The Impact of Social, Legal, and Medical Transition on Psychological Distress for Transgender Persons

Alex Redcay
Beth Counselman-Carpenter
Wade Luquet
John Gunn

Abstract: *Psychological distress is a major health concern for transgender persons undertaking the transition process. The purpose of this secondary data analysis of the United States Transgender Survey (USTS) compiled by the National Center for Transgender Equality (NCTE) was to explore the relationship between the three stages of transition (social, legal, medical) and levels of psychological distress. While much of the current social work research focuses on risk factors related to psychological distress, particularly around discrimination, this study explores how each stage of transition can serve as a protective factor to increase overall well-being. Independent sample t-tests, ANOVA, and regressions were completed to determine if social, legal, and/or medical transition had a significant effect on psychological distress. Findings indicated that improving access to services supporting transition can reduce psychological distress. Implications for practice include the need for client psychoeducation related to factors of resilience and protective factors that accompany each step in the transition process, and the importance to collaborative care with trans-affirming medical providers. Similarly, implications for social work education include an increased need for integrated coursework with an inclusive and affirmative lens applied to all levels of social work for all LGBTQIA+, but particularly related to trans individuals and their families.*

Keywords: *Transition, transgender, psychological distress, protective factors*

Psychological distress among transitioning transgender persons has been well documented (Brecht et al., 2021; Timmins et al., 2017). The DSM-5-TR diagnosis of Gender Dysphoria is the term used to describe the sense of unease a person feels when their gender assigned at birth does not match their gender identity and/or their expressed gender. This unease can continue during the transition process and result in the psychological distress experienced by many transgender persons and its accompanying mental health concerns. The purpose of this secondary data analysis of the United States Transgender Survey (USTS) (James et al., 2016) compiled by the National Center for Transgender Equality (NCTE), is to explore the relationship between the three stages of transition, which include social, legal and medical transition related to gender affirmation, and how these varying layers of transition may serve as protective factors from psychological distress. We open this article by discussing some of the commonly accepted definitions related to the transition process and gender identity**.**

Alex Redcay, PhD, LCSW, Associate Professor, Department of Social Work, Millersville University Lancaster, PA. Beth Counselman-Carpenter, PhD, LCSW, Associate Professor, Department of Social Work, Adelphi University, Garden City, NY. Wade Luquet, PhD, LCSW, Professor, Department of Social Work, and John Gunn, PhD, Assistant Professor, Department of Psychology, Gwynedd Mercy University, Gwynedd Valley, PA.

Sex, Gender, and Gender Identity

Gender and sex are distinct constructs that are highly related but not interchangeable. Sex is assigned at birth, typically by medical professionals and parents at the time and is often based on visibly physical characteristics, such as external genitalia. Medical professionals often do not examine hormones, chromosomes, internal sex organs, or the white matter microstructure of the brain around the birth of a child (Redcay et al., 2019). Gender identity, however, is an internal emotional and cognitive awareness about oneself and one's gender and has been observed in the white matter microstructure of the brain (Redcay et al., 2019; Spizzirri et al., 2018; Uribe et al, 2020). For this analysis, participants in the United States Transgender Study self-identified as transgender or one of the many expressions of gender diversity, including but not limited to genderqueer, gender expansive, nonbinary, agender, third gender, and Two-Spirit.

Transition

Social workers should understand that the process of transition is multi-layered, poly-dimensional and may have different meanings for different clients. There are several models of transgender identity development, including but not limited to Devor's (2004) 14-stage model of transsexual identity development and Gagne et al.'s (1997) four themes of gender identification, however, this research focused specifically on the process of external transition. In earlier literature, transition was often referred to as the process or steps a transgender person (in historical literature, often referred to as a transsexual person) engaged in, particularly medical steps or interventions such as hormones, surgery, or voice therapy. This article aligns with the definition of transition outlined by Budge et al. (2013a): the process through which all transgender persons experience to identify as transgender with a particular focus on three structural steps including social, legal, and medical.

- *Social transition* refers to the process of socially using one's name, clothing/external appearance, hairstyle, and pronoun that match one's internal gender identity rather than the sex assigned at birth (Sherer, 2016).
- *Legal transition* refers to the process of changing one's identified sex on legal documents, such as one's driver's license, identification materials, and birth certificate.
- *Medical transition* includes puberty blockers/suppression, hormone therapy, speech/voice therapy, and surgical procedures.

The experience of transition is non-linear, allowing a series of steps and/or stages to occur separately or concurrently. Typically, social transition occurs first and may be required for a certain period to secure structural support for legal transition and finally medical intervention, which due to multiple factors such as access to health care, cost, and authorization for reimbursement of services, usually occurs as a last step in the transition process. However, legal, and medical transition are not required for one to identify as transgender or as gender expansive. See Chang et al. (2018), Hodax et al. (2023), Mallon (2021), and Tsai et al. (2021) for a deeper exploration into the steps towards transition,

identified family, community and structural barriers and strategies for providing affirming collaborative care when working with gender expansive youth.

There is much discussion around the diagnosis of Gender Dysphoria found in the Diagnostic Statistical Manual of Mental Disorders (DSM-5-TR), published by the American Psychiatric Association (2022) and the International Classification of Diseases (ICD-11) published by the World Health Organization (2019), which classifies a cluster of symptoms that are experienced in such a way that meets criteria for formal diagnosis from a medical or behavioral health professional. We acknowledge the history of pathologizing transgender persons through this diagnosis, as well as the concurrent reality that receiving this diagnosis can also facilitate access to services and health care. In May 2019, the World Health Organization made the historic decision to change the term "Gender Dysphoria" from a mental health diagnosis to "Gender Incongruence" to de-pathologize those identifying as transgender, which is reflected in the ICD-11, but this change was not recognized in the DSM-5-TR. However, for most steps in the medical transition process to be covered by insurance, a diagnosis of Gender Dysphoria is required and continues to represent confusion around the process of transition.

There remains a significant gap in the research related to each of the categories of transition, although, for the most part in the studies that do exist, each of the three categories of transition studied individually has been found to lead to improved outcomes for transgender persons. Few studies have been conducted on the importance of social transition for transgender individuals, particular trans youth, and the ones that exist have been identified as having significant design issues. The design issues came particularly because most studies on the mental health and wellbeing of trans youth were conducted before social transition. There is one positive study, however. Durwood et al. (2018) has found that trans youth who had completed a full social transition did not demonstrate increased depression or impaired self-worth when compared to a matched control sibling or peer. It is critical to note that much of this literature around social transition focuses exclusively on youth and not on those who socially transition as adults. There remains an enormous gap in the literature around social transition for transgender adults.

Legal transition appears to be the least discussed in current literature, although it relates to a critical and defining characteristic for all people - one's name. The ability to legally change one's name has been found to improve access to health care, socioeconomic stability, and feelings of self-worth (Collazo et al., 2013; Hill et al., 2018; White Holman & Goldberg, 2006).

Medical transition, the third category, for youth can include puberty blockers/suppression, affirmation-related hormone therapy, and affirmation-related surgeries, all of which have been found to mitigate gender dysphoria. However, studies have not yet clarified the importance or differential effect of each medically related step (Austin, 2018; de Vries et al., 2011). Medical interventions improve feelings of personal satisfaction with one's identified gender and in "passing," which is being accepted by others as one's identified gender (Fien et al., 2017). Medical transition at any age also improves overall medical care (Wilson et al., 2015) and quality of life (Murad et al., 2010). However, medical transition for youth, often referred to as gender-affirming medical care,

is under attack. As of April 2024, 24 states have enacted laws that limit or ban gender-affirming medical care (GAC) and 22 states have professional and/or legal penalties for providers serving minors if they provide gender-affirming care. This is a five-fold increase since 2021 on limits of GAC and affects nearly 40 percent of all transgender youth (Dawson & Kates, 2024).

Social work educators, students, and practitioners should explore and understand the research that looks at the systemic change process and explores the role of risk and protective factors in the process of transition. These include individual and family coping (Budge et al., 2013b; Sanchez & Vilain, 2009) and social support (Budge, et al., 2013a; Budge et al., 2013b). However, few studies have looked specifically at the overall effect of transition on psychological distress of transgender persons. Budge et al. (2012) looked at the intersection of social support, coping mechanisms, and the individual transition process from a qualitative perspective. This research found that those participants in earlier stages of transition showed higher levels of avoidant coping, which then led to higher levels of psychological distress. White et al. (2017) explored the mediating role of avoidant coping related to victimization and depression and found that while avoidant coping has a temporary effect on reducing stress related to victimization, it can lead to poorer mental health outcomes over time.

Other studies that explore the process and phenomenon of transition found gender binary differences within the transition process, such as transwomen reporting more loss of social capital, role clarity, social connections, and emotional support than transmen when progressing through the transition process (Gagne & Tewksbury, 1998). Budge et al. (2012) found once the process of transition has been completed, within the post-transition phase, negative emotional experiences were not as prominent. Tordoff et al. (2022) also found that gender-affirming medical care can lower rates of depression and suicidality over a 12-month period.

Psychological Distress

Transgender individuals experience rates of depression and anxiety at up to two times the rate of cisgender individuals. Within the United States, rates of depression within the transgender community can range from 50-62%, while the entire U.S. population reports rates of 16.6% (Budge et al., 2013; Hajek et al., 2023; Nemoto, Bodeker & Iwamoto, 2011; Nuttbrock et al., 2010) as well as high rates of comorbidity with anxiety. Psychological distress for transgender individuals is often related to higher levels of violence and discrimination. Research has shown that transgender youth appear to experience significantly higher rates of psychological distress when compared to cisgender youth. This psychological distress includes a higher risk of suicidal thoughts, attempts, depression, and anxiety disorders (Aitken et al., 2016; Millet et al., 2017; Spivey & Edwards-Leeper, 2019). One mitigating factor for youth specifically is that risk appears to be lower for those who receive emotional and social support throughout the transition process versus those who do not (de Vries et al., 2011; Durwood et al., 2018; McLaughlin & Olson, 2017; Steensma et al., 2013). For the purposes of this study, psychological distress is conceptualized through

the markers of the Kessler scale (Kessler et al., 2002), which looks at sensations of feeling fidgety, anxious, hopeless and/or depressed.

The United States Transgender Survey

The 2015 United States Transgender Survey (USTS) is the largest survey to date that explores the experiences of transgender adults in the Unites States and was recently re-administered in 2023, although findings have yet to be released. This survey was completed by 27,715 transgender and gender-expansive persons and included respondents from all fifty states as well as Guam, Puerto Rico, American Samoa, and United States military bases abroad. The online survey, which was completed anonymously, asked questions regarding employment, education, family life, physical and emotional health, interactions with the criminal justice system, and housing (James et al., 2016).

The general findings of the survey presented some bleak results. Nearly a third of respondents reported employment discrimination, including being harassed at work, being denied a promotion, or being fired (James et al., 2016). Additionally, 10 percent had experienced violence from immediate family members after coming out to them, and for those in school, over 50% reported some form of harassment. Also, almost 50% experienced verbal harassment, nearly 10% experienced physical assault, and almost half had a history of surviving sexual assault. In terms of social conditions, one-third of respondents reported living in poverty, with fewer than 20% identifying as homeowners. Nearly 40% of respondents shared that they experienced psychological distress, and 40% reported attempting suicide at least once in their lifetime. This study highlighted the complex and difficult challenges that transgender persons living in the United States experience on a daily basis at the micro, mezzo, and macro levels and deepens the call for providers to work hard and advocate for their clients to create a safer and more inclusive world while exploring the possibility of developing factors of post-traumatic growth.

This secondary analysis of the USTS data sought to find if social, medical, and legal transition lowers individual psychological distress for the transgender person. Based on the literature reviewed, our study examines three research questions: (1) Does social transition reduce psychological distress? (2) Does legal transition reduce psychological distress? (3) Does medical transition reduce psychological distress?

Methods

Data

The United States Transgender Survey (USTS) resulted in the largest dataset of transgender and gender expansive adults over 18 years of age. The USTS was conducted by the National Center on Transgender Equality (NCTE), as an evolution from the 2008/2009 National Transgender Discrimination Survey (NTDS), with an intention of closer alignment to federal surveys, inclusion of new questions, and allowing participants to use skip logic throughout the survey. USTS data is released for secondary analysis through an application and review process by key stakeholders at NCTE. USTS includes

nearly 1,500 variables and 28,000 observations (James et al., 2016). The USTS includes data on mental health, family life, socialization, health, sexual orientation identity, and spirituality. As indicated in Table 1, an anonymous sample of survey participants were recruited from approximately 800 locations, such as LGBTQIA+ social groups, health centers, and online communities (n=27,715).

Table 1. *Sample Characteristics by Gender Identity and Sexuality*

	***n* (%)**		
	Total	**Transgender**	**Genderqueer /Non-Binary**
Gender Identity	27715 (100%)	11493 (41.5%)	9465 (34.1%)
Heterosexual/Straight	3363 (12.1%)	1603 (5.8%)	160 (0.6%)
Gay/Lesbian/Same-Gender-Loving	4617 (16.7%)	2254 (8.1%)	754 (2.7%)
Bisexual/Pansexual	9185 (33.1%)	4053 (14.6%)	2940 (10.6%)
Queer	5706 (20.6%)	2043 (7.4%)	3106 (11.2%)
Asexual	2984 (10.8%)	867 (3.1%)	1671 (6%)
Sexuality not listed	1860 (6.7%)	673 (2.4%)	833 (3%)

IRB

The original USTS research was approved after a full review from the University of California at Los Angeles' Institutional Review Board. An Institutional Review Board application for full review was also approved by Southern Connecticut State University Institutional Review Board.

Predictor Variables

Social Transition

Social transition consists of two elements: living full time (dichotomous) and outness (3 continuous variables). *Outness* was defined as how much participants were out to all people in all contexts, at what age they began, and length of time since they have lived full time as their gender identity.

Live full time. The participants were asked, "Do you live full time as your gender identity?" Yes=1, No=0.

Total Outness. Level of outness was a continuous variable measured by asking, "How many people...currently know you are trans?" in several different categories such as family, healthcare providers, friends (etc.), with None=0, Some=1, Most=2, and All=3. For spouses and children, the question was answered with Yes=1 and each No=0 for a total score that ranged from 0-27 with higher numbers representing greater "outness" and social transition. Two other variables were considered under outness: Length of Time and Age of Transition. Length of Time was assessed by asking how many years since they were living full time (continuous number of years). Age of Transition was assessed by asking what age they began to live full time (continuous age).

Legal Transition

Legal transition consists of two different elements: a legal name change and a gender marker change.

Name. The continuous variable regarding changing the legal name was created with three questions. First, "Did you try or succeed in changing your legal name?" No=0, Yes=1. Second, "Did the court grant your name change?" No=0, In process=1, Yes=2. Finally, "How many IDs have your preferred name?" None=0, Some=1, All=2. The final Name variable has a minimum of 0 and a maximum score of 5 with higher scores indicating greater legal transition for name.

Gender. The continuous variable is regarding changing the gender marker. The only question is, "How many IDs have your preferred gender?" None=0, Some=1, All=2.

Legal Transition Total included the name variable plus the gender variable with a minimum of 0 and a maximum of 7 with higher scores indicating greater legal transition.

Medical Transition

Medical transition consists of three different elements: puberty blockers, hormones, and surgery.

Puberty blockers. The puberty blocker categorical variable was created through two questions: "Have you ever had a desire to take puberty blockers?" (Yes=1, No=0) and "Have you ever taken them?" (Yes=1, No=0). This continuous composite variable has a minimum score of 0 to a maximum of 2 with higher numbers representing a desire and/or participation in puberty blockers.

Hormones. The hormone categorical variable was created through three questions. For example, "Have you ever had a desire to take hormones?," "Have you ever taken them?," and "Are you currently taking either?" (Yes=1, No=0). This continuous composite variable has a minimum score of 0 to a maximum of 3 with higher numbers representing a greater desire or participation in hormones.

Surgery. Surgery was created through several questions that assessed what type of surgical interventions participants had desired or completed such as phalloplasty, electrolysis, vaginoplasty (etc.). Each question was answered with, "Do not want this=0," "Not sure if I want this=1," "Want it someday=2," and "Have had it=3." Since female and male surgeries consist of different procedures, two surgery variables were created: Surgery-Female (0=min, 30=max) and Surgery-Male (0=min, 15=max). Higher scores indicated higher desire or completion of surgical intervention. Surgery Female indicates a person assigned male at birth who received surgery to affirm their female identity. Surgery Male indicates a person assigned female at birth who received surgery to affirm their male identity.

Dependent Variable

Psychological Distress. The Kessler (2022) measurement tool has 6 items and assesses the degree of psychological distress. Questions include, "During the past 30 days, about how often did you feel...nervous, hopeless, restless or fidgety; so depressed that nothing could cheer you up, that everything was an effort, worthless?" Participants could respond on a 5-point Likert scale (0=none of the time, 1=a little of the time, 2=some of the time, 3=most of the time, 4=all of the time). Scores ranged from 0-24 points with a score of 13 as the cut off score for determining psychological distress. Higher scores indicated greater levels of psychological distress.

Analysis

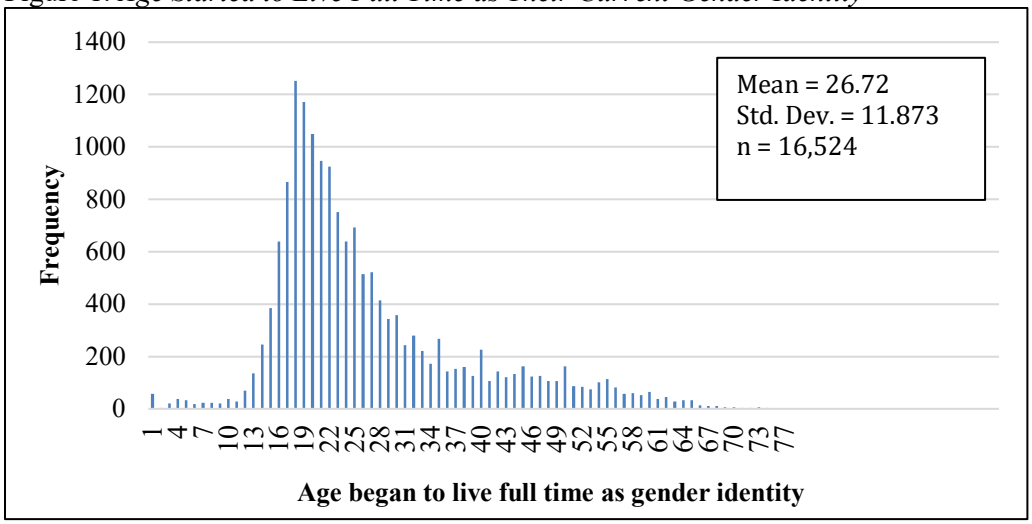
Using SPSS, an independent sample t-test (2 tailed), ANOVA, and regression were completed to determine if there was a significant impact of social, legal, and medical transition on psychological distress. The t-test and regression analysis assessed if social transition reduced psychological distress. The ANOVA analysis assessed if medical or legal transition reduced psychological distress. First, descriptive statistics will be presented and then the results from the research questions will follow.

Descriptive Statistics

Social Transition

Approximately 40% (*n*=11,135) of the sample reported that they did not live full time as their gender identity while 60% did (*n*=16,580). The mean age that participants started living full time as their gender identity was 26.7 years (*SD*=11.9, min=1, max=100). The mean number of years that participants had been living full time as their gender identity was 5.3 years (*SD*=6.9, min=0, max=98). See Figure 1 for overview.

Figure 1. *Age Started to Live Full Time as Their Current Gender Identity*



Legal Transition

Approximately 50% (*n*=13,769) of the participants reported that none of their identification had their preferred name while 29% (*n*=7,931) said that all their identification had their preferred name. On average, participants were 31 years old when they changed their legal name (min=1, max=75, *SD*=12.1). Nearly 90% of participants who changed their name legally spent less than $500 to complete the process, with 6% spending $0, 21% spending less than $100, 37% spending between $100 to $250, and 26% spending between $250 to $500. Most participants reported that none of their identification had their correct gender marker (67%, *n*=18,670) while only 12.2% (*n*=3,378) had the correct gender marker on all their identification.

Medical Transition

A minority of participants had wanted (15%, *n*=4,225) and received (1.3%, *n*=355) puberty blockers while a larger number of participants wanted (78%, *n*=21,598), received (47%, *n*=13,088) or were currently taking hormones (44%, *n*=12,095). Most transgender male participants reported not wanting any surgical intervention including top surgery (49%, *n*=13,550), hysterectomy (54%, *n*=14,912), metoidioplasty (70%, *n*=19,497), or phalloplasty (76%, n=21,136). A majority of transgender female participants reported not wanting any surgical intervention including top surgery (68%, *n*=18,922), electrolysis (60%, *n*=16,498), silicone injections (84%, *n*=23,376), orchidectomy (69%, *n*=19,131), vaginoplasty (67%, *n*=18,468), trachea shave (74%, *n*=20,420), facial feminization surgery (68%, *n*=18,888), or voice surgery (80%, *n*=22,031).

Psychological Distress

On average, participants were not psychologically distressed (M=10.7, *SD*=6.1), since their overall average score did not exceed the cut off score threshold of 13. Higher scores indicated a greater tendency towards mental illness or psychological distress. The cut-point of 13 was developed to operationalize a serious mental illness and someone experiencing significant impairment (Prochaska et al., 2012). Approximately six percent of U.S. adults report psychological distress with a score over 13 (Prochaska et al., 2012). However, approximately 40% of participants had a score of 13 or more, with 29% having a score between 13 to 18 and 10% having a score between 19 and the maximum score of 24 whereas 60% had a score below 12 with 28% between 0 to 5 and 33% between 6 to 12.

Results

Social, Legal and Medical transition were significantly associated with lower psychological distress accounting for between 1 to 18% in the total variance of psychological distress. Social transition, consisting of living full time as their gender identity and total outness, appeared to be a protective factor as it was associated with lower psychological distress. Legal transition consisted of name and gender marker change, and it appeared to be a protective factor as it was associated with lower psychological distress.

Finally, medical transition consisted of puberty blockers, hormones, and surgery, and each was a protective factor associated with lower psychological distress. First descriptive statistics will be presented and then the results from the research questions will follow.

Social Transition

Living full time

Approximately 40% (*n*=10,947) of the sample reported that they did not live full time as their gender identity while 60% did (*n*=16,255). An independent sample t-test compared the distress levels in individuals who reported that they lived full time as their gender identity compared to those who did not. Individuals who reported living full time (*M*=10.1, *SD*=6.1) as their gender identity had significantly lower distress when compared to individuals who reported that they did not (*M*=11.4, *SD*=5.9) live full time as their gender identity t (27,200) =17.2, p<.001. Living full time as their gender identity appeared to be a protective factor as it is associated with lower psychological distress.

Total Outness

A multiple regression was conducted to determine the predictors of age, years, and being out on psychological distress (see Table 2). Level of outness had an average of 14.9 out of a possible score of 27 (*SD*=0.56, *min*=0, *max*=27, percentiles: 25=6 points, 50=11 points, 75=16 points). The mean age that participants started living full time as their gender identity was 26.7 years (*SD*=11.9, *min*=1, *max*=100). The mean number of years that participants had been living full time as their gender identity was 5.3 years (*SD*=6.9, *min*=0, *max*=98).

Table 2. *Multiple Linear Regression Results Predicting Psychological Distress*

	B	**S.E.**	**β**	***t***	***p***
Age began living full time in your gender identity	-0.17	0.004	-0.32	-43.67	< 0.001
Number of years since transition	-0.18	0.006	-0.21	-28.96	< 0.001
Level of outness	-0.16	0.008	-0.15	-19.87	< 0.001
Note. F (1, 16172) = 394.84, p < 0.001, R^2 = 0.181					

Total outness significantly impacted distress and accounted for 18.1% of the variance of distress with all three elements were significant predictors (age of transition, years in transition, level of outness). Age that individuals began living full time (**β**= -.32, p<.001), number of years since transition (**β**= -.21, p<.001), and level of outness (**β**= -.15, p<.001) were significant predictors of psychological distress. When individuals began living full time at an older age, they had significantly lower levels of distress. The longer that the individuals had been living as their gender identity significantly lowered distress. Finally, the more out they were in all contexts to all people, the lower the level of distress. Concerns of multicollinearity were alleviated after examining the VIP statistics which ranged from 1.0 to 1.06. Any VIP scores above 4 can be interpreted as problematic multicollinearity.

Total outness appeared to be a protective factor as it was associated with lower psychological distress.

Legal Transition

An ANOVA was completed to see if having the correct name and gender marker on identification significantly affected distress (see Table 3). Participants who reported that higher levels of legal transition (M=6.8, SD=5.7, n=1,808) had significantly lower distress when compared to no legal transition (M=12.3, SD=5.8, n=12,059), $F(7, 27010)$ =386.9; p<.001, n=27,017, with a medium effect size (η^2=.091; power=1.00). A small effect size is η^2=.01, medium effect size is η^2=.06, large effect size is η^2=.14 (Cohen, 1988). Legal transition, specifically gender marker and legal name change, appeared to be a protective factor as it was associated with lower psychological distress.

Figure 2 shows the relationship between legal transition and psychological distress. Legal transition was categorized as between 0 (Zero) indicating no transition and 7 indicating the most amount of legal transition assessed. The more a person completed legal transition, the less distress they experienced. On average, the person who had no transition had a mean psychological distress score of 12.3 while the person who completed a legal transition score of 6 had a mean psychological distress score of 6.8.

Figure 2. *The Effect of Legal Transition on Psychological Distress*

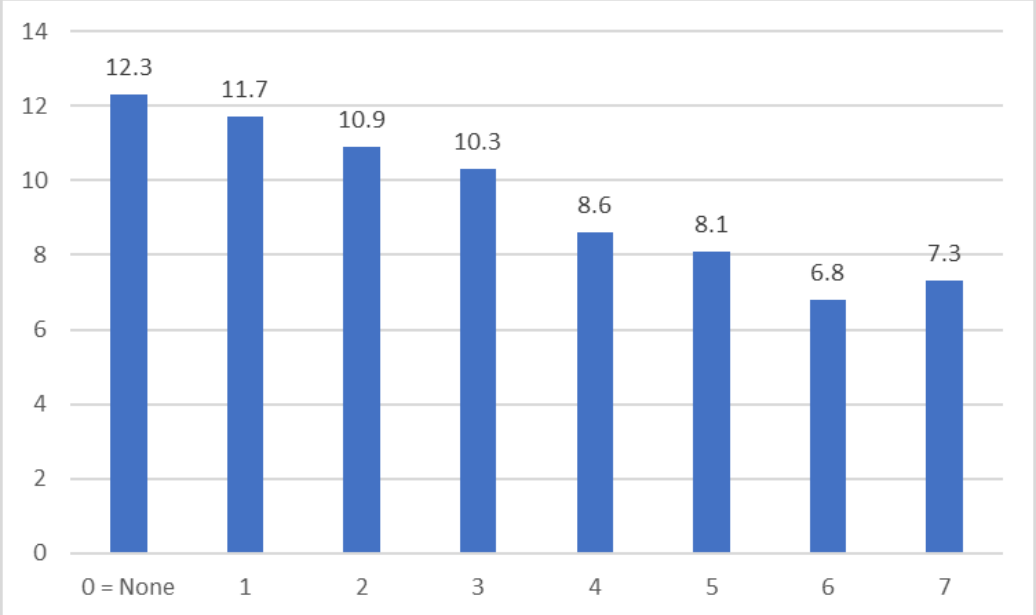


Table 3. *ANOVA Results Comparing Psychological Distress Across Levels of Legal Transition*

	Legal Transition [*M* (*SD*)]								*F* (7, 27010)	η^2
	(None) 0	**1**	**2**	**3**	**4**	**5**	**6**	**7 (Full)**		
Psychological Distress	12.3 (5.8)	11.7 (6.0)	10.9 (5.6)	10.3 (5.6)	8.6 (5.8)	8.1 (5.8)	6.8 (5.7)	7.3 (6.4)	386.9***	0.09
Note. ***$p < 0.001$										

Table 4. *ANOVA Results Comparing Psychological Distress Across Levels of Medical Transition - Puberty Blockers*

	Medical Transition (Puberty Blockers) [*M* (*SD*)]			*F* (2, 27199)	η^2
	None	**Desired**	**Had**		
Psychological Distress	10.4(6.0)	12.5(5.9)	9.8(6.1)	207.9***	0.02
Note. ***$p < 0.001$					

Table 5. *ANOVA Results Comparing Psychological Distress Across Levels of Medical Transition - Hormones*

	Medical Transition (Hormones) [*M* (*SD*)]				*F* (3, 27198)	η^2
	None	**Desired**	**Had Taken**	**Currently Taking**		
Psychological Distress	11.1(6.1)	12.6(5.7)	9.2(6.3)	9.1(5.8)	612.9***	0.06
Note. ***$p < 0.001$						

Table 6. *Simple Linear Regression Results Predicting Psychological Distress by Gender*

	B	S.E.	β	*t*	*p*
Surgery for Females	-0.10	0.01	-0.11	-17.35	< 0.001
Surgery for Males	0.14	0.01	0.07	11.12	< 0.001
Note. Surgery for Females: F (1, 27200) = 301.1, $p < 0.001$, $R^2 = 0.01$; Surgery for Males: F (1, 27200) = 123.7, $p < 0.001$, $R^2 = 0.01$					

Medical Transition

Blockers

An ANOVA was completed to see if having the desire for and having puberty blockers significantly impacted distress (see Table 4). Participants who reported that they had desired and received puberty blockers (M=9.8, SD=6.2, n=295) had significantly lower distress when compared to individuals who reported that they had desired but not received them (M=12.5, SD=5.9, n=3,909), F(2, 27199)=207.9; p<.001, n=27,202, with a small effect size (η^2=.02; power=1.00). Having a desire to and being on puberty blockers appeared to be a protective factor as it was associated with lower psychological distress.

Hormones

An ANOVA was completed to see if having the desire for and having hormones significantly impacted distress (see Table 5). Participants who reported that they had a desire for, had and were currently taking hormones (M=9.1, SD=5.8, n=11,617) had significantly lower distress when compared to individuals who reported that they did not have desire, never took them and were currently not on them (M=11.1, SD=6.1, n=5,698), F(3, 27198)=612.9; p<.001, n=27,202 with a medium effect size (η^2=.063; power=1.00). Having a desire to and being on hormones appeared to be a protective factor as it was associated with lower psychological distress.

Surgery

A linear regression was conducted to determine the impact of surgery on psychological distress (see Table 6). *Surgery for females* significantly impacted distress but accounted for only 1% of the variance of distress (**β**= -.11, p<.001). The more surgery desire or participation, the lower the psychological distress for individuals who were assigned male at birth and pursued female affirmation surgery. *Surgery for males* increased distress but accounted for only 1% of the variance of distress (**β**= .07, p<.001). Here the pattern was the reverse of that for females, with more desire for surgery or participation associated with higher the psychological distress. Individuals who were assigned female at birth and pursued male affirmation surgery had a small (1%) increase in distress.

Discussion

Each type of transition (social, legal, medical) was found to serve as a protective factor in lowering psychological distress with the exception of a small percentage of one group – those assigned female at birth experienced an increase in distress following affirmation surgery. While overall our findings support the protective nature of all factors of transition, further research is also needed to gain a better understanding as to why male affirmation surgery for those assigned female at birth increased distress. Although the overall increase in distress accounted for just 1 percent of the distress variance, it is statistically significant. This small but statistically significant finding supports the work of Crissman et al. (2019)

who found that those who share the intersection of transgender identity and female natal sex identified at birth, even when adjusting for age, race, marital status, education and poverty, experience more frequent mental distress. We agree with Crissman et al.'s (2019) hypothesis that this difference is most likely due to the intersection of multiple factors, social and biological, and may also relate to Bockting et al.'s (2013) finding that transgender males are more likely to experience enacted stigma as when compared to transgender males, which may in turn, contribute to increased distress. We share Crissman et al.'s (2019) suggestion to be cautious in all future research studies in recognizing there are gendered differences and significant gender heterogeneity even within the transgender and nonbinary community and that further research in the complex intersection of these factors is warranted (Barbee et al., 2022; Bustos et al., 2021; Johnson et al., 2024).

Overall, our results support Budge et al.'s (2012) call to address the positive aspects of transition in research and program development. Having access to every level of transition appears to be important in minimizing risk related to psychological distress and potentially improving mental health outcomes regardless of age or phase of lifespan development (Lewis, 2017). Social workers can educate trans individuals and their families of these protective factors throughout the transition process to minimize psychological distress (Austin, 2018; Dentato et al., 2018; McCarty-Caplan, 2018). Social workers must also recognize that protective factors, including providing trans-inclusive health care, can significantly reduce negative mental health consequences and improve wellbeing (Lewis, 2017; Stanton et al., 2017; Staples et al., 2018b).

The longer that participants had lived as their identified gender, the lower they reported their psychological distress, which supports Olson et al.'s (2016) findings that youth who are supported as they transition have lower rates of psychological distress. This provides the implication that when youth are allowed to live as their authentic selves, the greater the protective factors. The results also support Olson et al.'s findings that youth allowed to socially transition show similar rates of internalized psychopathology as cisgender peers. One way our study is unique is that it captures the importance of social transition in adulthood. Our finding that when individuals began living full time at an older age, they had significantly lower levels of distress. This supports Stanton et al.'s (2017) findings that older age, higher education, and a greater sense of connectedness to the LGBT community led to greater levels of wellbeing. More research to explore the reasons why "late-bloomers" or those who transition later in life experience less psychological distress is needed as it is unclear as to why this is the case (Fabbre, 2016; Stanton et al., 2017). While it may be related to the idea that the older one is, the less they care about perceptions of others, a deeper understanding of this protective factor is needed. For social workers in clinical practice, challenging one's own biases or assumptions related to the age of the transition process, and providing appropriate referrals for clients interested in transitioning, particularly for elders who may be pursuing the transition process, is important in determining appropriate referrals (Austin, 2018; Fabbre, 2016; McCarty-Caplan, 2018; Staples et al., 2018a).

Our findings support the notion that protective factors that come with improving access to structural change, particularly those related to "outness" (such as a legal name change and gender marker change, which appear on public documents and identification, e.g.,

one's driver's license) clearly have an important positive effect. Increasing access to legal processes, psychoeducation around the paperwork needed and legal processes to change one's name and identifying forms, and keeping legal costs down are important in reducing psychological distress and improving overall mental health outcomes. Although half of the respondents did not yet have identification that demonstrated legal name change and most of all respondents had not yet changed their gender marker on identifying documents, our findings indicate that for those who had undertaken the process, their levels of psychological distress were significantly lower. Being able to legally transition demonstrates an important protective factor, and social workers on the front lines of policy development along with local, state, and federal advocacy workers can serve as powerful allies in decreasing barriers to the transition process (Austin, 2018; Lewis, 2017). Methods of minimizing or eliminating cost related to this process and improving access to the documents needed and psychoeducation around how to complete these forms is a critically important step in facilitating positive protective factors. This can be difficult in many states where anti-trans policies have been implemented preventing transition and access to care and legal advice (Movement Advancement Project, 2017).

These findings, and the question about increased distress, also support Spivey and Edwards-Leeper's (2019) call to tease out exactly which aspects of transition are the most helpful, as well as why they might be the most helpful. For example, individuals who both wanted to be on hormones and those who had access to hormones expressed less psychological distress overall. Further social work research should explore if there are differences between the desire to be on and the process of starting and maintaining hormones as distinct protective factors. Also, while there is often a focus on medical transition being the ideal, or "gold standard" of transition related to passing, these findings clearly demonstrate lower levels of psychological distress with all three stages.

Finally, the desire to transition also served as a factor mitigating against psychological distress. This implication should be explored deeply in further research and be a basic construct taught in social work education (Staples et al., 2018a). Social work students should receive accurate and current information about the transition process and protective factors in foundation, advanced, and elective coursework (Dentato et al, 2018; McCarty-Caplan, 2018). Directors of social work programs tend to be more confident in their curriculum when compared to those in faculty positions, but students report even lower levels of confidence in the competency of the LGBTQIA+-related knowledge taught within the social work program (McCarty-Caplan, 2018). While prior research supports that transgender persons demonstrate incredible resilience, particularly when transgender persons receive social support (Grant et al., 2011), this study highlights the importance of allies, bystanders, and social work professionals helping to decrease barriers to any and all aspects of the transition experience, including minimizing gatekeeping policies, going through one's own psychoeducation about the steps of the process, and serving as a facilitator to either guide someone through the steps of the process or to provide safe and supportive referrals to those who possess the needed knowledge and services (Austin, 2018; McCarty-Caplan, 2018; Lewis, 2017).

Limitations

Our study had several limitations. First, we used secondary data analysis, so the research questions needed to fit the data collected. We also looked at all transgender and genderqueer/nonbinary folks as they primarily identified in the original study and did not differentiate in our analysis between these groups as per the original data collection process. Also, to our knowledge, our study is the first to examine the effect of social, legal, and medical transition together, so it is unclear if these distinct categories would show a unique effect on mental health if other data sets were examined. Finally, although we acknowledge the possibility for transgender youth and adults to experience a plethora of challenges, including but not limited to depression exclusively, suicidality, or substance use disorder, our study explained only general psychological distress. Future research should examine the impact of social, legal, and medical transition on specific aspects of the mental and physical health of transgender youth and adults, particularly related to how each stage of transition provides unique protective factors that enhance overall resilience. It is also critically important to understand each client's needs, expectations, and desires for transition at each stage from a unique and client-centered perspective, rather than using a one-size-fits-all approach.

Conclusion

Social workers in health care and agency settings have an ethical obligation to work with transgender persons holistically to increase their protective factors against psychological distress. The National Association for Social Workers (NASW) *Code of Ethics* (COE) states that the social worker has a commitment to the client (1.01) and the client has a right to self-determination (1.02; NASW, 2017). Outside factors such as social stigma, lack of access to legal assistance, and lack of access to medical treatments often hinder the transgender person from achieving their desire to live their gender identity. This calls for advocacy from social workers in the public health sector. Understanding how medical, legal, and social transitions work together to lower the psychological distress of transitioning transgender persons is an essential start to determining how and where social workers should advocate.

The data suggest that social workers working with transitioning transgender persons should receive additional training in the following areas to increase protective factors to decrease psychological distress:

1. *Social*: social workers should be able to refer clients to transgender support groups, especially those persons who lack support from family and friends. Transitioning persons should have access to those who have been through the process and can offer support and guidance as they begin to fully live their gender identity. The Trevor Project (2025) offers a 24-hour support line as well as information on area support groups.
2. *Legal*: social workers should be able to identify lawyers and legal teams that work with transgender persons to legally change their names, driver's licenses, wills, passports, and other documents to match their gender identity. There are

available resources, many at reduced cost, who can assist in this effort and lessen the person's stress at airports, mortgage companies, banks, and other places where it is important for the person's documents to match their identity. A good resource for information and advocacy is Lambda Legal (Lambda Legal, 2025).

3. *Medical*: Social workers should have a referral system of doctors, nurses, clinical social workers, and other medical personnel and resources so the transitioning person who so desires can make the physical changes to match their gender identity. Medical transition is the most expensive; social workers should be aware of reduced rate services for hormone medications, mental health services, and surgical services. A knowledge of available health insurance that covers transgender care is important since many insurance companies will deny, reduce, or slow-walk services. A good resource for this would be the Advocates for Trans Equity, Health and Healthcare webpage (2025).

This study explores the three phases of transition and how they may individually affect psychological distress. Findings indicate that the desire to transition and the transition process may increase protective factors. Social workers and behavioral health providers should focus not only on the risk factors, but the protective factors as well when working with transgender clients. In addition to agency programming that focuses on enhancing protective factors, community organizations should provide programs that have a strong feature of psychoeducation, particularly when discussing legal transition, and inclusive programming that addresses all three levels of transition equally when possible. While the process of transition may be a precarious time emotionally, psychologically and physically for transgender persons, this data analysis indicates that there are opportunities to support and enhance someone's journey through transition experiences that can minimize negative psychological effects. Community agencies such as the Mazzoni Center in Philadelphia provide not only individual care, but community education, legal advice, and sponsors the annual Trans-Health Conference where thousands of transgender persons, their families, allies, and mental health professionals gather in support of the physical, emotional, and legal needs of transgender individuals. When gatherings of this magnitude take place, transgender individuals have the opportunity to realize that they are not alone in their social, legal, and medical journeys toward transitioning and living as their authentic, complete selves.

References

Advocates for Trans Equity. (2025). *Health & healthcare*. Author. https://transequality.org/issues/health-healthcare

Aitken, M., VanderLann, D., Wasserman, L., Stojanovski, S., & Zucker, K. (2016). Self-harm and suicidality in children referred for gender dysphoria. *Journal of the American Academy of Children and Adolescent Psychiatry, 55*, 513-520.

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

Austin, A. (2018). Transgender and gender diverse children: Considerations for affirmative social work practice. *Child & Adolescent Social Work Journal*, *35*(1), 73-84.

Barbee, H., Deal, C., & Gonzales, G. (2022). Anti-transgender legislation—A public health concern for transgender youth. *JAMA Pediatrics, 176*(2), 125-126.

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*, 943-951.

Brecht, A., Bos, S., Ries, L., Winter, S. M., & Calvano, C. (2021). Assessment of psychological distress and peer relations among trans adolescents—An examination of the use gender norms and parent-child congruence of the YSR-R/CBCL-R among a treatment-seeking sample. *Children*, *8*(10), 1-17.

Budge, S., Adelson, J., & Howard, K. (2013a). Anxiety and depression in transgender individuals: the roles of transition status, loss, social support & coping. *Journal of Consulting and Clinical Psychology, 81*, 545-557. 4

Budge, S., Rossman, H. K., & Howard, K. (2013b). Coping and psychological distress among genderqueer individual: The moderating effect of social support. *Journal of LGBT Issues in Counseling, 8*, 95-117.

Bustos, V. P., Bustos, S. S., Mascaro, A., Del Corral, G., Forte, A. J., Ciudad, P., Kim, E. A., Langstein, H. N., & Manrique, O. J. (2021). Regret after gender-affirmation surgery: A systematic review and meta-analysis of prevalencev. *Plastic and Reconstructive Surgery - Global Open, 9*(3), 1-12.

Chang, S. C., Singh, A. A., & Dickey, L. M. (2018). *A clinician's guide to gender-affirming care: Working with transgender and gender-nonconforming clients*. Context Press.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Collazo, A., Austin, A., & Craig, S. L. (2013). Facilitating transition among transgender clients: Components of effective clinical practicev. *Clinical Social Work Journal, 41*(3), 228-237.

Crissman, H., Stroumsa, D., Kopernik, E., & Berger, M. (2019). Gender and frequent mental mistress: comparing transgender and non-transgender individuals' self-rated mental health. *Journal of Women's Health, 28*, 143-151.

Dawson, L., & Kates, J. (April 24, 2024). *Policy tracker: Youth access to gender affirming care and state policy restrictions*. Kaiser Family Foundation.

De Vries, A., Steensma, T., Doreleijers, T., & Cohen-Kettenis, P. (2011). Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *The Journal of Sexual Medicine, 8*, 2276-2283.

Dentato, M. P., Kelly, B. L., Lloyd, M. R., & Busch, N. (2018). Preparing social workers for practice with LGBT populations affected by substance use: Perceptions from students, alumni, and service providers. *Social Work Education*, *37*(3), 294-314.

Devor, A. (2004). Witnessing and mirroring: A 14-stage model of transgender identity formation. *Journal of Gay & Lesbian Psychotherapy, 8*, 41-67.

Durwood, L., McLaughlin, K., & Olson, K. (2018). Mental health and self-worth in socially transitioned transgender youth. *Journal of the American Academy of Child and Adolescent Psychiatry, 56*, 116-123.

Fabbre, V. (2016). Queer aging: Implications for social work practice with lesbian, gay, bisexual, transgender, and queer older adultsv. *Social Work, 62*(1), 73-76.

Fien, L. A., Salgado, C. J., Alvarez, C. V., & Estes, C. M. (2017). Transitioning transgender: Investigating the important aspects of the transition: A brief report. *International Journal of Sexual Health, 29*, 80-88.

Gagne, P., & Tewksbury, R. (1998). Conformity pressures and gender resistance among transgendered individuals. *Social Problems, 45*, 81-101.

Gagne, P., Tewksbury, R., & McGaughey, D. (1997). Coming out and crossing over: Identify formation and proclamation in a transgender community. *Gender and Society, 11*, 478-508.

Grant, J. M., Mottet, L. A., Tanis, J., Harrison, J., Herman, J. L., & Keisling, M. (2011). *Injustice at every turn: A report of the National Transgender Discrimination Survey*. National Center for Transgender Equality and National Gay and Lesbian Task Force.

Hajek, A., König, H. H., Blessmann, M., & Grupp, K. (2023). Loneliness and social isolation among transgender and gender diverse people. *Healthcare, 11*(10), 1-10.

Hill, B. J., Crosby, R., Bouris, A., Brown, R., Bak, T., Rosentel, K., VandeVusse, A., Silverman, M., & Salazar, L. (2018). Exploring transgender legal name change as a potential structural intervention for mitigating social determinants of healthy among transgender women of color. *Sexuality Research and Social Policy, 15*, 25-33.

Hodax, J. K., Crouch, J. M., Sethness, J. L., Loren, D., Kahn, N. F., Asante, P. G., & Sequeira, G. M. (2023). Strategies for providing gender-affirming care for adolescents in the primary care setting. *Pediatric Annals, 52*(12), e442-e449.

James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *Executive Summary Of The Report Of The 2015 U.S. Transgender Survey*. National Center for Transgender Equality.

Johnson, A., McClurg, A., Baldino, J., Das, R., & Carey, E. (2024). Fertility preservation choices and decisional regret after gender-affirming surgery in transgender men or gender nonbinary persons. *Fertility and Sterility (F&S) Reports: American Society for Reproductive Medicine (ASRM), 5*(1), 87-94

Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S.-L. T., Walters, E. E., & Zaslavsky, A. M. (2002). Short screening scales to monitor

population prevalences and trends in non-specific psychological distress. *Psychological Medicine, 32*, 959-976.

Lambda Legal. (2025). *About us*. Author.

Lewis, C. P. (2017). The road to trans-inclusive health care: Policy implications and the critical role of social work. *Health & Social Work, 42*(1), 60-62.

Mallon, G. P. (2021). Strategies for child welfare professionals working with transgender and gender expansive youth. Jessica Kingsley Publishers.

McCarty-Caplan, D. (2018). Seeing the same thing differently: Program director, faculty, and student perceptions of MSW LGBT competence. *Journal of Social Work Education, 54*(3), 448-463.

Millet, N., Longworth, J., & Arcelus, J. (2017). Prevalence of anxiety symptoms and disorders in the transgender population: A systematic review of the literature. *International Journal of Transgenderism, 18*(1), 27-38.

Movement Advancement Project. (2017, February). Mapping transgender equality in the United States. Author.

Murad, M., Elamin, M., Garcia, M., Mullan, R., Murad, A., Erwin, P., & Montori, V. (2010). Hormonal therapy and sex reassignment: A systematic review and meta-analysis of quality of life and psychosocial outcomes. *Clinical Endocrinology, 72*, 214-231.

National Association of Social Workers [NASW]. (2017). Code of ethics of the NASW. Author.

Nemoto, T., Bodeler, B., & Iwamoto, M. (2011). Social support, exposure to transphobia: Correlates of depression among male-to-female transgender women with a history of sex work. *American Journal of Public Health, 101*, 1980-1988.

Nuttbrock, L., Hwahng, S., Bockting, W., Rosenblum, A., Mason, M., Macri, M., & Becker, J. (2010). Psychiatric impact of gender-related abuse across the life course of male-to-female transgender persons. *Journal of Sex Research, 47*, 12-23.

Olson, K., Durwood, L., DeMeules, M., & McLaughlin, K. (2016). Mental health of transgender children who are supported in their identities. *Pediatrics, 137*, 1-8.

Prochaska, J. J., Sung, H. Y., Max, W., Shi, Y., & Ong, M. (2012). Validity study of the K6 scale as a measure of moderate mental distress based on mental health treatment need and utilization. *International Journal of Methods in Psychiatric Research, 21*(2), 88-97.

Redcay, A., Counselman Carpenter, E., McMahon, S., Luquet, W., Rice, K., & Lance, R. (2019). The arc of justice: Advancing the human rights of transgender and gender expansive youth through challenging policies and laws. *Journal of Human Rights and Social Work, 4,* 156-163.

Sanchez, F., & Vilain, E. (2009). Collective self-esteem as a coping resource for male-to-female transsexual. *Journal of Counseling Psychology, 56*, 202-209.

Sherer, I. (2016). Social transition: Supporting our youngest transgender children. *Pediatrics*, *137*(3), 1-2.

Spivey, L. A., & Edwards-Leeper, L. (2019). Future directions in affirmation psychological interventions with transgender children and adolescents. *Journal of Clinical Child and Adolescent Psychology, 48*, 342-256.

Spizzirri, G., Duran, F., Chaim-Avancini, T. M., Serpa, M. H., Cavallet, M., Pereira, C., Santos, P. P., Squarzoni, P., da Costa, N. A., Busatto, G. F., & Abdo, C. (2018). Grey and white matter volumes either in treatment-naïve or hormone-treated transgender women: A voxel-based morphometry study. *Scientific Reports, 8*(1), 1-10.

Stanton, M. C., Ali, S., & Chaudhuri, S. (2017). Individual, social and community-level predictors of wellbeing in a US sample of transgender and gender non-conforming individuals. *Culture, Health & Sexuality, 19*(1), 32-49.

Staples, J. M., Bird, E. R., Masters, T. N., & George, W. H. (2018a). Considerations for culturally sensitive research with transgender adults: A qualitative analysis. *Journal of Sex Research, 55*(8), 1065-1076.

Staples, J. M., Neilson, E. C., Bryan, A. E. B., & George, W. H. (2018b). The role of distal minority stress and internalized transnegativity in suicidal ideation and nonsuicidal self-injury among transgender adults . *Journal of Sex Research, 55*(4/5), 591-603.

Steensma, T. D., Kreukels, B. P. C., de Vries, A. L. C., & Cohen-Kettenis, P. T. (2013). Gender identity development in adolescence. *Hormones and Behavior*, *64*(2), 288-297.

Timmins, L., Rimes, K.A., & Rahman, Q. (2017). Minority stressors and psychological distress in transgender individuals. *Psychology of Sexual Orientation and Gender Diversity, 4*(3), 328-340.

Tordoff, D. M., Wanta, J. W., Collin, A., Stepney, C., Inwards-Breland, D. J., & Ahrens, K. (2022). Mental health outcomes in transgender and nonbinary youths receiving gender-affirming care. *JAMA Network Open, 5*(2), 1-13.

Trevor Project. (n.d.). Home. Author.

Tsai, M., Lau, M., & Kuper, L. (2021). Health care transition of transgender youth. *Pediatrics, 147*, 605-605.

Uribe, C., Junque, C., Gómez-Gil, E., Abos, A., Mueller, S. C., & Guillamon, A. (2020). Brain network interactions in transgender individuals with gender incongruence. *NeuroImage, 211*, 1-12.

White Holman, C. W., & Goldberg, J. M. (2006). Social and medical transgender case advocacy. *International Journal of Transgenderism, 9*(3-4), 197-217.

White Hughto, J. M., Pachankis, J. E., Willie, T. C., & Reisner, S. L. (2017). Victimization and depressive symptomology in transgender adults: The mediating role of avoidant coping. *Journal of Counseling Psychology, 64*(1), 41-51.

Wilson, E., Chen, Y., Arayasirikul, S., Wenzel, C., & Raymond, H. (2015). Connecting the dots: Examining transgender women's utilization of transition-related medical care and associations with mental health, substance abuse and HIV. *Journal of Urban Health, 92*, 182-192.

World Health Organization. (2019). International classification of diseases (ICD-11). Author.

Author note: Address correspondence to Alex Redcay, Department of Social Work, Millersville University, Millersville, PA, 17551. Email: alex.redcay@millersville

Author ORCID

Wade Luquet https://orcid.org/0000-0003-2887-5389
Alex Redcay https://orcid.org/0000-0002-1778-3772
Beth Counselman-Carpenter https://orcid.org/0000-0002-4260-5783