Exploring the Diversity of Gender and Sexual Orientation Identities in an Online Sample of Transgender Individuals

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Although the term transgender is increasingly used to refer to those whose gender identity or expression diverges from culturally defined categories of sex and gender, less is known about the self-identities of those who fall within this category. Historically, recruitment of transgender populations has also been limited to specialized clinics and support groups. This study was conducted online, with the aim of exploring the gender identities, sexual orientation identities, and surgery and hormonal statuses of those who identify with a gender identity other than, or in addition to, that associated with their birth sex (n = 292). Genderqueer was the most commonly endorsed gender identity, and pansexual and queer were the most commonly endorsed sexual orientation identities. Participants identified with a mean of 2.5 current gender identities, 1.4 past gender identities, and 2 past sexual orientation identities. The majority of participants either did not desire or were unsure of their desire to take hormones or undergo sexual reassignment surgery. However, birth sex and age were significant predictors of "bottom" surgery and hormone status/desire, along with several identities and orientations. This study explores explanations and implications for these patterns of identification, along with the potential distinctiveness of this sample.

Within the last 15 to 20 years, transgender has expanded to become an umbrella term applied to a diverse group of individuals whose gender identity or expression diverges from culturally defined categories of sex and gender (Lev, 2007; Mallon, 1999). Many social service organizations have embraced transgender as a categorization useful for the organization and provision of services. Various politically oriented groups have also found the category to be an important tool for conducting identity-based politics. However, the definition and usage of the term remains contested, and those that fall under the umbrella may self-identify in a variety of ways (Davidson, 2007; Valentine, 2007). This study was conducted to explore the gender identities, sexual orientations, and surgery and hormonal statuses of those who identify with a gender identity other than, or in addition to, the gender associated with their birth sex. The secondary aim of the study was to explore how these forms of identification vary based on two important characteristics: age and birth sex. Although the term transgender is used here to refer to this umbrella of gender identities, it is important to acknowledge that not all individuals who are conceptualized as falling within the umbrella identify specifically as transgender (Valentine, 2007). Likewise, the ways individuals identifying as transgender experience and express their sense of gender vary greatly; thus, a precise definition of the term remains elusive. Several small, qualitative studies have been particularly helpful in elucidating the complexities of gender identity and
expression among transgender individuals, particularly as these self-understandings intersect with, and become shaped by, the larger structure of gender within society (Bockting, Benner, & Coleman, 2009; Dozier, 2005; Gagne, Tewksbury, & McGaughey, 1997; Morgan & Stevens, 2008). Similarly, sociologists, gender theorists, and transgender authors have advanced understanding of the socially constructed nature of sex- and gender-based categorizations. However, they continue to grapple with how to balance the structural opportunities and constraints afforded by the larger social structure with the very real experiences of gender on the individual level. Within psychology and quantitative research more broadly, self-identification of transgender individuals has remained largely underexplored. Therefore, knowledge of the range of identity possibilities within larger samples of transgender individuals is necessary to situate and provide reference points for more focused studies.

Unfortunately, authors do not always clarify the origin of the gender identities used in their studies, which further complicates the interpretation of study findings. Researchers may assign a gender identity, such as transsexual, to a particular population of individuals being studied, regardless of how they may self-identify. Other researchers have specifically sought out participants who self-identify as a particular gender identity. The resultant homogeneity of this latter approach may be helpful in determining health profiles of certain populations, for example, but is less helpful when studying the experiences or identity formation of transgender individuals as a whole. Both approaches appear poorly suited to exploring research questions within the broader range of gender identity possibilities, and both can fail to acknowledge the complexity of such work.

Similarly, much of the psychological literature on sexual orientation among transgender individuals characterizes orientation in terms of ratings of attraction, often to the neglect of self-identification (for a discussion of this issue, see Devor, 1993). Most notably, researchers have divided male-born transgender individuals into homosexual transsexual and non-homosexual, autogynephilic subtypes. Autogynephilic transsexuals are described as being primarily erotically aroused by images of themselves as female, whereas homosexual transsexuals are erotically aroused by males (Blanchard, 2005). Although research has suggested that the autogynephilic subtype does not apply to female-born transgender individuals, some have argued for the use of homosexual and non-homosexual subtypes (Chivers & Bailey, 2000). Such categorizations may be useful for research and clinical work, but they miss an important layer of experience: the self-reflexive, relational nature of sexual orientation identity (Bockting & Coleman, 1991). A growing body of literature suggests that sexual orientation identity may not be fully captured by ratings of behavior or attraction alone (e.g., Igartua, Thombs, Burgos, & Montoro, 2009; Rothblum, 2000). Additionally, researchers have highlighted a recent move toward some individuals rejecting or reworking traditional sexual orientation identity labels, as well as reclaiming and redefining labels such as queer (Horner, 2007; Savin-Williams, 2005). These shifts may be particularly relevant to transgender individuals. As seen in Dozier’s (2005) qualitative interviews with female-to-male (FTM) spectrum individuals, sexual orientation identities are experienced not only in terms of sex of the partner to whom an individual is attracted, but also the sex and gender attributes of the individual claiming the identity, as well as the gender dynamics imbedded within sexual interactions.

Much of the quantitative research conducted on transgender populations is based on data collected from clinical samples, particularly those attending sexual reassignment clinics. An implicit assumption of such research is that individuals presenting at these clinics identify as transsexual, or that the self-identification of these individuals does not warrant further exploration or documentation. Therefore, although the research is in this area is growing, both the self-identities of those seeking medical intervention, as well as the characteristics of those who do not, or have not yet sought treatment remains largely unknown. More recently, a handful of studies conducted using online samples have helped to broaden this literature; however, these studies face many of the limitations previously discussed. Those that provided explicit information on the identities of respondents included Chivers and Bailey (2000), who recruited “female-to-male transsexuals at any stage of transition.” Although these authors reported a wide range of Kinsey fantasy scores and difficulty classifying respondents into two groups, much of the article focuses on comparisons between those classified by the researchers as homosexual and heterosexual. In their online transgender health survey, Rosser, Oakes, Bockting, and Miner (2007) asked “participants who self-identified as transgender” to identify as one of the following: transsexual, cross-dresser or transvestite, drag, female/ male impersonator, or other (such as transgenderist, bigender, genderqueer, two spirit, etc.). Although 29.5% of the sample identified as “other,” these responses were not reported, and participants were only allowed to select one identity.

By primarily studying transgender individuals presenting at clinics for sex reassignment surgery (SRS), a certain transgender narrative is also created and reaffirmed. Transgender—or, more specifically, transsexual—becomes defined by a desire for sex reassignment. For example, in her representation of “becoming” among male-to-female transsexuals, Bolin (1998) detailed a model predicated on the use of SRS to achieve identity formation, as well as the “natural” performance and embodiment of femininity. The final stage of this
model also necessitates the rejection of the individual’s transgender history to facilitate the embrace of a female identity. Although such models are likely to represent actual, lived experiences of many individuals, they do not recognize or explore the possibility that individuals may identify as transgender and not seek out surgery for a variety of reasons. Moving further, individuals identifying as a variety of gender identities may seek out hormones or certain surgeries, but may not wish to undergo all available options (Diamond & Butterworth, 2008; Hansbury, 2005).

Given the complexities of gender, researchers and clinicians, such as Sanger (2008), have proposed that the focus on, and use of, specific or dominant categorizations may exclude and silence the experiences of those whose conceptualizations of their own gender do not fit into such categories. As the broader applicability of these narrower conceptualizations is being challenged, clinicians are also increasingly working toward making the process of medical transition more transparent and client focused (Bockting, Robinson, Benner, & Scheltema, 2004; Ekins 2005; Lev, 2007). Based on his research and clinical experience, Bockting (2008) argued this involves affirming clients in their own unique gendered self-understanding. For an increasing number of individuals, this may not reflect an exclusively male or female identity, or a progression from hormones to surgery. The extent to which one desires hormones or surgery also appears to exist on a continuum.

Understanding the self-defined identities of transgender individuals is central to understanding the experiences of these individuals, particularly given the emphasis that society places on identity as an organizational tool, both as a way of reading others and representing the self to others. Transgender individuals must negotiate a positioning between male and female that is not well understood by the larger society; one that can result in tensions within the lesbian, gay, and bisexual communities as well (Davis, 2008). Particularly given the shifts that appear to be occurring in how transgender individuals view and represent gender, understanding these processes of negotiation are important, yet understudied. Language remains a critical component, and Meyer (2003) also argued that the language available for transgender individuals to communicate their experiences remains limited. Discussions of working with transgender individuals have highlighted the sense of empowerment gained through the control of language by those of an oppressed group (Buridge, 2007).

Moreover, the ways that individuals navigate their experiences and come to represent their identities has been shown to vary by geographic location, birth sex, and age, among other characteristics (Fassinger & Arsenneau, 2007; Floyd & Bakeman, 2006; Parks, 1999). At a basic level, these characteristics influence individuals’ access to resources and interactions with larger sociocultural systems. In particular, shifts in conceptualizing and communicating identity are likely to differentially affect particular transgender communities, and may also be more readily adopted by individuals earlier on in their process of transition. Historically, transgender communities have largely been sex segregated, both with unique histories, demographics, and health care and social service needs (Stryker, 2008). Evidence also suggests that there may be important, potentially biological, birth sex differences that influence the ways that transgender individuals experience their gender variance (Smith, van Goozen, Kuiper, & Cohen-Kettenis, 2005).

Therefore, additional study is necessary to document how transgender individuals represent their gender and sexuality, as well as further understand similarities and differences across groups. Such research has typically been extremely difficult, as researchers have been limited to studying specific populations of transgender individuals seeking treatment or participating in transgender conferences or support groups. However, the Internet now provides the ability to recruit a geographically diverse, non-clinical sample, where such individuals may not otherwise come into contact with researchers or potential research studies. Previous research has documented the efficacy of using Internet methods to collect information regarding sexual minorities, as well as transgender individuals (Mathy, 2002; Mustanski, 2001; Rosser et al., 2007). This study capitalized on this emerging methodology, and utilized a range of social networking sites to recruit participants. These participants reported on their self-identified gender identities, sexual orientation identities, and surgery/hormonal statuses; and additional data analysis was conducted to explore how these forms of identification may vary by age and birth sex.

Method

Participants

Participants were a convenience sample of adults, ages 18 years old and older, who self-identified themselves as within the transgender spectrum or gender variant in some way. These were the only two requirements for participation in the study. The study was advertised with the following text:

This survey is meant to explore the many forms of gender variant identity and sexuality, as well as some characteristics or perspectives that may be related to such an identity. Anyone who does not identify strictly as their “male” or “female” birth sex is encouraged to participate, whether you identify as transgender, genderqueer, intersex, or you enjoy deconstructing gender through drag, and so on.
Measures

The Web-based survey was developed to assess participants' current and past gender identities, current and past sexual orientations, and surgery and hormone statuses. Participants were asked to describe their current and past gender identities, with response options shown in Table 1. A free response option was also included, allowing participants to write in an identity not listed. Androgynous was the only gender identity that was listed by more than three participants and was, therefore, established as a separate category. Participants were then asked to indicate their current and past sexual orientations, with response options shown in Table 2. Whereas participants were allowed to select only one answer choice for their current sexual orientation, they were allowed to select as many answer choices as applicable when indicating their past sexual orientations, and a free response option was included for each question (not listed category). The gender identities and sexual orientation identities listed on the survey were identified through discussion with other lesbian, gay, bisexual, or transgender (LGBT) researchers and counselors, as well as through searches of LGBT resources and online communities.

An additional three questions asked participants to indicate surgery and hormone statuses (see Table 3 for response options shown in Table 2. Whereas participants were allowed to select only one answer choice for their current sexual orientation, they were allowed to select as many answer choices as applicable when indicating their past sexual orientations, and a free response option was included for each question (not listed category). The gender identities and sexual orientation identities listed on the survey were identified through discussion with other lesbian, gay, bisexual, or transgender (LGBT) researchers and counselors, as well as through searches of LGBT resources and online communities.

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response options). Top SRS refers to the surgical reconstruction of the chest involving breast tissue removal and chest re-contouring for those born female, and implants for those born male. Bottom SRS, or genital reconstruction surgery, refers to a range of procedures that utilize existing and occasionally grafted tissue to construct genitalia resembling that of the other sex. We selected these terms given the frequent use of bottom and top SRS as shorthand within the community, although we recognize these to be colloquial terms. We also acknowledge that some transgender individuals now prefer terms such as sex affirmation or gender confirmation surgery. Finally, participants were asked to indicate their use of, or desire to obtain, additional gender-related surgical procedures. Although these specific procedures were not assessed, they may include hysterectomy, facial feminization surgery, and laser hair removal.

Additional demographic information was also collected, including birth sex, age, education, location, and ethnicity and race, with categories modeled after the U.S. Census. To help prevent multiple responses, Internet protocol (IP) addresses were recorded. There were seven cases of repeat IP addresses, and given a repeat IP address may occur for various reasons (use of the same router or proxy server), each was inspected for time of submission, demographic information, and response patterns. These data did not suggest repeat submissions from the same individual; therefore, each response was included in analyses.

### Procedures

Once the survey was approved by the institutional review board, a short description of the survey and a link to the survey Web site was posted to a variety of transgender or gender variant groups with significant membership (>30 members, approximately 10–15 in total), spanning four major social networking Web sites and listservs. Data collection occurred continuously for a period of six months. Prospective participants were directed to an online survey Web site where they were first provided with a consent form and required to indicate their consent to participate in the project; those that consented were then directed to the survey. No incentives were provided for participation.

Binary logistic regression was used to test the extent to which each of the two predictor variables (age and birth sex) accounted for differences in identification (i.e., whether individuals did or did not identify with each identity label). Both predictor variables were simultaneously entered into each model such that their unique contributions could be assessed. For the purpose of analysis, age was divided into four ranges: 18 to 21, 22 to 25, 26 to 35, and 35 and older. When testing for age differences, 18 to 21 was used as the reference group, and results are presented as adjusted odds ratios (aORs).

### Results

#### Demographics

There were 340 participants who filled out the online survey. Of those, 48 were removed from the database because they did not answer any questions beyond the
demographic section, were under 18, or did not identify with a gender identity other than their birth sex. This left 292 valid participants.

Participants ranged in age from 18 to 73, with a mean age of 27.88 ($SD = 11.49$). The age range was heavily skewed toward younger participants, with over one third identifying as 21 or younger. A majority of the respondents were Caucasian (86.6%), with 1.4% identifying as African American, 2.4% as Asian, 0.7% as American Indian, and 0.3% as Native Hawaiian or other Pacific Islander. The remainder of participants entered their race in the free response option (8.2%), most indicating that they were of mixed race, and 2.7% left this question unanswered. In terms of ethnicity, 5.8% identified themselves as Hispanic.

Participants reported living in diverse demographic regions, including 38 U.S. states, the District of Columbia, three Canadian Provinces, and eight additional countries including Australia, Belgium, the Netherlands, Poland, Samoa, Singapore, South Africa, and the United Kingdom. Within the United States, states were divided into regions according to the U.S. Census. Just under 34% of the sample were from the Northeast, 15.1% from the Midwest, 18.8% from the South, and 6.7% from the West. Participants were also asked about their current living situation. Urbanites made up 36.6% of the sample, 41.8% were from suburbs, 16.1% were rural, and nearly 5% reported other or mixed living experiences.

Nearly one half of the participants reported completing some college (48.8%), and 19.6% were college graduates. Those whose highest educational attainment was high school made up 2.7% of the sample, and 3.4% had completed only some high school. Those who had completed some graduate school comprised 7.2% of the sample, and those who had earned a graduate degree comprised 7.9% of the sample.

Birth Sex

A female birth sex was indicated by 178 (61.0%) respondents, whereas 112 (38.4%) indicated their birth sex was male, and two (0.7%) indicated intersex as their sex assigned at birth. Birth sex males were significantly older, by an average of 12.5 years ($t = -8.97, p < .001$). The mean age of birth sex females was 23.1 years ($SD = 5.85$), and the mean age of birth sex males was 36.0 years ($SD = 13.96$).

Gender Identity

The gender identities endorsed by participants are reported in Table 1. As seen, genderqueer was the most common gender identity. Transgender, female, male, and transsexual identities were also common; however, a range of other gender identities were reported. A significant minority of participants also wrote in a gender identity that was not listed. Nearly one half of participants (45.2%) identified as neither male nor female, and some (5.5%) identified as both male and female. Although the remaining portion of the sample identified as either male or female, these identities were often combined with others, such as genderqueer or transgender. In fact, only nine (3.1%) participants selected female as their only current gender identity, and six (2.1%) identified as only male.

A significant majority (72.3%) of participants identified with more than one current gender identity, and 41.1% identified with more than two. The average number of current gender identities was 2.5 ($SD = 1.39$). Participants also endorsed an average of 1.4 ($SD = 1.25$) past identities that were unique from their current identity or identities. Past gender identities endorsed by participants are also listed in Table 1.

Both age and birth sex were predictors of several current gender identities in a logistic regression model. Controlling for birth sex differences and in comparison to the youngest age group (18–21), individuals in the oldest age group (35+) were more likely to identify as a crossdresser (aOR = 2.82, 95% confidence interval [CI] = 1.06–6.50), whereas those in the second oldest group (26–35) were more likely to identify as bigender (aOR = 3.05, CI = 1.06–8.72). Conversely, those in the oldest age group were less likely to identify as genderqueer (aOR = 0.33, CI = 0.14–0.77). Birth sex females were more likely than birth sex males to retain their birth sex as a current gender identity, $\chi^2(1, N = 292) = 10.87, p = .001$. Controlling for age, birth sex females were also more likely to identify as genderqueer (aOR = 4.61, 4.61, CI = 2.51–8.46) and less likely to identify as transgender (aOR = 0.25, CI = 0.12–0.51).

Sexual Orientation Identity

The sexual orientations endorsed by participants are reported in Table 2. The two most common sexual orientation identities were pansexual and queer, followed by lesbian, bisexual, and straight/heterosexual. However, a significant minority did not identify with a sexual orientation or wrote in an alternate orientation in the free response section. Participants also endorsed an average of 2.05 ($SD = 1.44$) past sexual orientations unique from their current sexual orientation. The most common past sexual orientation identities included heterosexual, bisexual, lesbian, and gay.

Certain sexual orientation identities also varied by age and birth sex. Controlling for birth sex differences, individuals in the oldest and second oldest age groups were more likely to identify as bisexual (aOR = 3.44, CI = 1.23–9.58 and aOR = 3.24, CI = 1.09–9.67, respectively). Those in the second oldest age group were also less likely to identify as lesbian (aOR = 0.26, CI = 0.07–0.95) and more likely to identify as queer (aOR = 2.51, CI = 1.02–6.17). Controlling for age, birth sex females were less likely to identify as straight
Hormones and SRS

As shown in Table 3, the percentages of participants indicating that they did not plan to take hormones or who were unsure of their desire were roughly equal, and slightly higher than the percentage currently taking hormones. For both top and bottom surgery, the “do not plan to in the future” response choice was the most frequently endorsed, and only a small minority had undergone either type of procedure. However, significant birth sex differences existed for responses to questions about hormones, χ²(4, N = 287) = 51.75, p < .001; bottom SRS, χ²(3, N = 286) = 77.68, p < .001; and other procedures, χ²(4, N = 287) = 128.53, p < .001; but not top SRS. The majority of those born male were either taking hormones or desired to in the future, whereas roughly two thirds of those born female were unsure or did not plan to take hormones. The majority of birth sex females also did not plan on undergoing bottom surgery or other procedures, although roughly one fourth were unsure about each. For birth sex males, slightly less than one half desired bottom surgery in the future, whereas slightly less than two thirds either had undergone or desired other procedures.

Discussion

This study documents a range of gender identities utilized by those who fall under the umbrella of transgender. Genderqueer, a relatively new identity largely absent from academic and medical discourse, was the most commonly endorsed by participants. Within individuals, these identities appeared to shift over time, and were often used in combination with each other. Furthermore, diversity existed in the ways these transgender participants identified their sexual orientations. Non-normative identities, such as pansexual and queer, were common, along with changes in identity labels over time. However, equally as important as acknowledging such shifts is understanding how they differentially affect particular transgender communities. We tested for age and birth sex effects and found both to be significant predictors of certain gender and sexual orientation identities. Possible explanations and implications for these patterns of identification are now explored in this article, along with the potential distinctiveness of this sample. Although we draw on previous research to explore the meanings individuals ascribe to their identities, it is important to note that heterogeneity exists within each identity label.

Gender Identity

Within LGBT communities more broadly, the emergence of new identity labels and shifts in ways of self-identifying have been noted. Coher and Hammack (2007) conceptualized identity development as a process where individuals’ narration of their personal experiences interacts with, and becomes anchored by, larger conceptualizations of what it means to be a member of a sexual minority within society. Along with others, they argued that at both the individual and collective level, narratives are evolving along with sociocultural shifts (Hammack, Thompson, & Pilecki, 2009; Parks, 1999). Similarly, perspectives on the identity development process are increasingly depathologizing sexual difference while incorporating fluidity and contextual factors (Diamond, 2003; Horn, Kosciw, & Russell, 2009). Some have suggested that a growing percentage of sexual minority youth appear to be identifying as queer, choosing to not identify with an identity label altogether, or challenging the assumption that their sexual orientation is a core feature of their sense of self (Horner, 2007; Savin-Williams, 2005).

Although previous research suggests that transgender individuals construct their identities in relation to dominant sociocultural understandings of what it means to be a man or a woman (e.g., Bolin, 1998; Gagne et al., 1997; Mason-Schrock, 1996), for a growing number of individuals, SRS and passing as the other sex appears less central to identity and transition. Researchers and counselors have subsequently acknowledged the growing necessity of counselors aiding their transgender clients in exploring alternate identity possibilities beyond male and female (Carroll, Gilroy, & Ryan, 2002; Diamond & Butterworth, 2008). An increasing number of autobiographical works also demonstrate the complexity and diversity of transgender experiences and identities (Kane-DeMaio & Bullough, 2006; Nestle, Wilchins, & Howell, 2002; Sycamore, 2006). Together with the organizing and community building made possible by the growth of the Internet (Shapiro, 2004), their presence facilitates the expansion of alternate perspectives and possibilities. Results from this study provide further evidence of the range of identity possibilities within the transgender spectrum—identities that have been explored by only a handful of smaller studies.

Reflecting on the FTM spectrum, Hansbury’s (2005) observations, this appears to be the most diverse, fluid, and youngest group within the
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spectrum. Our results provide partial empirical support for this observation, as individuals in the oldest group were less likely to identify as genderqueer. Age was also a significant predictor of crossdresser and bigender identification. Although generational and age effects are difficult to disentangle, they warrant additional attention.

Diamond and Butterworth (2008) also reported on the experiences of four FTM spectrum individuals who had adopted various masculine self-presentations, yet often negotiated a space for themselves that combined or fell in between male and female. In this study in particular, genderqueer was a more common identity among those born female, whereas transsexual identity was more common among those born male. Interestingly, these differences may mirror the sex differences seen in the expression of same-sex sexuality, where female same-sex sexuality appears more fluid (Diamond, 2008). However, given that masculinity in those born female is less stigmatized and pathologized than femininity in those born male, these dynamics are also likely to be a powerful determinant. Sociocultural considerations such as these, coupled with the greater difficulty associated with passing as female, may also delay the coming out or transition process for those born male. This could help to explain the considerable 12.5-year age difference we found between birth sex males and females.

How individuals manage multiple identities simultaneously also remains largely unexplored, although the majority of individuals in this study identified as more than one gender identity. This practice may reflect situational differences in identification (i.e., identify as transgender in certain situations but as male in others) or the inability of a single gender identity to capture an individual’s overall sense of self. Thus, follow-up studies are needed to explore not only the meaning individuals ascribe to their identities, but also how such identities function on an individual and societal level. Together, the existing literature on sexual orientation and gender identity development, as well as larger social psychological perspectives on identity, form a rich base to inform such work. Additionally, most participants also reported having identified as one or more previous gender identities unique from their current identity, highlighting the importance of examining identity trajectories and utilizing longitudinal approaches. However, a large number of participants identified as neither male nor female, suggesting identities such as genderqueer or transgender may be valid and independent identities, rather than only indications of movement between male and female.

Transgender itself is a relatively new identity, and its exact meaning and usage continues to be negotiated (Davidson, 2007; Valentine, 2007). Therefore, we attempted to frame this survey in a way that welcomed all who currently identified as a gender identity that was other than or in addition to their birth sex, whether or not they specifically identified as transgender.

Although it is very difficult to determine whether individuals identifying a specific way were relatively more or less likely to respond to the survey based on how it was described, a little less than one half of respondents identified as transgender. Notably, only two participants indicated their sex as intersex, providing preliminary evidence that online transgender and intersex communities are largely separate.

Sexual Orientation Identity

Findings regarding sexual orientation identity also provide important information on the ways transgender individuals represent their attractions, and how this may shift over time. Previous research has demonstrated that transgender individuals incorporate both their past and present sexual experiences into their gendered sense of self in ways that often challenge traditional categorizations of sexual behavior. Several studies demonstrate that transgender individuals narrate past sexual experiences in ways that align with their current gender identities and sexual orientations (Bockting et al., 2009; Schleifer, 2003; Schrock & Reid, 2006). If applied on the basis of the sex of the individuals involved, the labels homosexual, heterosexual, or transvestic often did not match or fully capture participants’ own descriptions of their identities or experiences. However, none of these smaller studies discussed identities such as queer and pansexual. This study expands on these findings, suggesting that among a more recent, larger Internet sample of transgender individuals who self-identify in diverse ways, non-binary modes of identification are common.

Transgender individuals may be likely to represent their sexual orientation in non-binary ways, such as queer and pansexual, given their own experiences transgressing societal norms surrounding sex, gender, and sexual roles/behaviors. Sexual orientations such as pansexual, queer, and bisexual also do not assume the sex or gender of the individual claiming the orientation. These individuals may wish to represent their attractions in ways that do not specifically reference their own sex or gender, which may be in transition, fluid, or not fully captured by gay, lesbian, or heterosexual identity labels. Sexual orientation identities that traditionally reference the sex or gender of the individual all appeared to be more common as past sexual orientation identities, indicating that many respondents may have moved away from this type of identity representation. Although we expected a queer identity to be more common among younger age groups given the shifts previously discussed, those in the second oldest group (aged 26-35) were more likely than the youngest age group (aged 18-21) to identify as queer. This suggests that a certain amount of exploration of one’s sexuality, or possibly being further along in transition, may increase one’s likelihood of identifying as queer. Similarly, a bisexual identity was more likely among older participants while
a lesbian identity was less likely. Birth sex differences in sexual orientation again appeared similar to sex differences seen in sexual orientation more broadly, with those born female more likely to identify as queer and those born male more likely to identify as straight.

**Hormone and Surgery Status**

Many participants also indicated that they did not wish to undergo SRS or take hormones. Given that researchers have typically focused on those that do seek out hormones or surgery, more information is necessary to understand these differences in experience, as well as any unique health care and psychosocial needs of those that do not seek medical transition. Although researchers and clinicians have increasingly acknowledged that not all transgender individuals desire hormones or SRS, this desire, as well as use of such interventions, has rarely been assessed within non-clinical samples. Chivers and Bailey’s (2000) online study of 39 transgender FTM spectrum individuals is one exception. In this study, slightly more than one half of participants had taken testosterone, slightly less than one half had undergone top surgery, and only two participants had undergone any form of bottom surgery. In another exception, Forshee (2008) reported a similar percentage of 321 transgender males completing his online survey also had undergone top surgery, while 71% were using testosterone, and 18% had undergone a hysterectomy, bottom surgery, or both. This study found lower rates across all three forms of intervention, which could be explained by the broader inclusion criteria, as well as the younger mean age of participants. Roughly one fourth of participants were unsure of their desire to undergo each, with an additional 4% to 43% wanting to in the future. These responses differed based on birth sex, with desire for bottom surgery reflecting this largest difference.

Sex differences in desire for bottom SRS is likely to be heavily influenced by the differences in financial costs and surgical outcomes for birth sex males versus birth sex females. Among Forshee’s (2008) FTM respondents, one half indicated financial cost as a major barrier. Although outcomes vary based on the surgical technique utilized, surgeons’ abilities to create the appearance and functioning of male genitalia remains particularly limited. Sex differences in use of hormones and other procedures are likely to be influenced by a number of complex factors, including the greater difficulty birth sex males experience with both physically passing and having their female identities legitimized by the larger society. These findings also help to explain the difference between this study’s sex ratio and those from studies of surgical registries and clinics.

As a whole, the data on SRS and hormones demonstrate that the vast majority of this sample would not have been represented had the research design only included transgender individuals presenting at clinics seeking medical intervention. This highlights the importance of alternate research strategies, and suggests that online research methodology may be particularly well suited to capture a wider range of transgender identifying individuals. These findings also challenge the wider applicability of transgender identity development models that focus on surgery and hormonal intervention as a central step in transition (e.g., Bolin, 1998; Devor, 2004). This is not to downplay the importance and necessity of such procedures for those transgender individuals that desire or seek them out, but to highlight the diversity of the transgender population as a whole. Taken together, the data stand in opposition to singular or universal characterizations of transgender identity or experience.

**Limitations and Suggestions for Further Research**

Although participants were diverse in their modes of identification, information collected utilizing online samples must be examined within the context of its limitations—namely, as in previous online surveys of LGBT populations, respondents were more likely to be White, younger, and more educated than the general population (Ross, Mansson, Daneback, Cooper, & Tikkanen, 2005; Rosser et al., 2007). A range of other factors such as perceptions of the researchers’ intentions, degree of connection to transgender communities, and desire to share one’s own experiences may have influenced potential participants’ decisions to participate. Additionally, results may represent a unique subpopulation of transgender individuals who utilize social networking Web sites and listservs. However, even if the sample were to be biased to such a subcommunity, the study provides a unique and valuable glimpse into the new forms of communication and community building now made possible through widespread Internet availability. The survey was posted to over one dozen groups, spanning four major social networking and message board sites during a six-month data collection period. Most of the states in the United States were represented, and respondents were distributed across urban, rural, and suburban locations. If the survey respondents represent a rather distinct subpopulation of the transgender community, this subpopulation reflects a wide range of identity possibilities and spans diverse social networking spaces not primarily based on geography (or in-person social activity).

More broadly, several researchers have discussed the impact the emergence and increasing availability of the Internet has had on transgender individuals and communities. The Internet provides an increasing number of media (i.e., chat, message boards, blogs, and videos) for individuals to seek social support, find resources,
and both gain access to and contribute to new frameworks for conceptualizing identity. The anonymity of the Internet affords individuals the ability to experiment with new ways of presenting themselves without some of the risks associated with doing so in the “real world” (Lev, 2007). It also allows individuals to develop self-representations that rely less on physical characteristics (Whittle, 1998).

However, the segregation based on birth sex and race or ethnicity visible within in-person transgender communities (e.g., Hwahng & Nuttbrock, 2007) are also liable to be reproduced on the Internet. Although the Internet may loosen such divides, those for whom lack of financial or social resources prevents access, as well as those who face more immediate, daily stressors (unstable housing, threats to personal safety) are likely to remain absent. The lack of racial and ethnic diversity within this study lends credence to this perspective, yet remains a significant limitation. In his ethnography describing the adoption of transgender as a collective identity, Valentine (2007) argued that the term transgender is rooted within White, middle- to upper-class conceptualizations of gender. As such, it often functions to evade or erase the distinct experiences of individuals within the subgroups it collectively subsumes. Conversely, racial- and class-based differences may also underlie the more recent proliferation of gender identity terminology. According to the transgender activists interviewed by Davidson (2007), genderqueer has typically reflected a young, White, academically rooted conceptualization of gender. Some participants worried that its use among those of more socioeconomically privileged backgrounds to “play with gender” obscures the very real, day-to-day struggles faced by many transgender individuals. Others expressed concern that genderqueer individuals were often excluded from transgender organizing on the basis on not being “trans enough” (Davidson, 2007, p. 70). Further research is necessary to explore how experiences of oppression or minority status shape gendered experiences and self-understandings, as well as the possibilities that exist to represent and communicate these differences.

Taken together, this study highlights the diverse, multilayered, and dynamic nature of identity within an online sample of transgender individuals. These findings suggest a continued evolution in the identity language used within certain subsets of transgender individuals. More research is necessary to understand the multiple, contextual factors that may help to explain the unique pattern of results, including the widespread availability of the Internet. However, this study adds to a growing body of literature that highlights the diversity of experience within the transgender umbrella. It also emphasizes the need for both researchers and clinicians alike to be sensitive to these differences in identity, as well as thoughtful of their own use of language.

References


Fassinger, R. E., & Arsenneau, J. R. (2007). “I’d rather get wet than be under that umbrella”: Differentiating the experiences and


