Behavioral Sciences, 5*(4), 565-575. https://doi.org/10.3390/bs5040565

Dwyer, S. C., & Buckle, J. L. (2009). The space between: On being an insider-outsider in qualitative research. *International Journal of Qualitative Methods*, *8*(1), 54-63. https://doi.org/10.1177/160940690900800105

Family First New Zealand. (2020). Responding to the Transgender Issue: parent resource guide. In Minnesota Family Council: Family First New Zealand (Ed.).

Fausto-Sterling, A. (2019) Gender/Sex, Sexual Orientation, and Identity Are in the Body: How Did They Get There?, *The Journal of Sex Research*, *56*(4-5), 529-555. https://doi.org/10.1080/00224499.2019.1581883

Fiani, C. N., & Han, H. J. (2019). Navigating identity: Experiences of binary and non-binary transgender and gender non-conforming (TGNC) adults. *International Journal of Transgenderism*, *20*(2-3), 181-194. https://doi.org/10.1080/15532739.2018.1426074

Fisher, A. D., Castellini, G., Bandini, E., Casale, H., Fanni, E., Benni, L., . . . Gualerzi, A. (2014). Cross-sex hormonal treatment and body uneasiness in individuals with gender dysphoria. *The Journal of Sexual Medicine*, *11*(3), 709-719. https://doi.org/10.1111/jsm.12413

Fisher, A. D., Castellini, G., Ristori, J., Casale, H., Cassioli, E., Sensi, C., . . . Mosconi, M. (2016). Cross-sex hormone treatment and psychobiological changes in transsexual persons: two-year follow-up data. *The Journal of Clinical Endocrinology & Metabolism*, *101*(11), 4260-4269. https://doi.org/10.1210/jc.2016-1276

Fitzsimons, T. (2020). Germany is 5th country to ban conversion therapy for minors. Retrieved May 9 2020 from https://www.nbcnews.com/feature/nbc-out/germany-5th-country-ban-conversion-therapy-minors-n1203166

Fleck, A. (2022). Where 'Conversion Therapy' Is Still Legal. Retrieved 10 October 2022 from https://www.statista.com/chart/27674/map-of-where-conversion-therapy-is-banned/

Foster Skewis, L., Bretherton, I., Leemaqz, S. Y., Zajac, J. D., & Cheung, A. S. (2021). Short-term effects of gender-affirming hormone therapy on dysphoria and quality of life in transgender individuals: a prospective controlled study. *Frontiers in Endocrinology*, 919. https://doi.org/10.3389/fendo.2021.717766

Fowler, J. A., Warzywoda, S., Franks, N., Mendis, M., Lazarou, M., Bisshop, F., . . . Dean, J. A. (2023). Highs, lows, and hormones: A qualitative metasynthesis of transgender individuals' experiences undergoing gender-affirming hormone therapy. *Journal of Homosexuality*, 1-32. https://doi.org/10.1080/00918369.2023.2186759

Fox, J., & Ralston, R. (2016). Queer identity online: Informal learning and teaching experiences of LGBTQ individuals on social media. *Computers in Human Behavior*, *65*, 635-642. https://doi.org/10.1016/j.chb.2016.06.009

Fraser, G. (2019a). Queer and Trans Experiences of Accessing Mental Health Support in Aotearoa: Summary of Findings for Participants and Community Advisors.

Fraser, G. (2019b). The Rainbow Mental Health Support Experiences Study: Summary of Findings.

Fraser, G., Brady, A., & Wilson, M. (2021). “What if I’m not trans enough? What if I’m not man enough?”: Transgender young adults’ experiences of gender-affirming healthcare readiness assessments in Aotearoa New Zealand. *International Journal of Transgender Health, 22*(4), 454-467. https://doi.org/10.1080/26895269.2021.1933669

Fraser, G., Shields, J., Brady, A., & Wilson, M. (2019). *The postcode lottery: Gender-affirming healthcare provision across New Zealand’s District Health Boards. (Unpublished Journal Article)*.

Frohard-Dourlent, H., Dobson, S., Clark, B. A., Doull, M., & Saewyc, E. M. (2017). “I would have preferred more options”: accounting for non-binary youth in health research. *Nursing Inquiry, 24*(1), e12150. https://doi.org/10.1111/nin.12150

Garrison, S. (2018). On the Limits of “Trans Enough. *Gender and Society, 32*(5), 613-637. https://doi.org/10.1177/0891243218780299

Garvin, P. (2018). What's the difference between "enby," "NB," and "non-binary"? Retrieved 29 May 2020

Gava, G., Cerpolini, S., Martelli, V., Battista, G., Seracchioli, R., & Meriggiola, M. C. (2016). Cyproterone acetate vs leuprolide acetate in combination with transdermal oestradiol in trans women: a comparison of safety and effectiveness. *Clinical Endocrinology, 85*(2), 239-246. https://doi.org/10.1111/cen.13050

Gava, G., Mancini, I., Cerpolini, S., Baldassarre, M., Seracchioli, R., & Meriggiola, M. C. (2018). Testosterone undecanoate and testosterone enanthate injections are both effective and safe in trans men over 5 years of administration. *Clinical Endocrinology, 89*(6), 878-886. https://doi.org/10.1111/cen.13821

Gender Minorities Aotearoa. (2023). Trans 101 Glossary Simplified. Wellington: Aotearoa New Zealand: Gender Minorities Aotearoa. https://genderminorities.com/glossary-transgender/

Gómez-Gil, E., Trilla, A., Salamero, M., Godás, T., & Valdés, M. (2009). Sociodemographic, clinical, and psychiatric characteristics of transsexuals from Spain. *Archives of Sexual Behavior, 38*(3), 378-392. https://doi.org/10.1007/s10508-007-9307-8

Halberstam, J. (2018). *Trans* : a quick and quirky account of gender variability*: University of California Press.

Hall, J. P., Batza, K., Streed, C. G., Boyd, B. A., & Kurth, N. K. (2020). Health Disparities Among Sexual and Gender Minorities with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 1-7. https://doi.org/10.1007/s10803-020-04399-2

Hansen, W. O. (2020). *"Every Bloody Right To Be Here" Trans Resistance in Aotearoa New Zealand, 1967-1989 (Unpublished masters thesis)*. Victoria University. Wellington. http://researcharchive.vuw.ac.nz/handle/10063/8954

Hembree, W. C., Cohen-Kettenis, P. T., Gooren, L., Hannema, S. E., Meyer, W. J., Murad, M. H., . . . T'Sjoen, G. G. (2017). Endocrine treatment of gender-dysphoric/gender-incongruent persons: an endocrine society clinical practice guideline. *The Journal of Clinical Endocrinology & Metabolism, 102*(11), 3869-3903. https://doi.org/10.1210/jc.2017-01658

Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice, 43*(5), 460. https://doi.org/10.1037/a0029597

Hibbert, M., Wolton, A., Crenna-Jennings, W., Benton, L., Kirwan, P., Lut, I., . . . Nambiar, K. (2018). Experiences of stigma and discrimination in social and healthcare settings among trans people living with HIV in the UK. *AIDS Care, 30*(7), 836-843. https://doi.org/10.1080/09540121.2018.1436687

Inclusive Education. (N.D). Plan sexuality and gender education years 1-8. Retrieved 29/06/2023 from https://inclusive.tki.org.nz/guides/supporting-lgbtiqa-students/plan-sexuality-and-gender-education-years-1-8/

InsideOUT. (2021). For Workplaces. Retrieved 29/06/2023 from https://insideout.org.nz/for-workplaces/

International Wellbeing Group. (2013). *Personal Wellbeing Index: 5th edition*. Australian Centre on Quality of Life, Deakin University: Melbourne. https://www.acc.co.nz/assets/provider/pwi-a-manual.pdf

Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: assessing partnership approaches to improve public health. *Annual Review of Public Health, 19*(1), 173-202.

James, S., Herman, J., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. A. (2016). *The report of the 2015 US transgender survey*. Washington, DC: National Center for Transgender Equality.

Jaspal, R., Nambiar, K. Z., Delpech, V., & Tariq, S. (2018). HIV and trans and non-binary people in the UK. *Sexuaally Transmitted Infections, 94*(5). http://dx.doi.org/10.1136/sextrans-2018-053570

Johnson, K., LeBlanc, A. J., Deardorff, J., & Bockting, W. O. (2020). Invalidation experiences among non-binary adolescents. *The Journal of Sex Research, 57*(2), 222-233. https://doi.org/10.1080/00224499.2019.1608422

Jones, B. A., Pierre Bouman, W., Haycraft, E., & Arcelus, J. (2019). Mental health and quality of life in non-binary transgender adults: A case control study. *International Journal of Transgenderism, 20*(2-3), 251-262. https://doi.org/10.1080/15532739.2019.1630346

Jourian, T. (2015). Evolving nature of sexual orientation and gender identity. *New Directions for Student Services, 2015*(152), 11-23. https://doi.org/10.1002/ss.20142

Kattari, S. K., Walls, N. E., Speer, S. R., & Kattari, L. (2016). Exploring the relationship between transgender-inclusive providers and mental health outcomes among transgender/gender variant people. *Social Work in Health Care, 55*(8), 635-650. https://doi.org/10.1080/00981389.2016.1193099

Katz-Wise, S. L., Ehrensaft, D., Vetters, R., Forcier, M., & Austin, S. B. (2018). Family functioning and mental health of transgender and gender-nonconforming youth in the trans teen and family narratives project. *The Journal of Sex Research, 55*(4-5), 582-590. doi: 10.1080/00224499.2017.1415291

Kelleher, C. (2009). Minority stress and health: Implications for lesbian, gay, bisexual, transgender, and questioning (LGBTQ) young people. *Counselling Psychology Quarterly, 22*(4), 373-379. https://doi.org/10.1080/09515070903334995

Keo-Meier, C. L., Herman, L. I., Reisner, S. L., Pardo, S. T., Sharp, C., & Babcock, J. C. (2015). Testosterone treatment and MMPI–2 improvement in transgender men: A prospective controlled study. *Journal of Consulting and Clinical Psychology, 83*(1), 143. http://dx.doi.org/10.1037/a0037599

Ker, A., Fraser, G., Fleming, T., Stephenson, C., da Silva Freitas, A., Carroll, R., . . . Lyons, A. C. (2021). 'A little bubble of utopia': constructions of a primary care-based pilot clinic providing gender affirming hormone therapy. *Health Sociology Review, 30*(1), 25-40. https://doi.org/10.1080/14461242.2020.1855999

Ker, A., Fraser, G., Lyons, A., Stephenson, C., & Fleming, T. (2020). Providing gender-affirming hormone therapy through primary care: service users' and health professionals' experiences of a pilot clinic. *Journal of Primary Health Care, 12*(1), 72-78. https://doi.org/10.1071/HC19040

Kerekere, E. (2017). *Part of the whānau: The emergence of takatāpui identity-He whāriki takatāpui.* (Doctor of Philosophy), Victoria University, Wellington. http://researcharchive.vuw.ac.nz/handle/10063/6369

Kerstetter, K. (2012). Insider, outsider, or somewhere between: The impact of researchers' identities on the community-based research process. *Journal of Rural Social Sciences, 27*(2), 7. https://egrove.olemiss.edu/jrss/vol27/iss2/7

Keuroghlian, A. S., Ard, K. L., & Makadon, H. J. (2017). Advancing health equity for lesbian, gay, bisexual and transgender (LGBT) people through sexual health education and LGBT-affirming health care environments. *Sexual Health, 14*(1), 119-122. https://doi.org/10.1071/SH16145

Khor, M. S., Cummins, R. A., Fuller-Tyszkiewicz, M., Capic, M. T., Jona, M. C., Olsson, C. A., & Hutchinson, D. (2020). *Australian Unity Wellbeing Index: - Report 36: Social connectedness andwellbeing.* Geelong: Australian Centre on Quality of Life, School of Psychology, Deakin University. http://www.acqol.com.au/projects#reports

Kozee, H. B., Tylka, T. L., & Bauerband, L. A. (2012). Measuring transgender individuals' comfort with gender identity and appearance: Development and validation of the Transgender Congruence Scale. *Psychology of Women Quarterly, 36*(2), 179-196. https://doi.org/10.1177/0361684312442161

Kranz, G. S., Wadsak, W., Kaufmann, U., Savli, M., Baldinger, P., Gryglewski, G., . . . Kasper, S. (2015). High-dose testosterone treatment increases serotonin transporter binding in transgender people. *Biological Psychiatry, 78*(8), 525-533. https://doi.org/10.1016/j.biopsych.2014.09.010

Kroenke, K., Spitzer, R. L., Williams, J. B., & Löwe, B. (2010). The patient health questionnaire somatic, anxiety, and depressive symptom scales: a systematic review. *General Hospital Psychiatry, 32*(4), 345-359. https://doi.org/10.1016/j.genhosppsych.2010.03.006

Kuper, L. E., Stewart, S., Preston, S., Lau, M., & Lopez, X. (2020). Body dissatisfaction and mental health outcomes of youth on gender-affirming hormone therapy. *Pediatrics, 145*(4) https://doi.org/10.1542/peds.2019-3006

Lee, J. G., Ylioja, T., & Lackey, M. (2016). Identifying lesbian, gay, bisexual, and transgender search terminology: A systematic review of health systematic reviews. *PloS one, 11*(5) https://doi.org/10.1371/journal.pone.0156210

Lev, A. I. (2013). Gender dysphoria: Two steps forward, one step back. *Clinical Social Work Journal, 41*(3), 288-296. https://doi.org/10.1007/s10615-013-0447-0

Losty, M., & O'Connor, J. (2018). Falling outside of the 'nice little binary box': a psychoanalytic exploration of the non-binary gender identity. *Psychoanalytic Psychotherapy, 32*(1), 40-60. https://doi.org/10.1080/02668734.2017.1384933

Mancini, E. (2010). *Magnus Hirschfeld and the Quest for Sexual Freedom: A History of the First International Sexual Freedom Movement*: Springer DOI: 10.1057/9780230114395

Manion, J. (2020). *Female Husbands :A Trans History*. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781108652834

Masumori, N., Baba, T., Abe, T., & Niwa, K. (2021). What is the most anticipated change induced by treatment using gender-affirming hormones in individuals with gender incongruence? *International Journal of Urology, 28*(5), 526-529. https://doi.org/10.1111/iju.14499

Matsuno, E., & Budge, S. L. (2017). Non-binary/genderqueer identities: A critical review of the literature. *Current Sexual Health Reports, 9*(3), 116-120. https://doi.org/10.1007/s11930-017-0111-8

McConnell, E. A., Birkett, M. A., & Mustanski, B. (2015). Typologies of social support and associations with mental health outcomes among LGBT youth. *LGBT Health, 2*(1), 55-61. https://doi.org/10.1089/lgbt.2014.0051

McDermott, E., Roen, K., & Piela, A. (2015). Explaining self-harm: Youth cybertalk and marginalized sexualities and genders. *Youth & Society, 47*(6), 873-889. https://doi.org/10.1177/0044118X13489142

Metzger, N. Y., & Boettger, S. (2019). The effect of testosterone therapy on personality traits of trans men: a controlled prospective study in Germany and Switzerland. *Psychiatry Research, 276*, 31-38. https://doi.org/10.1016/j.psychres.2019.03.053

Meyer, I. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674. https://doi.org/10.1037/0033-2909.129.5.674

Meyer, L., & Sikk, H. (2016). Introduction to lesbian, gay, bisexual, and queer history (LGBTQ history) in the united states. In M. E. Springate (Ed.), *LGBTQ America: A theme study of lesbian, gay, bisexual, transgender, and queer history* (pp. 1-38). Washington, DC: National Park Foundation and National Park Service. https://www.nps.gov/articles/lgbtqtheme-history.htm

Miller, M. D., & Ferris, D. G. (1993). Measurement of subjective phenomena in primary care research: the Visual Analogue Scale. *Family Practice Research Journal 13*(1), 15-24. PMID: 8484338

Ministry of Education. (2022). Inclusive Education. Retrieved 29/06/2023 from https://www.education.govt.nz/school/student-support/inclusive-education/

Ministry of Health. (2021). District Health Boards. Retrieved 21/06/2022 from https://www.health.govt.nz/new-zealand-health-system/key-health-sector-organisations-and-people/district-health-boards

Mitchell, G. (2017). Some terms are better than others *TransSubstantiation.* Retrieved 29 May 2020

Moser, C. (2017). ICD-11 and gender incongruence: Language is important. *Archives of Sexual Behavior, 46*(8), 2515-2516. https://doi.org/10.1007/s10508-016-0936-7

Motta, G., Crespi, C., Mineccia, V., Brustio, P. R., Manieri, C., & Lanfranco, F. (2018). Does testosterone treatment increase anger expression in a population of transgender men? *TheJournal of Sexual Medicine, 15*(1), 94-101. https://doi.org/10.1016/j.jsxm.2017.11.004

Mueller, S. C., De Cuypere, G., & T'Sjoen, G. (2017). Transgender research in the 21st century: a selective critical review from a neurocognitive perspective. *American Journal of Psychiatry, 174*(12), 1155-1162. https://doi.org/10.1176/appi.ajp.2017.17060626

Newcomb, M. E., Hill, R., Buehler, K., Ryan, D. T., Whitton, S. W., & Mustanski, B. (2020). High burden of mental health problems, substance use, violence, and related psychosocial factors in transgender, non-binary, and gender diverse youth and young adults. *Archives of Sexual Behavior, 49*(2), 645-659. https://doi.org/10.1007/s10508-019-01533-9

Oliphant, J. (2019). *DHB provision of care across Aotearoa, New Zealand 2019.* Retrieved from https://patha.nz/Symposium

Oliphant, J., Veale, J., Macdonald, J., Carroll, R., Johnson, R., Harte, M., . . . Bullock, J. (2018). *Guidelines for gender affirming healthcare for gender diverse and transgender children, young people and adults in Aotearoa New Zealand*. https://hdl.handle.net/10289/12160

Olson, J., Schrager, S. M., Belzer, M., Simons, L. K., & Clark, L. F. (2015). Baseline physiologic and psychosocial characteristics of transgender youth seeking care for gender dysphoria. *Journal of Adolescent Health, 57*(4), 374-380. https://doi.org/10.1016/j.jadohealth.2015.04.027

Ostertag, B. (2016). *Sex Science Self : A Social History of Estrogen, Testosterone, and Identity*: University of Massachusetts Press.

Pelusi, C., Costantino, A., Martelli, V., Lambertini, M., Bazzocchi, A., Ponti, F., . . . Meriggiola, M. C. (2014). Effects of three different testosterone formulations in female-to-male transsexual persons. *The Journal of Sexual Medicine, 11*(12), 3002-3011. https://doi.org/10.1111/jsm.12698

Peterson, C. M., Matthews, A., Copps-Smith, E., & Conard, L. A. (2017). Suicidality, self-harm, and body dissatisfaction in transgender adolescents and emerging adults with gender dysphoria. *Suicide and Life-Threatening Behavior, 47*(4), 475-482. https://doi.org/10.1111/sltb.12289

Pink Shirt Day. (2023). Pink Shirt Day: Downloadable resources Retrieved 29/06/2023 from https://pinkshirtday.org.nz/resources

Pinto, R. M., Melendez, R. M., & Spector, A. Y. (2008). Male-to-female transgender individuals building social support and capital from within a gender-focused network. *Journal of Gay & Lesbian Social Services, 20*(3), 203-220. https://doi.org/10.1080/10538720802235179

Prunas, A. (2019). The pathologization of trans-sexuality: Historical roots and implications for sex counselling with transgender clients. *Sexologies, 28*(3), e54-e60. https://doi.org/10.1016/j.sexol.2019.06.002

Rainbow Tick. (2019). What Do We Offer: The certification process. Retrieved 29/06/2023 from https://www.rainbowtick.nz/#offer

RainbowYouth. (ND). How to be a trans ally: A beginner's guide. In Lush (Ed.).

Reisner, S. L., Bradford, J., Hopwood, R., Gonzalez, A., Makadon, H., Todisco, D., . . . Zaslow, S. (2015). Comprehensive transgender healthcare: the gender affirming clinical and public health model of Fenway Health. *Journal of Urban Health, 92*(3), 584-592. https://doi.org/10.1007/s11524-015-9947-2

Reisner, S. L., Poteat, T., Keatley, J., Cabral, M., Mothopeng, T., Dunham, E., . . . Baral, S. D. (2016). Global health burden and needs of transgender populations: a review. *The Lancet, 388*(10042), 412-436. https://doi.org/10.1016/S0140-6736(16)00684-X

Renner, J., Blaszcyk, W., Täuber, L., Dekker, A., Briken, P., & Nieder, T. O. (2021). Barriers to accessing health care in rural regions by transgender, non-binary, and gender diverse people: a case-based scoping review. *Frontiers in Endocrinology, 12*, 717821. https://doi.org/10.3389/fendo.2021.717821

Reynolds, E. (2019). *A Descriptive Study Exploring the Presenting Psychosocial Factors among Transgender and Non-binary Individuals Seeking Gender Affirming Care.* (Bachelor of Arts (Unpublihsed Honours)), Massey University, Wellington.

Reynolds, P. (2012). Trauma and Maori LGBTQ (Takataapui) in New Zealand. *From Our Website: Do You Know?*, 10.

Rich, A. J., Salway, T., Scheim, A., & Poteat, T. (2020). Sexual minority stress theory: Remembering and honoring the work of Virginia Brooks. *LGBT health, 7*(3), 124-127. https://doi.org/10.1089/lgbt.2019.0223

Riggs, D. W., & Treharne, G. J. (2017). Decompensation: A novel approach to accounting for stress arising from the effects of ideology and social norms. *Journal of Homosexuality*, *64*(5), 592-605. https://doi.org/10.1080/00918369.2016.1194116

Rimes, K. A., Goodship, N., Ussher, G., Baker, D., & West, E. (2019). Non-binary and binary transgender youth: Comparison of mental health, self-harm, suicidality, substance use and victimization experiences. *International Journal of Transgenderism*, *20*(2-3), 230-240. https://doi.org/10.1080/15532739.2017.1370627

Rodrigues, L., Carneiro, N. S., & Nogueira, C. (2021). A history of scientific, medical and psychological approaches to transsexualities and their critical approach. *Saúde e Sociedade*, *30*, e200768. https://doi.org/10.1590/S0104-12902021200768

Rodríguez, M. F., Granda, M. M., & González, V. (2018). Gender incongruence is no longer a mental disorder. *Journal of Mental Health & Clinical Psychology*, *2*(5) https://doi.org/10.29245/2578-2959/2018/5.1157

Roen, K. (2001). Transgender theory and embodiment: The risk of racial marginalisation. *Journal of Gender Studies*, *10*(3), 253-263. https://doi.org/10.1080/09589230120086467

Romesburg, D. (2018). *The Routledge history of queer America*: Routledge.

Ronan, K. R., Davies, G., Wikman, R., Canoy, D., Jarrett, M., & Evans, C. (2016). Family-centered, feedback-informed therapy for conduct disorder: Findings from an empirical case study. *Couple and Family Psychology: Research and Practice*, *5*(3), 137. https://doi.org/10.1037/cfp0000059

Rood, B. A., Maroney, M. R., Puckett, J. A., Berman, A. K., Reisner, S. L., & Pantalone, D. W. (2017). Identity concealment in transgender adults: A qualitative assessment of minority stress and gender affirmation. *American Journal of Orthopsychiatry*, *87*(6), 704. https://doi.org/10.1037/ort0000303

Rood, B. A., Reisner, S. L., Surace, F. I., Puckett, J. A., Maroney, M. R., & Pantalone, D. W. (2016). Expecting rejection: Understanding the minority stress experiences of transgender and gender-nonconforming individuals. *Transgender Health*, *1*(1), 151-164. https://doi.org/10.1089/trgh.2016.0012

Rosenberg, S., Tilley, P., & Morgan, J. (2019). "I couldn't imagine my life without it": Australian trans women's experiences of sexuality, intimacy, and gender-affirming hormone therapy. *Sexuality & Culture*, *23*(3), 962-977. https://doi.org/10.1007/s12119-019-09601-x

Ross, C. A. (2015). Commentary: Problems with the sexual disorders sections of DSM-5. *Journal of Child Sexual Abuse*, *24*(2), 195-201. https://doi.org/10.1080/10538712.2015.997411

Schulz, S. L. (2018). The informed consent model of transgender care: An alternative to the diagnosis of gender dysphoria. *Journal of Humanistic Psychology*, *58*(1), 72-92. https://doi.org/10.1177/0022167817745217

Serano, J. (2016). *Whippping Girl: A transsexual woman on sexism and the scapegoating of femininity* (2nd ed.). Berkeley, CA: Seal Press.

Snyder, J. E. (2011). Trend analysis of medical publications about LGBT persons: 1950–2007. *Journal of Homosexuality, 58*(2), 164-188. https://doi.org/10.1080/00918369.2011.540171

Solanki, P., Colon-Cabrera, D., Barton, C., Locke, P., Cheung, A. S., Spanos, C., . . . Lane, R. (2022). Gender-Affirming Hormone Therapy for the Trans, Gender Diverse, and Nonbinary Community: Coordinating World Professional Association for Transgender Health and Informed Consent Models of Care. *Transgender Health, 8*(2) https://doi.org/10.1089/trgh.2021.0069

Somerville, C. (2015). Unhealthy attitudes: the treatment of LGBT people within health and social care services. *Stonewall, London*

Spanos, C., Grace, J. A., Leemaqz, S. Y., Brownhill, A., Cundill, P., Locke, P., . . . Cheung, A. S. (2021). The informed consent model of care for accessing gender-affirming hormone therapy is associated with high patient satisfaction. *The Journal of Sexual Medicine*, *18*(1), 201-208. https://doi.org/10.1016/j.jsxm.2020.10.020

Spitzer, R. L., Kroenke, K., Williams, J. B., & Group, P. H. Q. P. C. S. (1999). Validation and utility of a self-report version of PRIME-MD: the PHQ primary care study. *Jama*, *282*(18), 1737-1744. doi:10.1001/jama.282.18.1737

Statistics New Zealand. (2019). Sex, gender, and sexual orientation. Retrieved 5 June 2020

Statistics New Zealand. (2021). 2023 Census first to collect gender and sexual identity from everyone in Aotearoa New Zealand. Retrieved 10/10/2022 2022

Stonewall Staff. (2022). Which countries have already banned conversion therapy? Retrieved 11 October 2022 from https://www.stonewall.org.uk/about-us/news/which-countries-have-already-banned-conversion-therapy

Strauss, P., Cook, A., Winter, S., Watson, V., Wright-Toussaint, D., & Lin, A. (2017). Trans-Pathways: the mental health experiences and care pathways of trans young people-summary of results. In T. K. Institute (Ed.). Perth, Australia. https://anrows.intersearch.com.au/anrowsjspui/handle/1/20351

Stryker, S. (2016). Transgender history in the united states and the palces that matter. In M. E. Springate (Ed.), *LGBTQ America: A theme study of lesbian, gay, bisexual, transgender and*

queer history (pp. 1-36). Washington DC: National Park Foundation and National Park Service.

Su, D., Irwin, J. A., Fisher, C., Ramos, A., Kelley, M., Mendoza, D. A. R., & Coleman, J. D. (2016). Mental health disparities within the LGBT population: A comparison between transgender and nontransgender individuals. *Transgender Health, 1*(1), 12-20. https://doi.org/10.1089/trgh.2015.0001

Tan, K. K., Ellis, S. J., Schmidt, J. M., Byrne, J. L., & Veale, J. F. (2020). Mental health inequities among transgender people in Aotearoa New Zealand: findings from the Counting Ourselves Survey. *International Journal of Environmental Research and Public Health, 17*(8), 2862. https://doi.org/10.3390/ijerph17082862

Taylor, J., Zalewska, A., Gates, J. J., & Millon, G. (2019). An exploration of the lived experiences of non-binary individuals who have presented at a gender identity clinic in the United Kingdom. *International Journal of Transgenderism, 20*(2-3), 195-204. doi: 10.1080/15532739.2018.1445056

Testa, R. J., Habarth, J., Peta, J., Balsam, K., & Bockting, W. (2015). Development of the gender minority stress and resilience measure. *Psychology of Sexual Orientation and Gender Diversity*, *2*(1), 65. https://doi.org/10.1037/sgd0000081

Testa, R. J., Michaels, M. S., Bliss, W., Rogers, M. L., Balsam, K. F., & Joiner, T. (2017). Suicidal ideation in transgender people: Gender minority stress and interpersonal theory factors. *Journal of Abnormal Psychology*, *126*(1), 125. https://doi.org/10.1037/abn0000234

Teymoori, A., Real, R., Gorbunova, A., Haghish, E., Andelic, N., Wilson, L., . . . von Steinbüchel, N. (2020). Measurement invariance of assessments of depression (PHQ-9) and anxiety (GAD-7) across sex, strata and linguistic backgrounds in a European-wide sample of patients after Traumatic Brain Injury. *Journal of Affective Disorders, 262*, 278-285. https://doi.org/10.1016/j.jad.2019.10.035

The Australian Centre on Quality of Life. (N.D.). Australian Centre on Quality of Life. Retrieved from https://www.acqol.com.au/publications

The Disinformation Project. (2023). Working paper: Transgressive transitions. Retrieved from https://thedisinfoproject.org/2023/05/05/working-paper-transgressive-transitions/

The Rainbow Project (ND). *What do we mean by trans or non-binary. (https://www.rainbow-project.org/what-we-do-mean-by-trans-or-non-binary/)*

Thorne, N., Witcomb, G. L., Nieder, T., Nixon, E., Yip, A., & Arcelus, J. (2019). A comparison of mental health symptomatology and levels of social support in young treatment seeking

transgender individuals who identify as binary and non-binary. *International Journal of Transgenderism, 20*(2-3), 241-250. https://doi.org/10.1080/15532739.2019.1640514

Tomyn, A. J., Fuller Tyszkiewicz, M. D., & Cummins, R. A. (2013). The personal wellbeing index: psychometric equivalence for adults and school children. *Social Indicators Research, 110*(3), 913-924. https://doi.org/10.1007/s11205-011-9964-9

Tomyn, A. J., Weinberg, M. K., & Cummins, R. A. (2015). Intervention efficacy among 'at risk'adolescents: a test of subjective wellbeing homeostasis theory. *Social Indicators Research, 120*, 883-895. https://doi.org/10.1007/s11205-014-0619-5

Travers, R., Bauer, G., & Pyne, J. (2012). Impacts of strong parental support for trans youth: A report prepared for Children's Aid Society of Toronto and Delisle Youth Services. *Trans Pulse*. 1-5.

Treisman, R. (2022). New Zealand just became the latest country to outlaw conversion therapy. Retrieved 11 October 2022 from https://www.npr.org/2022/02/16/1081139566/new-zealand-ban-conversion-therapy

Turan, Ş., Aksoy Poyraz, C., Usta Sağlam, N. G., Demirel, Ö. F., Haliloğlu, Ö., Kadıoğlu, P., & Duran, A. (2018). Alterations in body uneasiness, eating attitudes, and psychopathology before and after cross-sex hormonal treatment in patients with female-to-male gender dysphoria. *Archives of Sexual Behavior, 47*(8), 2349-2361. https://doi.org/10.1007/s10508-018-1189-4

Turban, J. L., Beckwith, N., Reisner, S. L., & Keuroghlian, A. S. (2020). Association between recalled exposure to gender identity conversion efforts and psychological distress and suicide attempts among transgender adults. *Jama Psychiatry, 77*(1), 68-76. doi:10.1001/jamapsychiatry.2019.2285

Twisk, J., & de Vente, W. (2002). Attrition in longitudinal studies: How to deal with missing data. *Journal of Clinical Epidemiology, 55*(4), 329-337. https://doi.org/10.1016/S0895-4356(01)00476-0

National Center for Transgender Equality. (2020). The Discrimination Administration. Retrieved 16/12/2020 from https://transequality.org/the-discrimination-administration

Veale, J. (2008). Prevalence of transsexualism among New Zealand passport holders. *Australian & New Zealand Journal of Psychiatry, 42*(10), 887-889. https://doi.org/10.1080/00048670802345490

Veale, J., Byrne, J., Tan, K. K., Guy, S., Yee, A., Nopera, T. M.-L., & Bentham, R. (2019). *Counting ourselves: the health and wellbeing of trans and non-binary people in Aotearoa New Zealand*: Transgender Health Research Lab. https://hdl.handle.net/10289/12942

Veale, J., Tan, K. K., & Byrne, J. L. (2021). Gender identity change efforts faced by trans and nonbinary people in New Zealand: Associations with demographics, family rejection, internalized transphobia, and mental health. *Psychology of Sexual Orientation and Gender Diversity, 9*(4), 478-487. https://doi.org/10.1037/sgd0000537

Veale, J., Watson, R. J., Peter, T., & Saewyc, E. M. (2017). The mental health of Canadian transgender youth compared with the Canadian population. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine, 60*(1), 44-49. doi: 10.1016/j.jadohealth.2016.09.014

Wallerstein, N., & Duran, B. (2010). Community-based participatory research contributions to intervention research: the intersection of science and practice to improve health equity. *American Journal of Public Health, 100*(S1), S40-S46. https://doi.org/10.2105/AJPH.2009.184036

Weinhardt, L. S., Xie, H., Wesp, L. M., Murray, J. R., Apchemengich, I., Kioko, D., . . . Cook-Daniels, L. (2019). The role of family, friend, and significant other support in well-being among transgender and non-binary youth. *Journal of GLBT Family Studies, 15*(4), 311-325. https://doi.org/10.1080/1550428X.2018.1522606

White Hughto, J. M., & Reisner, S. L. (2016). A systematic review of the effects of hormone therapy on psychological functioning and quality of life in transgender individuals. *Transgender Health, 1*(1), 21-31. https://doi.org/10.1089/trgh.2015.0008

Wi-Hongi, A., Greig, A., & Hazenberg, E. (2017). Towards a Model of Informed Consent: Trans Healthcare in Aotearoa New Zealand. In E. Hazenberg & M. Meyerhoff (Eds.), *Representing Trans: Linguistic, legal and everyday perspectives* (pp. 153-170). Wellington: New Zealand: Victoria University Press. http://vup.victoria.ac.nz/representing-trans-linguistic-legal-and-everyday-perspectives/

Wiepjes, C. M., Nota, N. M., de Blok, C. J., Klaver, M., de Vries, A. L., Wensing-Kruger, S. A., . . . Cohen-Kettenis, P. (2018). The Amsterdam cohort of gender dysphoria study (1972–2015): trends in prevalence, treatment, and regrets. *The Journal of Sexual Medicine, 15*(4), 582-590. https://doi.org/10.1016/j.jsxm.2018.01.016

Willis Street Physiotherapy. (N.D). Gender & Sex Affirming Service. Retrieved from https://www.willisstreetphysiotherapy.co.nz/about-us/wellbeing/gender-diversity-service/

Zucker, K. J., Lawrence, A. A., & Kreukels, B. P. C. (2016). Gender dysphoria in adults. *Annual Review of Clinical Psychology, 12*, 217-247. https://doi.org/10.1146/annurev-clinpsy-021815-093034

Zwickl, S., Chaplin, B., Bisshop, F., Cook, T., Soo, C. T. M., Birtles, B., . . . Macdonald, J. (2022). Re: The RANZCP position statement on gender dysphoria. *Australian and New Zealand Journal of Psychiatry, 56*(10), 1217-1218. https://doi.org/10.1177/00048674221112007

Appendix A

Glossary of Terms

Table 6

Glossary of Key Terms

Transgender	A person whose gender is different from the sex they were assigned at birth. An umbrella term uniting trans people regardless of medical transition.
Trans	Abbreviation of transgender or transsexual, or an umbrella similar to 'transgender'.
Trans man	A man who was assigned female at birth.
Trans woman	A woman who was assigned male at birth.
Non-binary Ira tāhūrua-kore, Tāhine.	An umbrella term for all genders other than just female/woman/girl or male/man/boy
Gender Fluid/ Bigender	These are non-binary gender identities that indicate shifting between different genders or presentations. They are similarly used by those who feel they have both male and female sides to their personalities.
Genderqueer	More specific to rejecting binary genders. Those who identify as genderqueer may identify as neither male nor female, may see themselves as outside of or in between the binary gender boxes, or may simply feel restricted by gender labels. Additionally, this term is often considered offensive by older generations. As the term ‘queer’ was initially deemed derogatory but has since been claimed back by younger generations, similarly to the history behind the word “queer”.
Takataapui	Takataapui refers to Māori who are not heterosexual and/or not cisgender. It is used both as a gender identity (similar to transgender), as an attraction or sexual orientation (similar to Lesbian, gay, bi, or pansexual). It is also used as an umbrella term for all non-heterosexual and/or non-cisgender Māori people.
Neutrois and Agender	One who feels neutral in their gender or who rejects the influence of gender on their person. Sometimes the term nongendered is used in a similar fashion. Identifying as neutrois or agender is not indicative of one’s anatomy, birth assignment, or pronoun preference, and can be used in conjunction with another gender signifier, for example neutrois woman

Intersex	Describes a person whose natal physical sex characteristics (e.g. anatomy, chromosomes) are ambiguous in the context of the male/female sex binary. A person may not know they have intersex anatomy until they reach puberty and their body changes differently than expected, or until they find themselves infertile as an adult.
Transsexual	An older term that originated in the medical and psychological communities. Still preferred by some people who have changed or seek to change their bodies often through surgeries. Unlike transgender, transsexual is not an umbrella term.
Cis, Cisgender and Cissexual	A person who identifies with the gender assigned to them at birth.
AFAB/AMAB	Acronyms meaning assigned female at birth or assigned male at birth. In cases when it's necessary to refer to the birth assigned sex of a trans person; this is the way to do it.
Gender / Gender Identity	Refers to a person's recognition of themself as male, female, or something else. 'Social gender' = how a person is perceived, 'Registered gender' = gender recorded on identification documents.
Gender Expression / Presentation	The outward expression of one's gender; for example through clothing, voice, body shape, and behaviours.
Sex	A socially constructed system for assignment and classification of people, typically as male or female. Social sex = how a person is perceived. Sex assigned at birth = based on genitals at birth. Registered sex = sex registered on identity documents.
The gender binary/sex binary	Unscientific theory that only 2 sexes/genders exist, with mutually exclusive and unchangeable characteristics.
Gender Dysphoria	Clinical term referring to dissonance or experienced distress experienced between one's assigned gender and/or one's body, and one's personal sense of self.
Heteronormative / Heteronormativity	This refers to the deeply held institutional belief that relationships between heterosexual masculine cis men and heterosexual feminine cis women are normal/natural/right, while all other relationships are viewed as abnormal/inferior/wrong.

Transphobia	Fear, discomfort, distrust, or hatred directed towards trans people or trans concepts. This word is used similarly to homophobia, etc. There are many factors which contribute to transphobia such as: misconceptions around scientific fact or biology, religious ideologies, or ideas of gendered oppression revolving around reproductive capacity.
Transmisogyny	The unique combination of misogyny, or hatred of women, with transphobia, or hatred of trans people.
Cissexism / Cissupremacy	Bias in favour of cis people over trans people, or beliefs that cis people are inherently superior to trans, more real, more natural, etc. This often refers to systems which advantage cis people over trans people or unconscious systems of thought, rather than transphobic individuals.
Transition Whakamana ira (gender affirmation).	A broad term referring to changes that transgender people make as part of being transgender. Can include social, medical, or other changes.
Passing	Being read as the gender one wishes to be read as (usually used in a binary cisgender context). The term 'passing' is falling out of fashion as it is seen to imply that one should desire to look cisgender.
Gender Affirming Healthcare	Refers to several different types of gender affirmation or physical transition related procedures such as: hormone therapy, breast removal and breast augmentation (top surgery), sexual reconstruction surgery (SRS) and/or Gender Affirming Genital Surgery (GAgS) (bottom surgery), facial feminisation procedures, voice therapy, laser hair removal etc. Not all transgender people choose to or can afford or access gender affirming care therefore overemphasising the importance of this care to the transition or affirmation process should be avoided.

Note. Adapted from https://genderminoritiesaotearoa.files.wordpress.com/2016/06/gender-minorities-aotearoa-glossary-gender-minority-words-and-how-to-use-them.pdf. Copyright 2023 by Gender Minorities Aotearoa.

Appendix B

Participant Information Sheet for Study One

Study Title: Longitudinal impacts of gender affirming hormone therapy on gender incongruence and psychosocial issues for transgender and non-binary persons.

Locality: Wellington Regional Hospital, Capital and Coast District Health Board

Principle Investigator: Emma Reynolds

Investigators: Jemima Bullock, Dr Simon Bennett, and Associate Professor Keith Tuffin

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You are invited to take part in a study investigating the ways gender affirming hormone therapy (GAHT) impacts body satisfaction (congruence), mental health, social relationships and quality of life for transgender, non-binary, and takatāpui people. Please note we are using these terms as umbrella terms which incorporate all individuals with diverse gender identities.

Whether or not you take part is your choice. If you don't want to take part, you don't have to give a reason, and it won't affect the care you receive. If you do want to take part now, but change your mind later, you can pull out of the study at any time.

You do not have to decide today whether you will participate in this study. Before you decide you may want to talk about the study with other people, such as family, whānau, friends, or healthcare providers. Feel free to do this.

If you agree to take part in this study, you will need to sign the Consent Form on the last page of this document and return it to the principle investigator. You may keep this information sheet for your own records.

Purpose and benefits of this study:

The purpose of this study is to generate more insight into the effects of GAHT, which may result in further understanding of the ways GAHT specifically affects transgender, non-binary, and takatāpui people's perceptions about themselves, and their quality of life. Additionally, there is potential for this study to improve the way clinicians can describe specific effects of GAHT to future patients seeking treatment and can assist health practitioners in determining other areas of support and care that may be needed in addition to GAHT.

The study may benefit future people undergoing GAHT as well as their support network, and the services involved in trans health care.

Participation in this study:

Participants are being invited to this study due to their existing participation in the first part of this study. Participation in this study will involve a one on one interview with Emma Reynolds which will be held at a private location that best suits you. The interview will be approximately 30-60 minutes long and will be audio-recorded and transcribed for analysis. You may bring a support person along with you to this interview if you would like. You will be given a copy of the transcript of the interview afterwards to verify that it is an accurate representation of what you have said, you may change may details at this time.

You will be reimbursed with a $30 supermarket voucher to acknowledge your participation.

Your rights in this study:

If you choose not to take part in this study, or if you decide to opt out at any point, this will not impact the level of care you receive form the Endocrinology department or your GP.

There is a risk that you may feel uncomfortable or distressed during the interview. If this occurs, you are welcome to change the topic, take a break from the interview, or stop participating and leave the interview altogether. You will not have to provide a reason for this. If you experience any distress as a result of participating in the study (either during the interview or afterwards) please let Emma know, and she will ensure that you are adequately supported.

All information gathered (including recordings and transcripts) will be strictly confidential. The only time Emma may need to break confidentiality, is if you disclose a health or safety threat to yourself or someone else. If confidentiality needs to be broken, Emma will always do her best to speak with you about this first.

You have the right to access health information gathered about yourself and make any changes when required.

If you were injured in this study, you would be eligible to apply for compensation from ACC just as you would be if you were injured in an accident at work or at home. This does not mean that your claim will automatically be accepted. You will have to lodge a claim with ACC, which may take some time to assess. If your claim is accepted, you will receive funding to assist in your recovery. If you have private health or life insurance, you may wish to check with your insurer that taking part in this study won't affect your cover.

What happens after the study?

The information gathered will be stored securely and will be password protected. It will only be accessed by the investigators listed above. Information will be permanently deleted after ten years as per Wellington DHB protocol. Information may continue to add to other research relevant to this study.

Any publications and reports from this study will be anonymised, so there will be no way for participants to be identified. Findings from this study will be communicated through university dissertation, professional conferences and relevant psychological and/or health journal articles.

For the purposes of checking for accuracy of information gathered for this study, an approved member of the Health and Disability Ethics Committee in New Zealand or their representative may review your relevant medical records.

Contact for concerns, queries, and more information:

Emma Reynolds, Clinical Psychology Doctoral Student

Massey University Wellington
Phone: [redacted]
Email: Emma.Reynolds.2@uni.massey.ac.nz

OR

Jemima Bullock, Consultant Clinical Psychologist
Endocrine Department, Capital & Coast District Health Board │UPOKO KI TE URU HAUORA
Phone: 04 806 2473, Internal Ext: 82473, Reception: 04 806 2140
Email: jemima.bullock@ccdhb.org.nz

For Maori Health Support or to discuss any concerns or issues regarding this study, please contact:
Whanau Care Services at Wellington Hospital on:
Phone: (04) 385 5956.

If you want to talk to someone who isn't involved with the study, you can contact an independent health and disability advocate on:
Phone: 0800 555 050
Email: advocacy@hdc.org.nz

You can also contact the health and disability ethics committee (HDEC) that approved this study on:
Phone: 0800 4 ETHICS
Email: hdecs@moh.govt.nz

Statement of Approval
This study has been approved by the Health and Disability Ethics Committee in New Zealand - ethics reference number: **19/CEN/9/AM01**

Appendix C

Consent Form for Study One

Please tick to indicate your consent to the following:

I have read, or have had read to me in my first language, and I understand the Participant Information Sheet.	Yes ☐	No ☐
I have been given sufficient time to consider whether or not to participate in this study.	Yes ☐	No ☐
I have had the opportunity to consult a legal representative, whanau/ family support or a friend to help me ask questions and understand the study if necessary.	Yes ☐	No ☐
I am satisfied with the answers I have been given regarding the study and I have a copy of this consent form and information sheet.	Yes ☐	No ☐
I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without this affecting my medical care.	Yes ☐	No ☐
I consent to the research staff collecting and processing my information, including information about my health.	Yes ☐	No ☐
I agree to an approved auditor appointed by the New Zealand Health and Disability Ethic Committees, or any relevant regulatory authority or their approved representative reviewing my relevant medical records for the sole purpose of checking the accuracy of the information recorded for the study.	Yes ☐	No ☐
I understand that my participation in this study is confidential and that no material, which could identify me personally, will be used in any reports on this study.	Yes ☐	No ☐
I know who to contact if I have any questions about the study in general.	Yes ☐	No ☐
I understand my responsibilities as a study participant.	Yes ☐	No ☐
I understand that I will be invited to complete four questionnaires at a 6 month follow up appointment to aid future research.	Yes ☐	No ☐

I understand that I will be invited to complete four questionnaires at a 12 month follow up and may attend a clinical interview with the investigator, to aid future research.	Yes ☐	No ☐
I wish to receive a summary of the results from the study. (Please enter below the method in which you wish to receive the results i.e. email address).	Yes ☐	No ☐

Contact information for results:

Email:

And/or Postal Address:

Declaration by participant:

I hereby consent to take part in this study.

Participant's name/ingoa:

Signature: Date/rā:

Declaration by member of research team:

I have given a verbal explanation of the research project to the participant and have answered the participant's questions about it.

I believe that the participant understands the study and has given informed consent to participate.

Researcher's name/ingoa:

Signature: Date/rā:

Appendix D

Measures Used for Study One

PATIENT HEALTH QUESTIONNAIRE (PHQ-SADS)

This questionnaire is an important part of providing you with the best health care possible. Your answers will help in understanding problems that you may have. Please answer every question to the best of your ability

A. During the last 4 weeks, how much have you been bothered by any of the following problems?		Not bothered (0)	Bothered a little (1)	Bothered a lot (2)
1.	Stomach pain	☐	☐	☐
2.	Back pain	☐	☐	☐
3.	Pain in your arms, legs, or joints (knees, hips, etc.)	☐	☐	☐
4.	Feeling tired or having little energy	☐	☐	☐
5.	Trouble falling or staying asleep, or sleeping too much	☐	☐	☐
6.	Menstrual cramps or other problems with your periods	☐	☐	☐
7.	Pain or problems during sexual intercourse	☐	☐	☐
8.	Headaches	☐	☐	☐
9.	Chest pain	☐	☐	☐
10.	Dizziness	☐	☐	☐
11.	Fainting spells	☐	☐	☐
12.	Feeling your heart pound or race	☐	☐	☐
13.	Shortness of breath	☐	☐	☐
14.	Constipation, loose bowels, or diarrhea	☐	☐	☐
15.	Nausea, gas, or indigestion	☐	☐	☐

PHQ-15 Score ☐ = ____ + ____

B. Over the last 2 weeks, how often have you been bothered by any of the following problems?		Not at all (0)	Several days (1)	More than half the days (2)	Nearly every day (3)
1.	Feeling nervous anxiety or on edge	☐	☐	☐	☐
2.	Not being able to stop or control worrying	☐	☐	☐	☐
3.	Worrying too much about different things	☐	☐	☐	☐
4.	Trouble relaxing	☐	☐	☐	☐
5.	Being so restless that it is hard to sit still	☐	☐	☐	☐
6.	Becoming easily annoyed or irritable	☐	☐	☐	☐
7.	Feeling afraid as if something awful might happen	☐	☐	☐	☐

GAD-7 Score ☐ = ____ + ____ + ____

C. Questions about anxiety attacks.

		NO	YES
a.	In the last 4 weeks, have you had an anxiety attack — suddenly feeling fear or panic?.....	☐	☐
b.	Has this ever happened before?.....	☐	☐
c.	Do some of these attacks come suddenly out of the blue — that is, in situations where you don't expect to be nervous or uncomfortable?.....	☐	☐
d.	Do these attacks bother you a lot or are you worried about having another attack?.....	☐	☐
e.	During your last bad anxiety attack, did you have symptoms like shortness of breath, sweating, or your heart racing, pounding or skipping?.....	☐	☐

D. Over the last 2 weeks, how often have you been bothered by any of the following problems?

		Not at all (0)	Several days (1)	More than half the days (2)	Nearly every day (3)
1.	Little interest or pleasure in doing things.....	☐	☐	☐	☐
2.	Feeling down, depressed, or hopeless.....	☐	☐	☐	☐
3.	Trouble falling or staying asleep, or sleeping too much.....	☐	☐	☐	☐
4.	Feeling tired or having little energy.....	☐	☐	☐	☐
5.	Poor appetite or overeating.....	☐	☐	☐	☐
6.	Feeling bad about yourself — or that you are a failure or have let yourself or your family down.....	☐	☐	☐	☐
7.	Trouble concentrating on things, such as reading the newspaper or watching television.....	☐	☐	☐	☐
8.	Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual.....	☐	☐	☐	☐
9.	Thoughts that you would be beter off dead of or hurting yourself in some way.....	☐	☐	☐	☐

PHQ-9 Score ☐ = ____ + ____ + ____

E. If you checked off any problems on this questionnaire, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
☐	☐	☐	☐

4. Satisfaction with Life as a Whole and the PWI Scale (Written Format)

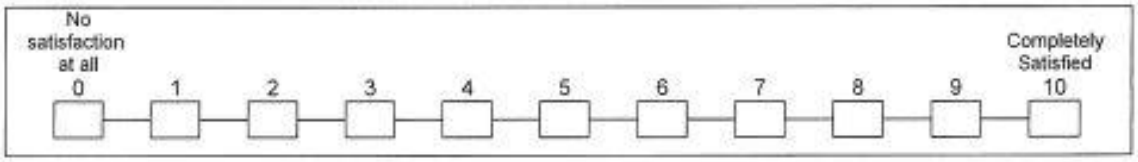
4.1 Instructions for Written Format (i.e. test items answered in written questionnaire)

The following questions ask how satisfied you feel, on a scale from zero to 10. **Zero** means you feel no satisfaction at all and **10** means you feel completely satisfied. "

4.2 Test Items

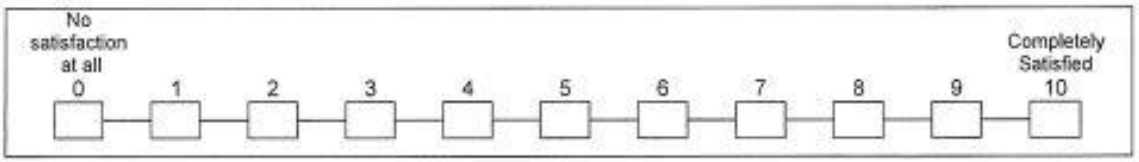
Part 1 [Optional Item]

1. "Thinking about your own life and personal circumstances, how satisfied are you **with your life as a whole ?"**

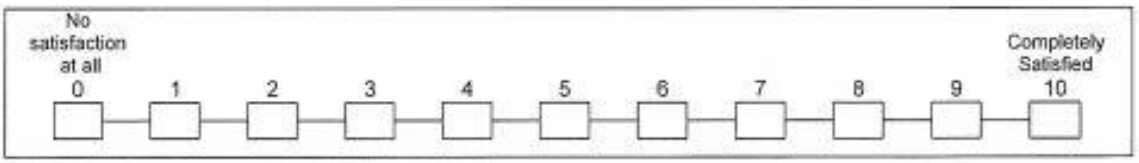


Part 2

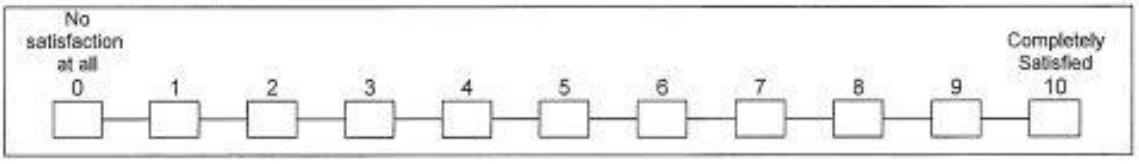
1. "How satisfied are you **with your standard of living ?"**



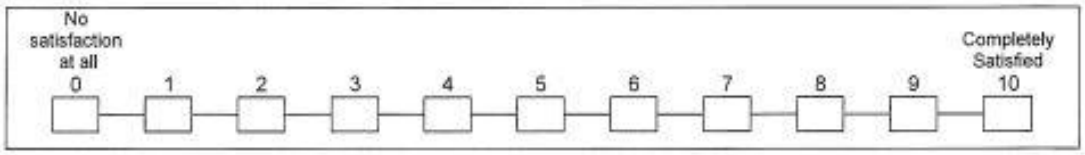
2. "How satisfied are you **with your health ?"**



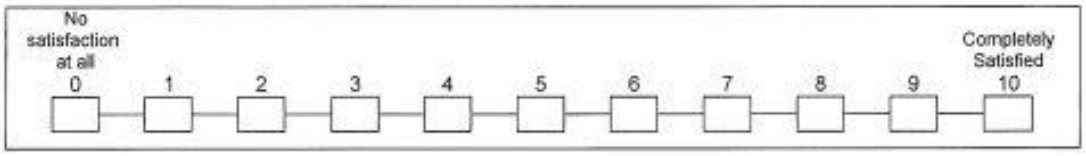
3. "How satisfied are you **with what you are achieving in life ?"**



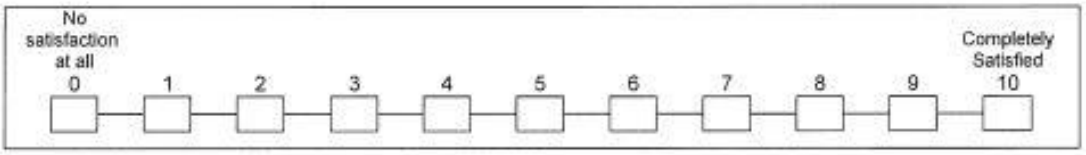
4. "How satisfied are you **with your personal relationships ?"**



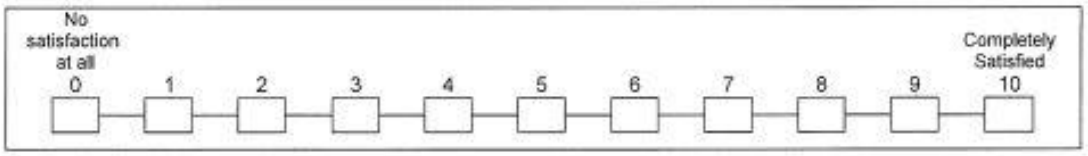
5. "How satisfied are you **with how safe you feel ?"**



6. "How satisfied are you **with feeling part of your community ?"**

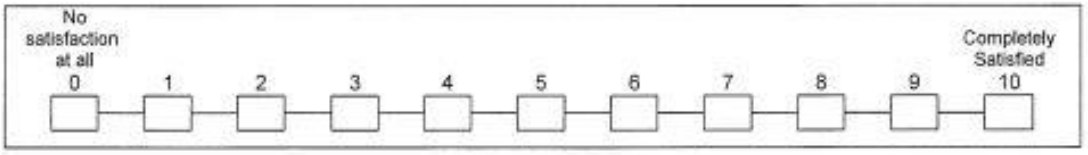


7. "How satisfied are you **with your future security ?"**



[Optional item]

8. "How satisfied are you **with your spirituality or religion ?"**



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HUTT VALLEY DHB

Capital & Coast
District Health Board
Groko ki te uku hauora

For office use only
Label or NHI:

Transgender Congruence Scale

Gender identity is defined as the gender/genders that you experience yourself as; it is not necessarily related to your assigned sex/gender at birth.

For the following items, please indicate the response that best describes your experience over the past 2 weeks.

---

1. My outward appearance represents my gender identity.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

2. I experience a sense of unity between my gender identity and my body.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

3. My physical appearance adequately expresses my gender identity.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

4. I am generally comfortable with how others perceive my gender identity when they look at me.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

5. My physical body represents my gender identity.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

6. The way my body currently looks does <u>not</u> represent my gender identity.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

Please continue on other side

7. I am happy with the way my appearance expresses my gender identity.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

8. I do <u>not</u> feel that my appearance reflects my gender identity.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

9. I feel that my mind and body are consistent with one another.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

10. I am <u>not</u> proud of my gender identity.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

11. I am happy that I have the gender identity that I do.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

12. I have accepted my gender identity.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

---

For office use only:

☐ 1st appointment
☐ 3 mth medical follow up
☐ 1 year follow up

Total Scale Score:

AC subscale:

GIA subscale:

☐ 1st appointment
☐ 3 mth medical follow up
☐ 1 year follow up

For office use only
Label or NHI:

Goals Tracking Form

Goal 1:

---

0 ●——————————● **10**

No progress **Goal Achieved**

0 = 10 =

Frequency:

Intensity:

Duration:

Goal 2:

---

0 ●——————————● **10**

No progress **Goal Achieved**

0 = 10 =

Frequency:

Intensity:

Duration:

Goal 3:

No progress **Goal Achieved**

0 = 10 =

Frequency:

Intensity:

Duration:

Appendix E

Examples of Participants' Goals Tracking Form

Goals Tracking Form

Date:

For office use only: A They/Them

E-GAHT - Baseline

Goal 1: Felling better about how I look

0 ✕ 10

No progress — **Goal Achieved**

0 = I don't like how I look

10 = I will be happy with how I look. I would be able to know from my self-perception.

Goal 2: More comfortable in social situations

0 ✕ 10

No progress — **Goal Achieved**

0 = Acting like I think I'm expected to be

10 = Acting like who I am

Goal 3: Look more feminine/less masculine

0 ✕ 10

No progress — **Goal Achieved**

0 = I look masculine

10 = Comparison – then to now (taking selfies, 1 per month).

Goals Tracking Form

Date:

For office use only: B They/Them

T-GAHT – baseline

Goal 1: Be gendered as female by other people less often.

0 — 10

No progress — **Goal Achieved**

0 = People who don't know me gender me as female most of the time, people who know me misgender me as female sometimes and never as male.

10 = People who know me seldom misgender me, strangers avoid using gendered terms for me or gender me male at least as often as female.

Goal 2: more able to assert my gender identity to others.

0 — 10

No progress — **Goal Achieved**

0 = I am somewhat uncomfortable asserting my gender as I expect that people may react negatively, uncomfortably or with confusion. People react negatively or with confusion when I assert my gender identity.

10 = I can assert my gender identity and feel that people understand that I am not female. I don't feel that people are humouring me but really seeing me as female.

Goal 3: Myself and my partner think that the physical changes to my body are attractive.

0 — 10

No progress — **Goal Achieved**

0 = No changes or changes that I/my partner don't find attractive

10 = All changes are attractive to me/my partner

Goals Tracking Form

Date:

For office use only: C He/Him

T-GAHT - Baseline

Goal 1: Facial Hair

No progress **Goal Achieved**

0 = No hair

10 =Hair on my Face

Goal 2: Voice Drop

No progress **Goal Achieved**

0 = High pitched. Feel like I sounds like Minnie Mouse.

10 = Comparisons using video. Hearing myself talk. Other people will notice. Voice deeper.

Goal 3: Be more confident.

No progress **Goal Achieved**

0 = Anxiety, self-doubt. Worrying about what other people will think.

10 = Less anxiety.

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Capital & Coast
District Health Board
Hōpoko ki te uru hauora

Goals Tracking Form

Date:

For office use only: D She/Her

E-GAHT – baseline

Goal 1: Changes in body

No progress **Goal Achieved**

0 =

10 = Breast development, fat re-distribution, softer skin, decreased body hair.

Goal 2: Increase in confidence

No progress **Goal Achieved**

0 =

10 = Feeling more confident in myself. Feel more comfortable looking in the mirror at my face and body.

Goal 3: I will feel more affirmed in my gender

No progress **Goal Achieved**

0 =

10 = I feel affirmed.

Appendix F

Information Sheet for Study Two

Study Title: Longitudinal impacts of gender affirming hormone therapy on gender incongruence and psychosocial issues for transgender and non-binary persons (phase two).

Locality: Wellington Regional Hospital, Capital and Coast District Health Board

Principle Investigator: Emma Reynolds

Investigators: Jemima Bullock, Dr Simon Bennett, and Associate Professor Keith Tuffin

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You are invited to take part in a study investigating the ways gender affirming hormone therapy (GAHT) impacts body satisfaction (congruence), mental health, social relationships and quality of life for transgender, non-binary, and takatāpui people. Please note we are using these terms as umbrella terms which incorporate all individuals with diverse gender identities.

Whether or not you take part is your choice. If you don't want to take part, you don't have to give a reason, and it won't affect the care you receive. If you do want to take part now, but change your mind later, you can pull out of the study at any time.

You do not have to decide today whether you will participate in this study. Before you decide you may want to talk about the study with other people, such as family, whānau, friends, or healthcare providers. Feel free to do this.

If you agree to take part in this study, you will need to sign the Consent Form on the last page of this document and return it to the principal investigator. You may keep this information sheet for your own records.

Purpose and benefits of this study:

The purpose of this study is to generate more insight into the effects of GAHT, which may result in further understanding of the ways GAHT specifically affects transgender, non-binary, and takatāpui people's perceptions about themselves, and their quality of life. Additionally, there is potential for this study to improve the way clinicians can describe specific effects of GAHT to future patients seeking treatment and can assist health practitioners in determining other areas of support and care that may be needed in addition to GAHT.

The study may benefit future people undergoing GAHT as well as their support network, and the services involved in trans health care.

Participation in this study:

Participants are being invited to this study due to their existing participation in the first part of this study. Participation in this study will involve a one on one interview with Emma Reynolds which will be held at a private location that best suits you. The interview will be approximately 30-60 minutes long and will be audio-recorded and transcribed for analysis. You may bring a support person along with you to this interview if you would like. You will be given a copy of the transcript of the interview

afterwards to verify that it is an accurate representation of what you have said, you may change may details at this time.

You will be reimbursed with a $30 supermarket voucher to acknowledge your participation.

Your rights in this study:

If you choose not to take part in this study, or if you decide to opt out at any point, this will not impact the level of care you receive form the Endocrinology department or your GP.

There is a risk that you may feel uncomfortable or distressed during the interview. If this occurs, you are welcome to change the topic, take a break from the interview, or stop participating and leave the interview altogether. You will not have to provide a reason for this. If you experience any distress as a result of participating in the study (either during the interview or afterwards) please let Emma know, and she will ensure that you are adequately supported.

All information gathered (including recordings and transcripts) will be strictly confidential. The only time Emma may need to break confidentiality, is if you disclose a health or safety threat to yourself or someone else. If confidentiality needs to be broken, Emma will always do her best to speak with you about this first.

You have the right to access health information gathered about yourself and make any changes when required.

If you were injured in this study, you would be eligible to apply for compensation from ACC just as you would be if you were injured in an accident at work or at home. This does not mean that your claim will automatically be accepted. You will have to lodge a claim with ACC, which may take some time to assess. If your claim is accepted, you will receive funding to assist in your recovery. If you have private health or life insurance, you may wish to check with your insurer that taking part in this study won't affect your cover.

What happens after the study?

The information gathered will be stored securely and will be password protected. It will only be accessed by the investigators listed above. Information will be permanently deleted after ten years as per Wellington DHB protocol. Information may continue to add to other research relevant to this study.

Any publications and reports from this study will be anonymised, so there will be no way for participants to be identified. Findings from this study will be communicated through university dissertation, professional conferences and relevant psychological and/or health journal articles.

For the purposes of checking for accuracy of information gathered for this study, an approved member of the Health and Disability Ethics Committee in New Zealand or their representative may review your relevant medical records.

Contact for concerns, queries, and more information:

Emma Reynolds, Clinical Psychology Doctoral Student
Massey University Wellington
Phone: [redacted]
Email: Emma.Reynolds.2@uni.massey.ac.nz

OR

Jemima Bullock, Consultant Clinical Psychologist
Endocrine Department, Capital & Coast District Health Board │UPOKO KI TE URU HAUORA
Phone: 04 806 2473, Internal Ext: 82473, Reception: 04 806 2140
Email: jemima.bullock@ccdhb.org.nz

For Maori Health Support or to discuss any concerns or issues regarding this study, please contact:
Whanau Care Services at Wellington Hospital on:
Phone: (04) 385 5956.

If you want to talk to someone who isn't involved with the study, you can contact an independent health and disability advocate on:
Phone: 0800 555 050
Email: advocacy@hdc.org.nz

You can also contact the health and disability ethics committee (HDEC) that approved this study on:
Phone: 0800 4 ETHICS
Email: hdecs@moh.govt.nz

Statement of Approval
This study has been approved by the Health and Disability Ethics Committee in New Zealand - ethics reference number: **19/CEN/9/AM01**

Appendix G

Consent Form for Study Two

Please tick to indicate your consent to the following

I have read or have had read to me in my first language, and I understand the Participant Information Sheet.	Yes ☐	No ☐
I have been given enough time to consider whether or not to participate in this study.	Yes ☐	No ☐
I have had the opportunity to consult a legal representative, whanau/ family support or a friend to help me ask questions and understand the study if necessary.	Yes ☐	No ☐
I am satisfied with the answers I have been given regarding the study and I have a copy of this consent form and information sheet.	Yes ☐	No ☐
I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without this affecting my medical care.	Yes ☐	No ☐
I consent to the research staff collecting and processing my information, including information about my health.	Yes ☐	No ☐
I agree to an approved auditor appointed by the New Zealand Health and Disability Ethic Committees, or any relevant regulatory authority or their approved representative reviewing my relevant medical records for the sole purpose of checking the accuracy of the information recorded for the study.	Yes ☐	No ☐
I understand that my participation in this study is confidential and that no material, which could identify me personally, will be used in any reports on this study.	Yes ☐	No ☐
I know who to contact if I have any questions about the study in general.	Yes ☐	No ☐
I understand my responsibilities as a study participant.	Yes ☐	No ☐
I wish to receive a summary of the results from the study. (Please enter below the method in which you wish to receive the results i.e. email address).	Yes ☐	No ☐

Contact information for results:

Email:

And/or Postal Address:

Declaration by participant:

I hereby consent to take part in this study.

Participant's name/ingoa:

Signature: Date/rā:

Declaration by member of research team:

I have given a verbal explanation of the research project to the participant and have answered the participant's questions about it.

I believe that the participant understands the study and has given informed consent to participate.

Researcher's name/ingoa:

Signature: Date/rā:

Appendix H

Interview Schedule for Study Two

Focus area or topics	**Questions and prompts/probes**
Demographics	"What is your age, ethnicity, and gender?" "Where are you from/where were you born? Where do you live now?" "How long have you been taking GAHT?"
Understanding specific issues for trans people seeking GAHT	"What experiences made you seek hormone therapy?" *prompt if needed* "These can range from physical, to emotional, to social, to occupational etc…"
How does GAHT address these issues?/ Participants perceptions of GAHT	"How has GAHT helped in making better some of the challenges that you have just talked to me about?" "Are there any instances that GAHT has not helped with?" "If yes, which issues and why do you think GAHT didn't help?" /OR/ "What have you enjoyed/liked about taking GAHT?" "What haven't you enjoyed/liked?" "What advice would you give to people who want to start GAHT, or what do you wish people had told you about the process?"
Ideas for improving current care	"What additional support or services did you receiving alongside GAHT?" "Were these helpful and why?" "What additional support or services do you think you could have helped from receiving alongside GAHT and why?"
Minority stress/societal treatment	"What experiences have you had as a result of identifying the way you do?" "Have you had any discriminatory experiences? Could you talk to me about them?" " "In your opinion did taking GAHT reduce your experiences of discrimination?"
Open space	"Is there anything else you'd like to tell me about your journey with GAHT or anything you feel is important that we haven't covered?"

Appendix I

Research Case Study

Case Study Five

Working with Individuals from Marginalised Communities: reflections on my doctoral research and its influence on my internship with the Department of Corrections

Candidate: Emma Reynolds

Massey University Wellington

Clinical Psychology Programme

Student ID: [redacted]

Setting: Department of Corrections

Massey University Supervisors: Simon Bennett, Jemima Bullock, and Keith Tuffin

This case study represents the work of Emma Reynolds during her doctoral research from 2019 to 2020 as well as her reflections as an Intern Psychologist in 2021.

Abstract

This case study amalgamates knowledge and experiences I have gathered from both my doctoral research and my internship at the Department of Corrections. My internship was based at the Counties Manukau team where I had experience working with clients from Auckland Region Women's Correctional Facility (ARWCF), Korowai Manaaki (Youth Justice Residence) and the Manurewa Probation site. This work begins with a summary of my doctoral research to date, including a condensed literature review on transgender and non-binary biopsychosocial issues as well as gender affirming hormone therapy (GHAT), it also includes my research aim and study design. Specific focus is then placed on how my qualitative interviews with my participants helped shape and inform my clinical skills when conducting assessment interviews and building therapeutic alliance. This case study also talks to the importance of language use when working with people from marginalised communities, and outlines gender affirming processes within Aotearoa prisons.

Doctoral Research Summary

My doctoral research aims to assess biopsychosocial issues of trans people in Aotearoa prior to starting Gender Affirming Hormone Therapy (GAHT), and to measure any changes in these issues once GAHT has been administered for one year. The following section will provide a brief summary of current literature around biopsychosocial issues and GAHT. The study's aims, design, and methodology are also summarised.

Terminology

When writing about gender identities, there are a many different terms and interpretations of these terms to consider. It is important, therefore, to identify and define the key words used throughout this document to ensure clarity. This report will be referring predominantly to the term's transgender, non-binary, trans man, trans woman, and gender diverse. I also use the term takatāpui which has been defined by Kerekere (2017), as an umbrella term which incorporates individuals who identify as Māori as well as holding diverse sex, sexuality, and/or gender identities. Also, as an umbrella term for transgender (both trans-men, and trans-women), non-binary, and other gender diverse peoples, the terms trans and trans communities will be used. Lastly, the term cisgender will be used to denote a person whose gender identity is congruent with their sex assigned at birth.

Biopsychosocial Experiences

A considerable amount of the research around trans matters has emphasized the immense mental health and social disparities that are experienced by these communities compared to cisgender populations. Most concerning, transgender and non-binary people are found to be at higher risk of suicide, attempted suicide, and non-suicidal self-injury compared to cisgender controls (Cavanaugh, Hopwood, Gonzalez, & Thompson, 2015; Clark et al., 2014; Mueller, De Cuypere, & T'Sjoen, 2017; Olson, et al., 2015) Also, studies on transgender mental health have found higher diagnoses of depression and depressive symptoms as well as anxiety (Bockting, et al., 2013; Bouman, et al., 2016; Clark et al., 2014; Davey, Bouman, Meyer, & Arcelus, 2015; Dhejne, Van Vlerken, Heylens & Arcelus, 2016; Mueller et al., 2017; Solomon et al., 2017; White Hughto & Reisner, 2016). Studies have also reported higher instances of alcohol and substance abuse and lower employment and socio-economic status compared with cisgender populations (Gomez-Gill et al., 2009; Mueller at al., 2017; Olsen et al., 2015; Pinto, Melendez & Spector, 2008).

Alongside this, transgender participants often report feeling excluded from society and experience high levels of stigma, discrimination, bullying within schools, as well as harassment in the workplace and society in general (Kozee, Tylka, & Bauerban, 2012; Peterson, Mathews, Copps-

Smith & Conrad 2017; Simon, Zsolt, Fogd, & Czobor, 2011; Strauss et al., 2017). When researching American transgender and non-binary individuals' perceptions of discrimination in the workplace whilst transitioning, Brewster, Velez, Mennicke and Tebbe (2014) found that out of 139 participants at least 80% experienced some form of aggression or non-acceptance. Instances of such hostility ranged from; immediate termination from their employment, verbal threats, insults and harassment from colleagues, being excluded from social events, being told to change their clothes or remove makeup, and being asked highly private or unusual questions. Participants also experienced discomfort from occurrences of institutional discrimination, such as gendered uniforms and gendered bathrooms.

A New Zealand nationwide survey exploring health and wellbeing for trans people (Veale et al, 2019) confirms findings from previous literature. From the 1,178 trans participants who completed this survey, 71% had experienced high or very high instances of depression and/or anxiety (compared with 8% of the general population), 56% had had serious suicidal ideation within the last 12 months, and 37% had previously attempted suicide. Furthermore, 21% of school aged participants had been bullied (compared with 5% of the general population), and 67% of participants had experienced discrimination at some point in their lives with 44% having experienced discrimination in the past year.

With regards to physical characteristics and their impact on wellbeing, some studies have mentioned that breast development is particularly important for trans women (due to the size of breasts in proportion to width of shoulders and chest) (Cavanaugh et al., 2015), as well as the removal of breasts for trans men (Richards et al., 2016). Voice incongruence has been found to be a significant factor of distress for transgender individuals (Bultynck, et al., 2017; Cavanaugh et al., 2015; Richards et al., 2016). Other specific aspects that have been mentioned have been: facial and body hair, building muscle, changing hairstyle, and packing of the groin. (Cavanaugh et al., 2015 & Richards et al., 2016). Obesity and desire for weight change has also been associated with people experiencing gender incongruence (Olson et al., 2015; Peterson et al., 2017). A New Zealand survey found that 67% of their trans men participants wanted removal of breasts and around 50% of trans women desired voice therapy for their voice incongruence, as well as feminizing genital surgery (Veale et al., 2019).

Minority Stress Model

The minority stress model (Meyer, 2003), can explain why minority identities (in this instance trans communities), experience such high rates of psychological distress and ill health. The model explains

that higher instances of distress are a result of the stigma and discrimination that society places on these individuals for not conforming to the 'normed' standards of gender identities.

Using the minority stress model as a basis for measuring the relationship between mental health and experiences of social stigma, Bockting et al., (2013) found a positive association between psychological distress and societal discrimination. Additionally, Kelleher (2009) explored the impact of minority stress among lesbian, gay, bisexual and transgender youth in Ireland and found that youth with higher expectations of discrimination and societal rejection reported symptoms of suicidal ideation, depression and anxiety more often. Bockting et al., also found that social support (especially from trans peers) mitigated levels of distress in their participants. Unfortunately, however, rejection from family and limited support within the workplace is commonly experienced by trans individuals (Hendricks & Testa, 2012). One study noted that 21% of their 350 participants had families who did not support their gender identity (Bradford, Reisner, Honnold & Xavier, 2013), and Brewster et al. (2014) found that less than half of their participants felt supported by some of their colleagues during transition.

GAHT

It is important to note that not everyone in trans communities' experiences distress around their gender incongruence nor are they seeking gender affirming treatment (Oliphant et al., 2018; WPATH, 2012). However, those persons who do seek gender affirming health care are doing so with the hopes of physically changing some aspects of their body that are incongruent to their identity in order to alleviate the distress that this incongruence causes. Consequently, it is commonly believed that if a trans individual physically presents (or 'passes') more like their gender, they will face less discrimination, which will in turn improve their overall wellbeing. It is important, therefore, to understand exactly what physical aspects of gender incongruence (i.e. body dysphoria, physical, social, and sexual functioning) are most pertinent to ensure that gender affirming care is adequately addressing this need.

However, the current literature pertaining to the benefits of GAHT is inconclusive. Some state that following GAHT, participants experienced significant decreases in anxiety, depression, agoraphobia, and experiences of hostility (White Highto & Reisner, 2016) overall improvements in mental health (Cavanaugh et al., 2015); and increase in perceived quality of life (Gorin-Lazard et al., 2012).

Conversely, longitudinal studies conducted by, Asscheman et al. (2011) and Dhejne et al. (2011) have both found higher rates of suicide, psychiatric morbidity and drug abuse in transgender

individuals after gender affirming treatment. Costantino et al., (2013) assessed sexual function and changes in mood for trans men prior to and one year after receiving testosterone. They found that while participant's experiences of general sexual functioning improved, changes in mood were not significant. It is important to note, also, that these latter three studies were assessing the effectiveness of GAHT in conjunction with sex reassignment surgery. For many trans people who seek gender affirming health care, the high cost and inaccessibility of funding for gender affirming surgeries create a huge barrier to access (Costantino et al., 2013). Therefore, GAHT is commonly the first port of call and, ultimately, the only realistic option. Research exploring the effects of GAHT in isolation is, thus, crucial in further understanding its impact on trans individual's overall well-being.

Study Aims

This study aims to identify the biopsychosocial issues that are unique to trans people in Aotearoa prior to starting GAHT and to measure potential reductions in these issues once GAHT has been administered for one year. This study will use both quantitative and qualitative methods to assess GAHT effectiveness. Analysing longitudinal survey data as well as generating further understandings through semi-structured interviews. This study will not only be looking at how GAHT changes physical characteristics, but the impact of these physical changes on participants overall wellbeing and experiences of or perceptions of discrimination from others

Research Design

This is a mixed methods study, with phase one using quantitative analysis and phase two using qualitative analysis. The design of phase one of this study is a longitudinal cohort panel survey design. For phase two, 10 participants will partake in a semi structured interview, of which their responses will be interpreted using inductive thematic analysis.

Phase one: Quantitative component

Participants and recruitment:

Participants for this study will be 18 years or over, who identify as transgender, non-binary, takatāpui, or gender diverse who are attending an assessment at the Endocrinology Department at Wellington Regional Hospital due to their desire to begin GAHT. Participants will be invited to take part in the study prior to their assessment at the Endocrinology Department. The invitation was sent out at the same time as they receive information about their upcoming assessment and included the information sheet and consent form for them to consider Participants will then sign the consent form in the presence of Ms. Bullock if they choose to participate. Ms. Bullock is the senior clinical psychologist working at the Endocrine department in Wellington Hospital and is responsible for administering the

psychological assessments for people seeking GAHT within this service. It will be made clear on both the information sheet and during the assessment that choosing not to take part, or withdrawing from this study, will have no impact on their eligibility to receive GAHT or any other services within the Endocrine Department.

Measures:

Data will be collected from the psychology reports written from participants' hormone therapy readiness assessment(s), clinic letters from the endocrinologist indicating start dates of GAHT, and scores from the questionnaire. The questionnaire incorporates four broad constructs, covering: overall health, quality of life, congruence with gender identity, and personalized goals for GAHT. This questionnaire will be administered at the time of the assessment (baseline), six months after GAHT has first been prescribed, and one year after GAHT has first been prescribed. The four components of the questionnaire have been taken from: an adapted version of the full Patient Health Questionnaire ([PHQ-SADs], Kroenke, Spitzer, Williams & Lowe, 2010), the Personal Wellbeing Index ([PWI], International Wellbeing Group, 2013), the Transgender Congruence Scale ([TCS], Kozee et al., 2012), and a Goals Tracking Form (GTF).

Location:

Capturing of baseline data will be at the Endocrinology Department of Wellington Hospital, as this is the most efficient way to administer the questionnaires to new participants. The six month and twelve month follow up questionnaires will be administered either via email or post, depending on what each participant is most comfortable with.

Data analysis:

Participants will be selected from a convenience sample from all service users who present at the Endocrinology Department for GAHT over the study period. Sample size is, therefore, dependent on how many clients attend the Endocrinology Department during this time. Sample size is a common limitation within trans health research due to the finite number of persons presenting to gender affirming services (Mueller et al., 2017). However, because of the prominent gaps in trans research, a smaller sample size is still justifiable. Additionally, findings from the qualitative component of this research will contribute to the quantitative data and its analyses. Descriptive characteristics will be captured at baseline and will include age, ethnicity, sex assigned at birth, and gender identity. Mean responses to the questionnaire will be analysed at baseline, six months and 12 months. Differences between means will be compared using ANOVA.

Phase two: Qualitative component

Participants and recruitment:

Ten participants will be selected from the pool of participants recruited in phase one. All participants will have signed the consent form stating that they may be invited for a follow-up 12-month interview with Ms. Reynolds. Consideration of selection of participants will be based around varying descriptive characteristics with the aim of selecting participants with the greatest varieties of age, gender, ethnicity etc.

Location:

The location of the one year follow up interviews were held at either Ms Reynolds' office at Massey University, and interview room at Massey University Library if the office was occupied, or at the participant's home. Participants chose the location that was most convenient and comfortable for them.

Procedure/Interview:

The semi-interview was guided by a number of research questions to prompt the interview and elicit discussion from the participants. See Appendix A for a copy of the interview schedule.

Data analysis:

Interviews will be audio recorded and then transcribed word for word. Data will be analysed using inductive thematic analysis; where themes will be established from the data itself rather than the researcher interpreting the data based on pre-existing or pre-determined themes or theories (Braun & Clarke, 2013). Data analysis will follow the six phases of thematic analysis as outlined by Braun and Clarke (2006).

Ethical Considerations

Phase one of this study was approved by the Health and Disability Ethics Committee on March 15th 2019, reference number: 19/CEN/9. Amendments to this ethics application were made for phase two of this study and approved on 20th April 2020, reference number: 19/CEN/9AM01. Ethical approval and locality sign off within Wellington Hospital was also obtained for this study by Capital Coast and District Health (CCDHB). CCDHB special staff status was granted to enable Ms Reynolds to access participants' information in their data base. This study has also received endorsement from the CCDHB Māori Partnership Board Research Advisory Group.

Clinical Psychology Internship

My internship began in January 2021 with the Counties Manukau Community Corrections team at the Department of Corrections. This was a full year internship at the Manukau Psychologists Office,

which provides psychological services to: Auckland Region Women's Correctional Facility (ARWCF), Korowai Manaaki (Youth Justice Residence), and to all the community probation sites within the Counties Manukau area. My internship was primarily based at ARWCF, so most of the experience, reflections, and observations I talk to below are in relation to this. The following contains personal reflections on how certain processes of my doctoral research impacted on my internship – such as building rapport, interviewing skills, and working with populations who experience higher rates higher rates of stigma and discrimination from general society. Additionally, the following will also talk to the gender affirming processes that are available to trans, takatāpui, and non-binary individuals across all prisons within Aotearoa.

Rapport and Interview skills

Whakawhanaungatanga:

Building rapport with a client is fundamental for establishing a positive working alliance and is a significant contributor for effecting positive change in our work. Rapport can be obtained through specific skills such as empathic responding, active listening, and validating a person's experiences. Within a New Zealand and Te Ao Maori context, whakawhanaungatanga is also crucial. Whakawhanaungatanga refers to the process of building connections and links with others, by sharing personal information about where you are from, whakapapa or heritage links, and connections to landmarks and places. For both my qualitative interviews in my doctoral research and in my clinical practice during my internship, I used whakawhanaungatanga. Rather than launching straight into asking questions about the individual in front of me, or before getting down to 'business' to discuss consent forms and procedures, I took the time at the begging of each interview to introduce myself, where I was from, where my family were from, and other important landmarks to me, then asked my participants or clients to do the same if they felt comfortable doing so. This not only served to ease some potential tensions within the room, but also gave me insight into who my client was and what things were important enough to them to choose to share with me. This often elicited more informal conversations at the begging of sessions around shared experiences that emerged, such as shared places of growing up or dwelling, family heritage, and previous occupations. For example, my time spent working in schools and with young children on the autism spectrum elicited conversations and sharing of experiences with a participant who had a younger sibling with autism, and another who worked in early childcare. Within my internship, I would often introduce myself first with my pepeha in Te Reo, and then talk to that in English afterwards with clients who were Maori. Often times, I had clients who complimented me on my use and pronunciation of Te Reo, remarking that they had recently learnt their own pepeha and displayed enthusiasm in sharing it with me.

At times, however, use of Te Reo and my pepeha, was met with some shame (whakama) or dismissiveness from my clients which may have ruptured the therapeutic alliance. From this, I learnt to 'test' out my client's engagement with Tikanga Maori by asking if they would like to begin the session in a certain way, explaining that I often start sessions with karakia. When clients were not as responsive to this, or dismissive, I would then proceed to introduce myself in English so as not to create any animosity in the relationship from the get-go. Ultimately, I learnt that being reflexive to how I opened sessions and responding to my client and their needs rather than opening sessions in a 'prescribed' way to be beneficial to my clinical work.

Self-Disclosure:

During both my internship and my qualitative research, I also found the use of self-disclosure to be incredibly helpful. At the begging of my internship, I found it challenging to engage clients in therapy (especially my male clients in the community) and struggled to tackle their questions of what therapy is and why it was important for them. Upon discussing this challenge with one of my colleagues, she gave me an excellent example or template of how to explain therapy to clients with the use of self-disclosure. She would often say to clients "do you ever do something, or speak to someone in a certain way and then regret it afterwards? I do this all the time, for instance, I love my mum so much, she means the world to me, but for whatever reason, when I'm in a bad mood, I used to snap at her and say something mean to her that I'd end up regretting later…. Has this ever happened to you with someone you love?... It has?... well in therapy we look at why people might do these things and how we can change these behaviours, so we don't hurt those close to us anymore." Often, I found this small act of self-disclosure would enhance the therapeutic relationship, place the role of therapy in context for the client, and reduce some of their prior misconceptions about therapy. With regards to my research, I used self-disclosure about my sexual identity during the whakawhanaungatanga process. Although sexual and gender identity are different, many people who fall under the LGBTQIA+ umbrella have similar experiences of having to come to terms with their identity in a heteronormative and cis-normative society – a society that prioritises cisgender and heterosexual people, and showcases them as the "norm". Although I wasn't trans, I found that many of my participants were able to make a connection with me following my disclosure such as "oh! I'm bi-sexual too!" I was able to have conversations with my participants about societies false preconceptions about what it means to be bi-sexual and the difficulties that come with that.

Focusing on the needs of the individual:

During my interviews for my research, I always included a question around whether there was anything important that participants wanted to tell me that we had not yet discussed. I took this approach with me into my internship and ensured there was space at the end or during the assessment for my clients to talk about what was important for them, or to discuss pertinent topics or issues that I may not have asked about. I also asked clients if they had any specific goals for themselves while in prison or on parole, and what sorts of programmes had or had not worked for them in the past and why. Doing this would sometimes bring to light an issue that I had not even thought about and it ensured that I was not treating my participants or clients as a homogenised group who experience the same difficulties or have the same needs. It also ensured that I was not solely focussing on what *I* thought was most important or placing my experiences or expertise above the clients own.

Working with marginalised populations

In both my work as a researcher with trans communities and my work with people involved in the criminal justice system I have routinely been confronted with my own personal values and beliefs. At times I have felt immense sadness, anger, and helplessness at how unjust or unfair someone's life can be and have at times felt guilt around my own privilege. I work in a space where my professional role and my personal values are often conflicted, and I have to walk a tight rope between the two. Working in line with my core values while also working within a system that has historically dehumanised the people in its care can be a challenge. This year has taught me how I can use my education, privilege, and professionalism to stand up for what I believe is right whilst maintaining my professional integrity. An example I can draw on here is when I have respectfully and professionally called other staff members out on their use of the term's "offender" or "prisoner". These terms are still routinely used by staff within the Department of Corrections, even though changes are being implemented to phase these out due to their degrading connotations and there disconnect with person first language. This can be quite a nerve-racking thing to do, however when I have not commented on staffs use of this language, I have walked away from the interaction feeling worse than if I had said something. Being an advocate for those who are routinely marginalised and discriminated against by greater society is incredibly important to me, and I will continue to stand up for what I believe in to try and effect change where I can, even in seemingly small or insignificant ways.

Similarly using respectful and humanising terms, terms which place the person first has been paramount in my research. For instance, the terms "male to female" (MtF) and "female to male" (FtM) were commonly used in trans research up until recently but have none been deemed problematic. Referring to a person by their sex assigned at birth rather than their gender identity can

be incredibly offensive for a trans person, as they no longer want to be viewed as or referred to by their sex assigned at birth. They do not want people to see them as a "male" or "female" first if that is not their actual gender, just like a person would not want others to see them as an "offender" first before anything else.

I believe that changes in language have a greater impact in not only enlightening the wider community to why previous terms are problematic, but also in affirming the people who are subjected to these terms by placing the focus on the individual in front of us rather than focusing on one specific aspect of them, something that they may not even see themselves as.

Gender Affirmation in Prison

I was impressed, and I must admit somewhat surprised, to find that the Department of Corrections had recently established policy and protocols for the care of trans people in prison. During the early stages of my internship, before I built up my client case load, I spent some time looking into these policies. The four main principles on Tatou (Department of Corrections online database) states that trans people should be managed in a way which:

1. is individualised according to need
2. seeks to preserve their dignity, safety and privacy
3. enables the maintenance of a person's gender identity
4. appropriately addresses risk and maintains the integrity of the sentence / order while developing self-empowerment within the person

Within prison, a trans person is able to access a number of gender affirming services. Such services include accessing support to legally changing their name and pronouns and informally changing their name and pronouns on some departmental documentation. They can be considered for any appropriate rehabilitation group programmes with which ever gendered group they feel most comfortable in or be referred for one on one interventions if this is an option and they feel unsafe to work in a group. They have access to things such as chest binders (to hide breast tissue), groin packers, implements that help with groin tucking, and gender affirming clothes. They can also be referred for a transgender and non-binary health assessment to seek referral for GAHT as well as gender affirming surgery.

I had one client in ARWCF who did not identify as a woman and who was in the initial stages of accessing testosterone to affirm his gender. Although I was not a part of this person's pathway to access gender affirming care, I was able to work responsively with this person to ensure that our work together also affirmed his gender identity. I was able to confidently ask my client about which

pronouns he would like used in his report, and whether he wanted to be referred to as Mr., Mx., Ms. or something else. My client had not actually given this much thought at the time of our assessment and did not know what I meant by asking which pronouns he would like me to use. Because of my research, I felt confident and competent in providing education on pronouns and the difference between having a sex assigned at birth and a gender identity and why some people choose to change their pronouns from the ones assigned to them at birth. From this conversation my client was able to decide that he wanted he/him pronouns used throughout his report but did not want to be described as a "trans-man" in the report. I also gained consent from my client to talk with the custodial staff on his unit to notify them of his pronouns so that they could address him in the most respectful way going forward.

Conclusion

My experiences with my research have, at times, positively contributed to my work as an intern at the Department of Corrections. Namely my ability to build rapport and whakawhanaungatanga with my clients – placing the person first, use of some self-disclosure, and ensuring that I see my clients as unique individuals with personalised issues and experiences rather than viewing them as a homogenised group. My internship, like my research, has also further highlighted my passion for working against social injustice and for being an advocate for those who have experienced marginalisation and discrimination from society. I hope that I can continue to work at the Department of Corrections and use my specialised knowledge in the area of gender affirming care to contribute to further changes in departmental policy and to educate others within the department.

References

Asscheman, H., Giltay, E.J., Megens, J. A. J., de Ronde, W. P., van Trotsenburg, M. A., & Gooren, L. J. G. (2011). A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones. *European Journal of Endocrinology, 164*, 635-643.

Bockting, W. O., Milner, M. H., Swinburne-Romaine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. *American Journal of Public Health, 103*(5), 943-951.

Bouman, W. P., Davey, A., Meyer, C., Witcomb, G. L., & Arcelus, J. (2016). Predictors of Psychological well-being among treatment seeking transgender individuals. *Sexual and Relationship Therapy, 31*(3), 359-375

Bradford, J., Reisner, S. L., Honnold, J. A., & Xavier, J. (2013). Experiences of transgender-related discrimination and implications for health: results from the Virginia transgender health initiative study. *American Journal of Public Health, 103*(10), 1820-1829

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Braun, V., & Clarke, V. (2013). *Successful Qualitative Research: a practical guide for beginners.* London, UK: SAGE publications Ltd.

Brewster, M. E., Velez, B. L., Mennicke, A., & Tebbe, E. (2014). Voices from beyond: a thematic content analysis of transgender employees' workplace experiences. *Psychology of Sexual Orientation and Gender Diversity, 1*(2), 159-169.

Bultynck, C., Pas, C., Defreyne, J. Cosyns, M., den Heijer, M., & T'Sjoen, G. (2017). Self-perception of voice in transgender persons during cross-sex hormone therapy. *The Laryngological, 127*, 2796-2804

Cavanaugh, T., Hopwood, R., Gonzalez, A., & Thompson, J. (2015). The medical care of transgender persons. Boston, MA: *Fenway Health*; October; 1-38.

Clark, T. C., Lucassen, M. F. G., Bullen, P., Denny, S. J., Flemming, T. M., Robinson, E. M., & Rossen, F. V. (2014). The Health and Well-Being of Transgender High School Students: Results from the New Zealand Adolescent health Survey (Youth'12). *Journal of Adolescent Health, 55*, 93-99.

Costantino, A., Cerpolini, S., Alvisi, S., Morselli, P. G., Venturoli, S., & Meriggiola, M. C. (2013) A Prospective Study on Sexual Function and Mood in Female-to-Male Transsexuals During Testosterone Administration and After Sex Reassignment Surgery, *Journal of Sex & Marital Therapy, 39*(4), 321-335.

Davey, A., Bouman, W. P., Meyer, C., & Arcelus, J. (2015). Interpersonal Functioning Among Treatment-Seeking Trans Individuals. *Journal of Clinical Psychology, 71*(12), 1173-1185.

Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A. L. V., Langstrom, N., Landen, M. (2011). Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden. *PLoS One, 6*(2), 1-8.

Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A. L. V., Langstrom, N., Landen, M. (2011). Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden. *PLoS One, 6*(2), 1-8

Gomez-Gil, E., Tilla, A., Salamero, M., Godas, T., & Valdes, M. (2009). Sociodemographic, clinical, and psychiatric characteristics of transsexuals from Spain. *Archives of Sexual Behaviour, 38*(3), 378-392.

Gorin-Lazard, A., Baumstarck, K., Boyer, L., Maquigneau, A., Gebleux, S., MPsy, Penochet, J. C.… Bonierbale, M. (2012). Is Hormonal Therapy Associated with Better Quality of Life in Transsexuals? A Cross-Sectional Study, *The Journal of Sexual Medicine, 9*, 531-541.

Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: an adaption of the minority stress model. *Professional Psychology: Research and Practice, 43*(5), 460-467.

Kelleher, C. (2009). Minority stress and health: implications for lesbian, gay, bisexual, transgender, and questioning (LGBTQ) young people. *Counselling Psychology Quarterly, 22*(4), 373-379.

Kerekere, E. (2017). Part of the whanau: The emergence of takatapui identity he whakariki takatapui (Unpublished doctoral thesis). Victoria University, Wellington, New Zealand.

Kozee, H. B., Tylka, T. L., & Bauerban, L. A. (2012). Measuring Transgender Individuals' Comfort with Gender identity and appearance: Development and validation of the transgender congruence scale. *Psychology of Women Quarterly, 36*(2), 179-196.

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

Mueller, S. C., De Cuypere, G., & T'Sjoen, G. (2017). Transgender research in the 21st Century: A selective critical review from a neurocognitive perspective. *American Journal of Psychiatry, 174*(12). 1155-1162.

Oliphant, J., Veale, J., Macdonald, J., Carroll, R., Johnson, R., Harte, M., Stephenson, C. & Bullock, J. (2018). Guidelines for gender affirming care for gender diverse and transgender children, young people and adults in Aotearoa New Zealand. ISBN: 978-0-473-45837-9.

Olson, J., Schrager, S. M., Belzer, M., Simons, L. K., & Clark, L. F. (2015). Baseline Physiologic and Psychosocial Characteristics of transgender youth seeking care for gender dysphoria. *Journal of Adolescent Health, 57*, 374-380.

Peterson, C. M., Mathews, A., Copps-Smith, E., & Conrad, L. A. (2017). Suicidality, Self-harm and Body Dissatisfaction in Transgender Adolescents and Emerging Adults with Gender Dysphoria. *Suicide and Life-Threatening Behaviour, 47*(4), 475-482.

Pinto, R. M., Melendez, R. M., & Spector, A. Y. (2008). Male-to-female transgender individuals building social support and capital from within a gender-focussed network. *Journal of Gay & Lesbian Social Services, 20*(3), 203-220.

Richards, C., Bouman, W. P., Seal, L., Barker, M. J., Nieder, T. O., & T'sjoen, G. (2016). Non-Binary or Genderqueer Genders. *International Review of Psychiatry, 28*(1), 95-102.

Simon, L., Zsolt, U., Fogd, D., & Czobor, P. (2011). Dysfunctional Core Beliefs, Perceived Parenting Behaviour and Psychopathology in Gender Identity Disorder: A Comparison of Male-to-Female, Female-to-Male Transexual and Nontransexual Control Subjects. *Journal of Behaviour Therapy and Experimental Psychiatry, 42*, 38-45.

Solomon, D. T., Heck, N., Reed, O. M., & Smith, D. W. (2017). Conducting Culturally Competent Intake interviews with LGBTQ Youth. *Psychology of Sexual Orientation and Gender Diversity, 4*(4), 403-411.

Straus, P., Cook, S., Winter, S., Watson, V., Wright Toussaint, D., Lin, A. (2017). Trans pathways: the mental health experiences and care pathways of trans young people. Summary of results. Telethon Kids Institute, Perth, Australia.

The World Professional Association for Transgender Health. (2012). Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People (7th version). Retrieved from: https://www.wpath.org/publications/soc

Veale J, Byrne J, Tan K,Guy S, Yee A, Nopera T & Bentham R. (2019). *Counting Ourselves: The health and wellbeing of trans and non-binary people in Aotearoa New Zealand*. Transgender Health Research Lab, University of Waikato: Hamilton NZ.

White Hughto, J. M., & Reisner, S. L. (2016). A systematic review of the effects of hormone therapy on psychological functioning and quality of life in transgender individuals. *Transgender Health, 1*(1), 21-31.

Appendix A

Whakawhanaungatanga – introduce myself, where I am from, what I am currently doing at Massey, why I am so passionate about this research, ask participant questions about themselves or their day, general chit chat to elicit rapport:

“Thank you so much for agreeing to take part in this interview today. The main objectives for today are to gather some information on your journey with hormone therapy, to gain your insight into the effectiveness of hormone therapy, and to see what other areas of services and/or supports you think would be helpful for people to have access to alongside receiving hormones.”

“Your answers from this interview will be used as part of my doctorate research and publications from this research will hopefully also be used to influence future decision making for access to gender affirming care as well as increasing societal awareness of trans issues and their access to health care.”

“Some of the topics or questions I ask might be quite personal, so if you feel uncomfortable or upset at any time during the interview we can always pause the interview and take a break, change the topic of conversation, or move onto the next question, or stop the interview completely, I’ll be guided by you and what you think is best.”

“Depending on your answers the interview should take approximately an hour.”

“Do you have any questions for me?”

*continues on next page:

Focus area or topics	**Questions and prompts/probes**
Demographics	"What is your age, ethnicity, and gender?" "Where are you from/where were you born? Where do you live now?" "How long approximately have you been taking GAHT?"
Specific issues for trans people seeking GAHT	"What experiences made you seek hormone therapy?" *prompt if needed* "These can range from physical, to emotional, to social, to occupational etc…"
How does GAHT address these issues?/ Participants perceptions of GAHT	"So, what have you noticed/experienced since beginning GAHT?" "How has GAHT helped in making better some of the challenges that you have just talked to me about?" "Are there any instances that GAHT has not helped with?" "If yes, which issues and why do you think GAHT didn't help?" "What have you enjoyed/liked about taking GAHT?" "What haven't you enjoyed/liked?" "What advice would you give to people who want to start GAHT, or what do you wish people had told you about the process?"
Ideas for improving current care	"What additional support or services did you receiving alongside GAHT?" "Were these helpful and why?" "What additional support or services do you think could have helped you alongside GAHT and why?" "How do you think we could support trans people better?"
Minority stress/societal treatment	"What experiences have you had as a result of identifying the way you do?" For example, when interacting with other people, socially or in settings like school, work, shops, support services, etc? "Have you had any discriminatory experiences? Would you mind talking to me about them?" " "In your opinion did taking GAHT reduce any of your experiences of receiving discrimination?"
Open space	"Is there anything else you'd like to tell me about your journey with GAHT or anything you feel is important that we haven't covered?"