

## Gender Identity 5 Years After Social Transition

Kristina R. Olson, Ph.D.,<sup>a</sup> Lily Durwood, M.S.,<sup>b</sup> Rachel Horton, B.S.,<sup>a</sup> Natalie M. Gallagher, Ph.D.<sup>a</sup> Aaron Devor, Ph.D.<sup>c</sup>

**Affiliations:** <sup>a</sup>Princeton University; <sup>b</sup>University of Washington; and <sup>c</sup>University of Victoria

**Address correspondence to:** Kristina Olson, Department of Psychology, Princeton University, 523 Peretsman Scully Hall, Princeton, NJ 08540, krolson@princeton.edu, 217-649-8406.

**Short title:** 5 Years After Childhood Social Transition

**Conflict of Interest Disclosures (includes financial disclosures):** All authors have no conflicts of interest to disclose.

**Funding/Support:** The collection of the data in this report and some of the authors' time (KO, RH, and NG) over the course of this project have been supported by: National Institutes of Health grant HD092347, National Science Foundation grants BCS-1523632, SMA-1837857, and SMA-2041463, a grant from the Arcus Foundation (all to KO), and a National Science Foundation GRFP grant to LD. In addition, KO receives financial support from the MacArthur Foundation.

**Role of Funder/Sponsor (if any):** Funders played no role in determining the research questions asked nor have they seen the results prior to review.

**Clinical Trial Registration (if any):** none

**Abbreviations:** none

### Article Summary

This article examines the frequency of retransition and current gender identity amongst youth who identified as binary transgender children earlier in childhood.

### What's Known on This Subject

There has been considerable debate about early childhood social transitions and whether they will lead to high rates of retransition. However, less is known about rates of retransition or identity outcomes following social transitions in childhood.

### What This Study Adds

This study provides an estimate of the frequency of retransitions amongst children who socially transitioned before age 12 and provides an update on their current identities, an average of 5 years after their initial social transitions.

46 **Contributors' Statement Page**

47

48 Dr. Olson conceptualized the current study, supervised data collection, carried out the  
49 initial analyses, and drafted the initial manuscript.

50

51 Ms. Durwood and Dr. Devor conceptualized the current study and provided extensive  
52 revisions on the manuscript.

53

54 Ms. Horton acquired and compiled the data and tables and provided feedback on the  
55 manuscript.

56

57 Dr. Gallagher acquired, compiled, and analyzed the data and provided feedback on the  
58 manuscript.

59

60 All authors approved the manuscript as submitted and agree to be accountable for all  
61 aspects of the work.

62

63

64 **Abstract**

65

66 **Background and Objectives.** Concerns about early childhood social transitions amongst  
67 transgender youth include that these youth may later change their gender identification (i.e.,  
68 retransition), a process that could be distressing. The present study aimed to provide the  
69 first estimate of retransitioning and to report the current gender identities of youth an  
70 average of 5 years after their initial social transitions.

71

72 **Methods.** The present study examined the rate of retransition and current gender identities  
73 of 317 initially-transgender youth (208 transgender girls, 109 transgender boys;  $M=8.1$   
74 years at start of study) participating in a longitudinal study, the Trans Youth Project. Data  
75 were reported by youth and their parents through in-person or online visits or via email or  
76 phone correspondence.

77

78 **Results.** We found that an average of 5 years after their initial social transition, 7.3% of  
79 youth had retransitioned at least once. At the end of this period, most youth identified as  
80 binary transgender youth (94%), including 1.3% who retransitioned to another identity  
81 before returning to their binary transgender identity. 2.5% of youth identified as cisgender  
82 and 3.5% as nonbinary. Later cisgender identities were more common amongst youth  
83 whose initial social transition occurred before age 6 years; the retransition often occurred  
84 before age 10.

85

86 **Conclusions.** These results suggest that retransitions are infrequent. More commonly,  
87 transgender youth who socially transitioned at early ages continued to identify that way.  
88 Nonetheless, understanding retransitions is crucial for clinicians and families to help make  
89 them as smooth as possible for youth.

90

91 **Keywords.** Transgender children, social transitions, retransitions, desistence, gender  
92 identity, detransition

## 93 **Introduction**

94           Increasing numbers of children are *socially transitioning* to live in line with their  
95 gender identity, rather than the gender assumed by their sex at birth—a process that  
96 typically involves changing a child’s pronouns, first name, hairstyle, and clothing. Some  
97 concerns about childhood social transitions have been raised<sup>1</sup>, including that these  
98 children may not continue to identify as transgender, rather they might “retransition” (also  
99 called a “detransition” or “desistence”), which some suggest could be distressing for the  
100 youth<sup>1-3</sup>. Research has suggested that ages 10-13 years may be particularly key times for  
101 retransition and that identity may be more stable after this period for youth who show  
102 early gender nonconformity<sup>3</sup>.

103           Other clinicians argue that early social transitions can be beneficial for some  
104 gender-diverse youth<sup>4-6</sup>. Some clinicians and scholars who support early childhood social  
105 transitions encourage families to remain open to later retransitions<sup>7,8</sup>, which are seen by  
106 some as part of a youth’s exploration of their gender<sup>9</sup>.

107           Unfortunately, very little data about retransitions exist in the scientific literature.  
108 We have been able to find limited data on the number of youth who socially transition in  
109 childhood and then go on to retransition afterwards. One paper included 4 youth who  
110 socially transitioned; none of them had retransitioned 7 years later<sup>10</sup>. We know of three  
111 (mentions of) early-transitioning youth who retransition<sup>8,9</sup>. However, these papers include  
112 no mention of how many other youth the same clinical team saw who did not retransition,  
113 making it impossible to guess at a retransition rate.

114           In the present paper we aimed to compute an estimate of retransition amongst a  
115 cohort of more than 300 early-transitioning children. Here we report the retransition rate  
116 an average of 5 years post-initial (binary) social transition, as well as how many of these

117 participants are living as binary transgender youth, nonbinary youth, and cisgender youth  
118 at the same timepoint.

## 119 **Methods**

120 A total of 317 binary socially-transitioned transgender children ( $M_{age} = 8.07$ ;  $SD =$   
121  $2.36$ ; 208 initially transgender girls, 109 initially transgender boys; see Table 1 for  
122 additional demographics) joined this longitudinal study (The Trans Youth Project, TYP)  
123 between July 2013 and December 2017. For inclusion in TYP, children had to be 3-12  
124 years of age and had to have made a “complete” binary social transition<sup>10</sup> including  
125 changing their pronouns to the binary gender pronouns that differed from those used at  
126 their births.

127 As part of the larger longitudinal study, parents and youth were regularly asked  
128 about whether they had begun using puberty blockers and/or gender affirming hormones.  
129 At most visits they were not asked about whether puberty had begun, though our available  
130 data suggests that because these youth had socially transitioned at such early ages,  
131 most participants were followed by an endocrinologist well-before puberty began. The  
132 endocrinologists helped families identify the onset of Tanner 2 (the first stage of puberty)  
133 and prescribed puberty blockers within a few months of this time. Therefore, the onset of  
134 puberty blockers is used as our proxy for the onset of puberty. Of the youth in this sample,  
135 37 (11.7%) had begun puberty blockers before beginning this study.

136 This study did not assess whether participants met criteria for the DSM-5 diagnosis  
137 of Gender Dysphoria in Children. Many parents in this study did not believe that such  
138 diagnoses were either ethical or useful and some children did not experience the required  
139 distress criterion. Based on data collected at their initial visit, we do know that these  
140 participants showed signs of gender identification and gender-typed preferences

141 commonly associated with their gender, not their sex assigned at birth<sup>11</sup>. Further, parent  
142 report using the Gender Identity Questionnaire for Children<sup>12</sup>, indicated that youth showed  
143 significant “cross-sex” identification and preferences (when scored based on sex at  
144 birth)<sup>12</sup>.

145         Final identity classification for these analyses was based on our most recent  
146 interaction with the child and/or their parent before January 1, 2021. Because some  
147 families have not participated recently, we also separately report (in Table 2) the results of  
148 the  $n=291$  youth with whom the research team had an interaction within the 2 years prior  
149 to that deadline. This additional analysis allows us to assess whether those who  
150 retransitioned were more likely to have missed their more recent appointments with our  
151 team. Importantly, only one of the 26 families with whom we did not meet in the last two  
152 years has formally dropped out of the study; the others often did not complete  
153 participation during these two years due to personal circumstances at the time we  
154 attempted re-recruitment. We anticipate that many in this group will participate again in  
155 the future.

156         Based on pronouns at follow-up, participants were classified as *binary transgender*  
157 (pronouns associated with the other binary assigned sex), *nonbinary* (they/them pronouns  
158 or,  $n=3$ , a mix of they/them and binary pronouns), or *cisgender* (pronouns associated with  
159 their assigned sex). We confirmed this classification by reviewing other information  
160 available to the research team (e.g., child’s self-categorization in an interview or survey,  
161 email communications with the parents, etc). Only one classification was debatable; this  
162 participant was classified by pronouns (and in this paper) as nonbinary, but could have  
163 been classified as binary transgender (and not retransitioned).

164         This study has been approved by the University of Washington and Princeton

165 University IRBs.

## 166 **Results**

167 The overall rate of retransition was 7.3%. An average of 5.37 years (SD=1.74 years)  
168 after their initial binary social transition, most participants were living as binary  
169 transgender youth (94.0%; see Table 2). Included in this group were 4 individuals (1.3%  
170 of the total sample) who retransitioned twice (to nonbinary then back to binary  
171 transgender). Some youth (3.5%) were currently living as nonbinary, including one who  
172 had retransitioned twice (to cisgender then to nonbinary). Finally, 2.5% were using  
173 pronouns associated with their sex at birth and could be categorized as cisgender at the  
174 time of data collection, including one who first retransitioned to live as nonbinary. Similar  
175 percentages were observed when examining the 291 youth who were in touch with the  
176 research team in the last two years (see Table 2), when examining only those 280 youth  
177 who had not begun puberty blockers at the start of the study (Table 3), or if we examine  
178 only the 200 youth who had gone at least 5 years since their initial transition (Table 3).

179 We observed one potential (post-hoc) age effect. Youth who initially socially transitioned  
180 before age 6 (n=124), were more likely to be living as cisgender (5.6%), than youth who  
181 transitioned at age 6 or later (n=193; 0.5%), Fisher's exact test (comparing binary,  
182 cisgender, nonbinary; before vs. 6 or later),  $p = 0.02$ , although low rates of retransition  
183 were seen in both groups. In Table 2 we also report the results separately for children  
184 assigned male vs. female at birth; this distinction was not significantly associated with  
185 later identity,  $p = 0.47$ , Fisher's exact test. Finally, for exploratory purposes, in Table 3 we  
186 report outcomes separately for several subsets of our participants, including youth who  
187 had started puberty blockers, youth who had used puberty blockers and gender affirming  
188 hormones, and youth who are at least 14 years old (the age at which past work<sup>3</sup> has  
189 suggested retransitions will be less likely).

## 190 Discussion

191 Five years after an initial binary social transition, 7% of youth had retransitioned at  
192 least once. Most youth (94%) were living as binary transgender youth at the time of data  
193 analysis, including 1.3% who retransitioned initially to cisgender or nonbinary and then  
194 retransitioned back to binary trans identities. A small number of youth were living as  
195 cisgender youth (2.5%) or nonbinary youth (3.5%). We observed comparable rates when  
196 examining all participants who began the study (n=317), those who continue to be in  
197 regular contact with the research team (n=291), those who had gone at least 5 years since  
198 initial social transition (n=200), and those who started the study before beginning puberty  
199 blockers (n=280). We found no differences as a function of participant sex at birth. We  
200 observed slightly higher rates of retransition, and particularly later cisgender identity,  
201 amongst youth who initially socially transitioned before age 6. However, even in these  
202 youth, retransition rates were very low.

203 Amongst those who had begun puberty blockers and/or gender affirming hormones,  
204 only one had retransitioned to live as cisgender (and this youth had begun blockers, but  
205 not gender affirming hormones). One likely reason so few retransitions to cisgender  
206 occurred amongst those accessing medical transition is that most retransitioning in this  
207 cohort happened at early ages. All but one of the 8 cisgender youth had retransitioned by  
208 age 9 (the last retransitioned at 11). Some of these youth are still not eligible for blockers  
209 because they are still prepubertal; we anticipate that those who identify as cisgender are  
210 unlikely to seek blockers or hormones, but that the participants who have not begun  
211 puberty and who identify as binary transgender or nonbinary likely will.

212 Past work has suggested that the ages 10 to 13 are an especially critical time for  
213 retransition<sup>3</sup>. In our sample, many of the youth who retransitioned did so before that time  
214 frame, particularly the cisgender youth. In the nonbinary group, however, 6 of 11



215 retransitioned between age 10 and 13, with the remainder retransitioning before 10.  
216 Importantly, our sample differed from the past work upon which this age range was  
217 determined in several key ways including that our participants socially transitioned at  
218 earlier ages (perhaps pushing retransitions earlier too), had undergone complete social  
219 transitions including pronouns and names (not just hairstyle and clothing changes as in  
220 most cases in previous studies<sup>3</sup>), and are living at a different historic time in a different  
221 country. Any, or all, of these may turn out to be key differences related to age of  
222 retransition.

223 Our observed low retransition rate is consistent with a study in which 4 youth who  
224 had “completely” socially transitioned had not retransitioned 7 years later<sup>10</sup>. That finding  
225 is in the same ballpark as our study’s estimate of approximately 2.5% if we examine the  
226 percentage living as cisgender at the end of the study (i.e., those “desisting” from gender  
227 diverse outcomes). Together these papers suggest this outcome is relatively rare in this  
228 group.

229 Our observation that few youth who have begun medical intervention have  
230 retransitioned to live as cisgender is consistent with findings in the literature. Several  
231 studies reporting on outcomes amongst transgender youth receiving blockers and gender  
232 affirming hormones have reported relatively low rates of regret or stopping treatment<sup>13</sup>,  
233 which are potential indicators of retransition – though stopping treatment can occur for  
234 other reasons as well (e.g., side effects), as can regret (e.g., experiences of transphobia).

235 Our key finding – that there was a relatively low rate of retransition about five  
236 years after initial social transition – may, on the surface, appear contradictory with past  
237 clinic-based research on what is sometimes called “persistence and desistence”<sup>3</sup> of  
238 childhood gender dysphoria. Several large studies attempted to recontact adolescents and

239 adults who had previously been evaluated for gender dysphoria in childhood<sup>14-17</sup>. Many of  
240 those were formally diagnosed with what was, at the time, called Gender Identity  
241 Disorder. Those studies reported that a minority of youth later identified in a way that  
242 might indicate a transgender identity by today's definition.

243         Interpretation of those results, and especially comparison to the present work is  
244 difficult for several reasons. First, in past studies, when asked "are you a boy or a girl?"  
245 about 90% of the children supplied answers that aligned with their sex at birth<sup>18</sup>, leading  
246 some to question whether or not the majority of those children were the equivalent of  
247 transgender children today or not<sup>19-21</sup>. Second, participants in those studies were children  
248 between the 1960's and the 1990's, and many features of society have changed since then,  
249 including greater rates of acceptance and acknowledgement of transgender identities.  
250 Third, the parents of the youth in the present study support their children's identities, as  
251 indicated by their approval of their social transitions, while many of the parents of youth  
252 in past studies explicitly discouraged gender nonconformity or "cross-gender"  
253 identification<sup>15,22</sup>. Further, it would have been exceedingly rare for youth in those studies  
254 to socially transition, especially completely<sup>1,10</sup>. Finally, there were substantial drop-out  
255 rates in all of the prior studies<sup>14,15,17</sup>, making the true estimates of persistence or desistence  
256 difficult to obtain<sup>19,21</sup>. Because there are so many possible contributors to differences in  
257 rates of "persistence" (in past work) and "retransition" in the current work, we urge  
258 caution about overinterpreting differences, or overconfidence about which contributing  
259 factors explain the differences.

260         There are also some reasons why we might have had such a low retransition rate.  
261 First, on average, participants had socially transitioned 1.6 years before joining our study. It  
262 is possible that some youth initially try socially transitioning and then change their minds  
263 quickly. Such youth would be unlikely to be enrolled in this study because their eligibility

264 period would have been quite short and therefore the odds of finding the study and  
265 completing it would have been low. This means the children in our study may have been  
266 especially unlikely, compared to all children who transition, to retransition because they  
267 had already lived – and presumably been fairly content – with that initial transition for  
268 more than a year. Second, it is possible that families who failed to participate in the last two  
269 years of our study (n=26) were disproportionately those whose children retransitioned and  
270 who were therefore hesitant to participate again. If true, this could have reduced our  
271 retransition rate. We are skeptical of this possibility for a few reasons. First, four of these  
272 participants did retransition and had told us about that outcome, so it does not appear that  
273 hesitancy in telling us was rampant in this group. Third, many of these families continue to  
274 be in touch with our research team and only missed participation because of ongoing  
275 personal issues (e.g., COVID-19, emergency family circumstances, etc.). We anticipate that  
276 most of these families will be able to participate as we continue to follow these youth.  
277 Finally, from the beginning of the study, the research team has been clear in discussing  
278 with the families that we are open to any outcome in their youth.

279         As with past work, the present work has several key limitations. First, this is a  
280 volunteer community sample, meaning there could be biases in the kinds of families who  
281 sign up to participate. We know, for example, that unlike many samples of transgender  
282 youth, this sample of youth have normative levels of depression and only slight elevations  
283 in anxiety<sup>23</sup>. The parents of the participants in this study are disproportionately higher  
284 income and went to college at higher rates than the general population. We do not know  
285 whether these potential biases in the sample reflect biases in the cohort of children who  
286 socially transitioned in the mid-2010's in the U.S. and Canada. Therefore, whether the  
287 results generalize to youth without these characteristics is unknown.

288         Another potential limitation is that we used pronouns as the criteria for

289 retransitions. Not everyone who, for example, uses they/them pronouns identifies as  
290 nonbinary and someone might identify as transgender even if they are currently using  
291 pronouns associated with their sex at birth. However, examination of other data provided  
292 by families suggests that our pronoun-based criteria were largely consistent with  
293 classification that would have arisen from other types of information provided to the  
294 research team (e.g., labels used in an interview). Only one of the youth categorized as  
295 “retransitioned” might, by some other criteria, not meet that definition. However, because  
296 pronouns were the initial inclusion criterion (that is, to be in the study a child had to be  
297 using pronouns not associated with their sex at birth), they were the most consistent route  
298 of classification.

299         A related potential concern with these analyses is that we classified a change from  
300 using, for example, binary transgender to nonbinary as a “retransition.” Not everyone  
301 would categorize this change as a retransition. Many nonbinary people consider  
302 themselves to be transgender<sup>24</sup>. If we had used a stricter criterion of retransition, more  
303 similar to the common use of terms like “detransition” or “desistence”, referring only to  
304 youth who are living as cisgender, then our retransition rate would have been lower  
305 (2.5%).

306         One additional limitation in the present work is that the initial sample was  
307 disproportionately made up of trans girls. This is counter to recent reports that more peri-  
308 and post-pubertal transgender youth seeking clinical services recently are  
309 transmasculine<sup>25-27</sup>. Historically, and consistent with our data, samples of *prepubertal*  
310 gender nonconforming youth identified by their parents as such, have included more  
311 assigned males at birth<sup>15,16,22</sup>. Importantly, we did not observe a significant gender effect  
312 in terms of rates of retransition, so we do not predict any change in pattern of results if we  
313 had a different ratio of participants by sex at birth.

314 We anticipate continuing to follow this cohort into adolescence and adulthood. This  
315 continued follow-up is necessary because it is possible that as more youth move into  
316 adolescence and adulthood, their identities could change. As we already saw, some youth  
317 will retransition more than once so the present identities should not be interpreted as final.

318 As more youth are coming out and being supported in their transitions early in  
319 development, it is increasingly critical that clinicians understand the experiences of this  
320 cohort and not make assumptions about them as a function of older data from youth who  
321 lived under different circumstances. Though we can never predict the exact gender  
322 trajectory of any child, these data suggest that many youth who identify as transgender  
323 early, and are supported through a social transition, will continue to identify as  
324 transgender five years after initial social transition. These results also suggest that  
325 retransitions to one's gender assumed at birth (cisgender) might be likely to occur before  
326 age 10 amongst those who socially transition at the earliest ages (before age 6), though  
327 retransitions are still unlikely in this group. These data suggest that parents and clinicians  
328 should be informed that not all youth will continue on the same trajectory over time.  
329 Further understanding of how to support youth's initial and later transitions is needed.

## Acknowledgments

The authors wish to thank the families for their participation in this research.

## References

1. Steensma TD, Cohen-kettenis PT. Gender transitioning before puberty? *Arch Sex Behav.* 2011;40(4):649-650.
2. de Vries ALC, Cohen-Kettenis PT. Clinical management of gender dysphoria in children and adolescents: the Dutch approach. *J Homosex.* 2012;59(3):301-320.
3. Steensma TD, Biemond R, de Boer F, Cohen-Kettenis PT. Desisting and persisting gender dysphoria after childhood: A qualitative follow-up study. *Clin Child Psychol Psychiatry.* 2011;16(4):499-516.
4. Ashley F. Thinking an ethics of gender exploration: Against delaying transition for transgender and gender creative youth. *Clin Child Psychol Psychiatry.* 2019;24(2):223-236.
5. Sherer, I. (2016). Social transition: Supporting our youngest transgender children. *Pediatrics.* 2016; 137(3):e20154358.
6. Temple Newhook J, Pyne J, Winters K, Feder S, Holmes C, Tosh J, Sinnott MJ, Jamieson A, Pickett S. A critical commentary on follow-up studies and “desistance” theories about transgender and gender-nonconforming children. *Intl J Transgenderism.* 2018; 19(2): 212-224.
7. Leibowitz S. Social gender transition and the psychological interventions. In: Janssen A, Leibowitz S, eds. *Affirmative Mental Health Care for Transgender and Gender Diverse Youth.* Springer International Publishing; 2018:31-47.
8. Edwards-Leeper L, Spack NP. Psychological evaluation and medical treatment of transgender youth in an interdisciplinary “gender management service” (Gems) in a major pediatric center. *J Homosex.* 2012;59(3):321-336.
9. Menvielle E. A comprehensive program for children with gender variant behaviors and gender identity disorders. *J Homosex.* 2012;59(3):357-368.
10. Steensma TD, McGuire JK, Kreukels BP, Beekman AJ, Cohen-Kettenis PT. Factors associated with desistance and persistence of childhood gender dysphoria: a quantitative follow-up study. *J Am Acad Child Adolesc Psychiatry.* 2013 Jun 1;52(6):582-90.
11. Gülgöz S, Glazier J, Enright E et al. Similarity in transgender and cisgender children’s gender development. *Proceedings of the National Academy of Sciences.* 2019;116(49):24480-24485. doi:10.1073/pnas.1909367116
12. Johnson L, Bradley S, Birkenfeld-Adams A et al. A Parent-Report Gender Identity Questionnaire for Children. *Arch Sex Behav.* 2004;33(2):105-116. doi:10.1023/b:aseb.0000014325.68094.f3.
13. Kuper L, Stewart S, Preston S, Lau M, Lopez X. Body Dissatisfaction and Mental Health Outcomes of Youth on Gender-Affirming Hormone Therapy. *Pediatrics.* 2020;145(4). doi:10.1542/peds.2019-3006
14. Drummond K, Bradley S, Peterson-Badali M, Zucker K. A follow-up study of girls with gender identity disorder. *Dev Psychol.* 2008;44(1):34-45. doi:10.1037/0012-1649.44.1.34
15. Green R. The Sissy Boy Syndrome. 1987. doi:10.2307/j.ctt1ww3v4c
16. Singh D, Bradley S, Zucker K. A Follow-Up Study of Boys With Gender Identity Disorder. *Front Psychiatry.* 2021;12. doi:10.3389/fpsy.2021.632784
17. Wallien M, Cohen-Kettenis P. Psychosexual Outcome of Gender-Dysphoric

- Children. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2008;47(12):1413-1423. doi:10.1097/chi.0b013e31818956b9
18. Zucker K, Bradley S, Sullivan C, Kuksis M, Birkenfeld-Adams A, Mitchell J. A Gender Identity Interview for Children. *J Pers Assess*. 1993;61(3):443-456. doi:10.1207/s15327752jpa6103\_2
  19. Ashley F. The clinical irrelevance of “desistance” research for transgender and gender creative youth. *Psychol Sex Orientat Gend Divers*. 2021. doi:10.1037/sgd0000504
  20. Olson K. Prepubescent Transgender Children: What We Do and Do Not Know. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2016;55(3):155-156.e3. doi:10.1016/j.jaac.2015.11.015
  21. Temple Newhook J, Pyne J, Winters K et al. A critical commentary on follow-up studies and “desistance” theories about transgender and gender-nonconforming children. *International Journal of Transgenderism*. 2018;19(2):212-224. doi:10.1080/15532739.2018.1456390
  22. Zucker K, Bradley S. *Gender Identity Disorder And Psychosexual Problems In Children And Adolescents*. New York: Guilford Press; 1995.
  23. Gibson D, Glazier J, Olson K. Evaluation of Anxiety and Depression in a Community Sample of Transgender Youth. *JAMA Netw Open*. 2021;4(4):e214739. doi:10.1001/jamanetworkopen.2021.4739
  24. Darwin H. Challenging the Cisgender/Transgender Binary: Nonbinary People and the Transgender Label. *Gender & Society*. 2020;34(3):357-380. doi:10.1177/0891243220912256
  25. Aitken M, Steensma T, Blanchard R et al. Evidence for an Altered Sex Ratio in Clinic-Referred Adolescents with Gender Dysphoria. *J Sex Med*. 2015;12(3):756-763. doi:10.1111/jsm.12817
  26. de Graaf N, Carmichael P, Steensma T, Zucker K. Evidence for a Change in the Sex Ratio of Children Referred for Gender Dysphoria: Data From the Gender Identity Development Service in London (2000–2017). *J Sex Med*. 2018;15(10):1381-1383. doi:10.1016/j.jsxm.2018.08.002
  27. Meyenburg B, Renter-Schmidt K, Schmidt G. Transidentität in Jugend und Adoleszenz: Zur Veränderung der Sexratio und der Prävalenz in den letzten eineinhalb Jahrzehnten. *Zeitschrift für Kinder- und Jugendpsychiatrie und Psychotherapie*. 2021;49(2):93-100. doi:10.1024/1422-4917/a000763

**Table 1.** Participant demographics (N=317).

Race	
White Non-Hispanic	68%
White, Hispanic	9%
Black	2%
Asian	3%
Native American	<1%
Multiracial	17%
did not report	<1%
Annual Household Income	
Less than \$25,000	4%
\$25,001-\$50,000	10%
\$50,001-\$75,000	20%
\$75,001-\$125,000	31%
More than \$125,000	35%
did not report	1%
Geographic Location	
Northeast	13%
Midwest/Upper Plains	21%
Southeast	15%
Mountain West	13%
Pacific Northwest	20%
Pacific South	16%



**Table 2.** Participant information and current identity at last visit before January 1, 2021 Overall, for those with recent visits only, and by initial social transition and gender.

	Total Sample	Recent Sample (with visits in 2019 or 2020)	Sample who initially socially transitioned before age 6	Sample who initially socially transitioned at 6 or later	Transgender girls (at recruitment)	Transgender boys (at recruitment)
Sample Size	317	291	124	193	208	109
% assigned male at birth	65.6%	65.3%	73.4%	60.6%	100%	0%
Mean age at first transition	6.5 years old	6.4 years old	4.3 years old	7.9 years old	6.2 years old	7.1 years old
Mean age at start of study	8.1 years old	8.0 years old	5.9 years old	9.5 years old	7.7 years old	8.7 years old
Average time since start of study	3.8 years	4.1 years	3.8 years	3.8 years	3.9 years	3.7 years
Average time since first transition	5.4 years	5.7 years	5.4 years	5.4 years	5.5 years	5.3 years
Current Identity						
Binary Transgender	n=298; 94.0%	n=276; 94.8%	n=112; n=90.3%	n=186; 96.4%	n = 194; 93.3%	n = 104; 95.4%
Cisgender	n=8; 2.5%	n=6; 2.1%	n=7; 5.6%	n=1; 0.5%	n = 7; 3.40%	n = 1; 0.9%
Nonbinary	n=11; 3.5%	n=9; 3.1%	n=5; 4.0%	n=6; 3.1%	n = 7; 3.40%	n = 4; 3.7%

**Table 3.** Participant information and current identity at last visit before January 1, 2021 as a function of stages of medical transition and/or age.

	Total Sample	Sample of youth who had not begun blockers at start of the study	Sample of youth who have begun blockers (and not GAH) at the end of the study	Sample of youth who have begun gender-affirming hormones at the end of the study	Sample of youth 5+ Years since initial binary social transition	Sample of youth who are currently 14+ years old
Sample Size	317	280	92	98	200	70
% assigned male at birth	65.6%	69.6%	57.6%	58.2%	69.0%	52.9%
Mean age at first transition	6.5 years old	6.1 years old	6.6 years old	8.4 years old	6.2 years old	8.9 years old
Mean age at start of study	8.1 years old	7.6 years old	8.3 years old	10.2 years old	8.0 years old	10.8 years old
Average time since start of study	3.8 years	3.9 years	4 years	4.3 years	4.5 years	4.4 years
Average time since first transition	5.4 years	5.5 years	5.8 years	6.1 years	6.4 years	6.3 years
Current Identity						
Binary Transgender	n=298; 94.0%	n = 263; 93.9%	n = 88; 95.7%	n = 97; 99.0%	n=190; 95.0%	n = 69; 98.6%
Cisgender	n=8; 2.5%	n = 8; 2.9%	n = 1; 1.1%	n = 0	n=4; 2.0%	n = 1; 1.4%
Nonbinary	n=11; 3.5%	n = 9; 3.2%	n = 3; 3.3%	n = 1, 1.0%	n=6; 3.0%	n = 0