



Gender Dysphoria and Sexual Well-Being Among Trans Masculine and Nonbinary Individuals

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Abstract

Prior qualitative research has noted that gender dysphoria impacts sexual engagement and satisfaction for many trans masculine and nonbinary individuals. As such, the current cross-sectional study aimed to investigate the exact relations between distinct aspects of gender dysphoria (i.e., genital, chest, other secondary sex characteristics, and social) and engagement in, and enjoyment of, specific sexual acts. To achieve this aim, a sample of 141 trans masculine and nonbinary participants who were assigned female at birth and whom had not undertaken a medical transition were recruited. Participants were identified as trans masculine ($n=52$), nonbinary ($n=72$), and agender ($n=17$). Participants completed a survey rating both body and social gender dysphoria and their engagement and enjoyment of receptive and performative roles across six partnered sex act domains (i.e., insertion, oral sex, sex toys, manual stimulation, nipple stimulation, and anal stimulation), as well as masturbation and noncoital activities. The overall results demonstrated that gender dysphoria is more salient to sexual acts that involve receiving versus providing sexual pleasure. In addition, genital and chest dysphoria were often significantly related to lower ratings of engagement and enjoyment. These results support the understanding that trans masculine and nonbinary individuals are likely negotiating sexual encounters to avoid sexual acts that involve areas of their body they find most distressing and marks an important area for future interventions and research.

Keywords Gender dysphoria · Nonbinary · Sexual well-being · Transgender

Introduction

Individuals whose sexual needs are met report increased happiness and overall well-being (Cheng & Smyth, 2015; Lee et al., 2016). Improving sexual well-being, which is inclusive of engagement and enjoyment of specific sexual acts, is an important avenue for increasing global well-being. For transgender and nonbinary (TNB) individuals, most research has framed an understanding of sexual well-being by focusing on potential improvements believed to accompany medical transition steps such as hormone therapy, gender affirming surgery, or other interventions. Research has indicated that prior to initiating a medical transition, TNB individuals are less likely than cisgender

individuals to engage in sexual activities (Bunger et al., 2017) and report lower levels of sexual satisfaction than TNB individuals who have initiated a medical transition (Bartolucci et al., 2015). After the initiation of medical transition steps, studies have indicated that TNB individuals report increased sexual satisfaction (e.g., Ruppin & Pfäfflin, 2015), orgasm (e.g., Wierckx et al., 2011), and frequency of sex (e.g., Costantino et al., 2013). Given that gender dysphoria is often a criteria for initiating medical transition, it is not surprising that the positive relation between medical transition and sexual well-being is assumed to be the result of reduced gender dysphoria (Coleman et al., 2012; Nikkelen & Kreukels, 2018). Yet, the relation between gender dysphoria and sexual well-being has not been directly tested in quantitative studies. Further, the focus on medical transitions within sex research has meant that our understanding of the sexual experiences of nonmedically transitioned TNB individuals remains limited (Bradford & Spencer, 2020; Nieder et al., 2020). As such, there is a need for research that captures the nuances of gender dysphoria and how it is directly related to sexual activity and enjoyment prior to medical transition.

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Gender Dysphoria

Most generally, gender dysphoria can be defined as distress or discomfort experienced when an individual's gender identity does not fit with societal expectations of their assigned sex (Coleman et al., 2012; Riggs et al., 2015). Gender dysphoria is a broad term that is often used to refer to both a diagnosis and a symptom (Byne et al., 2018). When Gender Dysphoria is utilized as a diagnosis, it is a dichotomous construct where the individual either does or does not meet diagnostic criteria (American Psychiatric Association [APA], 2013).¹ Conversely, when gender dysphoria is viewed as a symptom, it is a continuous construct (Castellini, 2017; Cohen-Kettenis & van Goozen, 1997; Deogracias et al., 2007; Fisk, 1974) which recognizes varying degrees of severity both within and across individuals (de Vries & Cohen-Kettenis, 2012; Pulice-Farrow et al., 2020; Schneider et al., 2016).

Prior research on the experiences of TNB individuals regarding specific sexual acts has considered the diagnostic view of Gender Dysphoria. These studies often utilize Gender Dysphoria as an inclusion criterion for sample enrollment (Bartolucci et al., 2015; Bungener et al., 2017; Kerckhof et al., 2019; Wierckx et al., 2014). Utilizing gender dysphoria in this way reduces the multifaceted construct into a unimodal assessment of "transness" (Ashley, 2021). The results of such studies do not provide meaningful information about how gender dysphoria relates to sexual outcomes, but rather they indicate the expected sexual outcomes for clinically diagnosed TNB individuals. This limits the ability of researchers to document how gender dysphoria, as it is experienced, is related to sexual well-being. In order to develop a clearer understanding of the possible impact of gender dysphoria on sexual well-being, the current study views gender dysphoria as continuous construct.

While there remains debate about whether the source of the distress of gender dysphoria stems from gender incongruence between the individual and their body or from stigma associated with a cisnormative society (Riggs et al., 2015), recent literature has recognized that gender dysphoria can be conceptualized as relating to both body and social experiences (see Jones et al., 2019b; Galupo et al., 2020; Hill-Meyer & Scarborough, 2014; Lindley & Galupo, 2020; Riggs & Bartholomaeus, 2018; Winters & Ehrbar, 2010). Body gender dysphoria encompasses the distress an individual experiences because of the difference between their felt gender and their body and is the intrapersonal aspect of gender dysphoria (Pulice-Farrow et al., 2020). Body gender dysphoria has been conceptualized in relation to three bodily locations: genital, chest, and other secondary sex characteristics (Jones et al., 2019a). Social gender dysphoria represents the distress that occurs when there is a difference between an

individual's felt gender and their social context and represents the interpersonal aspect of gender dysphoria (Galupo et al., 2020). The social context can include the presence of gendered social roles, how a person's gender is read by others, as well as how their gender is affirmed (i.e., social recognition and support of gender identity) or invalidated by others in communication. Despite the conceptual differences between body and social gender dysphoria, it is important to acknowledge that for TNB individuals, the two experiences may not be easily disaggregated. When an individual is engaged in partnered sex, for example, social context may become salient to the experience of genital dysphoria when a partner uses certain language to refer to a body part, or when a partner expects that sexual interactions follow a gendered script.

Gender Dysphoria and Sexual Well-Being

The World Health Organization (WHO; 2015) defines sexual health as "a state of physical, emotional, mental and social well-being in relation to sexuality [that] is not merely the absence of disease [or] dysfunction" (p. 5). Yet, TNB individuals' sexual well-being is most often studied from a medicalized model, which applies medical treatments (e.g., medical transition steps) to nonmedical conditions (e.g., sexual well-being) and fails to account for the emotional and social aspects of sexual encounters (Bradford & Spencer, 2020; Lindley et al., 2022; Prunas, 2019; Ryan, 2020). Further, this literature has necessarily overemphasized the sexual well-being of trans feminine individuals as they more frequently seek out medical transition processes than trans masculine or nonbinary individuals (Factor & Rothblum, 2008; Scheim & Bauer, 2015). Consequently, the experiences of trans masculine and nonbinary individuals remain an understudied area of research.

The few studies that have sought to understand how gender dysphoria informs the sexual well-being of trans masculine and nonbinary individuals in ways that align with the WHO's more holistic understanding of sexual health have all been qualitative in design. Together, these studies provide a nuanced, yet preliminary, understanding of the ways that trans masculine and nonbinary individuals creatively negotiate their sexual well-being as a way to cope with their gender dysphoria. Across studies, participants describe how gender dysphoria impacts their engagement with particular sexual acts such as masturbation, oral sex, and anal stimulation. For example, many describe placing strict boundaries to limit sexual activity involving specific body parts, such as their chest or genitals, as well as their engagement with specific sexual acts, such as insertion or nipple stimulation (e.g., Anzani et al., 2021; Lindley et al., 2021; Martin & Coolhart, 2022).² Sexual engagement for trans masculine and nonbinary

¹ To avoid conflation of the terms in the current article, Gender Dysphoria is utilized to refer to the diagnosis and lowercase Gender Dysphoria to refer to the symptom.

² We are intentional in using insertion to refer to sexual acts which involve an object (i.e., sex toy, finger, penis, etc.) being inserted into a bodily cavity (i.e., vagina or anus) rather than penetration to avoid the connotation that penetration involves only a penis and vagina (Davies & Baker, 2015).

individuals, then, can be understood as the result of strategic negotiation of specific sexual acts that present differently for each individual in relation to where on the body distress is located. However, as qualitative research is limited in its ability to generalize findings, there is a need to quantitatively test the relation between aspects of gender dysphoria and sexual act engagement.

Trans masculine and nonbinary individuals have also discussed gender dysphoria in the context of both sexual dissatisfaction and sexual satisfaction, which represent overall evaluations of sexual acts. When describing experiences of sexual dissatisfaction, participants note that body gender dysphoria is linked to a need to mentally disconnect, which prevents individuals from staying in the moment during sex (Lindley et al., 2020). Conversely, feeling comfortable with their bodies was a component of sexual satisfaction (Lindley et al., 2021). Together these qualitative findings suggest that trans masculine and nonbinary individuals who experience high levels of chest or genital gender dysphoria are likely to find reduced enjoyment of specific sexual acts; however, there is a need to test this hypothesis with representative samples and quantitative methods.

Trans masculine and nonbinary individuals have additionally described how social gender dysphoria may impact their enjoyment of specific sexual acts. For instance, trans masculine and nonbinary individuals have described the ways in which supportive partners can assist them in overcoming their gender dysphoria during sexual acts, which contributed to sexual satisfaction (Pulice-Farrow et al., 2019). Specifically, partners can utilize gender affirming language (e.g., “testodick,” front hole) and sexual roles (e.g., “topping”) thereby increasing gender affirmation and reducing experiences of both body and social gender dysphoria (Riggs & Bartholomaeus, 2018). However, not all TNB individuals experience gender affirmation during sex which may increase experiences of social gender dysphoria and subsequently result in less sexual satisfaction (Galupo et al., 2020). Research with trans feminine individuals has indicated that social dysphoria can impact sexual experiences (Doorduyn & van Berlo, 2014; Lindroth et al., 2017). Among trans masculine and nonbinary individuals, the limited qualitative research suggests that social gender dysphoria may negatively impact enjoyment of specific sex acts as well; however, there is a need to test this proposed hypothesis.

Current Study

The present cross-sectional study focuses on nonmedically transitioned trans masculine and nonbinary individuals’ sexual well-being in relation to gender dysphoria. We conceptualized sexual well-being as being composed of both engagement with, and enjoyment of, specific sexual acts. Further, we conceptualized gender dysphoria as a multifaceted construct composed of both specific bodily aspects (i.e., chest, genitals, and other secondary sex characteristics), as well as a social component. In order to contextualize our participants’ experiences of gender dysphoria,

we include a comparison with a clinical sample (Jones et al., 2019a) that completed the Gender Congruence and Life Satisfaction Scale.

Qualitative research has suggested that gender dysphoria likely affects receptive sexual acts more than performative acts and that aspects of gender dysphoria impact specific sexual acts differently (Anzani et al., 2021; Galupo et al., 2020; Lindley et al., 2020; Martin & Coolhart, 2022). Therefore, it was hypothesized that genital and chest gender dysphoria would be uniquely related to specific receptive sexual acts as they are related to specific body parts. In particular, we expected that the results of independent samples t-test would indicate that individuals who abstained from receiving insertion, oral sex, sex toys, or manual stimulation have higher ratings of genital gender dysphoria (H1) and individuals who abstained from receiving nipple stimulation would have higher ratings of chest gender dysphoria ratings (H2). There were no specific a priori hypothesis regarding other secondary sex characteristics and social gender dysphoria with regard to engagement with specific sexual acts.

Prior research has indicated that both body and social gender dysphoria are components of sexual satisfaction (Lindley et al., 2020, 2021; Martin & Coolhart, 2022; Pulice-Farrow et al., 2019). As such, it was expected that specific types of gender dysphoria would be uniquely related to the subjective ratings of enjoyment of specific receiving sexual acts. In particular, we expected that the results of Pearson’s correlations would indicate that enjoyment ratings for receiving insertion, manual stimulation, sex toys, or oral sex would be negatively related to genital gender dysphoria ratings (H3) and enjoyment ratings for receiving nipple stimulation would be negatively related to chest gender dysphoria ratings (H4). Additionally, we expected that if ratings of social gender dysphoria were related to a sexual act, that relation would be negative (H5). Again, there were no specific a priori hypothesis regarding other secondary sex characteristics in relation to enjoyment of specific sexual acts.

Method

Sample Overview

We use the phrase “trans masculine and nonbinary” to refer to our sample of participants who were assigned female at birth and who have not undertaken a medical transition. While we recognize that this categorization includes individuals with diverse gender identities such as man, trans man, trans masculine, nonbinary, and agender, this category also reflects shared experiences these individuals may have with their bodies during sex. In this way, we are invoking the understanding that an individual’s gender socialization and sex characteristics cannot always be disentangled (van Anders, 2015). This concept of gender/sex is especially salient to the study of sexual engagement of TNB individuals which involves the negotiation of body parts that are both

gendered (Nagoshi & Brzuzy, 2010) and sexualized (Flores et al., 2018). Riggs and Due (2013) have noted that TNB individuals who share an assigned sex tend to have more similarities, than differences, due to societal cisnormative expectations of the individual and their body, regardless of their gender identity. As the current sample of participants have not undergone any medical transition steps, they all share similar body parts and thus when they engage in sexual encounters, their bodies are likely used in similar ways. Grouping trans masculine and nonbinary individuals who have a shared assigned sex allows for the simultaneous recognition of heterogeneous gender expression and shared bodily experience that inform our participants' sexual well-being (Riggs et al., 2020). In order to support our grouping decision, we conducted initial chi-square tests and independent samples *t* tests to confirm that there were no significant differences in any of the sexual act engagement (*p* between 0.189 and 0.885) or enjoyment (*p* between 0.192 and 0.922) outcomes across gender identity (trans masculine, nonbinary, and agender).

Further, we chose to include only participants who had not yet undertaken a medical transition or did not desire a medical transition as prior research has noted that medical transition steps can improve both gender dysphoria (van de Grift et al., 2017) and sexual well-being (e.g., Cardoso da Silva et al., 2016; Costantino et al., 2013; Hess et al., 2014; Ruppim & Pfäfflin, 2015). As such, the current study provides a baseline understanding of the relation between gender dysphoria and sexual well-being.

Participants

A total of 296 participants who identified as being assigned female at birth completed the cross-sectional survey. However, 155 participants responded "yes" they had undertaken at least one medical transition step (e.g., hormone therapy, nonsurgical cosmetic procedures, and/or gender affirmation surgeries) and were removed from analysis. This left a final sample size of 141 participants, of whom 29.1% (*n* = 41) responded "no" or "not interested" in any medical transition steps and 70.9% (*n* = 100) responded "not yet/ in my future plans" to at least one medical transition step. Participants identified as trans masculine (*n* = 52), nonbinary (*n* = 72), and agender (*n* = 17) and ranged in age from 18 to 54 with 58.9% of participants being between the ages of 18 and 24. There was limited ethnic diversity within the sample, where 73.8% identified as White and 26.2% as a racial/ethnic minority. Most participants were located in North America and Western Europe when they completed the survey (see Fig. 1). The most frequently endorsed sexual identities were bisexual (24.1%), pansexual (22.0%), and queer (17.7%). For full participant demographics, see Table 1.

Participants were recruited from announcements posted to social networking websites focusing on sexual and gender minority communities. These online resources included Reddit threads focused on trans identities, as well as Facebook pages dedicated to trans research or trans support groups. The recruitment flyer

disclosed the purpose of the study (i.e., to gain a better understanding of how gender experiences and gender dysphoria may or may not interact to impact levels of sexual well-being), inclusion criteria (i.e., at least 18 years old and identified as trans, nonbinary, or with a trans history or status), as well as the contact information of the primary investigator. The flyer additionally stated the primary investigator's TNB identity, as well as how TNB individuals were involved with survey design to improve trust with TNB communities and utilize best practice techniques regarding recruitment (see Tebbe & Budge, 2016). The majority of our participants were recruited through Facebook (54.7%), followed by Reddit (35.8%), Tumblr (5.6%), through a friend (2.8%), or via other means (1.1%). All data were collected during the month of September 2019. The survey was only provided in English; however, participants were not restricted by geographical location.

Procedure

Participants completed an online survey with no incentive provided for participation. The survey began with an informed consent document followed by demographic questionnaire, measure items, open-ended questions, and concluded with a prompt thanking the participants and provided them with an opportunity to leave suggestions to improve future studies. In order to check the quality of our data and to ensure participants remained consistent in their responses, we assessed gender identity at three different points during the demographics questions. First, participants indicated that they fit our inclusion criteria and identified within the TNB community. Second, participants selected which gender label best fit their identity using a forced-choice gender option (i.e., trans feminine, trans masculine, nonbinary, agender). Third, participants provided their gender identity via a write in response. Responses were then checked to ensure that all participants were assigned female at birth and that their responses were congruent across the three gender identity prompts, with results indicating that no responses were discrepant. Thus, all remaining 114 participants were included in the current analysis.

Measures

Gender Dysphoria

Gender dysphoria was measured using the Gender Congruence (GC) subscale of the Gender Congruence and Life Satisfaction Scale (GCLS; Jones et al., 2019a). The GC subscale assesses gender dysphoria during the last six months, contains 17 items, and is composed of four subscales: genitals, chest, other secondary sex characteristics, and social gender role recognition. The genitals subscale contains six items focused on how an individual relates to their genitals, an example item is "I have felt that my genitals do match with my gender identity." The chest subscale contains four



Fig. 1 Graphic representation of the geographical location of the respondents to the questionnaire

items concerning how an individual relates to their chest, an example item is “I have felt extremely distressed when looking at my chest.” The other secondary sex characteristics subscale contains three items focused on how an individual relates to their hair and voice, an example item is “I have felt that my facial hair conflicts with my gender identity, either because I have it and do not like it or because I would like to have it.” Finally, the social gender role recognition subscale contains four item concerning how an individual relates to social readings of their gender, an example item is “I have found it distressing that others do not address me according to my gender identity.” All subscale items are on a 5-point scale from 1 (*always*) to 5 (*never*), with items averaged to obtain subscale scores. All subscales were reversed scored so that low scores reflected lower severity of gender dysphoria. All subscales showed acceptable internal consistency: genitals $\alpha = 0.79$, chest $\alpha = 0.91$, other secondary sex characteristics $\alpha = 0.75$, and social $\alpha = 0.78$.

Sexual Act Engagement and Enjoyment

The measure for sexual act engagement and enjoyment was created for this study. Sexual activity was measured

via receptive and performative roles across six partnered sex act domains (i.e., insertion, oral sex, sex toys, manual stimulation, nipple stimulation, and anal stimulation), as well as masturbation and noncoital activities during the last six months (see “Appendix”). The sexual acts assessed represented common sexual acts and were categorized into both receptive and performative acts. Participants responses were recorded in a yes (1) or no (0) format. If a participant indicated that they had engaged in a specific sexual act, they were then asked “if the experience was enjoyable” and answered on a 5-point scale from 0 (*strongly disagree*) to 4 (*strongly agree*). Additionally, all participants were asked if they perceived sexual activity overall as pleasurable on a 5-point scale from 0 (*strongly disagree*) to 4 (*strongly agree*).

Data Analysis

Data were analyzed with SPSS version 26. First, the data were screened for univariate outliers, as well as skewness and kurtosis. Current participants’ ratings of gender dysphoria were then compared to a clinical sample who had completed the Gender Congruence and Life Satisfaction

Table 1 Participant demographics ($N = 141$)

	% (n)
<i>Age Range</i>	
18–24	58.9 (83)
25–34	30.5 (43)
35–44	8.5 (12)
45–54	2.1 (3)
<i>Gender Identity</i>	
Trans Masculine	36.8 (52)
Nonbinary	51.1 (72)
Agender	12.1 (17)
<i>Race/Ethnicity</i>	
American Indian/Alaskan Native	1.4 (2)
Asian/Asian American	2.1 (3)
Biracial/Multiracial	7.8 (11)
Black/African American	2.1 (3)
Hispanic/Latinx	2.8 (4)
White/Caucasian	73.8 (104)
No Answer	5.0 (7)
Other	5.0 (7)
<i>Education Level</i>	
Less Than High School	1.4 (2)
High School Degree/GED	46.1 (65)
2 Year Degree	12.1 (17)
4 Year Degree	21.3 (30)
Professional Degree	15.6 (22)
Doctorate/Terminal Degree	3.5 (5)
<i>Sexual Identity</i>	
Asexual	15.6 (22)
Bisexual	24.1 (34)
Fluid	1.4 (2)
Gay	5 (7)
Heterosexual	2.1 (3)
Lesbian	4.3 (6)
Pansexual	22.0 (31)
Queer	17.7 (25)
Other	7.8 (11)

Scale to contextualize their level of distress. Next, to test hypotheses one and two, independent samples t -tests were conducted to determine if there were significant differences within aspects of gender dysphoria ratings between those who did and did not engage with specific sexual acts. Considering the large number of independent samples t -tests that were conducted, interpretation of statistical significance was derived from both null hypothesis significance tests and effect sizes with corresponding confidence intervals (Lee, 2016). Finally, to test hypothesis three through five, Pearson's correlations were conducted to determine if there were significant relations between aspects of gender dysphoria and ratings of sexual act enjoyment.

RESULTS

Data Screen

No significant outliers nor any missing values were discovered when evaluating the assumptions of univariate normality. However, all 15 measures of enjoyment did display negative skew (values between -2.43 and -0.85) and kurtosis (values between 0.00 and 7.00). The negative skew of enjoyment items should be expected assuming that most individuals who engage in a sexual act are likely to report enjoying the act. Further, the items did not meet the level of significant skewness (absolute value greater than 3) or kurtosis (absolute value greater than 10; Kline, 2011).

Descriptive Findings for Gender Dysphoria

To assess levels of gender dysphoria, participants were split into two groups: those who expressed no desire for medical transition steps (no desire, $n = 41$) and those who expressed a desire to undertake medical transition steps in the future (future plans, $n = 100$). Participants in both groups endorsed the greatest distress with chest and social gender dysphoria and the least distress with genitals and other secondary sex characteristics (see Table 2). The means and standard deviations from these groups were then compared to those of a clinical sample of trans masculine individuals ($n = 46$) who had similarly not undergone medical transition steps, but who were seeking such interventions, and had completed the Gender Congruence and Life Satisfaction Scale (Jones et al., 2019a). This comparison allowed for an understanding of gender dysphoria levels for the current community-based sample in relation to a clinical sample seeking medical transition, as well as a comparison between individuals with differing desires for medical transitions. Participants in the current study endorsed significantly lower ratings of genital ($\eta^2_p = 0.25$ [95% CI: 0.15, 0.35]), chest ($\eta^2_p = 0.37$ [95% CI: 0.26, 0.46]), and other secondary sex characteristics gender dysphoria ($\eta^2_p = 0.25$ [95% CI: 0.14, 0.34]), with large effect sizes found for each comparison. Tukey's HSD post hoc comparisons indicated that for each bodily focused location of gender dysphoria, trans masculine individuals from the comparison clinical sample indicated significantly more distress than did participants in either group of the current study ($p < 0.001$), and current participants who indicated a future plan for medical transition steps indicated significantly more distress than participants with no desire ($p < 0.05$). Individuals in all three groups demonstrated comparable scores for social gender dysphoria.

Descriptive Findings for Sexual Engagement and Enjoyment

Descriptive findings for sexual engagement and enjoyment can be found in Table 3. One hundred and thirty-three

Table 2 Differences in gender dysphoria ratings of current participants compared to a clinical sample

	Current Sample		Clinical Sample		
	No Desire ^a (<i>n</i> = 41)	Future Plans ^b (<i>n</i> = 100)	(<i>N</i> = 46)	<i>F</i> (2, 184)	η^2_p
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)		
Genitalia	1.98 (0.69)	2.61 (0.99)	3.51 (0.93)	31.01*	0.25
Chest	2.73 (0.87)	3.97 (0.83)	4.46 (0.66)	54.39*	0.37
Other Secondary Sex Characteristics	2.50 (0.88)	3.02 (1.06)	4.09 (0.91)	30.19*	0.25
Social Gender Role Recognition	3.35 (0.64)	3.53 (0.65)	3.37 (0.76)	1.47	–

^aParticipants who expressed no desire for medical transitions steps

^bParticipants who expressed a desire to undertake medical transition steps in the future

**p* < .001

participants (94.33%) indicated that they had engaged in at least one sexual act during the previous six months. Frequencies of engagement differed across specific sexual acts for both receiving and performing. For receptive acts, participants most often engaged in manual stimulation (62.4%), insertion (57.4%), and nipple stimulation (56.7%) and less often engaged in anal stimulation (14.2%). Notably, the most enjoyed sexual acts were sex toys ($M = 3.65$, $SD = 0.74$), anal stimulation ($M = 3.50$, $SD = 0.83$), and insertion ($M = 3.36$, $SD = 0.83$) with the least enjoyed being nipple stimulation ($M = 2.78$, $SD = 1.24$). Thus,

participants' actual engagement in receptive sexual acts did not align with their enjoyment ratings. For example, although nipple stimulation was among the most frequently reported receptive sex acts, it was rated the least enjoyable.

For performative acts, participants were most often engaged in manual stimulation (66.7%), oral sex (58.9%), and nipple stimulation (44.7%) and least often engaged in anal stimulation (14.9%). Participants' enjoyment of performative acts was more aligned with their engagement, with sex toys ($M = 3.69$, $SD = 0.55$), manual stimulation ($M = 3.45$, $SD = 0.71$), and nipple stimulation ($M = 3.41$, $SD = 0.78$) being the most enjoyed and anal stimulation the least ($M = 3.19$, $SD = 0.93$).

Regarding masturbation, most participants reported masturbating (87.9%); however, masturbation was reported as the second least enjoyable act ($M = 2.94$, $SD = 1.09$) following receiving nipple stimulation. In contrast, nearly half of the participants engaged in noncoital activities (49.6%) and reported relatively high enjoyment ($M = 3.54$, $SD = 0.74$). It is important to note that participants' overall sexual activity enjoyment rating was relatively low ($M = 2.89$, $SD = 1.18$), with all but two specific sexual acts having a higher enjoyment rating than overall sexual activity.

Table 3 Frequency of engagement with and enjoyment of specific sexual acts

	Engagement % (<i>n</i>)	Enjoyment <i>M</i> (<i>SD</i>)
Receptive		
Insertion	57.4 (81)	3.36 (0.83)
Oral Sex	46.1 (65)	3.17 (1.17)
Sex Toys	36.2 (51)	3.65 (0.74)
Manual Stimulation	62.4 (88)	3.19 (0.98)
Nipple Stimulation	56.7 (80)	2.78 (1.24)
Anal Stimulation	14.2 (20)	3.50 (0.83)
Performative		
Insertion	39.0 (55)	3.38 (0.87)
Oral Sex	58.9 (83)	3.39 (0.82)
Sex Toys	36.2 (51)	3.69 (0.55)
Manual Stimulation	66.7 (94)	3.45 (0.71)
Nipple Stimulation	44.7 (63)	3.41 (0.78)
Anal Stimulation	14.9 (21)	3.19 (0.93)
Masturbation	87.9 (121)	2.94 (1.09)
Noncoital	49.6 (70)	3.54 (0.74)
Overall Sexual Activity	–	2.89 (1.18)

Genital and Chest Gender Dysphoria Related to Engagement in Specific Sexual Acts

Differences in gender dysphoria by sexual act engagement were assessed through independent samples *t* tests. Full results are presented in Table 4. In partial support of H1, participants who abstained from (receiving) insertion ($d = 0.39$ [95% CI: 0.06, 0.73]), sex toys ($d = 0.56$ [95% CI: 0.21, 0.91]), and manual stimulation ($d = 0.41$ [95% CI: 0.07, 0.75]), were shown to have significantly higher ratings of genital gender dysphoria; however,

Table 4 Differences in gender dysphoria across sexual activity engagement and enjoyment

Gender Dysphoria	Statistic	Receptive						Performative						Masturbation	Noncoital	Overall Sexual Activity
		Insertion	Oral Sex	Sex Toys	Manual Stimulation	Nipple Stimulation	Anal Stimulation	Insertion	Oral Sex	Sex Toys	Manual Stimulation	Nipple Stimulation	Anal Stimulation			
Genital	No <i>M</i> (<i>SD</i>)	2.64 (0.94)	2.54 (0.97)	2.61 (0.98)	2.67 (0.99)	2.64 (0.98)	2.42 (0.95)	2.46 (0.99)	2.60 (1.00)	2.44 (1.00)	2.61 (1.01)	2.45 (0.93)	2.43 (0.94)	2.64 (1.27)	2.46 (1.03)	-
	Yes <i>M</i> (<i>SD</i>)	2.27 (0.94)	2.29 (0.93)	2.09 (0.82)	2.28 (0.91)	2.26 (0.91)	2.44 (1.01)	2.38 (0.90)	2.30 (0.91)	2.41 (0.89)	2.33 (0.92)	2.39 (0.99)	2.38 (1.09)	2.40 (0.91)	2.39 (0.88)	-
	<i>t</i> (<i>df</i>)	2.32*	1.54	3.19**	2.36*	2.32*	-0.08	0.49	1.86	0.16	1.63	0.38	0.23	0.76 ^a	0.40	-
	<i>d</i>	0.39	-	0.56	0.41	0.39	-	-	-	-	-	-	-	-	-	-
	Enjoyment (<i>r</i>)	-0.32**	-0.34**	-0.10	-0.23*	-0.07	-0.09	-0.13	0.04	-0.09	-0.16	0.10	-0.23	-0.45**	-0.16	-0.24**
Chest	No <i>M</i> (<i>SD</i>)	3.87 (0.97)	3.79 (0.93)	3.79 (1.00)	3.79 (1.00)	3.87 (0.97)	3.66 (1.01)	3.60 (1.04)	3.81 (0.93)	3.66 (1.02)	3.78 (1.00)	3.66 (1.05)	3.61 (1.00)	3.69 (1.17)	3.69 (1.06)	-
	Yes <i>M</i> (<i>SD</i>)	3.41 (0.99)	3.39 (1.06)	3.29 (0.98)	3.50 (1.00)	3.40 (0.99)	3.28 (0.98)	3.61 (0.95)	3.46 (1.04)	3.50 (1.00)	3.52 (1.00)	3.54 (0.96)	3.56 (1.06)	3.59 (0.99)	3.53 (0.96)	-
	<i>t</i> (<i>df</i>)	2.70**	2.42*	2.89**	1.67	2.81**	1.60	-0.07	2.08*	0.90	1.47	0.66	0.23	0.37	0.95	-
	<i>d</i>	0.46	0.41	0.51	-	0.48	-	-	0.36	-	-	-	-	-	-	-
	Enjoyment (<i>r</i>)	-0.15	-0.17	-0.15	-0.08	-0.11	-0.02	-0.16	0.15	-0.10	-0.10	0.32*	-0.09	-0.31**	-0.11	-0.21*
Other Secondary	No <i>M</i> (<i>SD</i>)	2.84 (1.02)	2.79 (1.03)	2.87 (1.06)	2.90 (1.06)	2.84 (1.05)	2.81 (1.03)	2.81 (1.03)	2.79 (1.02)	2.85 (1.05)	2.83 (1.08)	2.85 (1.10)	2.86 (1.04)	2.90 (1.07)	2.89 (1.08)	-
	Yes <i>M</i> (<i>SD</i>)	2.89 (1.05)	2.96 (1.05)	2.86 (0.99)	2.85 (1.02)	2.89 (1.03)	3.20 (1.02)	2.96 (1.04)	2.92 (1.05)	2.90 (1.02)	2.89 (1.02)	2.89 (0.96)	2.94 (1.02)	2.86 (1.03)	2.84 (0.99)	-
	<i>t</i> (<i>df</i>)	-0.28	-0.97	0.04	0.28	-0.32	-1.56	-0.88	-0.71	-0.24	-0.31	-0.22	-0.33	0.15	0.28	-
	<i>d</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Enjoyment (<i>r</i>)	-0.12	-0.34**	0.00	-0.05	-0.06	-0.10	-0.12	0.08	-0.19	-0.01	0.17	-0.15	-0.02	0.05	0.01
Social	No <i>M</i> (<i>SD</i>)	3.52 (0.67)	3.48 (0.65)	3.48 (0.64)	3.53 (0.67)	3.47 (0.67)	3.49 (0.65)	3.49 (0.65)	3.47	3.45 (0.64)	3.53 (0.66)	3.47 (0.66)	3.49 (0.66)	3.54 (0.81)	3.49 (0.59)	-
	Yes <i>M</i> (<i>SD</i>)	3.45 (0.64)	3.47 (0.66)	3.47 (0.69)	3.45 (0.64)	3.49 (0.64)	3.39 (0.68)	3.46 (0.66)	3.48 (0.63)	3.52 (0.68)	3.45 (0.65)	3.49 (0.64)	3.44 (0.64)	3.47 (0.63)	3.47 (0.71)	-
	<i>t</i> (<i>df</i>)	0.66	0.09	0.11	0.77	-0.18	0.67	0.29	-0.14	-0.63	0.62	-0.15	0.29	0.44	0.20	-
	<i>d</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Enjoyment (<i>r</i>)	-0.22	-0.22	-0.15	-0.11	0.05	-0.29	-0.10	-0.08	-0.05	-0.08	0.30*	-0.32	-0.16	-0.19	-0.17*

p* < .05, *p* < .01^aThe degrees of freedom for this *t* test was 18

receiving oral sex was not related to genital gender dysphoria. While not expected, abstinence from receiving nipple stimulation ($d=0.39$ [95% CI: 0.06, 0.73]) was also significantly related to higher ratings of genital gender dysphoria.

Supporting H2, participants who abstained from receiving nipple stimulation ($d=0.48$ [95% CI: 0.14, 0.82]) had significantly higher ratings of chest gender dysphoria; however, higher ratings of chest gender dysphoria was also related to abstinence from (receiving) insertion ($d=0.46$ [95% CI: 0.12, 0.80]), oral sex ($d=0.41$ [95% CI: 0.07, 0.74]), sex toys ($d=0.51$ [95% CI: 0.16, 0.85]), and performing oral sex ($d=0.36$ [95% CI: 0.02, 0.70]). Other secondary sex characteristics and social gender dysphoria were not significantly related to engagement of specific sexual acts.

Aspects of Gender Dysphoria Significantly Related to Enjoyment of Specific Sexual Acts

Pearson's correlations were used to consider the relations gender dysphoria ratings and enjoyment of specific sexual acts, with full results in Table 4. In partial support of H3, genital gender dysphoria was negatively related to enjoyment of (receiving) insertion ($r=-0.32, p<0.01$), oral sex ($r=-0.34, p<0.01$), and manual stimulation ($r=-0.23, p<0.05$); however, it was not significantly related to enjoyment ratings for receiving oral sex. While not expected, genital gender dysphoria was also negatively related to enjoyment ratings of masturbation ($r=-0.45, p<0.01$) and overall sexual activity ($r=-0.24, <0.01$).

H4 was not supported; participants' ratings of chest gender dysphoria were not significantly related to enjoyment of receiving nipple stimulation. However, chest gender dysphoria was positively related to performing nipple stimulation ($r=0.32, p<0.05$) and negatively related to masturbation ($r=-0.31, p<0.01$) and overall sexual activity enjoyment ($r=-0.21, p<0.05$). In partial support of H5 regarding social gender dysphoria, overall sexual activity enjoyment ($r=-0.17, p<0.05$) was negatively related; however, performing nipple stimulation ($r=0.30, p<0.05$) was positively related. Finally, while no predictions were made related to other secondary sex characteristics gender dysphoria, there was a negative relation with receiving oral sex ($r=-0.34, p<0.01$).

Discussion

Prior sexual research involving TNB individuals has typically utilized Gender Dysphoria as an inclusion criterion, where participants were screened to determine if they meet diagnostic criteria and should be included in the sample (e.g., Bartolucci et al., 2015; Bungener et al., 2017; Kerckhof et al., 2019; Wierckx et al., 2014). Viewing gender dysphoria as a dichotomous inclusion criterion, rather than a continuous variable of interest, has limited our understandings of how sexual well-being is related to gender

dysphoria. Nonetheless, a limited body of qualitative research has indicated that gender dysphoria likely effects engagement with, and enjoyment of, specific sexual acts thus impacting trans masculine and nonbinary individuals' sexual well-being. The current study was able to test these hypothesized relations and demonstrated that specific aspects of gender dysphoria (i.e., genitals, chest, other secondary, and social) are significantly related to specific sexual act engagement and enjoyment.

Another important methodological approach for the current study was the focus on trans masculine and nonbinary individuals who had not undertaken a medical transition. The experiences of individuals who do not seek, or have not initiated, medical transitions are often neglected in general TNB focused research (Nieder et al., 2020), and especially within sex research (Bradford & Spencer, 2020). The current community-based sample of trans masculine and nonbinary participants endorsed significantly lower levels of body gender dysphoria (i.e., genital, chest, and other secondary sex characteristics) but similar levels of social gender dysphoria compared to a clinical sample of trans masculine individuals who had not undertaken a medical transition. Within our sample, participants who indicated a future desire to undertake medical transition steps endorsed significantly higher levels of body gender dysphoria than did those with no desire. Considering that recruitment of TNB participants for sex research often comes from gender identity clinics where participants are actively seeking medical transition steps, the relation between gender dysphoria and sexual outcomes may be artificially inflated. That is, individuals who are seeking medical transitions are likely to experience more distress from gender dysphoria than those not seeking medical transitions and the scope of distress may be restricted to higher ranges (Olson et al., 2015). Researchers should be mindful to utilize recruitment strategies that engage a diversity of TNB participants who may not desire, be actively seeking, and/or currently undertaking a medical transition so that a more accurate understanding of the relation between gender dysphoria and outcomes can be understood.

Gender Dysphoria and Sexual Well-Being

Although previous research has indicated that prior to medical transition, TNB individuals are less likely to engage in sexual acts than cisgender individuals (Bungener et al., 2017), the current participants reported engaging in a range of both receptive and performative sexual acts and most frequently engaged in masturbation. However, participants indicated relatively low levels of overall enjoyment in alignment with prior research that indicated lower levels of sexual satisfaction prior to medical transitions compared to after (Bartolucci et al., 2015). This discrepancy between engagement and enjoyment was also found for specific sexual acts. For example, participants reported that masturbation was the most frequent sexual act they engaged in although it had the third lowest rating of enjoyment. Similarly, the three most frequently engaged in receptive sexual acts (i.e., manual

stimulation, insertion, and nipple stimulation) did not directly align with the three most enjoyed (i.e., sex toys, anal stimulation, and insertion). Thus, studies which look at either engagement or enjoyment in isolation (e.g., Nikkelen & Kreukels, 2018; Scott et al., 2018) may be missing important effects. In future studies involving TNB participants, researchers should be cognizant to include both aspects of sexual well-being.

The current research also allowed an understanding of the possible relations between aspects of gender dysphoria (i.e., genital, chest, other secondary sex characteristics, and social) and sexual well-being. The overall results demonstrated that gender dysphoria is more salient to sexual acts which involve receiving sexual pleasure rather than providing pleasure. Trans masculine and nonbinary participants in a prior qualitative study have described providing sexual pleasure (vs receiving) as a way of detaching from their bodies and avoiding gender dysphoria (Anzani et al., 2021). The current finding that abstinence from receptive (vs performative) sexual acts is more often related to gender dysphoria supports the conceptualization that primarily engaging with performative sexual acts serves as an avoidant coping strategy for addressing gender dysphoria. As such, it may be important for researchers to investigate the extent to which focusing on other's sexual pleasure in response to the distress of gender dysphoria affects overall well-being for trans masculine and nonbinary individuals.

The results also revealed that gender dysphoria is not a homogenous experience that affects sexual well-being universally or equally. Although there was a cause to believe that social gender dysphoria would be related to sexual enjoyment, the results showed that it was largely unrelated. This may be due to the ways in which social dysphoria can present during sexual activities which were not captured in the current study. The measure of social gender dysphoria utilized in this study assesses social gender dysphoria in normal day to day interactions; whereas social gender dysphoria experienced during sexual engagement may be more explicitly tied to sexualized communication (e.g., discussion of sexual acts), gendered expectations (e.g., discussion of sexual roles), or sexualized body parts (e.g., discussion of genitals). Thus, as noted in the introduction, despite the utility of separating body from social gender dysphoria in research, for TNB individuals engaging in sexual acts, these aspects of gender dysphoria may be interrelated. It will be important for researchers to investigate how social gender dysphoria presents differently during sexual acts versus common social exchanges to more fully understand how it may impact sexual well-being. Equally, the nonsignificant relations between social gender dysphoria and sexual enjoyment may be the result of affirming partners. It could be that experiences of social gender dysphoria are offset by partner gender affirmation during sexual activities, as these contribute to sexual satisfaction (Anzani et al., 2021; Lindley et al., 2020). It is possible that partners who validate and respect trans masculine and nonbinary individuals' sexual boundaries provide a context for gender euphoria which is enjoyment related to a

congruence between their felt and experienced gender (Ashley & Ells, 2018). As such, both clinicians and researchers should investigate the extent to which trans masculine and nonbinary individuals experience gender affirmation during sexual activities and how they view its contribution to their sexual well-being.

Despite social gender dysphoria not being significantly related to sexual well-being, body gender dysphoria was related as expected. In particular, participants' sexual engagement and enjoyment were dependent upon where on the body gender dysphoria was centralized. For example, gender dysphoria that was explicitly linked to more sexualized body parts (i.e., genitals and chest) was more salient to sexual engagement and enjoyment. Thus, special attention should be paid to genital and chest gender dysphoria.

Genital Gender Dysphoria

Qualitative studies have indicated that trans masculine and nonbinary individuals may avoid sexual acts involving genitals if they experience distress with that area of their body (Anzani et al., 2021; Lindley et al., 2020; Martin & Coolhart, 2022). Consistent with this understanding, participants with elevated levels of genital gender dysphoria in the current study were less likely to engage in (receptive) manual stimulation, sex toys, or insertion. Considering that both receptive manual stimulation and insertion were the most frequently engaged in sexual acts, it is important to note that not all trans masculine and nonbinary individuals with genital gender dysphoria may avoid sexual genital contact. Rather, it appears that those who are most distressed by genital gender dysphoria may avoid these kinds of sexual acts.

While it was expected that genital gender dysphoria would be related to receptive oral sex, this was not the case. Yet less than half of our participants engaged in this act and those who did reported relatively low enjoyment. Future research is merited to illuminate what, if not genital gender dysphoria, is leading to decreased engagement with and enjoyment of receptive oral sex.

Although genital gender dysphoria was not related to engagement with all genitally focused sexual acts, it was negatively related to enjoyment of all receptive sexual acts involving genitals except receiving stimulation from sex toys. Additionally, while genital gender dysphoria did not significantly relate to participants' engagement with masturbation, there was a strong negative relation between genital gender dysphoria and enjoyment of masturbation. Cisnormative sexual scripts indicate that sex must involve genital contact (Wiederman, 2005), as a result, our participants may feel compelled to engage in genital focused sexual acts despite genital gender dysphoria and low levels of enjoyment.

Overall, it appears as if genital gender dysphoria might not be distressing enough to keep trans masculine and nonbinary individuals from engaging in genital focused sexual acts but may significantly reduce their enjoyment of such acts. The finding that even low levels of genital gender dysphoria are negatively

related to enjoyment of genital focused sexual acts is important considering that participants endorsed significantly lower levels of genital gender dysphoria than a comparison sample of nonmedically transitioned trans masculine individuals. In future studies, researchers should focus on what effect reducing genital gender dysphoria can have on sexual enjoyment as the current trans masculine and nonbinary participants frequently engaged in genital focused sexual acts.

Chest Gender Dysphoria

The trans masculine and nonbinary participants' ratings of chest gender dysphoria were the highest of all the bodily aspects of gender dysphoria, indicating that they found this area of their bodies particularly distressing. Qualitative studies have indicated that trans masculine and nonbinary individuals may place strict boundaries around sexual acts which involve distressing areas of the body, and that receptive nipple stimulation represents an acutely avoided sexual act (Anzani et al., 2021; Galupo et al., 2020; Lindley et al., 2020). The current findings support this understanding of sexual boundaries where participants who did not engage in receptive nipple stimulation endorsed significantly higher ratings of chest gender dysphoria. Further, receptive nipple stimulation was the least enjoyed of all the sexual acts. Despite this, nipple stimulation was the second most frequently engaged in receptive sexual act. Together, these findings indicate that there are likely other factors that impact decisions to engage with chest-related sexual acts. For example, trans masculine and nonbinary individuals have described engaging in sexual acts based on partner desire, even when they are personally dissatisfying and do not serve to affirm their gender (Lindley et al., 2020).

It is important to note that higher ratings of chest gender dysphoria were not only related to receptive nipple stimulation but also related to refraining from receptive insertion and oral sex, and from performing oral sex. These findings suggest that chest gender dysphoria is not only related to sexual acts involving the chest. This is supported in the literature, where trans masculine and nonbinary individuals have indicated that during receptive insertion, they can be distressed by the movement of their chest, and if they notice their chest during sex they may become distressed and unable to stay in the moment (Lindley et al., 2021). Additionally, our results on genital gender dysphoria suggest a similar finding, as higher levels of genital gender dysphoria were related to disengagement with receptive nipple stimulation. These findings suggest that focusing solely on interventions that target the chest or genitals in isolation may have limited impact.

It is important to draw attention to the finding that overall, there were weak correlations between specific aspects of gender dysphoria and enjoyment of specific sexual acts. This indicates that while a relation exists, it does not explain a lot of the variance in enjoyment. While on the surface this finding might seem surprising, it reflects a larger problem within TNB research where gender dysphoria is assumed to be the root cause of all negative

indicators of well-being (Dietz & Halem, 2016). When provided the opportunity to freely describe aspects of sexual satisfaction, trans masculine and nonbinary individuals frequently discussed aspects unrelated to their TNB identity, such as their relationship with their partner, as contributing to satisfaction (Lindley et al., 2021). Additionally when describing their sexual dissatisfaction, trans masculine and nonbinary individuals also named partner aspects such as engaging in acts which their partner finds pleasurable but which they might find distressing (Lindley et al., 2020). Researchers aimed at improving trans masculine and nonbinary individuals' sexual enjoyment may do well to look at how interpersonal factors, as well as gender dysphoria, are related to sexual well-being.

Limitations

The current study utilized a convenience sample of online participants which can disproportionately sample White, educated, and middle-class participants (Christian et al., 2008). Despite our efforts to publish study flyers and links in online resources targeting diverse trans communities, the current sample is overly representative of White participants and results should be interpreted considering this limitation. Additionally, online sampling could have contributed to a self-selection effect where only participants who felt comfortable completing a survey on sexual behaviors or who experience higher levels of distress regarding sexual activities chose to participate. Thus, it is possible that the current sample of participants may be biased toward one extreme or the other. Online sampling did, however, allow us to recruit a community sample of trans masculine and nonbinary individuals who had not yet undertaken medical transition steps and represented diverse sexual identities. This allowed for a more accurate understanding of the relation between gender dysphoria and sexual well-being as our community-based sample was found to have significantly lower levels of body aspects of gender dysphoria than a similar clinical sample.

Current measures of sexual well-being do not capture TNB specific sexual encounters (Lindley et al., 2021). As such, the current study created a measure that assessed 14 sexual acts identified as salient to TNB individuals. Nonetheless, it is possible that there are sexual acts not captured by the measure that could have important implications for the sexual well-being of TNB individuals. The enjoyment items also asked if *the* act was enjoyable which may have led participants to reflect on a specific incidence of the sexual act rather than an aggregate enjoyment of multiple experiences of the act. Additionally, measuring sexual well-being as 14 distinct acts, rather than factors comprising a larger construct, required us to run numerous statistical tests which has the potential to increase the chances of type one error (Bender & Lange, 2001). In response to this potential limitation, statistical significance was inferred from both null hypothesis significance tests and effect sizes with corresponding confidence interval (Lee, 2016). Researchers wishing to develop a measure of TNB

sexual well-being should take these limitations into consideration and ensure that any future measure includes aspects such as sexual role (e.g., dominant vs submissive), satisfaction with partner(s), and aggregate experiences, as well as write items in a way that allows them to reflect broader constructs (e.g., genital or chest focused sexual acts).

Finally, the data collected in this study were cross-sectional, which limited our ability to interpret causality. Although this study improved our understanding that aspects of gender dysphoria are related to sexual engagement and enjoyment, the exact nature of their interactions cannot be surmised, nor can the discrepancy between engagement and enjoyment be fully understood. Further, the largely exploratory nature of the current study did not account for how psychological distress, such as anxiety or depression, may be related to the relation between

gender dysphoria and sexual outcomes. Considering the established relation between gender dysphoria and psychological distress (e.g., Brokjøb & Cornelissen, 2021), it is possible that increased gender dysphoria results in increased anxiety which may mediate its relation with sexual outcomes. As such, it will be important for researchers to utilize the current findings to develop more nuanced models of TNB individuals' sexual experiences that account for more psychological variables.

Appendix

See Table 5.

Table 5 Sexual engagement items

Overall Prompt	Below you will find a range of sexual activities that people might experience during their lifetime. Please select the answer that best represents your sexual experience <i>during the past 6 months</i>
Item Name Receptive	Question in Survey
Insertion	Did you have receptive (either anal or vaginal) sexual intercourse?
Oral Sex	Did a person lick, suck, or orally (mouth) stimulate your genitals?
Sex Toys	Did a person use sex toys (dildo, anal plug, strap-on, etc.) to stimulate you?
Manual Stimulation	Did a person touch, fondle, or manually (hand) stimulate your genitals?
Nipple Stimulation	Did a person orally (mouth) or manually (hand) stimulate your nipples?
Anal Stimulation	Did a person orally (mouth) or manually (hand) stimulate your anus?
Item Name Performative	
Insertion	Did you have an insertive (either with a penis or a strap-on) sexual intercourse (either anal or vaginal)?
Oral Sex	Did you lick, suck, or orally (mouth) stimulate a person's genitals?
Sex Toys	Did you use sex toys (dildo, anal plug, strap-on, etc.) to stimulate a person?
Manual Stimulation	Did you touch, fondle, or manually (hand) stimulate a person's genitals?
Nipple Stimulation	Did you orally (mouth) or manually (hand) stimulate a person's nipples?
Anal Stimulation	Did you orally (mouth) or manually (hand) stimulate a person's anus?
Masturbation	Have you masturbated?
Noncoital	Did you experience any non-coital behaviours (petting, heavy petting, etc.)?
Overall Sexual Activity	Overall, I do perceive sexual activity as pleasurable

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Code Availability Not applicable.

Declarations

Ethical Approval This study was approved by the Institutional Review Board at Towson University.

Conflict of interest The authors have no conflicts of interest nor competing interests to report.

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