Taylor & Francis
Taylor & Francis Group

Culture, Health & Sexuality

An International Journal for Research, Intervention and Care

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/tchs20

One person, many changes: a socioecological qualitative analysis of the experiences of transfeminine individuals undergoing feminising gender-affirming hormone therapy

James A. Fowler, Sarah Warzywoda, Mera Reyment, Tyson Crilly, Nia Franks, Fiona Bisshop, Penny Wood & Judith A. Dean

To cite this article: James A. Fowler, Sarah Warzywoda, Mera Reyment, Tyson Crilly, Nia Franks, Fiona Bisshop, Penny Wood & Judith A. Dean (2025) One person, many changes: a socioecological qualitative analysis of the experiences of transfeminine individuals undergoing feminising gender-affirming hormone therapy, Culture, Health & Sexuality, 27:3, 354-370, DOI: 10.1080/13691058.2024.2358099

To link to this article: https://doi.org/10.1080/13691058.2024.2358099

Published online: 03 Jun 2024.

CULTURE, HEALTH & SEXUALITY
2025, VOL. 27, NO. 3, 354–370
https://doi.org/10.1080/13691058.2024.2358099

One person, many changes: a socioecological qualitative analysis of the experiences of transfeminine individuals undergoing feminising gender-affirming hormone therapy

James A. Fowler[a], Sarah Warzywoda[a], Mera Reyment[b], Tyson Crilly[b], Nia Franks[c], Fiona Bisshop[d], Penny Wood[e] and Judith A. Dean[a]

[a]The University of Queensland, Faculty of Medicine, School of Public Health, Herston, QLD, Australia; [b]The University of Queensland, Faculty of Health and Behavioural Sciences, School of Psychology, St Lucia, QLD, Australia; [c]School of Psychology and Counselling, Faculty of Health, Engineering and Sciences, Centre for Health Research, Institute for Resilient Regions, University of Southern Queensland, Ipswich, QLD, Australia; [d]Holdsworth House Medical Practice, Brisbane, QLD, Australia; [e]Alexander Heights Family Practice, Perth, WA, Australia

ABSTRACT

Gender-affirming hormone therapy (GAHT) comes with many physical, psychological, and social changes that are often considered in isolation. This research uses a socioecological lens with a sample of 15 Australian transfeminine individuals to investigate the changes experienced during GAHT. Semi-structured interviews were conducted in 2022, with verbatim transcripts analysed using deductive thematic analysis with Bronfenbrenner's Socioecological Model (SEM) as a framework. Analyses revealed two themes intersecting multiple levels of the SEM. Theme 1 contained two sub-themes and broadly encapsulated how interactions with others influenced GAHT experiences. Sub-theme 1 spoke to how stigma creates positive or negative experiences (through the macrosystem, the exosystem, and proximal processes), while sub-theme 2 described how GAHT causes internal changes that promoted stronger interpersonal relationships (person and proximal processes). Theme 2 described how changes occurred over time, with some changes being temporary, and others being delayed (person and time). These themes highlight the interconnected nature of the physical, psychological, and social changes and experiences that can occur during GAHT. Best-practice care for trans people undergoing GAHT needs to be multi-faceted and holistic in order to embed support across different SEM components.

ARTICLE HISTORY
Received 11 December 2023
Accepted 17 May 2024

KEYWORDS
Transgender; gender-affirming hormone therapy; journeys; changes; qualitative

CONTACT James A. Fowler james.fowler@uq.edu.au

This article was originally published with errors, which have now been corrected in the online version. Please see Correction (http://dx.doi.org/10.1080/13691058.2024.2371613)

Introduction

Up to 80% of trans individuals, people whose gender differs from their sex-presumed-at-birth (Davidson 2007; Lindqvist, Sendén, and Renström 2021), may wish to pursue gender-affirming hormone therapy (GAHT) (Turban et al. 2022). Conventional GAHT involves the use of hormonal supplements such as oestrogen or testosterone which may be taken alongside hormonal blockers (e.g. anti-androgen medication; Nguyen et al. 2018). Normatively framed around aligning external appearance with gender (Connelly et al. 2021; D'Hoore and T'Sjoen 2022), trans people may pursue GAHT for a variety of reasons, for example to mitigate gender dysphoria or to increase body comfort, with GAHT functioning as one piece of a larger affirmation puzzle. Affirmation options pursued by trans people if desired also include social, legal, cosmetic (e.g. permanent hair removal), and surgical changes under the over-arching 'transitioning' umbrella (Turban et al. 2022).

Abundant evidence confirms that GAHT can be a safe and affirming supporting process with important mental health benefits and minimal physiological risk (Baker et al. 2021; Connelly et al. 2021; van Leerdam, Zajac, and Cheung 2021; Weinand and Safer 2015; White Hughto and Reisner 2016). Despite the highlighted positive outcomes, research suggests that the GAHT journey can be complex, as described by Fowler et al. (2023a) in their recent systematic review, who described GAHT as an experience full of highs, lows, and significant experiential differences. However, Fowler et al. (2023a) observed that although GAHT came with challenges, the affirmation it provided was reported to be worth the struggle. The authors of this review advocate for a deeper understanding of the experiences and challenges associated with hormonal transitioning to delineate pathways for greater support.

A socioecological perspective

Bronfenbrenner's socioecological model (SEM) (Bronfenbrenner and Morris 2006) – describes how multiple factors influence an individual's experience. The most recent revisions of this model identify four key factors: proximal process – person – context – and time (Bronfenbrenner and Morris 2006; Xia, Li, and Tudge 2020). Within a trans context, proximal processes reflect interactions between a trans person and other people and objects within their immediate environment. Person refers to factors within a trans individual that influence how they interact with their environment, such as personality variables. Context may be considered at four different levels: 1) the microsystem refers to the immediate environment in which interactions can take place, such as the home or the school); 2) the mesosystem which takes the form of interactions between microsystems, such as how individuals at a school may interact with parents; 3) the exosystem which refers to community level factors that trans people cannot directly engage with or control, such as parents' attitudes towards GAHT; and 4) the macrosystem which refers to over-arching cultural attitudes and beliefs that influence trans people's experience. Finally, the concept of time refers to how these changes evolve over time. Ecological perspectives have proven fruitful in previous conceptualisations of health and wellbeing factors for LGBTQIA+groups (Beck et al. 2018; Fowler and Buckley 2022; Luke and Goodrich 2015). For example, one

recent review applied this model in the context of improving bystander behaviour to reduce LGBTQIA+ related bullying (Fowler and Buckley 2022) by identifying specific (and intersecting) domains within the SEM which can be addressed to comprehensively promote bystander intervention.

Individuals undergoing GAHT experience a range of psychological, physical and social changes (Fowler et al. 2023a). Considering these changes from a socioecological perspective provides the opportunity to explore the myriad of factors that work synergistically to influence physical, psychological, and social changes and outcomes. This perspective recognises that transition outcomes are influenced by intrapersonal and social factors – such as friends (Galupo et al. 2014), family (Wilson et al. 2016), community (Higa et al. 2014) and health care providers (Wall, Patev, and Benotsch 2023). For example, family acceptance can reduce depressive symptoms, perceived 'burden' of being trans, and improve life satisfaction for trans youth (Simons et al. 2013). Perceived stigma and care offered by healthcare providers (for example, misattribution of symptoms to being trans and invasive questioning (Wall, Patev, and Benotsch 2023) can influence factors such as subsequent healthcare access (Safer et al. 2016). Additionally, school environments in which staff are indifferent to LGBTQIA+ bias-based bullying, and religious institutions that expose individuals to anti-LGBTQIA+ rhetoric, have been shown to negatively impact the wellbeing of trans youth (Higa et al. 2014).

Appraisal of GAHT-related changes is often tied to how gender-affirming they are, and how traits are perceived by broader society (Fowler et al. 2023a). For example, participants included in the study by Petry (2015) seeking feminisation felt that becoming 'weepy' was positive as it was 'womanly'. In addition, the review by Fowler et al. (2023a) highlighted that individuals in different social contexts (e.g. in different work environments) had to adapt their journeys to meet the specific environment they were in. For example, trans persons engaging in sex work often stopped hormones for a brief period to reduce erectile dysfunction (Rosenberg, Tilley, and Morgan 2019; Van Schuylenbergh et al. 2019). A study of trans individuals accessing gender-affirming care in the UK also highlighted how some trans individuals may temporarily discontinue gender-affirming care despite strong intentions to continue because of health or social reasons (Hall, Mitchell, and Sachdeva 2021). Therefore, journeys through GAHT cannot be considered in isolation, but rather as a dynamic, intersecting process shaped by an individual's unique environment.

The experiences of Australian transfeminine people

Australian research suggests that access to gender affirming care can be problematic. One study with Australian participants reported that almost 90% of trans participants had experienced some difficulty in accessing GAHT (Bretherton et al. 2020). The Australian trans community has consistently asserted that Australian healthcare systems are not structurally supportive of meeting their needs (Franks et al. 2023; Zwickl et al. 2019). Contemporary analysis of Australian GAHT practice continues to suggest that many trans people experience inferior healthcare provision, with transfeminine people more likely to be both misgendered and deadnamed by providers (Zwickl et al. 2024). Inadequate healthcare access occurs within a context of broader societal prejudice with 63% of Australian trans people in one study reporting having experienced

discrimination (Bretherton et al. 2020). Unsurprisingly, whilst trans communities are resilient (Puckett et al. 2019), trans Australians consistently reported adverse mental health when compared to age-matched cisgender peers (Bretherton et al. 2020).

Research suggests that transmasculine and transfeminine individuals may experience GAHT differently, particularly during its initiation. Australian research exploring the short-term impacts of GAHT found that transfeminine participants reported few changes in their quality of life compared to transmasculine participants who showed significant improvements (Foster Skewis et al. 2021). The authors posited a six-month study period was insufficient to elicit physiological change that aligned with Australian social norms surrounding what a 'woman' may look like: a premise supported by research conducted in Brazil which reported breast growth as a unique predictor of quality of life for transfeminine people (Silva et al. 2021), and the review by Fowler et al. (2023a) which identified how cultural norms influenced satisfaction with both GAHT processes and outcomes.

Consideration of the wider social and legal structures affecting access to GAHT is therefore important. Legal protections and broader social inclusions have been documented as priorities to improve the wellbeing of trans communities (Divan et al. 2016). These are factors that directly impact individual GAHT experience as they influence cultural norms and facilitate (or inhibit) access to vital gender-affirming procedures. Globally, there exists pressure to restrict access to GAHT for trans people. There are over 400 current anti-trans Bills proposed in the US government system that seek to restrict access to GAHT and deprive trans people of legal protections and access to GAHT (Trans Legistration Tracker 2024) - a quantity that is both a symptom, and feeder, of a broadening transphobia detrimental to trans people's lives. Australia does not currently experience an equivalent level of embedded transphobia within the political system. However, Bills such as the 'Religious Freedom Bill' (a bill proposing individuals can discriminate against LGBTQIA+ people due to personal religious beliefs; Ezzy et al. 2022) are a potentially insidious stepping-stone towards establishing legally protected forms of transphobia in Australia.

A sociocultural perspective is important when conceptualising transfeminine individual's journeys undergoing GAHT as it provides a framework to explore and understand the complex intersection between factors that influence individuals' experiences. The use of a sociological lens is however underused in transgender research. The aim of this study is to meaningfully extend current knowledge about transfeminine people's experiences during GAHT using Bronfenbrenner's SEM to provide a deeper understanding of this journey.

Methods

Data collection

Participants in this study were recruited from a larger investigation called GoLoCypro exploring cyproterone acetate (CPA: an anti-androgen used for testosterone suppression) titration with trans individuals seeking feminisation in Australia. The investigation is described in greater depth in Warzywoda et al. (2024). Anyone over the age of 18, living in Australia, and seeking hormonal feminisation could be enrolled by their physician into the GoLoCypro study. Participants were not excluded if they were already undergoing GAHT. All participants in this larger study were invited to complete one

semi-structured interview with members of the research team to explore their experiences undergoing GAHT. Details of data collection be found in Fowler et al. (2023b).

Interviews were conducted by two researchers (JF, JD) between May – October 2022 with fifteen individuals who were each paid AUD$50 for a one-hour interview. The two interviewers are experienced researchers with experience working with LGBTQIA+ communities, particularly in qualitative projects with a focus on health and healthcare systems. One of the interviewers (JD) also has extensive clinical experience in sexual and reproductive health including providing transgender care and support. The interviews explored experiences before accessing GAHT and experiences during GAHT. Interviews were conducted *via* teleconference software (e.g. Zoom) or in-person, depending on the preference of the participant and their location, given the interviewers were unable to travel across Australia.

Prior to analysis, all interview transcripts were coded into pre-GAHT or during-GAHT. These were coded chronologically in accordance with the participant's journey, meaning items were coded based on whether a participant was describing something that happened before, or after, starting GAHT, rather than this being interpreted by the researchers. This article focuses on portions of the interview exploring experiences undergoing GAHT, but given the complexity in journeys, pre-GAHT items are also considered and included where relevant. All interviews were transcribed verbatim by a reputable transcription company. All identities have been amended to protect the privacy of participants and pseudonyms (used to protect the identity of participants) are used alongside quotes. Ethical approval was received from the Royal Brisbane and Women's Hospital Human Research Ethics Committee (HREC/2019/QRBW/59298), and additional site-specific authorisations were received where necessary.

Data analysis

A deductive thematic analytical approach informed by the framework offered by Braun and Clarke (2013), was used in the research. First, transcripts were read and re-read by the lead author (JF) to attain a general sense of participants' stories and devise initial codes. At this point, a socioecological perspective was chosen for the analysis as it was felt it would meaningfully articulate participants' experiences. Following this, data were coded into each of the components of Bronfenbrenner's SEM (e.g. proximal processes, person, microsystem, mesosystem, exosystem, macrosystem; Bronfenbrenner and Morris 2006; Xia, Li, and Tudge 2020). These specific areas were read and re-read to identify overlap and interactions between model components: for example, how person-level changes evolved over time. The thematic structure was then discussed by the research team as a whole to gain consensus and ensure the presentation of data remained grounded in participants' voices. Any disagreement was considered and resolved as a team. This research team contained a mixture of trans and cisgender researchers to allow for the methodological benefit of including insider and outsider experiences in the research context (Hayfield and Huxley 2015).

Findings

Demographic information is reported in greater detail in Fowler et al. (2023b). However, Table 1 gives participants' pseudonym names, years undergoing GAHT,

Table 1. Hormone use of participants.

Name	Years on CPA	Oestrogen Route	Progesterone Route
Lee	1 year 11 months	Oral	–
Lucinda	4 years 5 months	Topical	–
Morgan	4 years 6 months	Implant	Oral
Demi	1 years 11 months	Implant	–
Alexia	2 years 11 months	Implant	Oral
Flora	4 years 6 months	Implant	–
Amelia	5 years	Implant	Oral / Suppository
Claudia	–	Topical	–
Esme	3 years 2 months	Implant	–
Milly	2 years 2 months	Topical	–
Paige	4 years	Topical	
Scarlet	–	Topical	Oral
Tara	1 year 7 months	Oral	–
Holly	–	Oral	–
Hazel	2 years 5 months '	Oral	–

Notes: Hormone routes as documented in the most recently available report from the larger Cyproterone Acetate (CPA) titration project. Years on CPA used as a proxy for years on gender-affirming hormone therapy as a minimum people of time. All names are pseudonyms

and route of oestrogen and CPA delivery. Participants ($n = 15$) were aged between 19-55 (mean age = 30; $SD = 9.7$) at the time of the study and had been in receipt of the testosterone blocker CPA for at least one year and seven months. Most ($n = 14$) participants self-identified as transfeminine/female/woman (using open-text entry). Through our application of the SEM, we identified two key themes across multiple levels of the SEM that highlight the complex experience of undergoing GAHT.

Theme 1 contained two sub-themes that explored how interactions influence GAHT experiences. Sub-theme 1 described how stigma can create positive or negative experiences (through the macrosystem, the exosystem, and proximal processes). Sub-theme 2 explored how GAHT produced internal changes which influenced the ways participants related to others (through the person and proximal processes). Theme 2 described how changes that occur during GAHT evolve over time, where some are temporary, and some are permanent (through the person and time). These themes, and how they relate to the SEM, are denoted pictorially in Figure 1.

Theme 1: Internal and external attitudes influence the experiences had during gender-affirming hormone therapy

Our analysis showed that the attitudes of others (exosystem) and society more broadly (macrosystem) influenced the individual journey undergone during GAHT in two ways. First, other people's attitudes influenced the quality of interactions and support received during GAHT (proximal processes), which in turn had an impact on how positive the individual's experience was. Negative attitudes were often grounded in stigma which in-turn created harmful experiences for our participants. Second, changes in personal attitudes and self-perceptions (within the person) influenced interactions with others (through a proximal process) as self-acceptance encouraged people to develop new friendships and sexual partnerships.

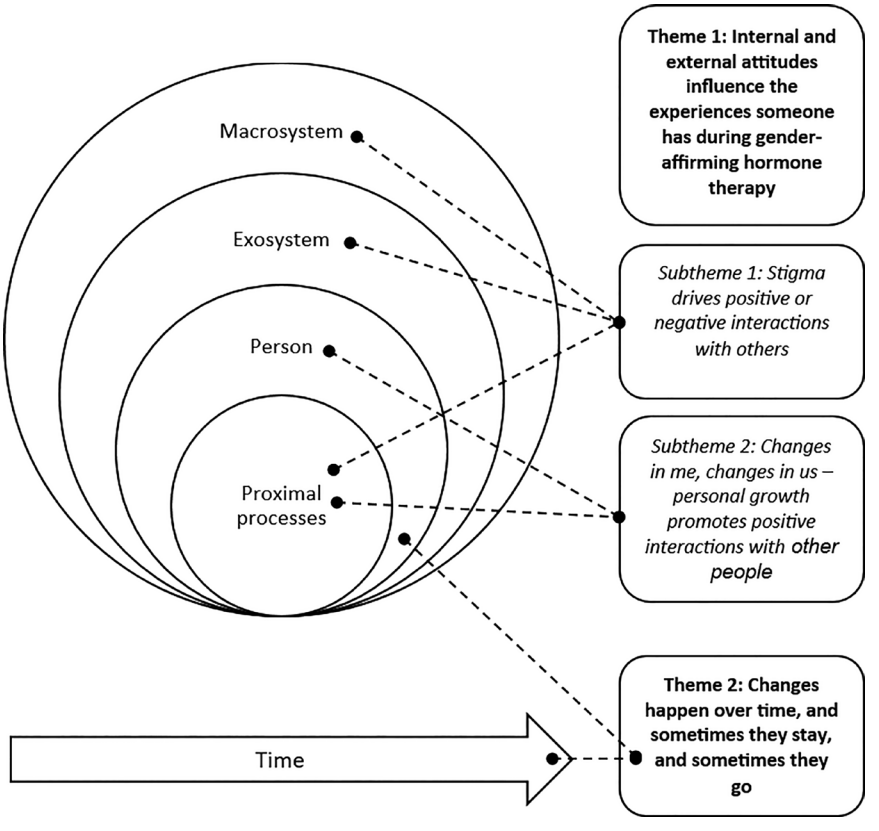

Figure 1. Overview of themes and their contributions from the socioecological model.
Note: Only factors used in the analyses described in this paper are reported in the figure.

Subtheme 1: Stigma drives positive or negative interactions with others

The attitudes of friends, family and healthcare providers influenced how supportive interactions were, in-turn influencing how participants felt about their GAHT journey. Scarlet, for example, believed that they would not have transitioned if not for the support of their partner alongside affirmation from others as they began coming out.

> And I think that her taking me to her family where everyone was aware of it, she told everyone, they were all aware of it and everyone was really, really supportive and just like, kind about it kind of set me up into this position where I was like, oh shit, everyone's going to be really cool about it (Scarlet)

Disclosing being trans and discussing GAHT was not always easy, and some participants described anxiety about telling their families due to potential non-affirming attitudes and harmful interactions. Some participants described fairly immediate negative experiences with family members and friends, however, there was also the potential for hurtful relationships to evolve (and change) over time.

> Called my dad, he was a dickhead about it… but he came around eventually and that was that (Scarlet)

Many participants who described being stigmatised by friends and family however did not have this redemption story and spoke of being unable to share the joys of their transition with close people, such as their family.

> Oh, it was very hush, hush. If I experienced any changes, I would just write them down myself and not really tell my parents… I'm having just like major life changes in a back room of my parents' house that if I went out and told them they'd try and cast me out (Tara)

For Claudia, their family's transphobic attitudes led to shameful and hurtful interactions if Claudia shared any positive improvements.

> But the problem is a positive improvement due to trans-related things is a negative improvement from their perspective. So, like if it looks like I'm having a great time, because I'm doing a lot of trans things. That's me doing bad things to them (Claudia)

Experiencing stigma, or being aware that it might occur, was one reason that participants sought the company of other trans people during their transition. Some were able to find positive, stigma-free spaces with other trans people who were affirming. But in these spaces, others who were not from a highly stigmatised environment could feel guilty.

> And it makes me oddly guilty, in some ways – I've had a really positive transition, in terms of I haven't had any negative reactions from anyone, socially and things like that (Lee)

The attitudes of, and interactions with, healthcare providers also shaped the experiences of undergoing GAHT. For example, having a positive, affirming general practitioner was important in helping individuals prepare for their journey and created a safe environment to discuss symptom management. For Holly, their general practitioner (GP) had been an affirming source of support. Their positive attitudes were clear through their interactions and the support they provided.

> [My GP] gave me a hug when I said I was trans. It was the biggest blessing for me. From then on, he gave me a list of clinics I could contact (Holly)

Paige's experience with a psychiatrist was different. Their psychiatrist held the attitude that alleviating dysphoria was the most important outcome from gender-affirming hormonal prescribing. Therefore, Paige experienced distressing, unsupportive interactions with this provider who refused to prescribe feminising hormones (e.g. oestrogen) until Paige had passed a probationary period on hormone blockers (e.g. anti-androgens).

> It was distressing to deal with… it was already a very confusing time and those conversations [with my psychiatrist] didn't really provide any certainty or things like that (Paige)

'Passing' (usually described as trans people being appropriately acknowledged by others as the gender they are), was described as a 'bullshit concept that's built on a lot of expectations'. However, for some participants, cultural attitudes towards what femininity or being a 'woman' might physically look like within a participant's cultural context influenced how safe they felt. Primarily, this was because if they did not meet this

standard, they feared overt discrimination. This drove internalised stigma, as a result of which some participants felt obliged to present in a certain way in order to be safe.

For example, to determine whether she 'passed', Demi used a web-based programme that allowed her to upload a photo of herself, and the programme would then assess whether she appeared like a 'dude' or a 'female'. Only once it determined Demi to be 'female' did she stop meticulous tracking of her appearance and began wearing 'feminine clothing, like tight jeans or tight leather jackets, stuff like that' in public.

> There's definitely an aspect of me needing to look a bit more feminine to build upon that – because if someone sees you as a man, regardless of how feminine you want to [be], and this is an internalised trans misogyny right now. Regardless of how feminine you want to be and call yourself, if that person doesn't believe that you are a woman, they will not be very nice to you if you're less! If you get what I mean (Demi)

In the context of safety from stigma, Alexia shared that she felt some of her peers unintentionally made other trans women vulnerable to harm by providing false (but supportive and affirming) comments suggesting they 'pass'. Whilst Alexia wanted their peers to feel supported, she felt that this approach rendered some vulnerable to discrimination.

> I was aware there's a certain like kind of skewing towards like over support in the hope of like, making someone feel better rather than like looking at the reality of their situation…. it's a safety thing for a lot of trans women and being able to like pass on their outside. And so if you're getting this feedback constantly from other trans people that you do pass and then you go out, you're constantly being misgendered or like being like harassed or whatever because you're visibly trans and you've got this disconnect in your mind where you're like, why do I pass to all these people but for some reason I'm not passing in general, it can start to really shake your confidence and mess with you (Alexia)

Subtheme 2: Changes in me, changes in us – personal growth promotes positive interactions with other people

Changes in internal attitudes and self-perception facilitated changed social relationships and positive interactions because participants described a new-found confidence which opened doors to new social environments and connections. This happened alongside being more emotionally open, which for some helped them feel 'free of any bonds or rules in this world'.

> My confidence has increased my ability to make friends, and to not feel like I'm being disingenuous when doing so is just fantastic. I'm putting myself out there, I finally feel like I'm able to achieve things. I feel like I'm able to want for things (Lee)

For Tara, as their perceptions towards their body changed, their interactions changed as they were more emotionally open and could connect more intimately with partners.

> [Transitioning] meant I was able to construct a better relationship with engaging with my body in a sexual manner… it's meant that I'm able to engage with partners in a much more intimate and kind way (Tara)

Finally, Lee described how during GAHT they had a growing yearning to share their journey with others so as to be a source of knowledge and inspiration. As Lee shared

their journey, their interactions changed, and they described welcoming the supportive interactions they had with others regarding GAHT as they became a visible safe person.

> I've had a few people come out to me and that sort of stuff, through this, so that's been positive, and people do like to come and talk to you about very weird things when you're transitioning, but hey, it's part of it *(*Lee*)*

Theme 2: Changes happen over time, and sometimes they stay, and sometimes they go

Participants described how their physical and emotional changes evolved over time. They experienced a wide range of physical changes such as hair growth, body size, breast size, sexual functioning, fat re-distribution, reduced strength, and heightened sensory experiences. Some physical changes occurred soon after commencing GAHT, whereas others took place years into transition.

> The feeling of losing strength was something that surprised me, and how quickly that came about. Like, it hit probably within the first month, and then never changed again. It wasn't gradual, it was just off (Lee)

Not all changes were permanent. For example, some experienced side-effects to specific medications (such as spironolactone or CPA) which were temporary or eventually resolved when changed to a new prescription.

> I remember the first day I took it, I had some side effects. I think, from memory, I ended up…I was lying on the floor, and the world was spinning… I think after the first few days, I think I stopped getting any side effects (Hazel)

Many physical changes were anticipated, and for some, long hoped for and imagined. However, these changes were often came accompanied by myriad of psychological changes, some unexpected – such as greater emotional instability – while others were a pleasant surprise – such as energy boosts and wider emotional capacities. As described by Claudia, both the physical and psychological changes happened over time, some 'slower than you'd think and faster than you'd think'. However, regardless of when these person-level changes occurred and whether they were anticipated, they appeared to be an important component of individuals' experience.

Participants sometimes described a process of learning over time how best to navigate their new bodies and emotional experiences.

> …so, I was able to access multiple emotions simultaneously, and able to access a lot more thought patterns and things like that, so it became a bit more of an experiential thing of learning how to deal with more channels being open, effectively (Claudia)

The passage of time was often important for individuals in guiding their expectations and management of change. Some participants used community knowledge and information resources to guide their transition timeline and track any changes. Over time though, participants often reported no longer tracking their changes. One reason for this, as described by Scarlet, was that the novelty of changes eventually wore off and they were happy.

> The further I've gone into my transition, the less interested that I've gotten in tracking it, I guess, because like, you know, at the start it's kind of like that novelty of like, oh, every single day you wake up, you're like, what's changed, what's changed? Whereas, now I'm like, you know, I barely noticed that anything is still changing because it's just like my new norm (Scarlet)

Following a timeline for some, however, was disheartening if the changes they experienced were slower than desired. Others felt the need to put the 'accelerator down' to speed up changes, despite having the 'pedal all the way down' according to their doctor.

> I started to and then it actually disheartened me more because once I had a timeline of where I wanted to be and I didn't match that timeline it upset me more, but then when changes did happen it made me happy even if they were outside of that timeline (Flora)

Overall, participants reported being able to manage the changes that occurred in their bodies and minds during GAHT – including changes that were unwelcome or surprising. While many felt they were not yet 'done', their newfound confidence from the changes they had experienced minimised the impact of changes they were still hoping for.

> I'm a lot more comfortable in my skin, a lot more assured in my identity. I feel like there's still stuff around, like, voice dysphoria, but that's fewer and further between (Lee)

Discussion

The aim of this study was to explore the GAHT experiences of a sample of transfeminine people using a socioecological lens. Our findings highlighted how changes were experienced across multiple levels of the SEM. We identified that external attitudes (e.g. friends, family, healthcare providers), and cultural-level expectations (exosystem and macrosystem) influenced how positive the journey was through supportive or non-supportive interactions (proximal processes). Additionally, how an individual's self-perception changed (person) influenced the interactions they sought (proximal processes). Finally, changes (person) occured over time, encompassing both good and bad facets. GAHT is a complex journey and both conceptualisations, and support mechanisms, need to consider all levels of change.

External attitudes and interactions

Our findings demonstrate the pivotal role that other people's attitudes, and particularly stigma, have on transfeminine people's GAHT journey by shaping the interactions and support they receive. When participants were around those with affirming attitudes, they reported better experiences, partly because of decreased exposure to non-affirming or transphobic comments. Research consistently highlights the influential role of friends, family and healthcare providers on trans people's physical and mental health outcomes (Galupo et al. 2014; Lewis et al. 2021; Simons et al. 2013; Wall, Patev, and Benotsch 2023; Wilson et al. 2016). Research also indicates the role that others' attitudes can play in accessing and maintaining GAHT – with one study of trans youth

identifying that trans people encountered greater systematic barriers to GAHT when parental support was low (Clark, Marshall, and Saewyc 2020). The literature also recognises that transfeminine individuals specifically are at a high-risk for experiencing multiple forms of violence. For example, one study of US trans women identified that across their lifetime, 83% had experienced verbal abuse and 56% physical abuse (Arayasirikul et al. 2022). Transfeminine people, particularly those of colour, have also described the pervasive and multi-faceted impacts of sexual violence (Matsuzaka and Koch 2018; Ussher et al. 2020). It is important therefore for trans individuals to be supported by positive social networks to provide a buffer against stigma and harmful interactions with others.

Many participants in this study described having positive sources of support (particularly from members of the trans community) that they developed over time. However, is important to consider formal structures (e.g. peer navigation) to support the development of peer support. It is also important to continue awareness campaigns to educate people on trans issues so as to help shift stigmatising attitudes which in turn foster negative and harmful interactions. These awareness campaigns should also work to shift the focus of healthcare away from deficit-based narratives (e.g. *via* a focus on dysphoria exclusively; Ashley 2019; White Hughto, Reisner, and Pachankis 2015; Franks et al. 2023), which we propose does not fully meet the needs of trans people seeking gender-affirming care.

Several participants in this study described how cis-normative and predominantly Western cultural influences regarding what constitutes a 'woman' were important for safety due to the potential for unsafe interactions from transphobic individuals if someone presented in a way that did not align with this. This aligns with the findings of Fowler et al. (2023a), who described how physical changes during GAHT are considered affirming in relation to how closely they resemble culturally specific prescriptions of gender (e.g. crying is 'womanly'). Fowler et al. (2023a) also described how some people felt rushed (and over-used GAHT) to rapidly change their external appearance to a cis-normative, culturally accepted gender presentation. Similar work by Anderson et al. (2020) indicates that some trans people feel that the effort to 'pass' (i.e. being appropriately acknowledged as the gender they are), can be motivated by many positive factors (e.g. self-affirmation and expression), but also by fear of discrimination. As described by Bockting et al. (2013), whilst passing may provide safety for trans people, it can also coincide with hypervigilance which may function as a form of stress.

Participants in Anderson et al. (2020) study also indicated that passing may reinforce cis-normative, binary representations of gender and erase trans identities altogether. Therefore, while aligning appearance with cis-normative, culturally expected representations of gender may be an important safety mechanism for some people, it may dually function as a barrier to long-term wellbeing. Future research exploring how these dual perceptions shift and evolve from initiation through to the possible life-long maintenance of GAHT, is needed. Research should partner this with initiatives to dismantle cis-normative and binary gender expectations, such as raising awareness about gender diversity and publicly challenging binary 'male' and 'female' stereotypes and expectations. These approaches would support trans people to be socially accepted as they are, and wherever they may be on their transition journey.

Self-perception and interactions

Our findings highlight the positive effect that improving self-confidence and self-perception had as a mechanism for finding community, positive social support, and healthy sexual experiences. Therefore, harnessing changes at these levels may be important to explore for future care provision for trans people, particularly as evidence highlights the burden among LGBTQIA+ groups to provide reciprocal support for one another (Worrell et al. 2022). Integrating stronger mental health supports may bolster trans communities by encouraging access to a wider range of social support and improving the quality of interactions between community members. Pragmatically, this may involve improved access to affirming psychological support alongside GAHT. This may be done alongside comprehensive sexual and reproductive health care to empower people undergoing this journey to engage in informed, safer sex practices.

Changes over time

Findings from this study demonstrate that physical changes evolve over time. As in the review by Fowler et al. (2023a), the changes noted by participants in this study were both positive and negative. Participants described, for example, challenges tolerating new hormones and consequential changes, whereas others noted only positive impacts. As advocated for in Fowler et al. (2023a), future studies should explore changes and their impact using longitudinal methodologies to accurately capture the GAHT journey. Cross-sectional conceptualisations may misrepresent overall experiences. For example, previous reviews have shown that GAHT improves the quality of life for trans people (van Leerdam, Zajac, and Cheung 2021; White Hughto and Reisner 2016). However short-term evidence has shown this may not happen in the first six months for transfeminine individuals (Foster Skewis et al. 2021). Therefore, focusing on changes cross-sectionally may not fully capture the diversity and fluidity of experiences that an individual may have during their journey of gender affirmation. Longitudinal studies that report on changes as they occur over time may shed greater light on the GAHT journey.

Strengths and limitations

A strength of this research was the use of a socioecological approach that has been previously applied in LGBTQIA+ contexts, as well as a research team containing both insiders and outsiders, ensuring a thorough examination of experiences undergoing GAHT. A limitation of this study was that the time-lapse between commencing GAHT and interviews may have limited the accuracy of some participants' reports. In addition, all the participants in this study were accessing hormonal feminisation, and the inclusion of those pursuing masculinisation may shed light on a wider range of experiences, particularly with respect to the role of culture in generating gender-based expectations in appearance and behaviour. Finally, the decision to use the SEM for analysis was decided upon post-hoc. Choosing this approach prior to data collection might have allowed for questions to be specifically designed around the model, thus increasing representation across all layers of the socioecological model.

Conclusion

In this study, the range of physical changes and psychological experiences varied widely for individuals throughout the GAHT journey. It was often shaped by the attitudes of others, the relationships and interactions an individual pursued, and how an individual's confidence and self-actualisation influenced these experiences. Given the complexity of factors affecting experiences of undergoing GAHT, it is important for future research and clinical practice to develop multi-faceted approaches to care that offer holistic personal and interpersonal support.

Disclosure statement

The authors have no conflicts of interest to declare.

Funding

This research was supported by the Sexual Health Research Fund, an initiative of the Sexual Health Ministerial Advisory Committee, funded by Queensland Health. It was administered by Australasian Society for HIV Medicine (ASHM).

ORCID

James A. Fowler http://orcid.org/0000-0001-5716-5250
Judith A. Dean http://orcid.org/0000-0002-2513-2013

Data availability statement

Due to the confidential and highly personal nature of the study, no data can be made available.

References

Anderson, A. D., J. A. Irwin, A. M. Brown, and C. L. Grala. 2020. "Your Picture Looks the Same as My Picture": An Examination of Passing in Transgender Communities." *Gender Issues* 37 (1): 44–60. https://doi.org/10.1007/s12147-019-09239-x.

Arayasirikul, S., C. Turner, D. Trujillo, S. L. Sicro, S. Scheer, W. McFarland, and E. C. Wilson. 2022. "A Global Cautionary Tale: Discrimination and Violence against Trans Women Worsen despite Investments in Public Resources and Improvements in Health Insurance Access and Utilization of Health Care." *International Journal for Equity in Health* 21 (1): 32. https://doi.org/10.1186/s12939-022-01632-5.

Ashley, F. 2019. "Gatekeeping Hormone Replacement Therapy for Transgender Patients is Dehumanising." *Journal of Medical Ethics* 45 (7): 480–482. https://doi.org/10.1136/medethics-2018-105293.

Baker, K. E., L. M. Wilson, R. Sharma, V. Dukhanin, K. McArthur, and K. A. Robinson. 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.

Beck, M. J., M. A. Rausch, H. D. Wikoff, and L. L. Gallo. 2018. "Ecological Considerations and School Counselor Advocacy with LGBT Students." *Journal of Counselor Leadership and Advocacy* 5 (1): 45–55. https://doi.org/10.1080/2326716X.2017.1402393.

Bockting, W. O., M. H. Miner, R. E. Swinburne Romine, A. Hamilton, and E. Coleman. 2013. "Stigma, Mental Health, and Resilience in an Online Sample of the US Transgender Population." *American Journal of Public Health* 103 (5): 943–951. https://doi.org/10.2105/AJPH.2013.301241.

Braun, V., and C. Clarke. 2013. *Successful Qualitative Research: A Practical Guide for Beginners*. London: SAGE

Bretherton, I., E. Thrower, S. Zwickl, A. Wong, D. Chetcuti, M. Grossmann, J. D. Zajac, and A. S. Cheung. 2020. "The Health and Well-Being of Transgender Australians: A National Community Survey." *LGBT Health* 8 (1): 42–49. https://doi.org/10.1089/lgbt.2020.0178.

Bronfenbrenner, U., and P. Morris. 2006. "The Bioecological Model Oo Human Development." In *Theoretical Models of Human Development*, 793–828. New Jersey, USA: Wiley.

Clark, B. A., S. K. Marshall, and E. M. Saewyc. 2020. "Hormone Therapy Decision-Making Processes: Transgender Youth and Parents." *Journal of Adolescence* 79 (1): 136–147. https://doi.org/10.1016/j.adolescence.2019.12.016.

Connelly, P. J., A. Clark, R. M. Touyz, and C. Delles. 2021. "Transgender Adults, Gender-Affirming Hormone Therapy and Blood Pressure: A Systematic Review." *Journal of Hypertension* 39 (2): 223–230. https://doi.org/10.1097/HJH.0000000000002632.

D'Hoore, L., and G. T'Sjoen. 2022. "Gender-Affirming Hormone Therapy: An Updated Literature Review with an Eye on the Future." *Journal of Internal Medicine* 291 (5): 574–592. https://doi.org/10.1111/joim.13441.

Davidson, M. 2007. "Seeking Refuge Under the Umbrella: Inclusion, Exclusion, and Organizing Within the Category Transgender." *Sexuality Research and Social Policy* 4 (4): 60–80. https://doi.org/10.1525/srsp.2007.4.4.60.

Divan, V., C. Cortez, M. Smelyanskaya, and J. Keatley. 2016. "Transgender Social Inclusion and Equality: A Pivotal Path to Development." *Journal of the International AIDS Society* 19 (3 Suppl 2): 20803. https://doi.org/10.7448/ias.19.3.20803.

Ezzy, D., L. Beaman, A. Dwyer, B. Fielder, A. McLeay, S. Rice, and L. Richardson-Self. 2022. "LGBTQ+ Non-Discrimination and Religious Freedom in the Context of Government-Funded Faith-Based Education, Social Welfare, Health Care, and Aged Care." *Journal of Sociology* 59 (4): 931–951. https://doi.org/10.1177/14407833211072566.

Foster Skewis, L., I. Bretherton, S. Y. Leemaqz, J. D. Zajac, and A. S. Cheung. 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* 12: 717766. https://doi.org/10.3389/fendo.2021.717766.

Fowler, J. A., Warzywoda, S., Franks, N., Mendis, M., Lazarou, M., Bisshop, F., Wood, P., Dean, J. A. 2023a. Highs, Lows, and Hormones: A Qualitative Metasynthesis of Transgender Individuals' Experiences Undergoing Gender-Affirming Hormone Therapy. *Journal of Homosex* 71 (7): 1652–1683. https://doi.org/10.1080/00918369.2023.2186759. Epub 2023 Mar 8. PMID: 36884002.

Fowler, J. A., S. Warzywoda, N. Franks, F. Bisshop, P. Wood, and J. A. Dean. 2023b. "'Ever Since I Knew I was Trans I Knew I Wanted Hormone Therapy': A Qualitative Exploration into the Journey of Australian Trans Individuals Accessing Feminizing Gender-Affirming Hormone Therapy." *International Journal of Transgender Health* https://doi.org/10.1080/26895269.2023.2290132.

Fowler, J. A., and L. Buckley. 2022. "A Socioecological Review of LGBTQI + Adolescent Bias-Based Bullying: What Characterizes a Bystander, and Where Do We Go From Here?" *Journal of Gay & Lesbian Mental Health* 28 (2): 179–209. https://doi.org/10.1080/19359705.2022.2138669.

Franks, N., A. B. Mullens, S. Aitken, and A. Brömdal. 2023. "Fostering Gender-IQ: Barriers and Enablers to Gender-affirming Behavior Amongst an Australian General Practitioner Cohort." *Journal of Homosexuality* 70 (13): 3247–3270. https://doi.org/10.1080/00918369.2022.2092804.

Galupo, M. P., L. A. Bauerband, K. A. Gonzalez, D. Brienne Hagen, S. D. Hether, and T. E. Krum. 2014. "Transgender Friendship Experiences: Benefits and Barriers of Friendships Across Gender Identity and Sexual Orientation." *Feminism & Psychology* 24 (2): 193–215. https://doi.org/10.1177/0959353514526218.

Hall, R., L. Mitchell, and J. Sachdeva. 2021. "Access to Care and Frequency of Detransition Among a Cohort Discharged by a UK National Adult Gender Identity Clinic: Retrospective Case-Note Review." *BJPsych Open* 7 (6): e184. https://doi.org/10.1192/bjo.2021.1022.

Hayfield, N., and C. Huxley. 2015. "Insider and Outsider Perspectives: Reflections on Researcher Identities in Research with Lesbian and Bisexual Women." *Qualitative Research in Psychology* 12 (2): 91–106. https://doi.org/10.1080/14780887.2014.918224.

Higa, D., M. J. Hoppe, T. Lindhorst, S. Mincer, B. Beadnell, D. M. Morrison, E. A. Wells, A. Todd, and S. Mountz. 2014. "Negative and Positive Factors Associated with the Well-Being of Lesbian, Gay, Bisexual, Transgender, Queer, and Questioning (LGBTQ) Youth." *Youth & Society* 46 (5): 663–687. https://doi.org/10.1177/0044118x12449630.

Lewis, T., D. M. Doyle, M. Barreto, and D. Jackson. 2021. "Social Relationship Experiences of Transgender People and Their Relational Partners: A Meta-Synthesis." *Social Science & Medicine (1982)* 282: 114143. https://doi.org/10.1016/j.socscimed.2021.114143.

Lindqvist, A., M. G. Sendén, and E. A. Renström. 2021. "What Is Gender, Anyway: A Review of the Options For Operationalising Gender." *Psychology & Sexuality* 12 (4): 332–344. https://doi.org/10.1080/19419899.2020.1729844.

Luke, M., and K. M. Goodrich. 2015. "Working with Family, Friends, and Allies of LBGT Youth." *Journal for Social Action in Counseling & Psychology* 7 (1): 63–83 https://doi.org/10.33043/JSACP.7.1.63-83.

Matsuzaka, S., and D. E. Koch. 2018. "Trans Feminine Sexual Violence Experiences: The Intersection of Transphobia and Misogyny." *Affilia* 34 (1): 28–47. https://doi.org/10.1177/0886109918790929.

Nguyen, H. B., A. M. Chavez, E. Lipner, L. Hantsoo, S. L. Kornfield, R. D. Davies, and C. N. Epperson. 2018. "Gender-Affirming Hormone Use in Transgender Individuals: Impact on Behavioral Health and Cognition." *Current Psychiatry Reports* 20 (12): 110. https://doi.org/10.1007/s11920-018-0973-0.

Petry, A. R. 2015. "[Transgender Women and The Gender Reassignment Process: Subjection Experiences, Suffering And Pleasure In Body Adaptation]." *Revista Gaúcha de Enfermagem* 36 (2): 70–75. https://doi.org/10.1590/1983-1447.2015.02.50158.

Puckett, J. A., E. Matsuno, C. Dyar, B. Mustanski, and M. E. Newcomb. 2019. "Mental Health and Resilience in Transgender Individuals: What Type of Support Makes a Difference?" *Journal of Family Psychology: JFP: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)* 33 (8): 954–964. https://doi.org/10.1037/fam0000561.

Rosenberg, S., P. J. M. Tilley, and J. Morgan. 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.

Safer, J. D., E. Coleman, J. Feldman, R. Garofalo, W. Hembree, A. Radix, and J. Sevelius. 2016. "Barriers to Healthcare for Transgender Individuals." *Current Opinion in Endocrinology, Diabetes, and Obesity* 23 (2): 168–171. https://doi.org/10.1097/med.0000000000000227.

Silva, E. D., T. M. Fighera, R. M. Allgayer, M. I. R. Lobato, and P. M. Spritzer. 2021. "Physical and Sociodemographic Features Associated with Quality of Life Among Transgender Women and Men Using Gender-Affirming Hormone Therapy." *Frontiers in Psychiatry* 12: 621075. https://doi.org/10.3389/fpsyt.2021.621075.

Simons, L., S. M. Schrager, L. F. Clark, M. Belzer, and J. Olson. 2013. "Parental Support and Mental Health among Transgender Adolescents." *The Journal of Adolescent Health* 53 (6): 791–793. https://doi.org/10.1016/j.jadohealth.2013.07.019.

Trans Legistration Tracker. 2024. "2024 anti-trans bills tracker." Accessed on February 16, https://translegislation.com/

Turban, J. L., D. King, J. Kobe, S. L. Reisner, and A. S. Keuroghlian. 2022. "Access To Gender-Affirming Hormones During Adolescence and Mental Health Outcomes Among Transgender Adults." *PloS One* 17 (1): e0261039. https://doi.org/10.1371/journal.pone.0261039.

Ussher, J. M., A. Hawkey, J. Perz, P. Liamputtong, J. Sekar, B. Marjadi, V. Schmied, T. Dune, and E. Brook. 2020. "Crossing Boundaries and Fetishization: Experiences of Sexual Violence for Trans Women of Color." *Journal of Interpersonal Violence* 37 (5-6): NP3552–NP3584. https://doi.org/10.1177/0886260520949149.

van Leerdam, T. R., J. D. Zajac, and A. S. Cheung. 2021. "The Effect of Gender-Affirming Hormones on Gender Dysphoria, Quality of Life, and Psychological Functioning in Transgender Individuals: A Systematic Review." *Transgender Health* 8 (1): 6–21. https://doi.org/10.1089/trgh.2020.0094.

Van Schuylenbergh, J., J. Motmans, J. Defreyne, A. Somers, and G. T'Sjoen. 2019. "Sexual Health, Transition-Related Risk Behavior and Need for Health Care Among Transgender Sex Workers." *The International Journal of Transgenderism* 20 (4): 388–402. https://doi.org/10.1080/15532739.2019.1617217.

Wall, C. S. J., A. J. Patev, and E. G. Benotsch. 2023. "Trans Broken Arm Syndrome: A Mixed-Methods Exploration of Gender-Related Medical Misattribution And Invasive Questioning." *Social Science & Medicine (1982)* 320: 115748. https://doi.org/10.1016/j.socscimed.2023.115748.

Warzywoda, S., J. A. Fowler, P. Wood, F. Bisshop, D. Russell, H. Luu, M. Kelly, V. Featherstone, and J. A. Dean. 2024. "How Low Can You Go? Titrating The Lowest Effective Dose of Cyproterone Acetate for Transgender And Gender Diverse People Who Request Feminizing Hormones." *International Journal of Transgender Health*. 1–10. https://doi.org/10.1080/26895269.2024.2317395.

Weinand, J. D., and J. D. Safer. 2015. "Hormone Therapy in Transgender Adults is Safe with Provider Supervision; A Review of Hormone Therapy Sequelae for Transgender Individuals." *Journal of Clinical & Translational Endocrinology* 2 (2): 55–60. https://doi.org/10.1016/j.jcte.2015.02.003.

White Hughto, J. M., and S. L. Reisner. 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.

White Hughto, J. M., S. L. Reisner, and J. E. Pachankis. 2015. "Transgender Stigma and Health: A Critical Review of Stigma Determinants, Mechanisms, and Interventions." *Social Science & Medicine (1982)* 147: 222–231. https://doi.org/10.1016/j.socscimed.2015.11.010.

Wilson, E. C., Y.-H. Chen, S. Arayasirikul, H. Fisher Raymond, and W. McFarland. 2016. "The Impact of Discrimination on the Mental Health of Trans*Female Youth and the Protective Effect of Parental Support." *AIDS and Behavior* 20 (10): 2203–2211. https://doi.org/10.1007/s10461-016-1409-7.

Worrell, S., A. Waling, J. Anderson, A. Lyons, C. A. Pepping, and A. Bourne. 2022. "The Nature and Impact of Informal Mental Health Support in an LGBTQ Context: Exploring Peer Roles and Their Challenges." *Sexuality Research & Social Policy* 19 (4): 1586–1597. https://doi.org/10.1007/s13178-021-00681-9.

Xia, M., X. Li, and J. R. H. Tudge. 2020. "Operationalizing Urie Bronfenbrenner's Process-Person-Context-Time Model." *Human Development* 64 (1): 10–20. https://doi.org/10.1159/000507958.

Zwickl, S., T. Ruggles, A. F. Q. Wong, A. Ginger, L. M. Angus, K. Eshin, T. Cook, and A. S. Cheung. 2024. "Disruption of Gender-Affirming Health Care, and COVID-19 Illness, Testing, And Vaccination Among Trans Australians During the Pandemic: A Cross-Sectional Survey." *The Medical Journal of Australia* 220 (1): 23–28. https://doi.org/10.5694/mja2.52169.

Zwickl, S., A. Wong, I. Bretherton, M. Rainier, D. Chetcuti, J. D. Zajac, and A. S. Cheung. 2019. "Health Needs of Trans and Gender Diverse Adults in Australia: A Qualitative Analysis of a National Community Survey." *International Journal of Environmental Research and Public Health* 16 (24): 5088. https://doi.org/10.3390/ijerph16245088.