

Gender Identity 5 Years After Social Transition

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BACKGROUND AND OBJECTIVES: Concerns about early childhood social transitions among transgender youth include that these youth may later change their gender identification (ie, retransition), a process that could be distressing. The current study aimed to provide the first estimate of retransitioning and to report the current gender identities of youth an average of 5 years after their initial social transitions.

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

RESULTS: We found that an average of 5 years after their initial social transition, 7.3% of youth had retransitioned at least once. At the end of this period, most youth identified as binary transgender youth (94%), including 1.3% who retransitioned to another identity before returning to their binary transgender identity. A total of 2.5% of youth identified as cisgender and 3.5% as nonbinary. Later cisgender identities were more common among youth whose initial social transition occurred before age 6 years; their retransitions often occurred before age 10 years.

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

Increasing numbers of children are socially transitioning to live in line with their gender identity, rather than the gender assumed by their sex at birth, a process that typically involves changing a child's pronouns, first name, hairstyle, and clothing. Some concerns about childhood social transitions have been raised,¹ including that these children may not continue to identify as transgender, rather they might "retransition" (also called a "detransition" or "desistence"), which some suggest could be distressing for youth.¹⁻³ Research has suggested that ages 10 to 13 years may be particularly key times for retransition and that

identity may be more stable after this period for youth who show early gender nonconformity.³

Other clinicians argue that early social transitions can be beneficial for some gender-diverse youth.⁴⁻⁶ Some clinicians and scholars who support early childhood social transitions encourage families to remain open to later retransitions,^{7,8} which are seen by some as part of a youth's exploration of their gender.⁹

Unfortunately, very few data about retransitions exist in the scientific literature. We have been able to find limited data on the number of youth

abstract

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Dr Olson conceptualized the current study, supervised data collection, carried out the initial analyses, and drafted the initial manuscript. Dr Durwood and Dr Devor conceptualized the current study and provided extensive revisions on the manuscript. Ms Horton acquired and compiled the data and tables and provided feedback on the manuscript. Dr Gallagher acquired, compiled, and analyzed the data and provided feedback on the manuscript. All authors approved the manuscript as submitted and agree to be accountable for all aspects of the work.

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who socially transition in childhood and then go on to retransition afterward. One paper included 4 youth who socially transitioned; none of them had retransitioned 7 years later.¹⁰ We know of 3 mentions of early-transitioning youth who retransition.^{8,9} However, these papers include no mention of how many other youth the same clinical team saw who did not retransition, making it impossible to guess a retransition rate.

In the present paper, we aimed to compute an estimate of retransition among a cohort of more than 300 early-transitioning children. Here, we report the retransition rate an average of 5 years after initial (binary) social transition, as well as how many of these participants are living as binary transgender youth, nonbinary youth, and cisgender youth at the same timepoint.

METHODS

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

As part of the larger longitudinal study, parents and youth were regularly asked about whether they had begun using puberty blockers and/or gender-affirming hormones. At most visits, they were not asked about whether puberty had begun, though our available data suggests that because these youth had socially transitioned at such early

ages, most participants were followed by an endocrinologist well before puberty began. The endocrinologists helped families identify the onset of Tanner 2 (the first stage of puberty) and prescribed puberty blockers within a few months of this time; therefore, the onset of puberty blockers is used as our proxy for the onset of puberty in youth who received blockers. Of the youth in this sample, 37 (11.7%) had begun puberty blockers before beginning this study.

This study did not assess whether participants met criteria for the Diagnostic and Statistical Manual of Mental Disorders, Fifth edition, diagnosis of gender dysphoria in children. Many parents in this study did not believe that such diagnoses were either ethical or useful, even if they had been diagnosed, and some children did not experience the required distress criterion after transitioning. Based on data collected at their initial visit, these participants showed signs of gender identification and gender-typed preferences commonly associated with their gender, not their sex assigned at birth.¹¹ Further, parent report using the Gender Identity Questionnaire for Children¹² indicated that youth showed significant “cross-sex” identification and preferences (when scored based on sex at birth).¹²

Final identity classification for these analyses was based on our most recent interaction with the child and/or their parent before January 1, 2021. Because some families have not participated recently, we also separately report (Table 2) the results of the $n = 291$ youth with whom the research team had an interaction within the 2 years before that deadline. This additional analysis allows us to assess whether those who retransitioned were more likely to have missed their more

TABLE 1 Participant Demographics ($N = 317$)

Demographics	%
Race	
White, non-Hispanic	69
White, Hispanic	9
Black	2
Asian	3
Native American	<1
Multiracial	17
Annual household income, \$	
<25 000	3
25 001–50 000	10
50 001–75 000	21
75 001–125 000	31
>125 000	35
Location	
Northeast	15
Midwest/Upper Plains	21
Southeast	15
Mountain West	13
Pacific Northwest	20
Pacific South	16

recent appointments with our team. Importantly, only 1 of the 26 families with whom we did not meet in the past 2 years has formally dropped out of the study; the others often did not complete participation during these 2 years because of personal circumstances at the time we attempted re-recruitment. We anticipate that many in this group will participate again in the future.

Based on pronouns at follow-up, participants were classified as binary transgender (pronouns associated with the other binary assigned sex), nonbinary (they/them pronouns or, $n = 3$, a mix of they/them and binary pronouns), or cisgender (pronouns associated with their assigned sex). We confirmed this classification by reviewing other information available to the research team (eg, child’s self-categorization in an interview or survey, e-mail communications with the parents). Only 1 classification was debatable; this participant was classified by pronouns (and in this paper) as nonbinary but could have been

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 Age 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, y	6.5	6.4	4.3	7.9	6.2	7.1
Mean age at start of study, y	8.1	8.0	5.9	9.5	7.7	8.7
Average time since start of study, y	3.8	4.1	3.8	3.8	3.9	3.7
Average time since first transition, y	5.4	5.7	5.4	5.4	5.5	5.3
Current identity, <i>n</i> (%)						
Binary transgender	298 (94.0)	276 (94.8)	112 (90.3)	186 (96.4)	194 (93.3)	104 (95.4)
Cisgender	8 (2.5)	6 (2.1)	7 (5.6)	1 (0.5)	7 (3.40)	1 (0.9)
Nonbinary	11 (3.5)	9 (3.1)	5 (4.0)	6 (3.1)	7 (3.40)	4 (3.7)

classified as binary transgender (and not retransitioned).

This study has been approved by the University of Washington and Princeton University institutional review boards.

RESULTS

The overall rate of retransition was 7.3%. An average of 5.37 years (SD = 1.74 years) after their initial binary social transition, most participants were living as binary transgender youth (94.0%; Table 2). Included in this group were 4 individuals (1.3% of the total sample) who retransitioned twice (to nonbinary then back to binary transgender). Some youth (3.5%) were currently living as nonbinary, including one who had retransitioned first to cisgender then to nonbinary. Finally, 2.5% were using pronouns associated with their sex at birth and could be categorized as cisgender at the time of data collection, including one who first retransitioned to live as nonbinary. Similar percentages were

observed when examining the 291 youth who were in touch with the research team in the past 2 years (Table 2), when examining only those 280 youth who had not begun puberty blockers at the start of the study (Table 3), or if we examine only the 200 youth who had gone at least 5 years since their initial transition (Table 3).

We observed 1 potential (post hoc) age effect. Youth who initially socially transitioned before age 6 ($n = 124$), were more likely to be living as cisgender ($n = 7$; 5.6%) than youth who transitioned at age 6 or later ($n = 1$ of 193; 0.5%), Fisher exact test (comparing binary, cisgender, nonbinary; before vs. age 6 years or later), $P = .02$, although low rates of retransition were seen in both groups. In Table 2, we also report the results separately for children assigned male versus female at birth; this distinction was not significantly associated with later identity, $P = .47$, Fisher exact test. Finally, for exploratory purposes, in Table 3, we report outcomes separately for several

subsets of our participants, including youth who had started puberty blockers, youth who had used puberty blockers and gender-affirming hormones, and youth who are at least 14 years old (the age at which past work³ has suggested retransitions will be less likely).

DISCUSSION

Five years after an initial binary social transition, 7% of youth had retransitioned at least once. Most youth (94%) were living as binary transgender youth at the time of data analysis, including 1.3% who retransitioned initially to cisgender or nonbinary and then retransitioned back to binary trans identities. A small number of youth were living as cisgender youth (2.5%) or nonbinary youth (3.5%). We observed comparable rates when examining all participants who began the study ($n = 317$), those who had been in touch with the research team in the last two years ($n = 291$), those who had gone at least 5 years since initial social transition ($n = 200$), and

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 Gender-Affirming Hormones) 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+ y of Age Since Initial Binary Social Transition	Sample of Youth Who Are Currently 14+ y of Age
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, y	6.5	6.1	6.6	8.4	6.2	8.9
Mean age at start of study, y	8.1	7.6	8.3	10.2	8.0	10.8
Average time since start of study, y	3.8	3.9	4	4.3	4.5	4.4
Average time since first transition	5.4	5.5	5.8	6.1	6.4	6.3
Current identity						
Binary transgender	<i>n</i> = 298; 94.0%	<i>n</i> = 263; 93.9%	<i>n</i> = 88; 95.7%	<i>n</i> = 97; 99.0%	<i>n</i> = 190; 95.0%	<i>n</i> = 69; 98.6%
Cisgender	<i>n</i> = 8; 2.5%	<i>n</i> = 8; 2.9%	<i>n</i> = 1; 1.1%	<i>n</i> = 0	<i>n</i> = 4; 2.0%	<i>n</i> = 1; 1.4%
Nonbinary	<i>n</i> = 11; 3.5%	<i>n</i> = 9; 3.2%	<i>n</i> = 3; 3.3%	<i>n</i> = 1, 1.0%	<i>n</i> = 6; 3.0%	<i>n</i> = 0

those who started the study before beginning puberty blockers (*n* = 280). We found no differences as a function of participant sex at birth. We observed slightly higher rates of retransition, and particularly later cisgender identity, among youth who initially socially transitioned before age 6 years. However, even in these youth, retransition rates were very low.

Among those who had begun puberty blockers and/or gender-affirming hormones, only 1 had retransitioned to live as cisgender (and this youth had begun blockers, but not gender-affirming hormones). One likely reason so few retransitions to cisgender occurred among those accessing medical transition is that most retransitioning in this cohort happened at early ages. All but 1 of the 8 cisgender youth had retransitioned by age 9 years (the last retransition was at age 11 years). Some of these youth are still not eligible for blockers because they are still prepubertal; we anticipate that those who identify as cisgender are unlikely to seek blockers

or hormones, but that the participants who have not begun puberty and who identify as binary transgender or nonbinary likely will.

Past work has suggested that the ages 10 to 13 years are an especially critical time for retransition.³ In our sample, many of the youth who retransitioned did so before that time frame, particularly the cisgender youth. In the nonbinary group, however, 6 of 11 retransitioned between ages 10 and 13 years, with the remainder retransitioning before age 10. Importantly, our sample differed from the past work on which this age range was determined in several key ways, including that our participants socially transitioned at earlier ages (perhaps pushing retransitions earlier, too), had undergone complete social transitions including pronouns and names (not just hairstyle and clothing changes as in most cases in previous studies³), and are living at a different historic time in a different country. Any, or all, of these may turn out to be key

differences related to age of retransition.

Our observed low retransition rate is consistent with a study in which 4 youth who had completely socially transitioned had not retransitioned 7 years later.¹⁰ That finding is in the same ballpark as our study's estimate of ~2.5% if we examine the percentage living as cisgender at the end of the study (ie, those "desisting" from gender-diverse outcomes). Together, these papers suggest this outcome is relatively rare in this group.

Our observation that few youth who have begun medical intervention have retransitioned to live as cisgender is consistent with findings in the literature. Several studies reporting on outcomes among transgender youth receiving blockers and gender-affirming hormones have reported relatively low rates of regret or stopping treatment,¹³ which are potential indicators of retransition, though stopping treatment can occur for other reasons as well (eg, side

effects), as can regret (eg, experiences of transphobia).

Our key finding, that there was a relatively low rate of retransition about 5 years after initial social transition, may, on the surface, appear contradictory with past clinic-based research on what is sometimes called persistence and desistence³ of childhood gender dysphoria. Several large studies attempted to recontact adolescents and adults who had previously been evaluated for gender dysphoria in childhood.¹⁴⁻¹⁷ Many of those were formally diagnosed with what was, at the time, called gender identity disorder. Those studies reported that a minority of youth later identified in a way that might indicate a transgender identity by today's definition.

Interpretation of those results, and especially comparison with the present work, is difficult for several reasons. First, in past studies, when asked "are you a boy or a girl?" about 90% of the children supplied answers that aligned with their sex at birth,¹⁸ leading some to question whether the majority of those children were the equivalent of transgender children today or not.¹⁹⁻²¹ Second, participants in those studies were children between the 1960s and the 1990s, and many features of society have changed since then, including greater rates of acceptance and acknowledgment of transgender identities. Third, the parents of the youth in the current study support their children's identities, as indicated by their approval of their social transitions, whereas many of the parents of youth in past studies explicitly discouraged gender nonconformity or "cross-gender" identification.^{15,22} In addition, it would have been exceedingly rare for youth in those studies to socially transition, especially completely.^{1,10} Finally, there were substantial drop-out

rates in all of the previous studies,^{14,15,17} making the true estimates of persistence or desistence difficult to obtain.^{19,21} Because there are so many possible contributors to differences in rates of persistence (in past work) and retransition in the current work, we urge caution about overinterpreting differences, or overconfidence about which contributing factors explain the differences.

There are also some reasons why we might have had such a low retransition rate. First, on average, participants had socially transitioned 1.6 years before joining our study. It is possible that some youth initially try socially transitioning and then change their minds quickly. Such youth would be unlikely to be enrolled in this study because their eligibility period would have been quite short and therefore the odds of finding the study and completing it would have been low. This means the children in our study may have been especially unlikely, compared with all children who transition, to retransition because they had already lived and presumably been fairly content with that initial transition for more than a year. Second, it is possible that families who failed to participate in the past 2 years of our study ($n = 26$) were disproportionately those whose children retransitioned and who were therefore hesitant to participate again. If true, their exclusion could have reduced our retransition rate. We are skeptical of this possibility for a few reasons. First, 4 of these participants did retransition and had told us about that outcome, so it does not appear that hesitancy in telling us was widespread in this group. Second, many of these families continue to be in touch with our research team and only missed participation because of ongoing personal issues

(eg, COVID-19, emergency family circumstances). We anticipate that most of these families will be able to participate as we continue to follow these youth. Finally, from the beginning of the study, the research team has been clear in discussing with the families that we are open to any outcome in their youth.

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

Another potential limitation is that we used pronouns as the criterion for retransitions. Not everyone who, for example, uses they/them pronouns identifies as nonbinary and someone might identify as transgender even if they are currently using pronouns associated with their sex at birth. However, examination of other data provided by families suggests that our pronoun-based criteria were largely consistent with classification that would have arisen from other types of information provided to the research team (eg, labels used in an interview). Only 1 of the youth categorized as "retransitioned" might, by some other criteria, not meet that definition. However, because pronouns were the initial

inclusion criterion (that is, to be in the study children had to be using pronouns not associated with their sex at birth), they were the most consistent route of classification.

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

One additional limitation in the present work is that the initial sample was disproportionately made up of trans girls. This is counter to recent reports that more peri- and postpubertal transgender youth seeking clinical services recently are transmasculine.^{25–27} Historically, and consistent with our data, samples of parent-identified prepubertal gender nonconforming youth have included more assigned males at birth.^{15,16,22} Importantly, we did not observe a significant gender effect in terms of rates of retransition, so we do not predict any change in pattern of results if we had a different ratio of participants by sex at birth.

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

As more youth are coming out and being supported in their transitions early in development, it is increasingly critical that clinicians understand the experiences of this cohort and not make assumptions about them as a function of older data from youth who lived under different circumstances. Though we can never predict the exact gender trajectory of any child, these data suggest that many youth who identify as transgender early, and are supported through a social transition, will continue to identify as transgender 5 years after initial social transition. These results also suggest that retransitions to one's gender assumed at birth (cisgender) might be likely to occur before age 10 years among those who socially transition at the earliest ages (before age 6 years), though retransitions are still unlikely in this group. These data suggest that parents and clinicians should be informed that not all youth will continue the same trajectory over time. Further understanding of how to support youth's initial and later transitions is needed.

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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. Social transition: supporting our youngest transgender children. *Pediatrics*. 2016;137(3):e20154358
6. 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. *Int 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*. New York: 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;52(6):582–590
11. Gülgöz S, Glazier JJ, Enright EA, et al. Similarity in transgender and cisgender children's gender development. *Proc Natl Acad Sci USA*. 2019;116(49):24480–24485
12. Johnson LL, Bradley SJ, Birkenfeld-Adams AS, et al. A parent-report gender identity questionnaire for children. *Arch Sex Behav*. 2004;33(2):105–116
13. Kuper LE, 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):e20193006
14. Drummond KD, Bradley SJ, Peterson-Badali M, Zucker KJ. A follow-up study of girls with gender identity disorder. *Dev Psychol*. 2008;44(1):34–45
15. Green R. *The Sissy Boy Syndrome: The Development of Homosexuality*. New Haven, CT: Yale University Press; 1987

16. Singh D, Bradley SJ, Zucker KJ. A follow-up study of boys with gender identity disorder. *Front Psychiatry*. 2021;12:632784
17. Wallien MS, Cohen-Kettenis PT. Psychosexual outcome of gender-dysphoric children. *J Am Acad Child Adolesc Psychiatry*. 2008; 47(12):1413–1423
18. Zucker KJ, Bradley SJ, Sullivan CB, Kuksis M, Birkenfeld-Adams A, Mitchell JN. A gender identity interview for children. *J Pers Assess*. 1993;61(3):443–456
19. Ashley F. The clinical irrelevance of “desistance” research for transgender and gender creative youth [published online ahead of print 2021]. *Psychol Sex Orientat Gend Divers*. 10.1037/sgd0000504
20. Olson KR. Prepubescent transgender children: what we do and do not know. *J Am Acad Child Adolesc Psychiatry*. 2016;55(3):155–156
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. *Int J Transgenderism*. 2018;19(2):212–224
22. Zucker K, Bradley S. Gender identity disorder and psychosexual problems. In: *Children and Adolescents*. New York: Guilford Press; 1995
23. Gibson DJ, Glazier JJ, Olson KR. Evaluation of anxiety and depression in a community sample of transgender youth. *JAMA Netw Open*. 2021;4(4):e214739
24. Darwin H. Challenging the cisgender/transgender binary: nonbinary people and the transgender label. *GenD Soc*. 2020;34(3):357–380
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
26. de Graaf NM, Carmichael P, Steensma TD, Zucker KJ. 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
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 [Changes of sex ratio and prevalence in transgender teenagers over the past 15 years]. *Z Kinder Jugendpsychiatr Psychother*. 2021;49(2):93–100