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Gender identity and preadolescence: a pilot study

Identité de genre et préadolescence : une étude pilote

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disorder

Abstract Considering the scarcity of Italian investigations on gender identity in developmental age and specifically the total lack of investigation regarding preadolescence, we wanted to carry out a first exploratory study in this age bracket. We directed our attention to the cognitive and affective dimensions of gender identity. Moreover, we were interested in identifying possible deviations of gender typicality perception in a normal population as well as their associations, if any, with personality traits and psychosocial adjustment. Subjects' age ranged from 9 to 13 years. Investigation was carried out with the following instruments: for children the *Gender Identity Interview for Children* and the *Big Five Questionnaire* (BFQ) were used; for teachers a Gender Identity Questionnaire, based on the observation of behaviours relating to gender identity and gender role of children, and for parents the *Child Behaviour Checklist/4-18*, *CBCL*. At a descriptive level, the majority of children seem to be satisfied with the sex to which they belong, although a remarkable percentage (40.2%) does not recognise any positive elements to their gender. Descriptive analysis of subjects with sex-atypical profile (all females) showed specific personality traits at BFQ associated with gender nonconformity: high emotional instability and low conscientiousness. These results, however, should not be considered indicative of genuine correlations, rather they could represent a starting point for new hypotheses to be tested in future investigations. The same applies to scores at CBCL showing that subjects with sex-atypical profile have a tendency to exhibit aggressive-transgressive behaviours. These reflections lead us consider the advisability for the principal education institutions, school and family, to face the question of sexual education with the necessary serenity and competence, focusing above all on gender and role differences.
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MOTS CLÉS

Identité de genre ;

Résumé La constatation de la pénurie de recherches italiennes portant sur le développement de l'identité de genre et particulièrement à la préadolescence, nous a donné l'objectif de mener une première étude exploratoire sur cette tranche d'âge. Nous avons exploré plus par-

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Préadolescence ;
Typicité-atypicité de
genre ;
Trouble de l'identité de
genre

ticulièrement les dimensions cognitives et affectives de l'identité de genre. De plus, nous nous sommes intéressés aux éventuelles déviations de la perception de typicité de genre dans une population normale et les associations éventuelles avec les variables de personnalité et d'adaptation psychosociale. Cette étude porte sur 246 sujets âgés de 9 à 13 ans. Les outils employés pour la recherche sont : pour les enfants ; la Gender Identity Interview for Children, GII (Zucker et al., 1993) et le Big Five Questionnaire, BFQ-C (Barbaranelli et al., 1998) ; pour les éducateurs un questionnaire sur l'identité de genre, élaboré sur la base du Parent-Report Gender Identity Questionnaire for Children (GIQ, Johnson et al., 2004) ; pour les parents la Child Behaviour Checklist/4-18, CBCL (Achenbach, 1991). Sur un plan descriptif, la majorité des enfants semble satisfaite de leur sexe d'appartenance, mais 40,2 % ne reconnaissent pas d'existence d'éléments positifs liés à leur propre genre. L'analyse descriptive des sujets qui ont un profil sexuel atypique (toutes des filles) a montré des traits de personnalité spécifique au BFQ associés avec une non-conformité de genre : forte instabilité émotionnelle et faible niveau de conscience. Ces résultats doivent seulement être considérés comme un point de départ d'hypothèses à tester par des investigations futures. Les mêmes applications aux scores de la CBCL montrent que les sujets qui ont un profil sexuel atypique ont une tendance à avoir des comportements agressifs-transgressifs. Ces réflexions nous amènent à considérer qu'il y a une opportunité pour les principales institutions, écoles et familles, d'affronter avec sérénité et compétence la question de l'éducation sexuelle, en se focalisant avant tout sur les différences de genre et de rôles.

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Version abrégée

Introduction

L'identité de genre traduit la perception unitaire et persistante de soi en tant qu'homme ou femme (Simonelli, 2002). Du fait de la carence des recherches italiennes sur l'identité de genre en rapport avec l'âge de développement et en particulier l'absence de travaux sur la préadolescence, nous nous sommes fixé l'objectif de mener une première étude exploratoire sur cette tranche d'âge. De plus, nous avons cherché à détecter les éventuelles déviations de la perception de typicité de genre dans une population normale et les associations éventuelles avec les variables de personnalité et d'adaptation psychosociale. Par « atypie de la perception de l'identité de genre » dans cette recherche, nous entendons une non-conformité aux standards culturels normatifs *implicites* qui pourrait être source de malaise actuel et dans l'avenir dans des différentes dimensions existentielles et relationnelles.

Méthodes

Cette étude porte sur 246 sujets âgés de 9 à 13 ans. L'analyse descriptive a montré une légère majorité de femmes dans toutes les tranches d'âges. Les outils employés pour la recherche sont : pour les enfants/jeunes la Gender Identity Interview for Children, GII (Zucker et al., 1993) et le Big Five Questionnaire, BFQ-C (Barbaranelli et al., 1998) ; pour les éducateurs un questionnaire sur l'Identité de Genre, élaboré sur la base du Parent-Report Gender Identity Questionnaire for Children (GIQ, Johnson et al., 2004) ; pour les parents la Child Behaviour Checklist/4-18, CBCL (Achenbach, 1991).

Résultats

Les données de cette recherche montrent que dans certaines dimensions qui décrivent l'identité de genre et, en particulier, celles qui définissent le facteur « affectif » de genre, on a relevé des variations importantes par rapport aux résultats attendus, en ayant comme référence les standards implicites relatifs au genre définis par la culture. L'analyse descriptive des résultats montre que nos sujets ne fournissent pas de réponses atypiques aux items qui constituent le facteur « confusion cognitive de genre » ; mais, on retrouve un pourcentage considérable de réponses atypiques aux items qui mesurent le facteur « confusion affective de genre ». La plupart des enfants et des préadolescents semble satisfait de son appartenance sexuelle, bien que 40,2 % ne reconnaissent pas d'existence d'éléments positifs liés à leur propre genre.

Les résultats obtenus par l'analyse de la variance ne montrent pas de différence statistiquement significative pour les dimensions cognitives et affectives de l'identité de genre mesurées par la GII par rapport aux variables *sexe* et *âge scolaire*. Dans la population interrogée, 11 questionnaires remplis par des sujets féminins rapportaient de trois à cinq réponses non stéréotypiques. Parmi ces sujets nous n'avons identifié aucun profil qui puisse indiquer un trouble potentiel de l'identité de genre tel qu'on le trouve dans le DSM IV-TR (American Psychiatric Association, 2000). Compte tenu du nombre restreint des sujets du groupe avec des profils atypiques, nous avons pu effectuer seulement des évaluations générales vis-à-vis des caractéristiques des personnalités et de l'adaptation psychosociale mise en évidence par les autres tests (BFQ e CBCL). Enfin, concernant les évaluations effectuées par les éducateurs nous avons observé, dans quatre cas, des comportements non stéréotypés par rapport au sexe d'appartenance dans les domaines suivants : attitude typique du sexe opposé ; préférence pour les jeux agressifs et/ou compétitifs ; plus

grande acceptation dans le groupe des pairs du sexe opposé ; difficulté dans l'appréciation des changements pubertaires.

Conclusion

Nous sommes conscients de la complexité des variables impliquées dans l'étude de l'identité de genre et du rôle de genre dans cette phase du cycle de la vie. Cela nous pousse à adopter une attitude d'extrême prudence quant à la formulation de nos conclusions. Plutôt que d'apporter des réponses, notre travail permet d'envisager des recherches de grande échelle sur l'identité de genre et le rôle de genre, avec le but de recueillir des données significatives pour les comparer avec les autres travaux scientifiques déjà élaborés dans d'autres pays.

Full version

Introduction

Gender identity represents the unitary and persistent perception of oneself as male or female (Simonelli, 2002). Gender identity acquisition is a multifactorial process whose dimensions concern biological, psychological, relations and socio-cultural aspects (Zucker and Bradley, 1995). Gender role, instead, is everything a person communicates to others to show where he/she belongs: for example, the way he/she dresses, speaks or chooses favourite pastimes.

In our culture, prevalent definitions consider only two genders, each one corresponding to one sex. By the way, deviations from this already made pathway, strictly regarded as the only one possible and, above all, the only regular one, have always taken place.

Although starting from a biological sex with mainly dichotomic manifestations (Dèttore, 2005), it is presently believed that there are multiple ways for expressing one's gender.

A number of investigators have studied children's gender identity in terms of self-perceived similarity to gender stereotypes; other authors infer children's self-perceived gender typicality from their self-ratings on a specific class of sex-typed attributes, such as toy preferences or personality traits. However, if gender identity is multidimensional (Spence and Hall, 1996; Ruble and Martin, 1998; Egan and Perry, 2001), it is hazardous to infer an individual's overall self-perception as masculine or feminine from self-perceived sex typing in any single domain (Spence, 1993; Spence and Buckner, 1995). A further critical point is the difficulty in giving operative definitions of gender identity; many works are influenced by the meaning investigators ascribe to pattern of scores obtained with instruments for which it is not clear what they are meant to measure.

Considering the scarcity of Italian investigations on gender identity in developmental age, we directed our attention to cognitive and affective dimensions of gender identity. Moreover, we were interested in identifying possible deviations of gender typicality perception in a normal population as well as their associations, if any, with personality

traits and psychosocial adjustment. In this article, by "atypicality in gender identity perception" we mean a nonconformity to *implicit* normative cultural standards that might be a source of discomfort and maladjustment in several existential and relational areas, both at present and in the future.

Since atypicality is an index relating to self definition and exhibition of cross-sex-typed behaviours, its grade of *flexibility-rigidity* can produce very different outcomes: *flexibility* could presumably be a sign of an exploratory attitude towards the opposite sex, while *rigidity* presumably stresses some kind of discomfort in identifying with same-sex individuals.

A persistent perception of nonconformity with one's gender is however considered a risk factor for psychosexual development and for psychosocial adjustment. Nevertheless, bearing in mind that during development many risk indexes can be totally transitory or be the result of more general difficulties, in order to set a diagnosis of gender identity disorder (GID) exhaustive clinical evaluation is required.

Many tests used in research and clinical assessment show good psychometric properties as well as discriminating validity in spotting GID in developing subjects, but in most cases they actually tend to measure the construct of gender role (Zucker, 2005); this is the case for observation of toy-choices, clothes (Zucker, 1992) or temperamental and personality traits for which there are well-established normative gender differences (i.e. activity level, aggressiveness and involvement in rough-and-tumble play).

In our study we used an Italian translation of the *Gender Identity Interview for Children* by Zucker et al. (1993), which was developed specifically for measuring the construct of gender identity in children. Investigations utilizing this interview showed it is very useful in clinical work (among most recent studies: Zucker et al., 2003; Meyer-Bahlburg et al., 2004), as well as for studying main gender-typed identity features in normal population (Dèttore and Ristori, 2005). By this interview, gender dysphoria feelings, desire to belong to opposite sex and ambivalent feeling towards one's biological sex can be detected. More specifically, this instrument measures the two most characteristic aspects of GID, namely *cognitive gender confusion* (item 1, 2, 3 and 4) and *affective gender confusion* (item 6, 7, 8, 9, 10, 11 and 12). By the way, this interview alone is not sufficient to establish a diagnosis of GID, but it is a useful instrument within the framework of a more comprehensive and articulated multidisciplinary assessment process.

Participants and methods

The present investigation involved 246 subjects attending second level of Italian primary school (6 fourth grade and 6 fifth grade) and of secondary school (4 first grade and 4 second grade) of an institute in the province of Rome (see Fig. 1). Subjects' age ranged from 9 to 13 years; majority of subjects (30.5%) were 10 years old (see Fig. 2). As to sex variable, descriptive analysis showed a slight prevalence of female in all age groups (55.3% of total sample, vs. 44.7% of males, Fig. 3). As to socio-cultural characteristics, average participants were of middle-low station.

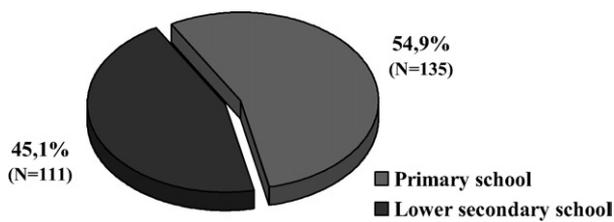


Figure 1 Variable “school”: frequencies and percentages. Variable « Scolarité » : fréquence et pourcentage.

Investigation was carried out with the following instruments:

- For children:
 - Gender Identity Interview for Children, GII (Zucker et al., 1993) administered as self-report.
 - Big Five Questionnaire, BFQ-C (Barbaranelli et al., 1998).
- For teachers:
 - A *Gender Identity Questionnaire*, based on the observation of behaviours relating to gender identity and gender role of children; the questionnaire was developed on the basis of the *Parent-Report Gender Identity Questionnaire for Children (GIQ, Johnson et al., 2004)*. Scores are on a five-point Likert scale, where 1 is a behaviour rated by teachers as very atypical and 5 is a very typical one. One hundred eighty-two questionnaires were returned completed (73.98%).
- For parents:
 - *Child Behaviour Checklist/4-18, CBCL (Achenbach, 1991a)*. One hundred and fifty-eight questionnaires were returned completed (64.23%).

Statistical study

Each instrument was descriptively analysed; furthermore, parametric statistics were compiled to verify the possible differences among participants for the aforementioned variables. Proportions of the total sample are given in %. Analysis of variance (ANOVA) was used, as appropriate, for comparing subgroups. The chosen level of significance is $P \leq 0.05$. SPSS (13.00 version) for Windows was used.

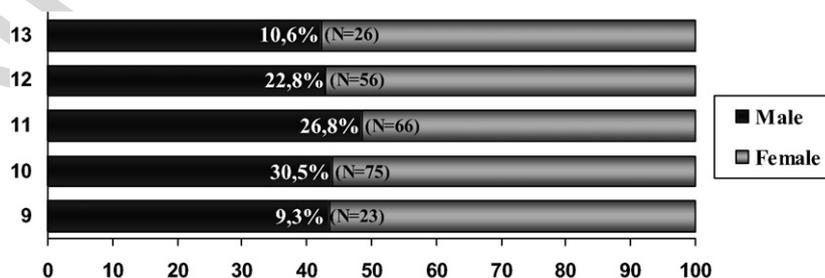


Figure 2 Variable “age”: frequencies and percentages. Variable « Âge » : fréquence et pourcentage.

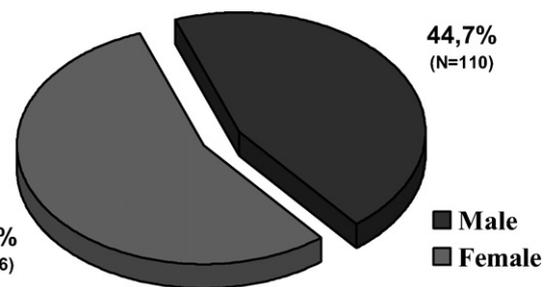


Figure 3 Variable “sex”: frequencies and percentages. Variable « Sexualité » : fréquence et pourcentage.

Results

The *GII* being utilised as *self-report* and not as an interview, it was not possible to catch ambivalence in the answers, since each item had dichotomic answering choices. In line with Zucker et al. (1993), a score of “0” was given to typical answers and a score of “2” was given to *atypical/non stereotypic* ones. Descriptive analyses are shown in Tables 1-3.

Descriptive analysis shows that subjects of our study do not give atypical answers to the first four items, except for two primary school children (1M and 1F) who only do so for item 4. According to Zucker et al. (1993), the first four items constitute the factor “*gender cognitive confusion*”. Therefore, children in our study clearly know the sex they belong to, classify their gender correctly and have acquired awareness of gender constancy, i.e. they believe their biological sex cannot change over time.

On the contrary, there are remarkable percentages of atypical answers to items measuring *affective gender confusion* (6, 8, 10). These items are meant to point out which gender is perceived as the best one, to detect desire to belong to the opposite sex and/or the sensation of feeling closer to one gender than to the other. Finally, with regard to atypical answers, the most important datum is that of item 5 (“are there any good things about being a boy/girl?”) which indicates the value ascribed to one’s gender identity.

As to items 6, 8 and 10, it is mostly female participants who give sex-atypical answers; as to item 5, percentages are more balanced among sexes but reversed, with a majority of males (38.2%F vs. 43.5%M).

Atypical answers to items 6, 8 and 10 show different trends in the two different schools (respectively, 20.9% in

Table 1 Frequencies and percentages of *typical* and *atypical* answers to the *GII Self-Report* ($N = 246$)
Fréquence et pourcentage de réponses typiques et atypiques au *GII Self-Report*

	Typical answers		Atypical answers		Missing value	
	N	%	N	%	N	%
Gender Identity Interview (Self-Report)						
1. Are you a boy or a girl?	246	100	0	0	0	0
2. Are you a (opposite of first response)?	244	99.2	0	0	2	0.8
3. When you ever grow up, will you be a Mommy or a Daddy?	245	99.6	0	0	1	0.4
4. Could you ever grow up to be a (opposite of first response)?	243	98.8	2	0.8	1	0.4
5. Are there any good things about being a boy (girl)?	145	58.9	99	40.2	2	0.8
6. Are there any things that you do not like about being a boy (girl)?	200	81.3	45	18.3	1	0.4
7. Do you think it is better to be a boy or a girl?	231	93.9	10	4.1	5	2.0
8. In your mind, do you ever think that you would like to be a girl (boy)?	226	91.9	16	6.5	4	1.6
9. In your mind, do you ever get mixed up and you are not really sure if you are a boy or a girl?	237	96.3	7	2.8	2	0.8
10. Do you ever feel more like a girl than a boy (a boy than a girl)?	216	87.8	27	11.0	3	1.2
11. When you dream at night, are you ever in the dream? If yes, in your dreams, are you a boy, a girl, or sometimes a boy and sometimes a girl?	211	85.8	4	1.6	17	6.9
12. Do you ever think that you really are a girl (boy)?	238	96.7	5	2.0	3	1.2

Table 2 Contingency table: answers at *GII Self-Report* *sex ($N = 246$)
Tableau de contingence : réponses au *GII Self-Report* * sexualité ($n = 246$)

Items	N	Typical answers				Atypical answers			
		M		F		M		F	
		N	%	N	%	N	%	N	%
1	246	110	100	136	100	0	0	0	0
2	244	108	98.18	136	100	0	0	0	0
3	245	110	100	135	99.26	0	0	0	0
4	245	108	98.18	135	99.26	1	0.90	1	0.73
5	244	61	55.45	84	61.76	47	42.72	52	38.23
6	245	95	86.36	105	77.20	14	12.72	31	22.79
7	241	106	96.36	125	91.91	1	0.90	9	6.61
8	242	108	98.18	118	86.76	0	0	16	11.76
9	244	106	96.36	131	96.32	3	2.72	4	2.94
10	243	103	93.63	113	83.08	5	4.54	22	16.17
11	229	90	81.81	121	88.97	1	0.90	3	2.20
12	243	108	98.18	130	95.58	0	0	5	3.67

Table 3 Contingency table: answers at the *GII Self-Report* *school-age ($N = 246$)
Tableau de contingence : réponses au *GII Self-Report* * âge-scolaire ($n = 246$)

Items	N	Typical answers				Atypical answers			
		Primary		Lower secondary		Primary		Lower secondary	
		N	%	N	%	N	%	N	%
1	246	135	100	111	100	0	0	0	0
2	244	134	99.25	110	99.09	0	0	0	0
3	245	134	99.25	111	100	0	0	0	0
4	245	132	97.77	111	100	2	1.48	0	0
5	244	76	56.29	69	62.16	59	43.70	40	36.03
6	245	113	83.70	87	78.37	22	16.29	23	20.72
7	241	127	94.07	104	93.69	6	4.44	4	3.60
8	242	126	93.33	100	90.09	5	3.70	11	9.90
9	244	132	97.77	105	94.59	1	0.74	6	5.40
10	243	121	89.62	95	85.58	12	8.88	15	13.51
11	229	113	83.70	98	88.28	3	2.22	1	0.90
12	243	130	96.29	108	97.29	3	2.22	2	1.80

secondary school and 16.3% in primary school; 9.9% in secondary school and 3.8% in primary school; 13.6% in secondary school and 9% in primary school); on the contrary, the

rate of atypical answers to item 5 was 36.7% among participants attending secondary school and 43.7% among those attending primary school.

ANOVA performed on cognitive and affective gender identity dimensions (as measured through GII) by sex and school-age produced no statically significant results.

Gender atypical profiles

Following indications by Zucker et al. (1993), we considered as “atypical” those profiles in which the self-report on gender identity contained at least three answers non adherent to sex. This *cut-off* score is by no means to be considered as indicative for pathology or developmental risk; instead, it must be a prompt for further investigation in the framework of a broader psychodiagnostic assessment. Atypical answers can reveal a *flexible* gender identity, scarcely bound to role stereotypes, without any aversive feelings toward one’s sex.

In the population we examined, 11 questionnaires of female subjects met the established criteria with nonstereotyped answers ranging from 3 to 5. No subject gave more atypical answers than typical ones, so no case was indicative for a potential GID as described by DSM IV-TR (American Psychiatric Association, 2000).

Considering the small number of subjects with sex-atypical profile, we chose to reason on general evaluation with respect to personality characteristics and psychosocial adjustment derives from the other tests (BFQ and CBCL). Multidimensionality of gender identity and the awareness that sex-nonconformity can be indicative of a higher mental flexibility suggest that a critical approach should be adopted in discussing the results of the present study.

As to BFQ profiles of these subjects, we found a tendency for high scores at the Emotional Stability Scale and a tendency for low scores at the Conscientiousness Scale (Table 4). Such scores might denote impulsive subjects with little self-control, who have difficulties in accepting rules and in staying calm; they might often feel sad, be in a bad mood, be restless, anxious or worried (Barbaranelli et al., 1998).

As to evaluation made by parents through CBCL, it is not possible to draw comprehensive conclusions since we could collect only five questionnaires regarding the 11 subjects with atypical profile. We can observe that in three cases they get a high score at the Externalisation Scale ($T = 64, 65, 68$) and in two cases a high score at Sexual Problem Scale ($T = 64, 76$). No significative scores can be found at the Skill Scale.

As to evaluations made by teachers through the *Questionnaire on Gender Identity*, we could collect seven questionnaires regarding the 11 subjects with atypical profile. In four cases non sex-stereotypical behaviours can be observed, such as cross-sex-typed behaviours, a preference for aggressive and/or competitive games, larger acceptance by peers of opposite sex, difficulties in appreciating pubertal changes.

Discussion

Some dimensions describing the construct of gender identity, especially the ones defining the “affective” gender factor, show significant variations from what one would expect with reference to implicit gender standards defined by culture. At a descriptive level, the majority of children seem to be satisfied with the sex to which they belong, although a remarkable percentage (40.2%) does not recognise any positive elements to their gender. Eighteen point three percent of subjects find aspects he/she dislikes in being male/female; 6.5% of subjects think it would be better to be of the opposite sex, and 11% claim to have felt/feel more similar to opposite sex than to his/her own sex.

It is mostly the females who give answer nonconforming to their gender and point out negative gender-bound aspects. These data seem to testify for girls being dissatisfied with a society which is more open to male expectancies and needs and more restrictive towards girls. The culture of the girls in the sample seems to ascribe more value to male sex. The socio-cultural status of sample is very likely to play a role in the remarkable stereotypic perception. On the other hand, it is also possible that females feel more free to express their nonconformity to gender and that deviations in female answers are an expression of the profound changes taking place in our society and regarding what is considered typical for males and for females. The trends we describe deserve further investigation in future studies involving a larger number of subjects and stratified samples.

The *Gender Identity Interview* by Zucker et al. (1993), used as *self-report*, proved to be a useful instrument for measuring gender identity in school-age subjects. There were neither particular problems in the administration nor in comprehension of items. In further investigation, “I do not know” could be added as a possible answer to items, in order to avoid losing information on “ambiguous” answers. Validity of GII had already been verified in clinical contests for intervention on children with gender dysphoria. Inversely, GII has never been used before in studies of gender identity features in non clinical samples of normal population aged as participants of the present study; nor was GII used for epidemiological investigations. The present work is characterised as an investigation of normal population, an area on which scientific literature is very scarce.

The Questionnaire on Gender Identity administered to teachers seems to be of help for school screening of potential risk, which, in any case, will need further evaluation through diagnostic protocols administered by psychologists with specific experience in this field.

Descriptive analysis of subjects with sex-atypical profile, all females, showed specific personality traits at BFQ associated with gender nonconformity: high emotional instabil-

Table 4 Means and standard deviation (S.D.) of BFQ scores: subjects with atypical profiles ($N = 11$)
Moyenne et déviation standard des scores du BFQ : Sujets ayant un profil atypique ($n = 11$)

Energy	Amicability	Conscientiousness	Emotional stability	Mental openness
Mean (S.D.)	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)
51.1 (10.42)	52.45 (8.83)	45.82 (9.48)	58.00 (6.59)	48.27 (12.88)

Low $0 < T < 45$; medium $46 < T < 55$; height $56 < T < 75$.

ity and low conscientiousness. These results, however, should not be considered indicative of genuine correlations, rather they could represent a starting point for new hypotheses to be tested in future investigation. The same applies to scores at CBCL showing that subjects with sex-atypical profile have a tendency to exhibit aggressive-transgressive behaviours. This datum might also reflect parent's attitude to overestimate boyish or nonfeminine behaviours exhibited by their daughters; alternatively, this datum might suggest a possible risk of psychosocial maladjustment for those subjects who fail to develop a feeling of complete satisfaction with their gender. Again, the data suggests a new direction for research rather than exhaustive conclusions.

Conclusion

Awareness of the complexity of variables involved in the study of gender identity and gender role in this phase of life leads us to be extremely cautious in drawing conclusions.

In accordance with the scarce literature existing on the subject, the results of this study showed that in small samples from a normal population, it is unlikely that subjects who potentially meet DSM-IV *TR*'s criteria for the diagnosis of GID or subjects at high risk for GID be found.

Considerations made so far suggest that it would be appropriate for the principal education institutions, school and family, to face the question of sexual education with the necessary serenity and competence, focusing above all on gender and role differences. In our complex society the need to develop a critical relation ability on genders is increasingly evident; this study, rather than giving answers, shows the need to develop a large scale research on gender identity and role in order to gather significant data to confront with scientific studies already elaborated in other countries.

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