LEGISLATING GENDER: DOES ‘X’ MARK THE SPOT FOR IMPROVING HEALTH AMONG GENDER-NONCONFORMING ADULTS?

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Sociology—Master of Arts

2023

ABSTRACT

This paper uses data from the Behavioral Risk Factor Surveillance Systems (BRFSS) survey over the period 2014-2021 to analyze the impact of new state-level policies allowing individuals to identify as gender-neutral ('X' gender marker) on their government-issued driver's license. In many states, this "third" gender category is not an option, and transgender and gender-nonconforming (TGNC) individuals face multiple barriers, including legislative restrictions, when seeking to adjust their gender identity and names on legal documents. A counterfactual framework exploits variation across states and years in enactment of gender-neutral driver's license laws to show that a gender-neutral 'X' marker shows promise for attenuating inequality in overall physical health among gender-nonconforming adults. These findings highlight the potential benefit to physical health that allowing a gender-neutral option on legal documents might have for gender diverse individuals.

This thesis is dedicated to my mom and dad, without whose support I would not be here.

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INTRODUCTION

Despite only approximately half of a percent of the adult population in the United States identifying as transgender (Williams Institute 2022), four hundred and ninety anti-trans bills were introduced across the United States in the first three months of 2023 alone – three hundred and seventeen more than in all of 2022, a two hundred and fifty-seven percent increase (Trans Legislation Tracker 2023) – many of them seeking to ban gender-affirming care for transgender youth and adults under the age of twenty-five, thereby forcibly detransitioning them. Meanwhile, less than half of all states have any sort of protections for gender minority individuals on the books (Movement Advancement Project 2023a). In a time when transgender people are over four times more likely than cisgender people to be victims of violent crime (Flores at al. 2021), one in four black trans youth have reported a suicide attempt in the past year (The Trevor Project 2023), and trans and gender-nonconforming (TGNC) adults have significantly higher rates of poor physical health (Lagos 2018; Scheim et al. 2022) and mental distress (Cicero et al. 2020; Feldman et al. 2021), it is imperative that researchers, activists, and policymakers call for expanded access to gender-affirming care and policies.

Gender-affirming healthcare and protective policies have proven positive implications for physical and mental health and healthcare access for TGNC youth and adults (Restar et al. 2020; King and Gamarel 2021; Gonzales et al. 2022; Green et al. 2022; Scheim et al. 2022; Tordoff et al. 2022). In order to add to this rapidly growing literature, I seek to examine whether policies that allow individuals to change their legal sex/gender marker to 'X' – so called gender-neutral ID laws (GNID) – have similar protective effects to policies that allow TGNC individuals to change their legal sex and name on identity documents (Crosby, Salazar, and Hill 2016; Le et al. 2016; Kidd, Dolezal, and Bockting 2018). In this study, I analyze data from the 2014-2021

Behavioral Risk Factor Surveillance System (BRFSS) and the Movement Advancement Project (MAP) to explore the potential for GNID laws to have a positive impact on poor self-rated physical health for gender-nonconforming (GNC) adults. The findings of this study have important public health implications for the promise of GNID laws and other similar policies that seek to be gender-affirming and protective for TGNC individuals.

BACKGROUND

Transgender and Gender-Nonconforming Health

Research has consistently shown that transgender and gender-nonconforming (TGNC) people have worse self-reported mental health (Burgwal et al. 2019; Crissman et al. 2019; Residner and Hughto 2019; Rimes et al. 2019; Cicero et al. 2020; Feldman et al. 2021) and physical health (Lagos 2018; Feldman et al. 2021; Scheim et al. 2022) than the cisgender population. This includes higher rates of disability (Smith-Johnson 2022) including HIV, heart disease, and emphysema (Feldman et al. 2021), greater frequency of mental distress (Crissman et al. 2019) including anxiety and depression (Lefevor et al. 2019), and self-harm, suicidality, and substance abuse (Lefevor et al. 2019; Rimes et al. 2019). GNC adults are also at higher risk of experiencing harassment, sexual abuse, and other traumatic events than cisgender and transmasculine and transfeminine people (Lefevor et al. 2019). Among the TGNC population, gender-nonconforming adults have significantly higher odds of reporting poor self-rated physical health (Lagos 2018; Burgwal et al. 2019) and mental health (Crissman et al. 2019; Rimes et al. 2019) than their transmasculine and transfeminine peers. TGNC people also face significant barriers in accessing healthcare (Residner and Hughto 2019; Cicero et al. 2020; Scheim et al. 2022), including gender-affirming treatment (Feldman et al. 2021). TGNC people are often hesitant to seek care, in part due to structural obstacles (Goldenberg et al. 2020) including lack of health insurance (Scheim et al. 2022) and negative cultural norms that foster bias among healthcare providers (Hsieh and shuster 2021; Loza et al. 2021).

Academics have theorized that these disparities in health and access to healthcare can be explained in part by stigmatization (Link and Phelan 2001; Frost, Lehavot, and Meyer 2015; Stacey, Reczek, and Spiker 2022) and minority stress processes (Meyer 1995). Link and Phelan

(2001) conceptualize stigma as the "co-occurrence of its components – labeling, stereotyping, separation, status loss, and discrimination" (p. 363), and they note that stigmatization on one domain of people's lives likely has dramatic bearing on additional domains such as housing, earnings, and health, to name but a few. Frost, Lehavot, and Meyer (2015) further note that prejudice-related stressors have unique negative consequences on health that persist beyond stressors unrelated to prejudice. Stigma against transgender people significantly limits access to vital resources and opportunities (Hughto, Reisner, and Pachankis 2015), and is additionally responsible for poor access to legal and medical resources (Lefevor et al. 2019). This stigma manifests in a variety of ways, including misgendering (McLemore 2018), and experiences of transphobia, including anti-trans violence (Lombardi 2009).

Gender Affirmation and Gender-affirming Policies

Stigma prevention coping interventions, including gender-affirming practices, policies, and care, can often help attenuate these stressors (Hughto, Residner, and Pachankis 2015). Research has shown that gender affirmation reduces disparities in healthcare access (Goldenberg et al. 2020; Scheim et al. 2022) and mental health among TGNC adults (Dorsen et al. 2022), including a reduction in suicidal ideation and psychological stress (Lelutiu-Weinberger, English, and Sandanapitchai 2020). Affirmation has been described by TNGC people as "being respected as a whole person" (Dorsen et al. 2022, p. 36), and can be as simple as using a TGNC individual's preferred language, including chosen name and pronouns. One's gender identity being respected and recognized may be considered a display of resilience, and is paramount in upholding transgender health (Lelutiu-Weinberger, English, and Sandanapitchai 2020).

Medical gender affirmation, including gender-affirming care and surgeries, has consistently been shown to enrich the lives of TGNC individuals, in particular through marked

increases in mental health (Green et al. 2022; Tordoff et al. 2022; Lee and Rosenthal 2023; Swan et al. 2023), decreases in suicidality (Green et al. 2022; Tordoff et al. 2022), and increased feelings of internal validation (Dorsen et al. 2022). In addition to medical affirmation, social and legal gender affirmation have been linked to positive changes in mental health outcomes and healthcare utilization (King and Gamarel 2021; Scheim et al. 2022). Social channels can include incorporating inclusive language in the workplace (Perales, Ablaza, and Elkin 2022), external affirmation from friends, colleagues, and family (King and Gamarel 2021), and changing one's name to one that better reflects one's gender (Pollitt et al. 2021). Legal affirmation is primarily obtained through legal name changes (Hill et al. 2018; Restar et al. 2020; Loza et al. 2021) and gender-concordant gender markers on identity documents (Restar et al. 2020; Scheim, Perez-Brumer, and Bauer 2020; DeChants et al. 2022; Tan et al. 2022; Yee, Lind, and Downing 2022).

Names, Gender Markers, and Identity Documents

While research has shown that access to and utilization of gender-affirming medical care (Green et al. 2022; Tordoff et al. 2022; Lee and Rosenthal 2023; Swan et al. 2023) and non-discrimination policies and expanded access to gender-affirming medical care (Goldenberg et al. 2020; Gonzales, Tran, and Bennett 2022; Scheim et al. 2022l; Trusczczynski et al. 2022) lead to greatly increased physical and mental health for transgender individuals, recent studies have also highlighted the importance of gender-concordant documents and names. Goetz and Arcomano (2021), through interviews with trans individuals in the U.S. and Canada, found that almost all TGNC people interviewed were interested in legal name changes and updating their legal gender markers.

Individuals who want to update their legal documents to be gender-concordant, but are unable to, have greater odds of attempting suicide in the last year (DeChants et al. 2022). TGNC

people who face barriers to obtaining gender-concordant IDs have higher levels of mental health problems (Tan et al. 2022) and higher rates of postponing medical care (Hill et al. 2018) than those with gender-concordant IDs. Legal name change has been shown to be an important structural intervention for gender diverse individuals, leading to increased socioeconomic stability (Hill et al. 2018), lower odds of harassment in public settings, and fewer housing-related issues due to gender identity (Loza et al. 2021). Perhaps most importantly, possession of gender-concordant IDs has been shown to lead to improved access to primary and transition-related health care (Hill et al. 2018) and being treated with more respect by doctors and other health care providers (Loza et al. 2021).

In addition to access to legal name changes and gender-concordant gender markers, some GNC individuals have expressed an interest in 'X' gender markers for their IDs (Goetz and Arcomano). Support for this is not unanimous among GNC people (Goetz and Arcomano 2021) and activists (Saguy 2023), in part due to a fear of a lack of compatibility with other identity documents. However, while the use of identification documents as biopolitical documents is problematic, the 'X' gender marker can be used as a tool of resistance and radical self-determination for gender diverse individuals (Quinan and Oosthoek 2021). Despite concerns, nearly half of all states in America have begun allowing residents to change their gender markers to 'X' on their driver's licenses and state ID cards (Movement Advancement Project 2023), and the Biden administration announced in April 2022 that people will be allowed to indicate their gender as 'X' on U.S. Passports (Block 2023).

While previous researchers have studied the health benefits of gender-affirming policies for all transgender adults, showing promising attenuating effects of gender-concordant markers and preferred name on a variety of legal documents, this is the first study to consider the

implications for physical health of policies that allow gender-nonconforming adults to choose a gender-neutral 'X' marker on their IDs, an important contribution to the discourse on how to alleviate negative health consequences among this marginalized population. Using the Behavioral Risk Factor Surveillance System (BRFSS), this study advances the literature on the efficacy of potentially gender-affirming policies in helping diminish disparities in physical health among TGNC individuals.

Keeping the patterns of inequality that transgender and GNC adults face in mind, and the potential impact of gender-affirming policies, I formulate three hypotheses. It stands to reason that the majority of the U.S. adult population will not seek to change the sex/gender marker on their licenses to 'X' unless it is a more accurate representation of their sex and/or gender identity, which can be tested through my first hypothesis.

Hypothesis 1: Gender-neutral ID laws will have no statistically significant impact on the probability of reporting fair to poor health for the cisgender population.

While it is uncertain whether transmasculine and transfeminine individuals are significantly more likely to identify with and prefer the male and female labels on identity documents, states that have begun to offer gender-neutral 'X' markers have noted that gender-nonconforming adults are the target audience for said policies, or were likely to be the primary group to take up this option. For example, California has labeled the gender-neutral gender marker as 'nonbinary' (California Courts Self-Help Guide 2023), and Washington has defined 'X' as "neither exclusively male or female" (Ingersoll Gender Center 2019). Due to this, and to the relatively small size of the gender-nonconforming population, it follows that there should be no significant effect of these policies on poor self-reported physical health for any group of

adults outside of those who are likely to take advantage of them, including other transgender adults experiencing health inequality. The logic for my second hypothesis follows the first.

Hypothesis 2: Gender-neutral ID laws will have no statistically significant impact on the probability of reporting fair to poor health for the transmasculine and transfeminine population.

Finally, to evaluate the efficacy of gender-neutral ID laws as channels of legal affirmation for GNC adults, I formulate my third hypotheses. This hypothesis serves to evaluate whether there are any detectable differences in self-reported poor physical health in the presence of GNID laws for GNC adults.

Hypothesis 3: Gender-nonconforming adults in states with gender-neutral ID laws will have a lower probability of reporting poor health than gender-nonconforming individuals in states without said policies.

METHODS

Behavioral Risk Factor Surveillance System Data

To explore the potential benefit of gender-neutral ID laws, I utilize data from Behavioral Risk Factor Surveillance System (BRFSS) surveys, which are administered by the Centers for Disease Control and Prevention (CDC). The BRFSS is a nationally representative health survey of noninstitutionalized U.S. adults, conducted continuously throughout the year by each U.S. state's public health department using household-based probability sampling and random digit dialing of both cell phones and landlines (Centers for Disease Control 2013). This paper utilizes data from the 2014-2021 releases of the survey, which include a small sample of respondents in 2022.

Beginning in 2014, the BRFSS included an optional sexual orientation and gender identity module (SOGI) that allows respondents to self-identify as transgender. If respondents indicate that they do identify so, they may select between three options: male-to-female transgender (transfeminine), female-to-male transgender (transmasculine), or transgender, gender-nonconforming (GNC). Across the seven and a half years of available data since its implementation, over 1.6 million respondents have submitted answers to this question. A categorical measure of gender identity was constructed from their answers, with 0 = a respondent identifies as cisgender male (n = 679,403), 1 = cisgender female (n = 855,177), 2 = transmasculine (n = 2,463), 3 = transfeminine (n = 2,664) and 4 = GNC (n = 1,613), for a total of 1,541,320 individuals. Individuals who answered 'don't know/not sure' or who refused to answer are discarded from the sample, but could potentially be imputed in future studies (Lagos 2018).

From the BRFSS, I construct one dependent variable. This variable of interest, fair to poor health, is a dichotomous outcome variable constructed based upon a respondent's self-rated

physical health over the past 30 days. Answers classified as "poor" and "fair" are combined as one, with the reference of good health consisting of individuals who answered "good," "very good," and "excellent." This construction of an indicator for poor health has shown to be a robust predictor of mortality in populations irrespective of socioeconomic status (DeSalvo et al. 2006; Frankenberg and Jones 2004; Gorman and Sivaganesan 2007; Lagos 2018).

Sociodemographic controls include age, racial and ethnic identity (non-Hispanic white, non-Hispanic Black, Hispanic of any race, and all other non-Hispanic respondents of other races), level of educational attainment (did not graduate high school, high school diploma/GED, some college, and college degree), employment status, and household income equal to or greater than $50,000 per year. To account for other household factors, indicators for whether a respondent has a child or is married or partnered is included, as partnerships have been shown to be good measures of social support (Rendall et al. 2011; Santini et al. 2015; Hult-Lundstad 2018), and parenthood has been shown to have mixed costs and benefits on an individual's health (Carson, Adamo, and Rhodes 2018; Simon and Caputo 2019; Metzger and Gracia 2023). Finally, a categorical measure of whether the respondent is a current or former user or does not currently use tobacco cigarettes is included, as this has been shown in previous literature to be an important contributing factor in poor health (Case and Paxson 2005; Preston and Wang 2006).

State Level Characteristics and Gender-affirming Laws and Policies

The policy variable of interest, gender-neutral ID law, is a dichotomous measure created using internet searches of gender-neutral driver's license policies and data from the Movement Advancement Project (2023). Between 2015 and 2023, 23 states have begun allowing their residents to choose between M, F, or X on their driver's licenses, beginning with Oregon. Of the 23 states with such a policy, 14 states contributed data on transgender residents to the BRFSS

between 2014 and 2021, including Arkansas, California, Colorado, Connecticut, Hawaii, Massachusetts, Minnesota, New Jersey, New Mexico, Nevada, Pennsylvania, Rhode Island, Utah, Virginia, Vermont, and Washington. While not every state's policy is identical in how one might obtain the new gender marker (e.g., it is free in California, but in Michigan there is an additional processing fee), their implementation is similar. Specifically, each policy allows an individual to change the sex or gender marker on their driver's license from male (M) or female (F) to gender-neutral (X). To date, not every state that allows individuals to obtain this new marker on their driver's license also allows the 'X' option for other legal documents. Future studies should examine the potential benefit of these more expansive policies, or at least consider them as control variables.

Since the political climate of each state might have some influence on individual health among its inhabitants, I construct two additional measures, including a dichotomous measure of whether the current state governor is a Democrat, and one categorical measure of whether Democrats hold a majority in none, one, or both state legislative houses. Furthermore, to account for the influence of other gender-affirming policies on health, I additionally construct three categorical measures of strength of policy, including negative, neutral, and positive, following the Movement Advancement Project's grading scale. The three policies include how easy it is to change one's legal gender on their driver's license and birth certificate, as well as whether a state requires the publication of a name change announcement (Movement Advancement Project 2023). For driver's licenses, states that require proof of surgery, court order, or amended birth certificates are classified as negative, states with unclear or unknown written policies, no standard procedure, or that require provider certification are classified as neutral, and states with easy-to-understand forms and no provider certification are considered positive. For birth

certificates, states that do not allow for one to amend their gender marker or require proof of 'sex reassignment' surgery are classified as negative, states with unclear, unknown, or unwritten policies or that may require a court order to change gender markers are classified as neutral, and those that issue new certificates with no surgery or court order requirements are classified as positive. Name change policies are considered negative if states require individuals to publish a name change announcement, neutral if they have unclear policies but allow individual court discretion, and positive if there are no publication requirements.

Regression Analysis

Marginal effects were obtained using binary logistic regression models to examine how disparities in self-rated physical health differed for adults in states with gender-neutral ID laws and those without. For all samples, three models were run. First, the base model assessed health disparities by gender-neutral ID laws, gender identity, and sociodemographic characteristics including sexuality, age, race/ethnicity, educational attainment, and survey year. For the second model, additional socioeconomic controls including employment status, household income, household composition, whether the individual was insured, and smoking history are also included. Finally, in order to account for the impact of other gender-affirming policies that may exist in states that have gender-neutral ID laws, I also control for three additional types of laws that determine how easy it is to 1) change one's legal name, 2) alter one's gender marker from 'M' to 'F' and vice versa on legal documents, and 3) change one's legal name and/or one's gender marker on a birth certificate.

I estimate all three models using a split-sample method separately for cisgender men and women, transmasculine and transfeminine people, and finally for gender-nonconforming adults to test my hypotheses. While using a simple interaction term of gender-neutral ID laws and

gender identity would allow me to explore these questions, split-sampling allows me to examine heterogeneity in the relationship between predictors and health outcomes, which are likely to be very complex and may vary dramatically across each different group of adults. The evidence for this last assumption is based primarily on the significant differences in sociodemographic factors across the board between cisgender men and women, transmasculine and transfeminine adults, and GNC adults as seen in Table 1, including LGBQ identity, race, level of education, household income, and partnership status. This could also be examined by fully interacting all independent variables with indicators for GNID laws and GNC identity, which yields qualitatively similar results, and is available upon request. All results were obtained in Stata version 16 using the *svy* function to adjust for stratified and clustered sampling and to cluster standard errors at the state level. Survey weights were not utilized due to potential issues with the BRFSS-provided raked weights (Todoroff and Hajat 2019; Cicero et al. 2020; Lett and Everhart 2022), and thus results are not representative nationally, as this approach treats the BRFSS as an unweighted cluster stratified random sample of the United States (Lett and Everhart 2022). To account for time-invariant differences in years and states, fixed effects for both are included as well.

RESULTS

Summary Statistics

Summary statistics for cisgender men, cisgender women, and transmasculine, transfeminine, and GNC individuals are provided in Table 1. Of all respondents in the sample, only 1,613 individuals identified as GNC, representing roughly 0.1 percent of the sample population. In terms of self-rated physical health, gender-nonconforming individuals are significantly more likely than all other groups to have reported fair to poor health in the past month. 27.46% of GNC adults report poor health, compared to 17.05% of cisgender men, 18.23% of cisgender women, 24.00% of transmasculine people, and 24.59% of transfeminine people. This overview shows that GNC adults are significantly more likely to report fair to poor health than their cisgender peers, and for some outcomes, their transgender peers. Additional potential risk factors are also more prevalent among GNC adults, including a much larger proportion of the individuals in the sample reporting some form of LGBQ+ identity, which has been commonly documented to contribute to worse health outcomes (King et al. 2008; Ayhan et al. 2020; Rees, Crowe, and Harris 2020). GNC adults in the sample were also more likely to be younger, less likely to be insured, and more likely to have a lower household income than their cisgender peers, all potential contributing factors for their worse reported health outcomes.

Table 2 presents summary statistics for GNC individuals, separated by whether they reside in a state with a GNID law at the time they were surveyed. GNC adults in states with gender-neutral ID laws are significantly less likely to report poor health, as well as more likely to identify as LGBQ, are younger on average, are more likely to be college graduates and employed, and earn significantly more than their GNC peers in states without GNID laws. These disparities across GNC people separated only by a difference in one policy are stark, and likely

Table 1: Descriptive overview (percentages) by gender identity

	Cisgender Men (*n* = 679,403)	Cisgender Women (*n* = 855,177)	Transmasculine (*n* = 2,463)	Transfeminine (*n* = 2,664)	Transgender, GNC (*n* = 1,613)
Poor self-rated health	17.05 [16.96, 17.14]	18.23 [18.15, 18.31]	24.00 [22.31, 25.68]	24.59 [22.95, 26.22]	27.46 [25.28, 29.64]
Identity document laws					
Gender neutral ID law	14.32 [14.23, 14.41]	12.92 [12.85, 12.99]	14.70 [13.30, 16.10]	12.24 [10.99, 13.48]	21.02 [19.03, 23.01]
Driver's license gender markers					
Negative law	18.18 [18.09, 18.27]	19.51 [19.42, 19.59]	28.70 [26.92, 30.49]	17.57 [16.12, 19.01]	16.49 [14.68, 18.30]
Neutral law	8.76 [8.69, 8.83]	8.26 [8.20, 8.32]	8.12 [7.04, 9.20]	7.02 [6.05, 7.99]	10.29 [8.81, 11.78]
Positive law	73.06 [72.95, 73.16]	72.23 [72.14, 72.33]	63.17 [61.27, 65.08]	75.41 [73.78, 77.05]	73.22 [71.05, 75.38]
Birth certificate gender markers					
Negative law	29.81 [29.70, 29.92]	30.82 [30.72, 30.92]	36.26 [34.36, 38.16]	30.11 [28.36, 31.85]	24.43 [22.33, 26.53]
Neutral law	12.71 [12.64, 12.79]	13.49 [13.42, 13.57]	13.44 [12.09, 14.79]	11.75 [10.53, 12.98]	13.21 [11.55, 14.86]
Positive law	57.48 [57.37, 57.60]	55.69 [55.58, 55.79]	50.30 [48.33, 52.28]	58.15 [56.27, 60.02]	62.37 [60.00, 64.74]
Name change reqs.					
Negative law	16.32 [16.23, 16.40]	16.59 [16.51, 16.67]	13.93 [12.56, 15.29]	16.55 [15.14, 17.97]	19.47 [17.53, 21.40]

Table 1 (cont'd)

Neutral law	52.50 [52.38, 52.62]	51.45 [51.35, 51.56]	47.30 [45.33, 49.27]	53.38 [51.48, 55.27]	48.98 [46.53, 51.42]
Positive law	31.19 [31.08, 31.30]	31.95 [31.85, 32.05]	38.77 [36.84, 40.70]	30.07 [28.33, 31.81]	31.56 [29.29, 33.83]
Sociodemographics					
LGBQ+	4.24 [4.20, 4.29]	4.48 [4.44, 4.52]	27.08 [25.32, 28.84]	35.70 [33.88, 37.52]	58.03 [55.62, 60.44]
Race/ethnicity					
White, non-Hispanic	78.83 [78.73, 78.93]	78.58 [78.50, 78.67]	70.77 [68.97, 72.56]	68.73 [66.97, 70.49]	68.13 [65.86, 70.41]
Black, non-Hispanic	6.47 [6.41, 6.53]	8.35 [8.29, 8.41]	9.66 [8.50, 10.83]	9.91 [8.77, 11.05]	7.50 [6.21, 8.79]
Hispanic	6.78 [6.72, 6.84]	6.40 [6.34, 6.45]	9.62 [8.46, 10.79]	10.10 [8.95, 11.24]	11.59 [9.62, 12.70]
Other race, non-Hispanic	7.92 [7.86, 7.98]	6.67 [6.62, 6.72]	9.95 [8.76, 11.13]	11.26 [10.06, 12.46]	13.21 [11.55, 14.86]
Age in years	54.29 [54.25, 54.33]	56.56 [56.53, 56.60]	49.81 [49.04, 50.58]	51.17 [50.48, 51.86]	43.00 [42.03, 44.97]
Education					
No or some high school	6.50 [6.44, 6.55]	5.99 [5.94, 6.04]	11.26 [10.01, 12.51]	14.46 [13.12, 15.80]	10.01 [8.54, 11.48]
High school graduate/GED	27.51 [27.40, 27.62]	26.18 [26.09, 26.28]	34.23 [32.35, 36.10]	36.12 [34.29, 37.95]	30.85 [28.59, 33.11]
Some college	26.24 [26.13, 26.34]	29.14 [29.05, 29.24]	28.58 [26.79, 30.36]	26.51 [24.84, 28.20]	27.86 [25.67, 30.05]
College graduate	39.76 [39.64, 39.87]	38.68 [38.57, 38.78]	25.93 [24.20, 27.67]	22.90 [21.30, 24.50]	31.28 [29.01, 33.55]

Table 1 (cont'd)

Currently employed	57.41 [57.29, 57.53]	45.45 [45.35, 45.56]	45.92 [43.95, 47.89]	47.94 [46.04, 49.83]	51.02 [48.58, 53.47]
Household income					
Less than $25,000	28.47 [28.37, 28.58]	38.28 [38.18, 38.39]	47.06 [45.08, 49.03]	48.24 [46.34, 50.13]	46.50 [44.06, 48.93]
$25,000 to $49,000	20.76 [20.66, 20.86]	21.38 [21.30, 21.47]	22.66 [21.00, 24.31]	22.22 [20.64, 23.80]	22.88 [20.82, 24.93]
$50,000 or more	50.77 [50.65, 50.88]	40.33 [40.23, 40.44]	30.29 [28.47, 32.10]	29.54 [27.81, 31.28]	30.63 [28.37, 32.88]
Household composition					
Any children	24.99 [24.89, 25.09]	26.66 [26.56, 26.75]	26.63 [24.89, 28.38]	20.61 [19.07, 22.15]	25.29 [23.17, 27.42]
Currently married/partnered	60.64 [60.53, 60.76]	52.77 [52.67, 52.88]	45.03 [43.06, 46.99]	43.32 [41.44, 45.20]	41.60 [39.19, 44.01]
Currently insured	91.77 [91.70, 91.84]	94.17 [94.12, 94.22]	89.24 [88.02, 90.47]	88.40 [87.18, 89.62]	89.46 [87.96, 90.96]
Smoking status					
Never smoker	51.68 [51.56, 51.80]	60.66 [60.56, 60.76]	58.83 [56.89, 60.78]	53.27 [51.37, 55.16]	59.21 [56.81, 61.61]
Former smoker	32.85 [32.74, 32.96]	25.81 [25.71, 25.90]	22.90 [21.24, 24.46]	26.76 [25.08, 28.45]	22.50 [20.46, 24.54]
Current smoker	15.47 [15.37, 15.55]	13.54 [13.46, 13.61]	18.27 [16.74, 19.80]	19.97 [18.45, 21.49]	18.29 [16.40, 20.18]

Note: 95% confidence intervals are shown in brackets.

Table 2: Descriptive overview (percentages) for gender-nonconforming adults by presence of GNID law

	States With No GNID Law (n = 1,274)	States With GNID Law (n = 339)	p
Poor self-rated health	28.65 [26.16, 31.14]	23.01 [18.51, 27.51]	0.04
Identity document laws			
Driver's license gender markers			
Negative law	20.88 [18.64, 23.11]	0.00 [0.00, 0.00]	< 0.001
Neutral law	10.83 [9.12, 12.54]	8.26 [5.31, 11.20]	
Positive law	68.29 [65.73, 70.85]	91.74 [88.80, 94.69]	
Birth certificate gender markers			
Negative law	30.06 [27.54, 32.58]	3.24 [1.35, 5.14]	< 0.001
Neutral law	13.11 [11.25, 14.96]	13.57 [9.91, 17.23]	
Positive law	56.83 [54.11, 59.55]	83.19 [79.18, 87.19]	
Name change publication requirements			
Negative law	23.70 [21.37, 26.04]	3.54 [1.56, 5.52]	< 0.001
Neutral law	50.55 [47.80, 53.30]	43.07 [37.77, 48.37]	
Positive law	25.75 [23.34, 28.15]	53.39 [48.06, 58.73]	
State political climate			
Democratic party legislative control			
No majority in either legislative house	58.99 [56.30, 61.68]	16.47 [12.47, 20.47]	< 0.001
Democratic majority in one house	12.84 [11.01, 14.67]	19.46 [15.19, 23.73]	
Democratic majority in both houses	28.17 [25.71, 30.63]	64.07 [58.90, 69.24]	

Table 2 (cont'd)

Democratic governor	52.76 [50.03, 55.50]	73.95 [69.22, 78.68]	< 0.001
Sociodemographics			
LGBQ+	53.30 [50.55, 56.04]	75.81 [71.13, 80.39]	< 0.001
Race/ethnicity			
White, non-Hispanic	67.90 [65.33, 70.46]	69.03 [64.08, 73.97]	0.37
Black, non-Hispanic	8.08 [6.59, 9.58]	5.31 [2.91, 7.71]	
Hispanic	11.07 [9.34, 12.79]	11.50 [8.09, 14.92]	
Other race, non-Hispanic	12.95 [11.11, 14.80]	14.16 [10.43, 17.89]	
Age in years	44.93 [48.82, 46.03]	35.76 [33.94, 37.57]	< 0.001
Education			
No or some high school	10.63 [8.93, 12.33]	7.69 [4.84, 10.55]	0.02
High school graduate/GED	31.42 [28.86, 33.97]	28.70 [23.85, 33.55]	
Some college	28.43 [25.94, 30.91]	25.74 [21.06, 30.42]	
College graduate	29.53 [27.02, 32.04]	37.87 [32.67, 43.07]	
Currently employed	49.14 [46.39, 51.89]	58.11 [52.83, 63.39]	0.003
Houshold income			
Less than $25,000	48.49 [45.84, 51.34]	38.64 [33.43, 43.85]	0.004
$25,000 to $49,000	22.29 [20.00, 24.58]	25.07 [20.44, 29.71]	
$50,000 or more	29.12 [26.63, 31.62]	36.28 [31.14, 41.43]	
Household composition			
Any children	25.51 [23.11, 27.91]	24.48 [19.88, 29.08]	0.70
Currently married/partnered	42.86 [40.13, 45.58]	36.87 [31.71, 42.04]	0.05

Table 2 (cont'd)

Currently insured	88.54 [86.79, 90.29]	92.92 [90.18, 95.66]	0.02
Smoking status			
Never smoker	57.85 [55.13, 60.56]	64.31 [59.18, 69.43]	0.10
Former smoker	23.23 [20.91, 25.56]	19.76 [15.50, 24.02]	
Current smoker	18.92 [16.76, 21.07]	15.93 [12.01, 19.84]	

Note: 95% confidence intervals are shown in brackets.

hint at some underlying unmeasured difference in the effects of individual gender-affirming policies that cannot be detected through the positive/neutral/negative classification I have utilized, (Du Bois et al. 2018; Goldenberg et al. 2020; Mezey 2020; Gonzales, Tran, and Bennett 2022; Truszczynski et al. 2022) individuals' access to healthcare (Kattari et al. 2015; Hughto et al. 2016; Bakko and Kattari 2020), or level of support in each state for transgender and gender identity issues (Pew Research Center 2022). Using the Movement Advancement Project's gender identity scores, only Arkansas had both a negative score and a GNID policy, while Pennsylvania and Utah had neutral scores, and Virginia had a low score as well as GNID laws. Of states without GNID laws, the overwhelming majority had low or negative gender identity scores.

In addition to differences in gender-affirming policies, states with GNID laws might also share significant differences in political climate, demographics, and socioeconomic status than states without GNID laws. States with GNID laws were significantly more likely to have Democratic Governors (73.95% vs. 52.76), Democratic party control in both legislative houses (64.07% vs. 28.17%), were more likely to have positive driver's license gender marker policies (91.74% vs. 68.29%), positive birth certificate gender marker policies (83.19% vs. 56.83%), as well as positive name change publication requirements (53.39% vs. 25.75%). These significant

differences in policy environments, as well as differences in demographic and economic characteristics of the GNC adults in states with and without GNID laws discussed above, are important to keep in mind when situating my final results in context, as they might have a greater impact on differences in self-rated physical health than individual policies such as GNID laws.

Regression Results

The primary results from each model are presented in Tables 3, 4, and 5, separated across each subpopulation and between three columns for each model. When comparing Akaike information criterion (AIC) and Bayesian information criterion (BIC) across all models, the third was found to be the best fit, leading me to utilize model three to analyze my three hypotheses. There are no significant effects of gender-neutral ID laws for poor self-rated physical health for cisgender men and women (ME = -0.001, $p = 0.324$) and transmasculine and transfeminine adults (ME = -0.037, $p = 0.122$), leading me to accept the first and second hypotheses that there is no overall effect of said laws for these populations. There is, however, significant heterogeneity in the relationship between predictors and health outcomes. Specifically, race and household composition are significant predictors of higher (lower) percentage point increases (decreases) in the probability of poor self-reported health respectively for cisgender adults compared to TGNC adults holding all else constant, while LGBQ identity predicts a significantly larger percentage point increase in the probability of poor health for transfeminine and transmasculine and GNC people than for cisgender men and women.

Hypotheses three is also accepted when using the third model (ME = 0.124, $p = 0.002$). Interestingly, when not including additional gender-identity policy controls in model 2, GNID laws showed no evidence of having a significant attenuating effect (ME = -0.054, $p = 0.151$) in

Table 3: Estimated marginal effects from logistic regression predicting poor self-reported health for cisgender men and women (n = 1,532,206)

	Model 1	Model 2	Model 3
Gender neutral ID law	0.001 [-0.002, 0.004]	-0.001 [-0.004, 0.001]	-0.002 [-0.005, 0.001]
Driver's license gender markers	*Negative law (reference)*		
Neutral law	-	-	-0.005 [-0.011, 0.001]
Positive law	-	-	-0.004 [-0.009, 0.002]
Birth certificate gender markers	*Negative law (reference)*		
Neutral law	-	-	0.003 [-0.001, 0.006]
Positive law	-	-	-0.002* [-0.005, -0.0003]
Name change publication requirements	*Negative law (reference)*		
Neutral law	-	-	-0.004 [-0.008, 0.0004]
Positive law	-	-	0.005 [-0.004, 0.005]
Gender identity	*Cisgender man (reference)*		
Cisgender woman	0.006*** [0.005, 0.007]	-0.006*** [-0.007, -0.005]	-0.006*** [-0.007, -0.005]
LGBQ	0.044*** [0.041, 0.047]	0.023*** [0.020, 0.026]	0.023*** [0.020, 0.026]
Race/ethnicity	*White, non-Hispanic (reference)*		
Black, non-Hispanic	0.037*** [0.035, 0.040]	0.037*** [0.035, 0.040]	0.037*** [0.035, 0.040]
Hispanic	0.051*** [0.049, 0.054]	0.051*** [0.049, 0.054]	0.051*** [0.049, 0.054]
Other race, non-Hispanic	0.037*** [0.034, 0.039]	0.037*** [0.034, 0.039]	0.037*** [0.034, 0.039]
Age 65+	-0.023*** [-0.025, -0.022]	-0.023*** [-0.025, -0.022]	-0.023*** [-0.025, -0.022]

Table 3 (cont'd)	Model 1	Model 2	Model 3
Education	*No or some high school (reference)*		
High school graduate/GED	-0.099*** [-0.102, -0.096]	-0.099*** [-0.102, -0.096]	-0.099*** [-0.102, -0.096]
Some college	-0.126*** [-0.129, -0.123]	-0.126*** [-0.129, -0.123]	-0.126*** [-0.129, -0.123]
College graduate	-0.182*** [-0.195, -0.179]	-0.182*** [-0.185, -0.179]	-0.182*** [-0.195, -0.179]
Currently employed	-	-0.141*** [-0.142, -0.140]	-0.141*** [-0.142, -0.140]
Household income > $50k	-	-0.055*** [-0.057, -0.054]	-0.055*** [-0.057, -0.054]
Household composition			
Any children	-	-0.031*** [-0.033, -0.030]	-0.032*** [-0.033, -0.030]
Currently married/partnered	-	-0.030*** [-0.031, -0.028]	-0.030*** [-0.031, -0.028]
Currently insured	-	0.010*** [0.008, 0.012]	0.010*** [0.008, 0.012]
Smoking status	*Never smoker (reference)*		
Former smoker	-	0.054*** [0.053, 0.057]	0.054*** [0.053, 0.056]
Current smoker	-	0.097*** [0.095, 0.099]	0.097*** [0.095, 0.099]

Note: Estimates are weighted. 95% confidence intervals are shown in brackets.
*$p < .05$; **$p < .01$; ***$p < .001$

the probability of reporting poor health for GNC adults. While neutral and positive driver's license and birth certificate gender marker policies have no significant impact on poor health for any subpopulation, name change publication policies that are neutral lead to a 1 percentage point reduction in the probability of reporting poor health for transmasculine and transfeminine people, and positive name change policies lead to a significant 13.1 percentage point decrease and 20.1 percentage point increase in the probability of reporting poor health for transfeminine and

Table 4: Estimated marginal effects from logistic regression predicting poor self-reported health for transmasculine and transfeminine adults (n = 5,115)

	Model 1	Model 2	Model 3
Gender neutral ID law	-0.034 [-0.083, 0.015]	-0.037 [-0.085, 0.010]	-0.010 [-0.067, 0.048]
Driver's license gender markers	*Negative law (reference)*		
Neutral law	-	-	0.016 [-0.119, 0.150]
Positive law	-	-	0.004 [-0.118, 0.127]
Birth certificate gender markers	*Negative law (reference)*		
Neutral law	-	-	0.040 [-0.036, 0.117]
Positive law	-	-	-0.004 [-0.056, 0.047]
Name change publication requirements	*Negative law (reference)*		
Neutral law	-	-	-0.010* [-0.118, -0.003]
Positive law	-	-	-0.131* [-0.231, -0.031]
Gender identity	*Transmasculine (reference)*		
Transfeminine	-0.006 [-0.031, 0.018]	-0.006 [-0.030, 0.017]	-0.007 [-0.030, 0.017]
LGBQ	0.075*** [0.046, 0.103]	0.046** [0.018, 0.074]	0.044** [0.016, 0.072]
Race/ethnicity	*White, non-Hispanic (reference)*		
Black, non-Hispanic	0.021 [-0.019, 0.062]	0.012 [-0.027, 0.051]	0.013 [-0.025, 0.052]
Hispanic	-0.042*** [-0.082, -0.003]	-0.028 [-0.069, 0.013]	-0.027 [-0.068, 0.014]
Other race, non-Hispanic	0.026* [-0.019, 0.071]	0.013 [-0.029, 0.056]	0.016 [-0.027, 0.058]
Age 65+	0.026 [-0.019, 0.071]	-0.045** [-0.072, -0.018]	-0.044** [-0.071, -0.018]

Table 4 (cont'd)	Model 1	Model 2	Model 3
Education	*No or some high school (reference)*		
High school graduate/GED	-0.136*** [-0.180, -0.092]	-0.082*** [-0.122, -0.043]	-0.081*** [-0.121, -0.042]
Some college	-0.184*** [-0.229, -0.140]	-0.118*** [-0.159, -0.078]	-0.118*** [-0.159, -0.077]
College graduate	-0.253*** [-0.297, -0.209]	-0.153*** [-0.195, -0.110]	-0.151*** [-0.194, -0.108]
Currently employed	-	-0.156*** [-0.180, -0.131]	-0.156*** [-0.181, -0.132]
Household income > $50k	-	-0.101*** [-0.127, -0.075]	-0.101*** [-0.127, -0.085]
Household composition			
Any children	-	-0.053*** [-0.082, -0.025]	-0.053*** [-0.081, -0.025]
Currently married/partnered	-	-0.007 [-0.032, 0.017]	-0.007 [-0.032, 0.017]
Currently insured	-	0.009 [-0.027, 0.045]	0.009 [-0.028, 0.045]
Smoking status	*Never smoker (reference)*		
Former smoker	-	0.087*** [0.058, 0.115]	0.008*** [0.059, 0.115]
Current smoker	-	0.083*** [0.053, 0.113]	0.083*** [0.053, 0.113]

Note: Estimates are weighted. 95% confidence intervals are shown in brackets.
*$p < .05$; **$p < .01$; ***$p < .001$

transmasculine and GNC people respectively. The negative impact on self-reported health for positive name change policies among GNC individuals is unexpected, as research has shown that chosen name use among TGNC people may be associated with sizable reductions in negative health outcomes (Pollitt et al. 2021), and may be related to the relatively small sample size of GNC individuals in states with GNID laws (n = 339), significant differences among the policies relating to legal name changes, or some other unmeasured difference or data limitations.

Furthermore, name change publication policies that are neutral (ME = -0.096, p = 0.042)

Table 5: Estimated marginal effects from logistic regression predicting poor self-reported health for gender-nonconforming adults (n = 1,602)

	Model 1	Model 2	Model 3
Gender neutral ID law	-0.061 [-0.136, 0.014]	-0.054 [-0.128, 0.020]	-0.124** [-0.201, -0.047]
Driver's license gender markers	*Negative law (reference)*		
Neutral law	-	-	-0.140 [-0.367, 0.087]
Positive law	-	-	-0.119 [-0.336, 0.098]
Birth certificate gender markers	*Negative law (reference)*		
Neutral law	-	-	-0.00001 [-0.141, 0.141]
Positive law	-	-	0.089 [-0.006, 0.184]
Name change publication requirements	*Negative law (reference)*		
Neutral law	-	-	0.015 [-0.104, 0.134]
Positive law	-	-	0.201** [0.050, 0.352]
LGBQ	0.156*** [0.111, 0.202]	0.141*** [0.095, 0.187]	0.145*** [0.099, 0.191]
Race/ethnicity	*White, non-Hispanic (reference)*		
Black, non-Hispanic	0.030 [-0.057, 0.116]	0.046 [-0.043, 0.135]	0.046 [-0.042, 0.137]
Hispanic	0.023 [-0.047, 0.094]	0.030 [-0.041, 0.100]	0.025 [-0.044, 0.095]
Other race, non-Hispanic	0.082* [0.010, 0.155]	0.064 [-0.004, 0.132]	0.059 [-0.010, 0.127]
Age 65+	0.100** [0.036, 0.164]	0.039 [-0.026, 0.103]	0.044 [-0.021, 0.108]
Education	*No or some high school (reference)*		
High school graduate/GED	-0.169*** [0.0259, -0.078]	-0.118** [-0.204, -0.032]	-0.120** [-0.206, -0.035]
Some college	-0.198*** [-0.291, -0.105]	-0.134** [-0.224, -0.044]	-0.132** [-0.222, -0.043]

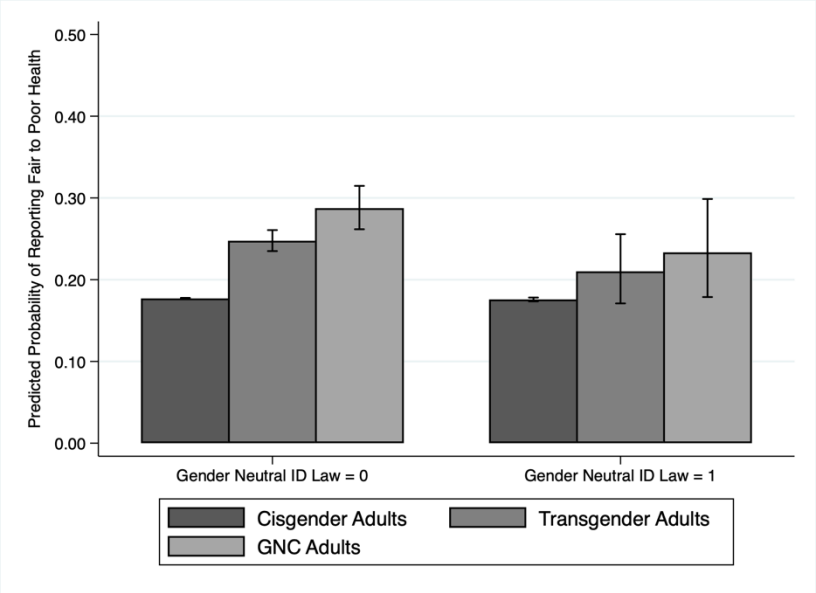
Table 5 (cont'd)	Model 1	Model 2	Model 3
College graduate	-0.296*** [-0.385, -0.208]	-0.215*** [-0.303, -0.126]	-0.217*** [-0305, -0.130]
Currently employed	-	-0.093*** [-0.138, -0.048]	-0.087*** [-0.132, -0.042]
Household income > $50k	-	-0.095*** [-0.142, -0.048]	-0.095*** [-0.142, -0.048]
Household composition			
Any children	-	-0.049 [-0.142, -0.048]	-0.047 [-0.096, 0.003]
Currently married/partnered	-	0.054* [0.009, 0.099]	0.051* [0.007, 0.096]
Currently insured	-	0.004 [0.009, 0.099]	0.002 [-0.065, 0.069]
Smoking status		*Never smoker (reference)*	
Former smoker	-	0.080** [0.027, 0.134]	0.083** [0.029, 0.137]
Current smoker	-	0.137*** [0.079, 0.196]	0.134*** [0.082, 0.198]

Note: Estimates are weighted. 95% confidence intervals are shown in brackets.
*$p < .05$; **$p < .01$; ***$p < .001$

or positive (ME = -0.131, $p = 0.010$) lead to significant percentage point decreases in poor self-rated physical health for transmasculine and transfeminine adults, although there is no significant gender-affirming impact from neutral and positive birth certificate and driver's license gender marker policies. Overall, the marginal effects are qualitatively identical for all sociodemographic controls between the three models, which is supported by their relatively similar AIC and BIC scores.

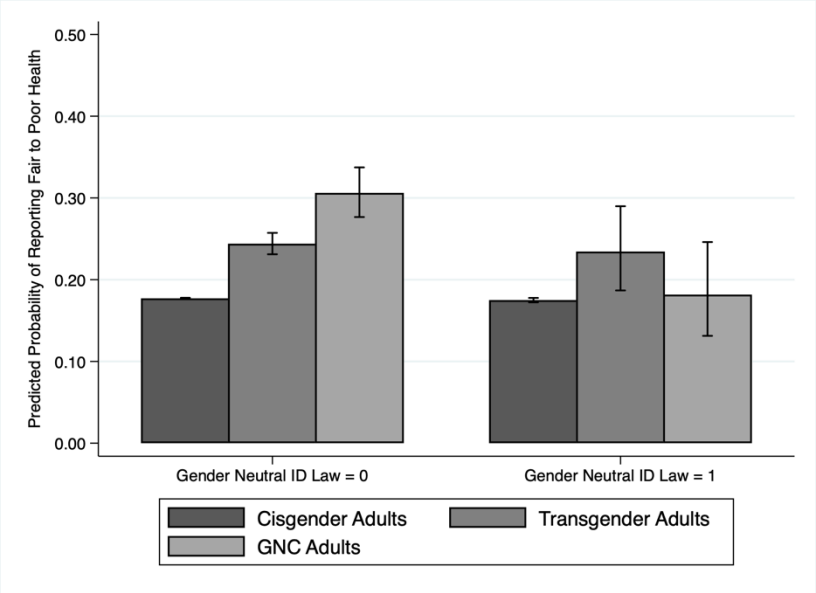
Finally, Figures 1 and 2 present the average predicted probabilities derived from models two and three respectively for fair to poor health. Consistent with findings from marginal effects from the second model, there are no significant differences in the probability of reporting poor health for cisgender adults (0.175 vs. 0.178), transfeminine and transmasculine people (0.210 vs.

Figure 1: (Model 2) Predicted probabilities of reporting poor health by presence of GNID laws



0.248), and GNC people (0.233 vs. 0.287) residing in states with GNID laws compared to those without. Using the third model, however, GNC adults in states with GNID laws have a significantly lower probability of reporting a health disadvantage (0.182) than GNC adults in untreated states (0.306). Cisgender adults (0.175 vs. 0.177) and transgender adults (0.234 vs. 0.244) do not have significantly different probabilities, however. The significant disparity in results across models is further shown with these predicted probabilities, and potentially suggest that GNID laws and other identity document policies are correlated with each other or with some other omitted variable. Further research should consider different ways of measuring gender-affirming policies that might play an important role in alleviating poor health among TGNC individuals when considering the merit of gender-neutral ID laws as gender-affirming policies.

Figure 2: (Model 3) Predicted probabilities of reporting poor health by presence of GNID laws



DISCUSSION

This study uses a large sample of cisgender, transgender, and gender-nonconforming adults to examine disparities in health across each population, and to investigate whether gender-neutral ID laws that allow individuals to alter their sex/gender marker on their driver's license to 'X' serve as a gender-affirming policy that might have any attenuating effect on poor self-reported physical health for GNC adults. I examined differences in demographic and socioeconomic characteristics across gender identities as well as between GNC adults who live in states with and without GNID laws. All three of my hypotheses are supported by an examination of descriptive statistics and analytical modeling. Consistent with previous research, TGNC individuals are significantly more likely to report poor health and decreased socioeconomic stability than their cisgender peers. GNC adults in states with GNID also report significant differences in demographic characteristics and poor health compared to GNC individuals in states without GNID laws.

When controlling for important demographic and economic factors as well as state-level gender-affirming policies, I find that GNID laws are associated with a 12.4 percentage point reduction in the probability of reporting poor physical health for GNC adults. Neither cisgender men and women nor transmasculine and transfeminine adults had any significant associated decreases in self-reported poor physical health, supporting my assumption that GNID laws are likely to be targeted towards and beneficial to GNC adults. These findings are also supported by plotted predicted probabilities obtained from the third model. This may suggest that GNID laws serve as gender-affirming policies that prevent stigma similar to other gender-affirming practices (Hughto, Residner, and Pachankis 2015; Lelutiu-Weinberger, English, and Sandanapitchai 2020; Dorsen et al. 2022), policies (Goldenberg et al. 2020; Gonzales, Tran, and Bennett 2022; Scheim

et al. 2022l; Trusczczynski et al. 2022), and access to other gender-concordant documents (Hill et al. 2018; Loza et al. 2021; Goetz and Arcomano 2021). While there is disagreement among GNC adults as to the importance or necessity for gender-neutral gender markers (Goetz and Arcomano 2021), my findings suggest that GNID laws that allow GNC adults to have at least one gender-concordant document might have important implications for self-rated physical health in spite of expressed concerns (Saguy 2023).

Limitations

It is important to note that these findings come with a number of important limitations that might have inflated the association between GNID laws and improvements in self-rated physical health among GNC adults. This study only examines the association between said policies and self-rated physical health, not causal relationships; since the Behavioral Risk Factor Surveillance System surveys are cross-sectional and not longitudinal, it is impossible to establish that there is a causal relationship between the enaction of GNID laws and any subsequent change in self-reported physical health. Health and demographic data are self-reported, which might lead to my results being affected by poor memory recall or social desirability bias. Previous studies have also noted that BRFSS data suffers from potential mismeasurement and underreporting that similar surveys of TGNC populations also face (Tordoff, Andrasik, and Hajat 2019; Cicero et al. 2020; Lett and Everhart 2022), leading to potentially skewed results. Issues with the BRFSS-provided raked weights (Lett and Everhart 2022) and the fact that only 43 states adopted the optional SOGI module between 2014 and 2021 also do not allow my results to be representative nationally.

The ability of the 2014-15 BRFSS' gender identity questions to provide information about respondents' sex has also come under scrutiny when identifying transgender respondents

because survey interviewers initially assess respondents' sex based on their interpretation of the timbre of a respondent's voice as opposed to asking about sex assigned at birth (Lagos 2019). Additionally, since BRFSS does not ask respondents whether they identify as gender-nonconforming unless they identified as transgender during the interview, and the survey does not allow gender-nonconforming individuals to select multiple gender identities that may reflect their true experience with gender, this study makes claims only about those gender-nonconforming respondents who explicitly identify as transgender and who identify more closely with a gender-nonconforming identity than with another label that was not included. Finally, LGBTQ legislation and anti-trans laws are rapidly changing, and their complicated nature make it almost impossible to operationalize as variables, making it difficult to control for all negative, neutral, and positive policies across the 43 states included in my sample.

CONCLUSION

This study is one of the first to examine the association between gender-neutral ID laws and self-reported physical health among GNC adults. My findings support previous research that has shown that transgender and gender-nonconforming adults report worse physical health than their cisgender peers (Lagos 2018; Scheim et al. 2022), and contribute to the literature by showing stark differences in demographic and economic characteristics among GNC adults in states with and without GNID laws. I also find some promising evidence that GNID laws are associated with a significant reduction in the probability of reporting poor physical health for GNC adults. My study faces a number of structural limitations currently present in the limited data that include TGNC adults, as well as complications from how difficult it is to track and operationalize rapid changes in LGBTQ+ related policies and the current flurry of anti-trans laws that have been circulating through state legislative bodies.

The literature would benefit from future qualitative research targeting GNC individuals with and without gender-neutral ID markers to understand why or why not they serve to affirm one's gender. Additional data would allow researchers to further explore better ways of measuring and controlling for additional gender-affirming policies that might have conflated or confounded my results, as well as what the rate of uptake is for GNID policies both among the GNC population and across other gender minority individuals. Finally, this research could be utilized to develop a conceptual framework to understand how broad social policies serve to directly influence embodied experiences of marginalization.

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