Early Findings from the TransYouth Project

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Gender Development in Transgender Children
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Abstract

Despite a dramatic increase in the number of socially transitioned transgender children (children who identify with the gender opposite their natal sex and who change their appearance and pronouns to align with that gender identity), little empirical research exists on transgender children’s gender development. Findings from the TransYouth Project, the first large, longitudinal study of socially transitioned transgender children, suggest that socially transitioned children’s gender development looks remarkably similar to their gender-typical, gender-matched peers and gender typical siblings. In this paper, we review findings from the few existing studies, connect this work to past work, and discuss future goals for better understanding gender development among transgender children.
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Gender Development in Transgender Children

In 2007, Barbara Walters interviewed 6-year-old Jazz Jennings, perhaps the first openly transgender child on American network television (1). Jazz’s story was notable not because she was transgender—a natal\(^1\) male who identified as a girl—but because her parents had permitted her to “socially transition”\(^2\) (i.e., she was referred to as a girl and by the pronoun “she,” rather than a boy and “he”). Since then, stories about socially-transitioned transgender children have appeared throughout popular media (2-4), and clinics that focus on gender development in children have been reporting a surge in the number of children who socially transition (5). Despite these increases, until two years ago, no quantitative research had been reported on the development of these children. In this paper, we review the empirical literature to date about gender development in transgender children who have socially-transitioned, note connections to past work with gender nonconforming children (i.e., children who show preferences and interests that were more common for children of the opposite\(^3\) sex but are not necessarily transgender and have not socially-transitioned), and outline key avenues for future work in this area.

The TransYouth Project

To our knowledge, only one lab has begun empirical investigation into gender development in socially-transitioned children. The TransYouth Project is a longitudinal study of gender development among socially-transitioned prepubescent transgender children (ages 3-12

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\(^1\) We use the terms “natal sex,” “natal male,” and “natal female” throughout the article for ease of comprehension to refer to the sex of the child at birth. Within transgender communities it is more acceptable to use the terms “assigned sex at birth,” “assigned male at birth,” and “assigned female at birth.” However, this language sometimes leads to confusion between transgender children and children who are intersex (those whose sex cannot be easily labeled male or female at birth). Thus, we use the more common language throughout this manuscript.

\(^2\) No hormonal or surgical interventions are involved in transitions at this young age.

\(^3\) Gender is often conceptualized as a spectrum or even a multi-dimensional space. Nonetheless, for ease of communication and because the children in this review see their gender as discrete and binary, we use the term “opposite” gender. So a child like Jazz is a girl according to her gender identity and this is the “opposite” of her sex assigned at birth (male).
years at the start of the study) from North America. Families are recruited into the study via online and in-person support groups and conferences for families with transgender children, via referrals from clinicians, by word-of-mouth, and in response to media stories about the project. Given that these children have socially-transitioned, and doing so at this age requires parental approval, the children in these studies have significant parental support of their gender identities at the time they participate (even if there is variation in their earlier support). Due to these sampling approaches, one must be cautious in generalizing the findings beyond samples sharing these characteristics.

In addition to the transgender children themselves, the TYP study includes two comparison groups. The first comparison group is a group of unrelated children, who are age- and gender-matched (i.e., a trans girl like Jazz would be paired with a girl) to the transgender participants, and are gender “typical”4. The second comparison group is a group of siblings of the transgender participants5. The siblings are an important comparison group because they have close contact with and knowledge about gender diversity, but are not transgender.

To date, three studies have been published that explore gender development in the TYP cohort. Olson, Key, and Eaton (7) reported on a group of 32 ($M = 9.1$ years) transgender elementary school-age children, Fast and Olson (8) reported on a group of 36 transgender preschool-age children ($M = 5.0$ years), and Olson and Enright (9) reported on a group of 56 transgender elementary school-age children ($M = 7.5$ years). In all studies, more than half of the transgender children identified as girls (63%, 78%, 75%, respectively). The data from these papers focused on four major constructs in gender development research: gender identity, gender-stereotypic preferences, gender stereotyping, and gender constancy.

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4 We use the term “typical” to refer to children who demonstrate the modal, or most common, pattern of gender development. Our use of this term should not imply that such development is prescriptively better (or worse).

5 In some studies, this group also includes the siblings of a group of gender nonconforming children.
Critically, this work was exploratory as all outcomes were theoretically possible and interesting. In particular, because transgender children live for some period of time treated by others as members of one group before being recognized as a member of the opposite group, it was possible that transgender children would show less-gendered responses than their gender-matched peers (perhaps as a result of the lasting impact of that early socialization), that they might assert their identities and beliefs even more than their gender-matched peers (perhaps in order to “prove” their gender identity), or that there have been no differences.

**Gender Identity**

Research on early gender development has suggested that most gender typical children reliably identify their gender by their third birthday (10). Studies of children in the 3-12 age range has found that most gender typical children identify with their gender and do so more strongly than with the opposite gender (11). In all studies of socially-transitioned transgender children that have assessed gender identity, transgender children, as young as 3 years of age (the youngest tested) have shown a clear and consistent identification with their current gender, and indicated feeling more similar to peers of their own gender and dissimilar to opposite gender peers; the magnitude of these effects does not differ from their gender- and age-matched peers (7-8). Further, elementary-aged transgender and gender typical children also showed equally strong implicit gender identification as measured by the Gender Identity Implicit Association Test, a more implicit or automatic assessment of gender identity (7).

**Gender-typed Preferences**

Another clear hallmark of early gender development in gender typical children is that they often show very robust and reliable gender-typed preferences (12-13). For example, boys tend to prefer being friends with other boys, and playing with toys and wearing clothes that are marketed toward boys (14-15). In the TYP study, during the preschool years, transgender children stated a preferences for toys, clothing and playmates, and wear clothing to their study appointment, that are stereotypically-associated with their gender (and not natal sex) at the
same rates as gender-matched children (8). Elementary-age transgender children preferred peers of their gender, novel toys endorsed by peers of their gender, and showed an implicit preference for their gender (i.e., they associated their gender with “good” and the opposite gender with “bad”; 7). Together, across measures and ages, the findings for preferences have been clear: Socially-transitioned transgender children showed the same gender-stereotypical preferences, in direction and magnitude, as unrelated controls and siblings of the same gender (7-8).

**Stereotyping**

Gender typical children endorse common gender stereotypes (e.g., that girls have long hair, or that boys don't wear dresses) by 3-4 years of age (for reviews see, 16-17) and negatively evaluate peers who violate gender stereotypes (18-19). While gender stereotype endorsement peaks around age 6 and then begins to decline in magnitude (20), even adolescents and adults endorse many gender stereotypes (21-22) and discriminate against people who violate gender stereotypes (23-25).

Unlike findings in the domains of identity and preferences, children in the TYP cohort showed differences from control participants in gender stereotyping, at least in the elementary years. In the preschool years (3-5 years), socially-transitioned transgender children did not significantly differ from unrelated controls or siblings in their level of stereotype endorsement, though at the mean level, transgender children and siblings endorsed gender stereotypes less than controls (8). At 6-8 years of age, this difference was significant. Transgender children and their siblings were significantly less likely to endorse gender stereotypes than unrelated controls, and believed that gender nonconformity in peers was more acceptable than unrelated controls did (9). By this age, transgender children and siblings were also more willing to befriend gender nonconforming peers than unrelated controls were. Whether these group differences are related to different interpersonal experiences (e.g., more exposure to gender nonconforming children), different socialization (e.g., parents may talk about gender differently), or some
combination of these factors remains an open question. Similarly, whether the developmental difference between groups can be explained by the smaller sample size of the preschool group or real developmental change is currently unknown (see 9, for more detailed discussion of this point), and remains an especially critical question for future replication efforts.

**Constancy**

Gender constancy, or the belief that gender is stable across time and consistent across situational changes, has been a cornerstone of research on gender development from the field’s earliest days (26). Achieving gender constancy has been viewed as a necessary milestone for young children, and critical to learning gender roles (27). Findings to date with gender typical children have largely suggested that by age 5, children come to believe gender is stable across development, and by age 7, they believe that gender is consistent across changes in situation (e.g., changing clothes) (28).

To date, gender constancy has only been explored in preschool-age transgender children (8). On a traditional gender constancy task (29), transgender children overwhelmingly indicated that they would remain a member of their current gender group in the future, and provided this answer at the same rates as children in the comparison groups. However, when asked about their gender as infants, transgender children differed from the comparison groups. Here, the majority of transgender children indicated that they were members of the opposite gender group in infancy (i.e., they provided the answer that aligned with their sex at birth).

Children were also asked about the stability of other people’s gender across time. Children in all participant groups believed that most people’s gender would be stable across time (i.e., most boys would grow up to be men). However, whereas unrelated controls always believed that gender was stable, transgender children and siblings believed that there would occasionally be a person whose gender was not stable from childhood into adulthood.

Responses by all groups about the consistency of gender across situational changes (e.g.,
clothing changes)—both for themselves and others—did not differ from chance, consistent with past work with children at this age (30).

Why did the transgender children indicate that their gender had changed since infancy? One possibility is that this is that transgender children often hear that they were previously a different gender (e.g., “you were born a boy”) and know that they are no longer living as that gender so they perceive this as a change or that they were confusing the concepts of sex and gender. Another possibility is that transgender children are reporting on a change they felt, moving from one gender to its opposite. Yet another possibility—consistent with the chance results on the third party consistency measures for all participant groups—is that transgender children, like all children at this age, are confused by stories involving changes in clothing and know that they used to dress as one gender and now dress as the opposite gender. Additional research is needed to understand how children are reasoning about these questions, especially as society moves forward and it becomes increasingly likely that even children without transgender siblings will be exposed to the existence of transgender or gender nonconforming people.

Limitations, Connection to Related Work, and Next Steps

Of course, there are critical limitations to these findings. First and foremost, these findings came from a single large-scale study, the TransYouth Project. That sample itself is limited in many ways. For example, the sample is predominantly White, of higher socioeconomic status, and higher parental educational status compared to the average child. Due to challenges in recruiting socially transitioned children, sample sizes in these papers are relatively small, are skewed toward more supportive families, and have biases associated with community recruitment (i.e., parents are likely more supportive of scientific research, members of groups treated poorly by researchers in the past are probably underrepresented). Further, because the children in these studies have all socially-transitioned before completing these measures we do not know if the results observed are a result of children’s social transitions or if they reflect
responses that would have been noted even before their transitions. Nonetheless, the first ever quantitative studies of gender development in young socially-transitioned transgender children described here have largely found the same results across conceptually related measures, suggesting these findings are likely to be robust, at least amongst similarly-biased samples.

Although the research presented here is the first to investigate development among socially transitioned transgender children, an older and more clinically-focused literature has reported on gender development amongst a related group of children. The children in past studies were referred to a clinic for showing gender nonconforming behavior (i.e., behaving in ways culturally associated with the opposite sex), but they had not socially-transitioned (i.e., the children in these clinic-referred samples were living as the gender associated with their sex at birth). Critically, the children in these past studies differed in a wide number of other ways as well. For example, they were participants sometimes decades before the present children, they were recruited through clinics so may have had more health problems, they lived in different countries, the studies were run by the same teams often performing evaluations and treatments for them, and they were more socio-economically diverse, to list a few (for further description of the differences, see 31). Despite these differences, findings from prior studies are relevant to the current work because they involved children at the same ages who were notable to the adults around them for their less-common gender development.

Many of the findings from clinic-referred gender nonconforming children, especially in the domain of preferences, align with the present findings. For example, the clinic-referred children displayed a preference for playmates, toys, and play styles stereotypically-associated with the opposite sex more often than their same-sex peers (32-37, just as the socially-transitioned transgender children in the TYP sample did (in fact the TYP sample showed effects that were equal in magnitude to opposite-sex gender typical peers, 7-8). The clinic-referred children also showed lower endorsement of beliefs about gender stability than gender typical,
control children, consistent with the findings to date with socially-transitioned transgender children (38).

While many of the findings are similar, one particularly striking dissimilarity between the present and past samples can be seen on a measure of gender identity. Fewer than 10% of gender-referred children in the past work identified as the gender opposite their sex at birth when asked if they were boys or girls (38-39). This is in contrast to the majority of children in the TransYouth Project who report being a member of the gender group opposite their sex at birth. Whether this difference is attributable to differences in recruitment techniques, measures, the fact that the TYP children had socially-transitioned, demographic differences, or something else is currently unknown.

In addition to the work on clinic-referred children, there has been a small literature on girls who show minor deviations in gender nonconformity—who are often called tomboys. These children are often self-identified and recruited from largely normative or more representative samples. One major finding in this literature has been that while tomboys differ from their female peers in their stronger interest in stereotypically-masculine activities, they do not differ from their female peers in their interest in stereotypically-feminine activities (40-41), suggesting that self-identified tomboys might be better categorized as androgynous, or high on both femininity and masculinity (see also 11). In this way, these children also appear to be “less extreme” in the degree to which they prefer and associate with things traditionally associated with the opposite sex than the clinic-referred or TYP cohorts.

One critical step for future work will be to bridge the gaps between these largely disparate literatures by giving similar measures to children recruited through diverse means. Gender nonconformity is likely better conceived of as continuous rather than categorical, and the literature could benefit from understanding the developmental course of children showing different degrees of gender nonconformity. If gender nonconforming children can be identified early, longitudinal work would allow researchers to investigate, for example, whether cross-
gender identification emerges before or after social transitions, whether some degrees of
gender nonconformity are more or less likely to fade or change over time (e.g., 33, 42-43).
Further, by following a large and diverse group of gender nonconforming children across time,
researchers can better understand the relationships between different aspects of gender
development (e.g., preferences, identity), identifying key signatures that might inform which (if
any) children would benefit, for example, from social transitions or other early supports. In this
way, we see the most exciting future work to be focused on recruiting large and diverse groups
of children, tracking their development, and expanding our understanding not only about gender
diversity but about gender development more broadly.

Conclusion

The early work from the TYP cohort suggests that there are myriad ways in which
socially-transitioned transgender children look like gender-matched children in terms of their
gender identities and gender expression. Transgender girls like Jazz identify as girls, and prefer
girl-typed toys and clothes as much as other girls. Similarly, transgender boys show patterns
indistinguishable from other boys on these measures. At the same time, transgender children
and their siblings appear to gender stereotype less, show greater tolerance for gender
nonconformity in others, and believe that there’s more variability in others’ gender experience
(e.g., seeing some people’s gender as changing across the lifespan) than gender typical
controls do. The similarity between transgender children and their siblings on measures
assessing their views of gender suggest that one need not be transgender to show flexibility in
thinking about gender. Despite these preliminary findings, considerably more work is needed,
especially aimed at linking the study of socially-transitioned transgender children to broader
questions about the diversity of children who display less common patterns of gender
development in early childhood.
References


