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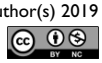

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Self-perception of transgender clinic referred gender diverse children and adolescents

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Abstract

Transgender children and adolescents show high rates of co-occurring psychopathology, which might be related to low self-confidence. Earlier research showed that compared to the norm population, transgender clinic–referred children have lower self-perception on two domains: physical appearance and global self-worth. This study aimed to compare self-perception in a sample of transgender clinic–referred children and adolescents with their standardization samples and to examine differences between these two groups. To measure self-esteem, the Self-Perception Profile for Children was administered to 305 referred children (162 assigned males at birth (AMABs) and 143 assigned females at birth (AFABs), mean age = 9.05 (*SD*, 1.47), range = 5.9–13.00 years), and the Self-Perception Profile for Adolescents was administered to 369 referred adolescents (118 AMABs and 251 AFABs, mean age = 15.27 (*SD*, 1.80), range = 10.73–18.03 years). To measure the severity of gender dysphoria, the parents of the children completed the Gender Identity Questionnaire and the adolescents completed the Utrecht Gender Dysphoria Scale. Referred children and adolescents had a significantly lower self-concept compared to the normative population, whereby referred adolescents felt less competent compared to referred children. Compared to their peers, childhood referred AFABs perceived themselves even better on scholastic and athletic competence and social acceptance. With regard to gender differences, referred AFABs generally showed a better self-perception compared to referred AMABs. The lower self-perception of transgender clinic–referred children and adolescents compared to same age peers deserves clinical attention and interventions aimed at, for example, improving social and physical self-worth.

Keywords

Self-esteem, self-perception, transgender, gender dysphoria

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Introduction

Gender Dysphoria[1] is defined by the *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (DSM 5) as "A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months' duration" (American Psychiatric Association [APA], 2013, p. 452). One's gender identity is the psychological understanding of one's experienced gender and may not correspond with the assigned sex at birth. Many terms have been used to define the group with an incongruence between one's assigned gender at birth and experienced gender identity. Transgender is an umbrella term including all people with a gender identity other than the assigned sex. Gender incongruence reflects the difference between assigned gender and the gender identity. Gender nonconforming, gender variant, and gender diverse are terms which refer to a continuum of the level of experiencing oneself from gender typical to nongender stereotypical (Ruban & Ehrensaft, 2017). In this article, the term gender diverse will be used for all children and adolescents seeking help at a transgender clinic. Diagnostically many of them meet the criteria for the DSM 5 diagnosis Gender Dysphoria.

In specialized transgender clinics, treatment is available for children and adolescents who experience distress about their gender identity (Leibowitz & de Vries, 2016; Ristori & Steensma, 2016). The general approach toward children with Gender Dysphoria consists of psychological interventions, whereas in adolescence this may be combined with physical interventions (Coleman et al., 2012). The number of children and adolescents with gender diversity referred to specialized transgender clinics is growing each year (Aitken et al., 2015; Wood et al., 2013). These increasing numbers make knowledge of psychological functioning of these children and adolescents highly relevant for care providers in specialized gender identity clinics as well as in general mental health settings.

Mental health care for children and adolescents with gender dysphoria is important because they appear to be a vulnerable group, and relatively high rates of psychopathology are present (APA, 2013; Ristori & Steensma, 2016; Wallien, Swaab, & Cohen-Kettenis, 2007). On the other hand, recent studies (Durwood, McLaughlin, & Olsen, 2017; Olson, Durwood, DeMeules, McLaughlin, 2016) found similar levels of depression and only slightly elevated level of anxiety in early transitioned children compared to population averages. However, this was a non-referred group and may not be generalizable to all children with gender dysphoria. Studies on pubertal adolescents with gender dysphoria found a high prevalence of psychiatric comorbidity and risk for suicidal ideations compared to the general population (Budge, Adelson, & Howard, 2013; de Vries, Doreleijers, Steensma, & Cohen-Kettenis, 2011; Grossman & D'Augelli, 2007; Hepp, Kraemer, Schnyder, Miller, & Delsignore, 2005; Jones, Robinson, Oginni, Rahman, & Rimes, 2017; Veale, Watson, Peter, & Saewyc, 2017; Virupaksha, Muralidhar, & Ramakrishna, 2016). A factor that is well known to be related with psychopathology is low self-esteem (Isomaa et al., 2013; Sowislo & Orth, 2013). So the high rates of reported psychiatric problems in individuals with gender dysphoria suggest that their self-esteem is also affected. In contrast, a high self-satisfaction in transgender youth predicted positive mental health outcomes (Grossman, D'Augelli, & Frank, 2011). Especially physical and social self-confidence may be affected in transgender youth because of (1) the incongruence between gender identity and the body's sex characteristics and (2) the lack of social acceptance (Costa et al., 2015; McConnel, Birkett, & Mustanski, 2016; McGuire, Doty, Catalpa, & Ola, 2016).

Self-esteem is a multidimensional concept, with a wide range of definitions (Leary & Baumeister, 2000). The level of self-esteem changes in each stage of life. Developmentally, self-worth is higher in childhood compared to adolescence and declines during puberty due to a more negative body image and other puberty-related problems (Robins & Trzesniewski, 2005). In the general

population, assigned females at birth (AFABs) are more prone to this decline in self-confidence compared to assigned males at birth (AMABs) during adolescence. Self-esteem may be measured in different ways and with various questionnaires. Two examples are the questionnaires developed by Rosenberg (1965) and Harter (2012a, 2012b).

Of interest, there is evidence that gender non-conformity, self-esteem, and psychological functioning are related. In a community sample of children (including gender conforming children) in middle childhood, the level of experienced gender incongruence affected the self-confidence of the children negatively, with more experienced gender incongruence correlating with lower global self-worth and social acceptance (Egan & Perry, 2001). In a longitudinal study following this community sample over time, self-esteem declined in children who appraised themselves as gender incongruent and led to more internalizing problems (Yunger, Carver, & Perry, 2004). In another study in our transgender clinic–referred prepubescent children, a negative correlation between gender diversity and self-worth was found using the Self-Perception Profile for Children (SPPC; Balleur-van Rijn, Steensma, Kreukels, & Cohen-Kettenis, 2013).

For this study, we were interested in self-esteem of transgender clinic–referred adolescents. We aimed to determine, in a clinic-referred sample, (1) whether transgender clinic–referred adolescents, like prepubescent children, have a lower self-concept than their peers from a normative sample; (2) whether self-perception in these referred adolescents is comparable to transgender clinic–referred children; (3) whether gender differences exist; and (4) whether a correlation between the severity of gender dysphoria and self-esteem is present.

Methods

Participants and procedure

In total, 644 children and 842 adolescents were consecutively referred to the Center of Expertise on Gender Dysphoria (CEGD) of the VU University Medical Center in Amsterdam, the Netherlands. A total of 193 children were under the age of 8 years during the diagnostic process and therefore not eligible for this study. Therefore, the initial sample consisted of 451 children and 842 adolescents. Children referred between January 1996 and January 2016 and adolescents referred between January 2004 and January 2016 were included in the study. Before 2004, the Dutch translation and validated measure for self-esteem used in this study was not available yet for adolescents.

At the CEGD, referred children and adolescents followed a different clinical procedure, with the focus on assessing gender dysphoria and providing general guidance and psychological advice, and for adolescents if needed, the eligibility for medical gender affirmative treatment (e.g. puberty suppression, see Kreukels and Cohen-Kettenis (2011) and de Vries and Cohen-Kettenis (2012) for a more extensive description of the clinical approach of the CEGD).

At the CEGD, both children and adolescents received a diagnostic assessment consisting of several individual and parent-shared sessions with a psychologist or a psychiatrist over a longer period of time and one psychodiagnostic assessment (see de Vries & Cohen-Kettenis, 2012). The questionnaires used in this study were part of this assessment. Therefore, the data collection was before any medical intervention.

Adolescents ($n = 190$) who started first with the children's approach and returned to the CEGD if gender dysphoria persisted into adolescence were excluded from the subgroup adolescents so that only new referrals were part of this study. As shown in Figure 1, for 622 cases (339 children and 283 adolescents), data on self-perception were not available and were excluded from the study. Reasons for missing data were children below the age of 8, the child/adolescent dropped

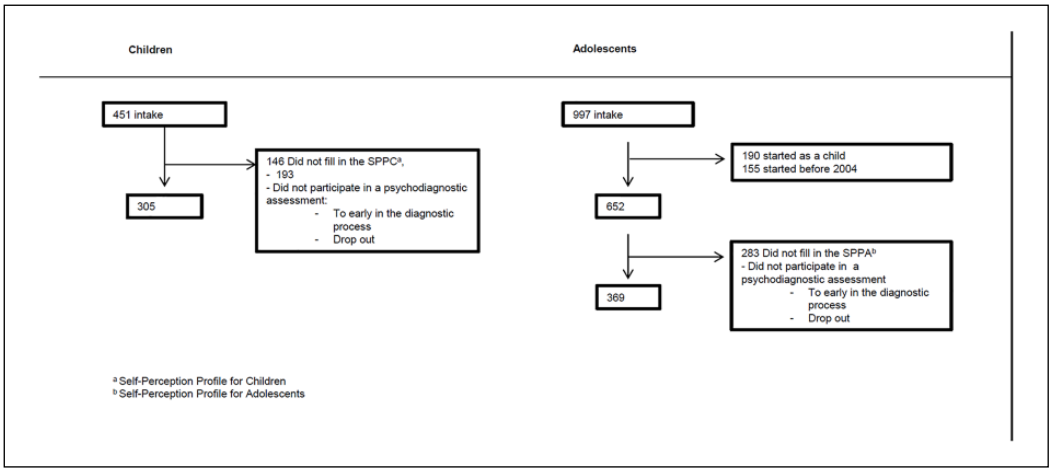

Figure 1. Flowchart for exclusion of participants with gender diversity.

Table 1. Participant characteristics of children and adolescents referred to the Center of Expertise on Gender Dysphoria.

		Children	Adolescents
Assigned gender at birth	Male, *N* (%)	162 (53.1)	118 (32)*
	Female, *N* (%)	143 (46.9)	251 (68)*
Age	*M* (*SD*)	9.05 (1.47)	15.27 (1.80)*
	Range	5.91–13.00	10.73–18.03
Total IQ	*M* (*SD*)	101.62 (13.85)	98.06 (16.06)*
	Range	66–138	60–145
Living with *N* (%)	Both parents	228 (74.8)	193 (52.3)*
	One parent	57 (18.7)	120 (32.5)*
	Other	17 (5.6)	41 (11.1)*
	Unknown	3 (0.9)	15 (4.1)

*$p < .05$.

out of the diagnostic process, or the child/adolescent was too early in the diagnostic process during the data collection.

Table 1 shows the demographic characteristics of the children and adolescents included in the study. The ages of children ranged from 5.91 to 13.00 ($M = 9.05$; $SD = 1.47$) years old, whereas adolescents' ages ranged from 10.73 to 18.03 ($M = 15.27$; $SD = 1.80$) years old. The ages of these two groups overlapped because the diagnostic assessment is adapted according to the school-type participants were attending, with prepubescent children in primary school following the children's assessment and adolescents in secondary school the adolescents' assessment.

Data of 147 out of the 305 children (between 1996 and 2009) of this study were described earlier in another study from the same clinic (Balleur-van Rijn et al., 2013).

In this study, all children and adolescents struggled with their gender identity, reason for referral to the specialized clinic, but not all may meet the DSM diagnosis "Gender Identity Disorder /Gender Dysphoria" (depending on which DSM version was used).

Informed consent. All parents and/or children and adolescents aged 12 years and older signed informed consent to allow the use of the questionnaires that were collected as part of the diagnostic assessment for this study. The VU University Medical Center medical ethics committee approved the study.

Measures

Self-perception. To measure the Self-Perception two questionnaires were used, the Dutch version of the SPPC (Harter, 2012a; Veerman et al., 2002) and the Dutch version of the Self-Perception Profile for Adolescents (SPPA) (Harter, 2012b; Treffers et al., 2002). The Dutch standardization samples of the SPPC and the SPPA were used to make group comparisons with the gender referred children and adolescents (Treffers et al., 2012; Veerman et al., 1997).

The SPPC consists of 36 questions, which are grouped into six scales: scholastic competence, social acceptance, athletic competence, physical appearance, behavioral conduct, and global self-worth. For each question, the children get two options, for example, "Some kids often forget what they learn BUT Other kids can remember things easily" (Harter, 2012a, p. 7). After the children decided which statement is most relevant for them, they have to choose if the statement is "sort of true for me" or "really true for me." The answers are evaluated by a 4-point score from "least competent" to "most competent," a higher result indicating a better perceived self-perception (Veerman et al., 1997). Each scale has a range from 6 to 24 points.

The scale global self-worth is not the sum score of the other scales, but consists of six more general questions like: "Some kids like the kind of person they are BUT other kids often wish they were someone else" (Harter, 2012a, p. 9).

The SPPA is similar to the SPPC, although the phrasing of the questions is adjusted to the different age groups. Furthermore, the SPPA consists of 35 items, grouped into seven scales. Compared to the six scales of the SPPC one extra scale is added, and every scale consists of five instead of six questions. This extra scale is close friendship. Scores of each scale of the SPPA are summed and range from 5 to 20 points (Treffers et al., 2012).

The internal consistence per scale of the Dutch version of the SPPC and the SPPA varies between moderate and good (Cronbach's alpha between 0.68 and 0.82). The test–retest reliability tested with the average test–retest Pearson correlation also varies from moderate to good (0.68–0.86) (Treffers et al., 2012; Veerman et al., 1997).

Severity of gender dysphoria. Children and adolescents who were referred to the CEGD may show less or more extreme gender incongruent behavior. To measure the extremeness of gender dysphoria, two distinct questionnaires were used for the children and the adolescents, respectively.

The *Gender Identity Questionnaire (GIQ)* is a parent-reported measure assessing their children's gender role behavior and the gender identity. It contains 16 questions about sex-typed behavior. The items have a 5-point scale; a low score indicates more extreme gender dysphoria. The suggestion of Johnson et al. (2004) to leave items 8 and 16 out was adopted.

The *Utrecht Gender Dysphoria Scale* (UGDS) is a self-report measure assessing the adolescents' gender role and gender identity. The questionnaire contains 12 questions on a 5-point scale (range, 12–60). A higher score reflects more extreme gender dysphoria (see Steensma, McGuire, Kreukels, Beekman, & Cohen-Kettenis, 2013).

Analyses

All data analyses were performed using SPSS version 22. If one item was missing on the SPPC, the average of the other items belonging to the same scale was used to replace the missing item.

There was never more than one item per scale missing. The data of the SPPA were only registered per scale, therefore missing items led to a missing value for that scale. This resulted in missing values of three adolescents.

The self-perception profiles were compared to the Dutch norm by a one-sample *t*-test to check if there were between-group differences.

The questions of the GIQ and UGDS differ for AMABs and AFABs, accordingly they were scored separately. The average was calculated by only using the answered items. Pearson *r* correlations were used to determine whether the severity of gender dysphoria was correlated with level of self-esteem.

In the SPPC and SPPA norm scores, there are differences between AMABs and AFABs and children and adolescents. To correct for these differences, we used the normative deviation scores. Normative deviation scores were calculated by subtracting the average of the normative population from the score of the participant. Thereafter, it was divided by the standard deviation of this normative population. This resulted in scores ranging from −4.75 to 2.78, with 0 meaning that there was no difference between the individual score and the normative population and, for example, a score of 1.0 or −1.0 meaning one standard deviation above or below the normative population, respectively.

The deviation scores (DS) were analyzed with a one-way analysis of covariance (ANCOVA) to determine the effect of gender (AMABs or AFABs) and group (being child or adolescent) on self-esteem. Marital status of the parents was unevenly distributed between children and adolescents and therefore analyzed as covariate. Marital status was divided in living with both biological parents, living with one biological parent, or living somewhere else.

Results

The final sample consisted of 305 referred children and 369 adolescents. A completed GIQ was available of 116 of the 162 referred AMABs in childhood and 86 of the 143 referred AFABs in childhood. A completed UGDS was available of 94 of the118 referred AMABs in adolescence and 200 of the 251 referred AFABs in adolescence.

Comparison with norm scores

Childhood referred assigned boys at birth. As shown in Table 2, referred AMABs felt significantly less competent compared to the Dutch normative male population on scholastic competence ($t(161) = -3.584$, $p < .001$), athletic competence ($t(161) = -3.11$, $p = .002$), physical appearance ($t(161) = -8.572$, $p < .001$), and global self-esteem ($t(161) = -7.637$, $p < .001$). There was no significant difference between referred AMABs and the normative male population on the scales social acceptance and behavioral conduct.

Childhood referred assigned girls at birth. Table 2 also shows the significant differences between referred AFABs and the Dutch normative female population. Referred AFABs perceived their self-perception significantly better compared to the norm sample of AFABs on the domains scholastic competence ($t(142) = 4.668$, $p < .001$), social acceptance ($t(142) = 3.831$, $p < .001$), and athletic competence ($t(142) = 7.018$, $p < .001$). Referred AFABs felt significantly less competent than the normative female population on physical appearance ($t(142) = -6.024$, $p < .001$), behavioral conduct ($t(142) = -3.879$, $p < .001$), and global self-worth ($t(142) = -7.005$, $p < .001$).

Table 2. Mean scores per subscale of the SPPC and the SPPA, transgender clinic referred AMABs and AFABs separately compared to the Dutch norm sample of AMABs and the Dutch norm sample of AFABs.

	Children				Adolescents			
	Dutch norm sample AMABs ($n = 180$) *M* (*SD*)	Gender referred AMABs ($n = 162$) *M* (*SD*)	Dutch norm sample AFABs ($n = 181$) *M* (*SD*)	Gender referred AFABs ($n = 143$) *M* (*SD*)	Dutch norm sample AMABs ($n = 581$) *M* (*SD*)	Gender referred AMABs ($n = 118$) *M* (*SD*)	Dutch norm sample AFABs ($n = 805$) *M* (*SD*)	Gender referred AFABs ($n = 251$) *M* (*SD*)
Scholastic competence	17.36 (3.53)	16.19 (4.15)*	16.29 (3.38)	17.76 (3.76)*	14.5 (2.54)	13.33 (3.27)*	13.1 (2.48)	13.56 (3.29)*
Social acceptance	17.78 (3.80)	17.45 (4.29)	17.45 (3.55)	18.63 (3.69)*	15.3 (2.72)	14.19 (3.53)*	15.4 (2.74)	14.53 (3.34)*
Athletic competence	18.70 (3.32)	17.72 (4.00)*	17.55 (3.16)	19.40 (3.15)*	14.8 (3.34)	10.78 (3.84)*	12.4 (3.35)	13.26 (4.12)*
Physical appearance	20.06 (3.64)	16.57 (5.18)*	18.91 (4.23)	16.78 (4.23)*	14.7 (3.07)	8.67 (3.03)*	12.7 (3.42)	8.92 (3.13)*
Behavioral conduct	16.97 (2.77)	17.43 (3.58)	18.02 (2.92)	16.96 (3.28)*	13.8 (2.76)	15.19 (3.17)*	14.8 (2.96)	14.71 (3.35)
Close friendship					16.6 (2.92)	16.03 (3.57)	17.7 (2.71)	16.38 (3.38)*
Global self-worth	20.01 (2.95)	17.20 (4.69)*	19.36 (3.17)	16.86 (4.27)*	16.0 (2.74)	10.08 (3.51)*	14.9 (3.10)	10.54 (3.30)*

SPPC: Self-Perception Profile for Children; SPPA: Self-Perception Profile for Adolescents; AMAB: assigned males at birth; AFAB: assigned females at birth.
*$p < .05$.

Table 3. Pearson's correlation coefficients between the subscales of the SPPC or the SPPA and the severity of gender dysphoria (measured by the GIQ for children or the UGDS for adolescents) for the total group and gender referred AMABs and AFABs separately.

	Children			Adolescents		
	Severity of gender dysphoria (GIQ)[a]			Severity of gender dysphoria (UGDS)[b]		
	Total group ($n = 202$)	Gender referred AMABs ($n = 116$)	Gender referred AFABs ($n = 86$)	Total group ($n = 294$)	Gender referred AMABs ($n = 94$)	Gender referred AFABs ($n = 86$)
Scholastic competence	.016	.045	−.075	.087	−.043	.155*
Social acceptance	−.094	−.011	−.294**	.045	.029	.052
Athletic competence	−.012	.023	−.120	.044	.002	.059
Physical appearance	.072	.081	.059	−.068	−.129	−.037
Behavioral conduct	.064	.094	.010	.012	−.041	.045
Close friendship				.040	.026	.046
Global self-worth	.097	.136	.036	−.064	−.176	.003

SPPC: Self-Perception Profile for Children; SPPA: Self-Perception Profile for Adolescents; GIQ: Gender Identity Questionnaire; UGDS: Utrecht Gender Dysphoria Scale; AMAB: assigned males at birth; AFAB: assigned females at birth.
[a]High scores indicate less extreme gender dysphoria.
[b]High scores indicate more extreme gender dysphoria.
*$p < .05$; **$p < .01$.

Adolescent referred assigned boys at birth. As can be seen in Table 3, adolescent referred AMABs felt significantly less competent on almost every domain compared to the normative male population. These included scholastic competence ($t(117) = -3.886, p < .001$), social acceptance ($t(117) = -3.429$, $p = .001$), athletic competence ($t(117) = -1.363$, $p < .001$), physical appearance ($t(117) = -21.62$, $p < .001$), and global self-worth ($t(116) = -18.271$, $p < .001$). On the contrary, adolescent referred AMABs perceived their behavior significantly better ($t(117) = 4.732$, $p < .001$) compared to assigned boys at birth of the Dutch normative population. No significant difference was found on the scale Close friendship.

Adolescent referred assigned girls at birth. Referred AFABs in adolescence had a different pattern of self-perception than the referred AMABs in adolescence. Referred AFABs perceived themselves significantly better on the scales scholastic competence ($t(254) = 2.258$, $p = .025$) and athletic competence ($t(254) = 3.329$, $p = .001$) compared to the normative female population. Referred AFABs felt significantly less competent than the normative Dutch sample on the scales social acceptance ($t(254) = -4.148$, $p < .001$), physical appearance ($t(254) = -19.3$, $p < .001$), close friendship ($t(254) = -6.215$, $p < .001$), and global self-esteem ($t(254) = -21.072$, $p < .001$). On the subscale behavioral conduct, no significant difference between both samples was found.

Correlations between gender diversity and self-perception. For referred AFABs in childhood, more extreme gender diversity was correlated with more perceived social acceptance. For referred AFABs in adolescence, more extreme gender diversity was correlated with better perceived scholastic competence. See Table 3 for further correlations between referred and self-perception.

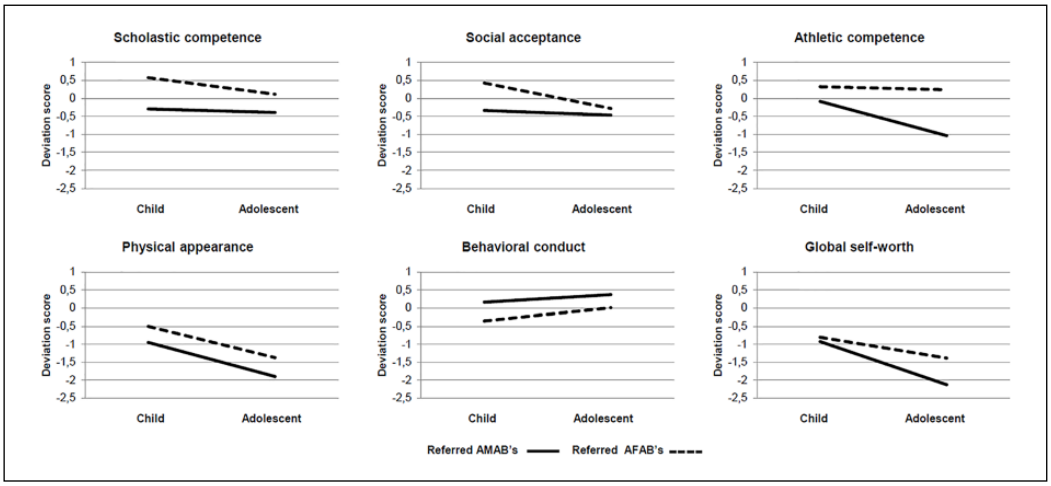

Figure 2. Self-Perception Profile for Children and Self-Perception Profile for Adolescents subscales deviation scores plotted against group, for referred AMABs and AFABs.

Gender and age differences and interaction

Scholastic competence. As can be seen in Figure 2, the ANCOVA of scholastic competence revealed an effect for group (child or adolescent) ($F(1,613) = 6.141$, $p = .013$) and gender ($F(1,613) = 54.782$, $p < .001$). Referred AFABs in childhood perceived their scholastic competence better than the normative population (0.58 DS), but in adolescence scholastic competence was perceived more similar to the normative population (0.15 DS). In referred AMABs, the difference between children and adolescents was smaller, being both in children and adolescents lower than the general population (−0.29 DS in children and −0.47 DS in adolescents).

Social acceptance. For social acceptance, an effect was found for group ($F(1,613) = 16.941$, $p < .001$), gender ($F(1,613) = 19.884$, $p < .001$), and Group × Gender interaction ($F(1,613) = 6.568$, $p = .011$). As can be seen in Figure 2, referred AFABs in childhood perceived their social acceptance better (0.41 DS) than the normative population, but this was lower than the normative population in adolescence (−0.27 DS). Referred AMABs in childhood (−0.31 DS) felt less competent than the normative population and this became lower in adolescence (−0.46 DS).

Athletic competence. For athletic competence, an effect was found for group ($F(1,613) = 28.016$, $p < .001$), gender ($F(1,613) = 69.730$, $p < .001$), and Group × Gender interaction ($F(1,613) = 17.428$, $p < .001$). As can be seen in Figure 2, the self-perception on the scale athletic competence of the referred AFABs was a little better than the normative population, whereby the referred children (0.31 DS) perceived their athletic competence better than the referred adolescents (0.21 DS). The self-perception of referred AMABs was in childhood (−0.09) close to the normative population, but was lower than the normative population in adolescence (−1.01).

Physical appearance. For physical appearance, an effect was found for group ($F(1,613) = 69.617$, $p < .001$), gender ($F(1,613) = 46.823$, $p < .001$), and Group × Gender interaction ($F(1,613) = 3.875$, $p = .049$). As can be seen in Figure 2, referred AMABs and AFABs felt less confident about their

physical appearance than the normative population both in childhood and adolescence. The self-perception of both referred AMABs and AFABs was lower in adolescence than in childhood, but a larger difference was found in referred AMABs. The deviation scores of the children were −0.94 DS for referred AMABs, and −0.50 DS for referred AFABs and the deviation scores of the adolescents were −1.91 DS for referred AMABs and −1.10 DS for referred AFABs.

Behavioral conduct. For behavioral conduct, an effect was found for group ($F(1,613) = 13.779$, $p < .001$) and gender ($F(1,613) = 30.334$, $p < .001$). As can be seen in Figure 2, the self-perception on the scale behavioral conduct was lower for referred AFABs in childhood than the normative population (−0.38 DS). Referred AFABs in adolescence perceived their behavioral conduct similar to the normative population (−0.02 DS). Referred AMABs in childhood perceived their behavioral conduct better (0.19 DS) than the normative population. The same held true for referred AMABs in adolescence (0.48 DS).

Global self-worth. For global self-worth, an effect was found for group ($F(1,613) = 58.235$, $p < .001$), gender ($F(1,613) = 14.570$, $p < .001$), and Group × Gender interaction ($F(1,613) = 8.218$, $p = .004$). As can be seen in Figure 2, the global self-worth in referred AMABs and AFABs was lower than the normative population in childhood and adolescence, in whom self-perception in adolescence was lower than the self-perception in childhood. The deviation scores of the referred children were −0.90 DS for referred AMABs and −0.80 DS for referred AFABs and the deviation scores of the referred adolescents were −2.10 DS for AMABs and −1.37 DS for referred AFABs.

Discussion

In this study, transgender clinic–referred children and adolescents had a lower self-perception at intake compared to the normative population. Furthermore, adolescents perceived themselves less competent than children. In addition, referred AFABs were more self-satisfied than the AMABs. These findings are in line with earlier research in transgender clinic referred and non-referred children (Balleur-van Rijn et al., 2013; Egan, & Perry, 2001); and now turned out to be true for referred adolescents as well. Only referred AFABs in childhood perceived themselves *better* compared to their same age peers on three of the self-competence domains: sport, school, and social acceptance.

The referred gender diverse children and adolescents felt especially very negative about their bodies and had a low global self-worth (a general negative feeling about themselves). This negativity about their bodies should be understood by the fact that gender dysphoria inherently results in negative feelings about one's body, as anatomic dysphoria is one of the indicators of the DSM 5 diagnosis Gender Dysphoria (APA, 2013). The current findings were that these negative feelings occurred more often in referred adolescents than in prepubescent referred children. Apprehensibly, body maturation during puberty with development of sex characteristics results in a further decreased body image of transgender youth (Steensma, Biemond, de Boer & Cohen-Kettenis, 2011). Apart from physical competence, other domains of self-perception, such as global self-worth and athletic competence, were affected as well, a finding that highlights the negative influence of gender incongruence on many aspects of the lives of these children and adolescents. In one study, low gender typicality was associated with internalizing problems, but only when social pressure to conform to gender norms was felt (Yunger et al., 2004). Indeed, gender diverse children and adolescents have to cope with peer victimization and stigmatization predicting emotional and behavioral problems (Grossman & D'Augelli, 2007; Seelman, Woodform, & Nicolazzo, 2017).

With regard to gender differences, referred AFABs perceived themselves in all aspects, except their behavior, more competent than referred AMABs, both during childhood and in adolescence. It could well be that masculine behavior in AFABs is more accepted than feminine behavior in AMABs (Sandnabba & Ahlberg, 1999). This tolerance might also explain the more positive self-esteem of referred assigned girls at birth (Isomaa, Väänänen, Fröjd, Kaltiala-Heino, & Marttunen, 2013). It was even the case that referred AFABs in childhood perceived themselves better in school and sports and more socially accepted than the normative sample of assigned girls at birth, a finding we did not see in AMABs.

Of notice, referred adolescents perceived their behavior better compared both to referred children and to their normative peers. This may be explained because adolescents are known to underreport their externalizing behavior (Berger, Jodl, Allen, & McElhany Davidson, 2005) or because their minority position forces them to keep more quiet and behave well.

Some limitations of this study should be mentioned. First, this is a cross-sectional study and therefore no conclusions can be drawn about the changes over time of self-esteem from childhood into adolescence. Furthermore, this study was performed at the CEGD and thus only contained data from one clinic. Only a selected sample of children and adolescents participated who had such extreme gender dysphoria that they were referred to the clinic. A considerable number of referred children and adolescents were excluded for this study because they were too early in the diagnostic process or dropped out before the diagnostic process was completed. No checks could be performed to determine the differences between the included and excluded group of children and adolescents, because of the lack of data of the excluded group of children. Furthermore, children and adolescents who themselves or their parents did not desire any medical treatment might not be included. In recent studies by Olson, Durwood, DeMeules, and McLaughlin (2016) and Durwood, McLaughlin, and Olson (2017) on non-referred socially transitioned transgender children, self-worth was similar compared to a control group and their siblings. Finally, an important methodology problem should be addressed. Researching differences between referred children and adolescents and a normative population raises the question with which normative group they should be compared, their assigned gender or their desired gender. In this research, the choice was made to use the assigned gender normative group as comparison, although this might not describe this population at best. In further research, a careful decision has to be made regarding what normative population is used.

Clinically, the results of this study have implications for care-takers, clinicians, peers, and teachers of transgender children and adolescents. Although the underlying mechanisms of the lower self-esteem in the referred children and adolescents of this study were not taken into account, which could be an objective for further research, a higher self-confidence and perceived social support are known as predictors for better mental health (Grossman, D'augelli, & Frank, 2011). One way to prevent the decrease in physical appearance competence is of course by early medical intervention with puberty suppression that stops physical development of undesired sex characteristics (Kreukels & Cohen-Kettenis, 2011). Furthermore, psychotherapy focusing on self-confidence could help to prevent a decline in social acceptance. One example could be psychomotor therapy which uses sports to address body experiences and the interaction in a social environment. This could help to improve the self-confidence of transgender youth and may contribute to the prevention of the development of psychiatric problems (Probst, Knapen, Poot, & Vancampfort, 2010).

As transgender adolescents felt themselves less socially accepted compared to transgender children and their normative peers, it is relevant to pay attention to the social acceptance of these adolescents. By educating peers and teachers reported harassments may be prevented (McGuire, Anderson, Toomey, & Russell, 2010). An example of increasing the confidence and self-esteem is

by a group intervention focusing on education and social support. This enlarges a supportive social network and thereby has a positive influence on the self-worth (Romijnders et al., 2017).

Finally, families should be supported in caring for their gender diverse youth since family acceptance is associated with positive physical and mental health, for example, better self-esteem and lower depression (Ryan, Russell, Huebner, Diaz, & Sanchez, 2010).

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Note

1. Throughout this article Gender Dysphoria is capitalized when referring to the *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (DSM 5) diagnosis, and gender dysphoria is lowercased when referring to individuals who experience dysphoria but who do not necessarily meet the diagnostic criteria for a DSM 5 diagnosis.

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