Gender Identity Disorder: A Literature Review from a Developmental Perspective

Tomer Shechner, PhD

Department of Psychology, Tel Aviv University, Ramat Aviv, Israel, and Feinberg Child Study Center, Schneider Children’s Medical Center of Israel, Petach Tikva, Israel

ABSTRACT

The present paper reviews the theoretical and empirical literature on children and adolescents with gender variant behaviors. The organizational framework underlying this review is one that presents gender behavior in children and adolescents as a continuum rather than as a dichotomy of normal versus abnormal categories. Seven domains are reviewed in relation to gender variant behavior in general, and to Gender Identity Disorder (GID) in particular: theories of normative gender development, phenomenology, prevalence, assessment, developmental trajectories, comorbidity and treatment.

INTRODUCTION

Gender identity disorder (GID) is one of the most controversial diagnoses of the DSM-IV (1) and almost incomparable in the complexity of its social, ethical and political considerations to any other diagnosis. Because not many children meet complete diagnostic criteria for GID, the clinical experience of mental health professionals working with GID children and adolescents is limited. What is far more common, however, are parents seeking counseling about their children’s gender variant behaviors, and therefore it is important to distinguish between these two conditions. The aim of the present paper is to review the available research data and clinical literature on gender variant behaviors in general, and on GID in particular, in children and adolescents.

Sex – The genetic, hormonal and anatomical characteristics that determine if one is a biological male or a biological female.

Gender – The psychological and cultural characteristics associated with biological sex.

Gender role – Attitudes, behaviors and personality traits that a society, in a given cultural and historical context, associates with the male or female social role. Masculinity and femininity, the main concepts in gender role, pertain to the presence of qualities and behaviors in an individual that are consistent with those expected from males and females.

Gender identity – Perception of one’s self as male or female. In children, gender identity is related to the ability to reliably answer the question: “Are you a boy or a girl?” The individual’s comfort with the sex and gender categories assigned at birth is a major element of gender identity.

Sexual orientation – The sex of the person or persons to whom the individual’s sexual fantasies, sexual arousal and sexual activities are predominantly directed. Sexual orientation ranges along a continuum from exclusive heterosexuality to exclusive homosexuality and includes various forms of bisexuality. A less common sexual orientation is asexuality, or the absence of sexual attraction to either sex.

THEORIES OF GENDER DEVELOPMENT

Gender is one of the most salient social categories, and it plays a major role in the way people define themselves and experience their social world. Extensive theoretical and empirical work has been invested in understanding the mechanisms underlying the trajectories of gender development. In this section, a brief description of theories of normative gender development is presented as

Address for Correspondence: Tomer Shechner, PhD, Department of Psychology, Tel Aviv University, POB 39040, Ramat Aviv 69978, Israel.

shechner@post.tau.ac.il
the basis for the discussion of gender nonconformity which follows. (For a comprehensive review of gender development theories, see 2, 3.)

Theories of gender development may be divided into four types: psychoanalytic theories, gender essentialism, environmental theories and cognitive theories.

Psychoanalytic theories of sex differentiation are rooted in Freud's early work. Freud (4) claimed that a child's gender role is determined during the phallic stage. Fear of castration motivates the child to identify with the same-sex parent, thereby incorporating that parent's gender roles and attitudes. These concepts were later expanded by Horney (5), Chodorow (6) and others. Psychoanalytic theories are not amenable to empirical study and have therefore not received much empirical support (3).

Gender essentialism attributes gender differentiation largely to biological differences and focuses on genetics, hormones and neurological factors. One example is the evolutionary perspective which explains human sex differences by the survival value of certain traits and characteristics adopted by men and women in primeval times (for example, see 7). Another is based on developmental neurophysiological studies of the causal effects of different biological factors on sex-typing attitudes and behaviors (for example, see 8).

Environmental theories explain gender development according to learning theory. Three elements are required for learning: the stimulus, the response to the stimulus and the resulting behavior. Reinforcement increases the probability that the behavior will recur, whereas punishment decreases the probability. Learning theory considers the organism to be passive and emphasizes experience and the role of the environment in shaping behavior. Accordingly, children learn expectations about social gender by the reactions to their behavior of various social agents, such as parents and teachers (9).

Cognitive theories claim that gender development is shaped by children's cognitive abilities, interests, knowledge and other personal characteristics. Liben (10) divided cognitive theories into two approaches: cognitive-environmental and developmental-constructivist. The cognitive-environmental approach emphasizes the interaction of the environment with the individual's personal characteristics. For example, Bussey and Bandura (11) proposed that besides direct learning, gender development involves learning through such advanced processes as modeling and imitation, and these require that the individual acquire certain skills and abilities.

Factors that contribute to the evolution and preservation of gender-typed behaviors include cognitive ability, emotional state, motivation, past experience and anticipated outcomes. Similarly, social-cognitive theories claim that gender-typed behaviors result from the triadic interaction among environmental events, personal factors and behavioral patterns.

The developmental-constructivist approach to gender development considers individuals to be active participants who seek, organize and use information they are exposed to in social contexts. It includes three major schools of thought: cognitive-developmental stage theory, gender schema theory and intergroup theory. For the purpose of this paper, only the first two are discussed.

The cognitive-developmental stage theory (12) derives from Piaget's studies of cognitive development which showed that cognition is the result of self-driven processes and not merely previous environmental experience. The same cognitive abilities that make it possible for children to understand constancies in the physical world such as the conservation of liquid quantity (i.e., that the quantity of liquid remains unchanged even if the liquid is poured into a container of a different shape) also make it possible for them to understand the consistency of gender. Kohlberg (12) described three cognitive stages of gender development: 1. Gender identity, achieved at age 2-3 years, is the individual's ability to label him/herself as a boy or girl, and serves as the core motivation for future gender-related behaviors. That is, a child recognizing the fact that he is a boy leads him to seek and perform activities his society defines as boy-like. 2. Gender stability, reached at age 4-5 years, is the ability of the individual to understand the lasting nature of gender. 3. The final cognitive stage of gender development, gender consistency, reached at age 6-7 years, refers to the individual's ability to understand that gender is a fixed category that does not change even in the face of external or physical changes. The acquisition of cognitive abilities of gender stability and consistency motivates the individual to actively perceive, process and apply information about gender derived from the environment.

Gender schema theory focuses on the way in which the individual's attitudes and knowledge about gender, termed collectively the gender cognitive schema, are used as a cognitive prism through which information from the environment is perceived and then manifested as behavior. As formulated by Martin and Halverson (13), the theory claims that young children understand to which gender group they belong and formulate cog-
nitive categories that classify stimuli (objects or activities) as appropriate for males or females (13). Thereafter, stimuli encountered in the world activate this schema and are evaluated accordingly. Stimuli that are congruent with individuals’ gender schema increase their interest and prompt them to actively seek to acquire gender-appropriate skills. In an extension of this theory, Liben and Bigler (2) proposed the dual-pathway gender schema theory which emphasizes individual differences explicitly. The theory suggests two pathways of development. One is an attitudinal pathway similar to the gender schema of Martin and Halverson (13) in which the individual’s gender attitudes lead him or her to engage in one activity or the other, with a directional link from the attitude to the specific behavior(s). The second is a personal pathway with an opposite directional link in which the individual’s activity affects his or her gender attitudes. In the personal pathway, the individual’s personal interests are more dominant than the gender attitude, and they determine if he or she engage in a specific activity. This, in turn, can affect the gender schema. For example, a boy who finds himself in a situation where he plays with dolls may come to believe that playing with dolls is for boys as well as for girls. The dual pathway model is particularly relevant to individual differences in gender behaviors in general, and gender variant behaviors in particular (14).

GID PHENOMENOLOGY

GID was first recognized as a psychiatric entity in the DSM-III (15), where it was included as two separate diagnoses by age: GID of childhood, and transsexualism (adolescents and adults). In the fourth edition of the DSM (16), the two diagnoses were collapsed into one, GID, with different criteria for children and for adolescents and adults.

The DSM-IV-TR (1) lists four criteria (A-D) for the diagnosis of GID (p. 576), as follows:

A – Strong and persistent cross-gender identification. The individual meets this criterion if he or she is characterized by at least four of the following five features:
1. Repeated stated desire to be, or insistence that he or she is, of the other sex.
2. Preference for cross-dressing and wearing stereotypical clothes of the opposite sex.
4. Intense desire to participate in stereotypical games of the opposite sex.
5. Strong preference for playmates of the other sex.

In adolescents and adults, cross-sex identification is manifested by a constant statement of the person’s desire to be, live as, and be treated as the other sex.

B – Persistent discomfort with one’s assigned sex or a sense of inappropriateness in the gender role of that sex. The individual meets this criterion if he/she has any of the following features: in boys, a feeling of disgust for their penis or testes, a wish not to have male sexual organs, aversion toward rough-and-tumble play, and rejection of stereotypical male activities and games; in girls, a wish not to have female sexual organs, an assertion that she has or will grow a penis, and a marked aversion towards normative feminine clothing. Affected adolescents and adults are preoccupied with getting rid of primary and secondary sex characteristics and/or express beliefs that they were born the wrong sex.

C – (exclusion criterion) – The presence of a physical intersex condition excludes the diagnosis of GID.

D – Clinically significant distress or severe functioning impairment due to the disturbance.

PREVALENCE OF GID

There are no reported epidemiological studies of the prevalence of GID in children or adolescents (17). Most of the published data are derived from samples of adults attending gender clinics for hormonal or surgical treatments, who represent only a specific segment of the population with cross-gender identification and behaviors. In addition, there is considerable empirical evidence indicating that GID in childhood does not necessarily persist into adulthood. Therefore, it is reasonable to assume that the prevalence varies by age (17).

One potential approach to determining the prevalence of GID in normative samples is to use screening instruments that include items on cross-gender or cross-sex identification (17), such as the Child Behavior Checklist (CBCL) (18). Of the 118 items in the English version of the CBCL, two measure cross-gender identification: “behaves like opposite sex” and “wishes to be opposite sex.” Like the other items, they are scored on a 3-point scale of 0 – not true, 1 - somewhat true, and 2 - very true. One study of non-referred children aged 4-11 years reported that among the boys, 3.8% assigned a score of 1 (somewhat true) to the item “behaves like the opposite sex” and 1.0% assigned it a score of 2 (very true). The corresponding rates for the non-referred girls were 8.3%
and 2.3%. The item “wishes to be the opposite sex” was assigned a score of 1 by 1.0% of the boys and 2.5% of the girls, and a score of 2 by none of the boys and 1.0% of the girls (19). The findings suggest that there is a sex difference in mild, but not extreme, cross-gender behaviors and that the tendency of children to behave like the opposite sex is greater than their tendency to actually wish to be the opposite sex. Very similar results were reported in a recent study of Dutch twins (20). In the Hebrew version of the CBCL there are only 113 items none of which measure cross-gender identification.

Numerous studies reported consistent findings indicating significantly higher referral rates for boys from age 3 to 12, than for girls. However, this difference decreases dramatically with age to almost no sex differences in referral rates for adolescents (21). The earlier difference might be explained by the relative tolerance of society for gender nonconformity in girls during childhood but not in adolescence, when gender roles intensify.

ASSESSMENT OF GID

As is true for other DSM diagnoses, a systematic clinical interview is the most comprehensive tool for the assessment of GID. The evaluation should include both the child and the parents and, in some instances, also teachers or other relevant social agents involved in the child’s life. The clinical interview is difficult, because it may deal with unpleasant experiences that can become intensified, accompanied by feelings of shame or embarrassment. Sometimes a prolonged intake process is needed before the parents or child feels secure enough to talk openly about sex and gender identification issues. Personal clinical experience suggests that many parents do not even inform their young children of the reason for attending counseling.

In addition to the clinical interview, the clinician has several instruments with which to assess sex-typing behavior. The Occupational, Activity and Trait Personal Interest and Attitude Measure Scales for Children (COAT-PM/AM) and Preschoolers (POAT-PM/AM) have been applied in normative samples in the United States (21, 22) and Israel (23). The Activities and Traits domains of the personal interest questionnaires are recommended for the assessment of sex-typing behaviors and preferences. Although they are not clinical measures, they offer the possibility of evaluating the child in a pleasant and nonthreatening manner. Although further empirical research examining the utility of these measures in a clinical context is necessary, there is some evidence that sex-typing measures assessing play preferences, in particular toy choice, can be useful in assessing children referred for concerns about their gender development (24).

Several reviews and empirical studies have emerged examining the common measures available for assessment of gender identification and gender roles for both research and clinical purposes (for a review, see 25).

DEVELOPMENTAL TRAJECTORIES IN GID

Retrospective studies provide strong empirical evidence that adults with a homosexual sexual orientation, with or without a specific diagnosis of GID, have a high level of recall of cross-gender behaviors in childhood. A meta-analysis of these studies revealed that homosexual men and women had significantly greater recollections of such behaviors than heterosexual men and women (26). This finding was later confirmed by others (for a review, see 27).

To avoid the limitations of retrospective designs, several groups conducted prospective studies of developmental trajectories for the identification of children with GID. Probably the most important to date is the work of Green (28) who compared 66 feminine boys and 56 normative boys aged 4-12 years with a follow-up measure for the available 44 feminine boys and 30 normative boys at ages 14 to 24 years. Homosexual fantasies were reported by 75% of the study group compared to none of the controls, and homosexual or bisexual behaviors were reported by 80% and 4%, respectively. Of the 44 boys who completed follow-up, only one had gender dysphoric feelings to the extent of considering sex reassignment surgery. Later prospective studies documented higher rates of 20% (29) and 16.1% (30) for gender dysphoric mood among boys diagnosed with GID or subclinical GID in childhood.

There is only one prospective study to date of the developmental trajectories of masculine girls (31). At enrollment, 60% of the girls met the criteria for GID and 40% had subthreshold GID. At follow-up, 12% had GID or gender dysphoria, 32% were classified as bisexual or lesbian in fantasy, and 24% were classified as bisexual or lesbian in behavior.

This body of prospective research suggests that GID often remits from childhood to adolescence and adulthood. Furthermore, cross-gender fantasies and behaviors in childhood appear to be largely predictive of a homosexual sexual orientation in adulthood (32). Liben
and Bigler (14) suggest a comprehensive explanation to the developmental trajectories of GID. Using the dual pathway model, they propose that both environmental-exogenous factors as well as internal-endogenous factors may account for the longitudinal drop in GID. Cognitive development from childhood to adulthood may lead to complex thinking abilities, resulting in modification of gender attitudes and behaviors. For example, a boy who thinks that there are only two kinds of people, masculine boys and feminine girls, might perhaps reconcile his own feminine interests by desiring to be female. It is reasonable to predict declines in GID over time as children realize that there can be both more and less feminine and masculine males and females. Changing cognitive attitudes about “right” and “wrong” gender behavior is likely to alleviate gender dysphoria.

**COMORBIDITY IN GID**

Most of the systematic data on psychopathologies associated with a childhood diagnosis of GID are derived from parental reports in screening measures such as the CBCL (21). Zucker and Bradley (29) showed that clinically referred children with GID have, on average, significantly more behavioral problems than their siblings or non-referred children. Similar results were reported from cross-nation and cross-clinic studies, wherein children with GID had mean CBCL total score in the clinical range, with a predominance of internalizing symptomatology relative to externalizing problems (33). In a recent study, boys with GID had a significantly higher total CBCL score than normative boys and normative girls, and significantly higher scores for externalizing symptoms than normative boys but not normative girls. In addition, there were no differences in scores for internalizing symptoms between the study and control groups (34). These findings are not totally in line with the theoretical model of GID proposed by Zucker and Bradley (29) and Coates and Person (35), which emphasized the major role of anxiety and assumed a higher-than-normal level of anxiety in individuals with GID.

Two more recent studies of GID comorbidity have used different psychopathological measures. One study used a structured psychiatric interview with parents of children diagnosed with GID (36). The results showed that 52% of the children had one or more additional psychiatric diagnoses, with more internalizing (37%) than externalizing (23%) symptoms in both boys and girls. However, only 31% had anxiety disorder.

In another study, anxiety was measured via physiological correlates of cortisol level, heart rate and skin conductance in stressful situations. Although the authors concluded that their data provided some evidence that children with GID are more prone to anxiety, the results indicated that children with GID showed higher levels only in skin conductance but not in other measures such as cortisol or heart rate levels (37).

**TREATMENT**

The complex ethical and social aspects of GID or subthreshold GID become all the more apparent when considering treatment. The most acute ethical issue concerns the relationship between gender nonconformity in childhood and later homosexuality. Although parents often express concern about the future sexual orientation of their child, homosexuality is not considered a mental disorder, and there is no justification for applying psychological interventions that aim to prevent it. In addition, empirical evidence from efficacy studies of sexual conversion therapies of any kind are, at best, extremely limited (38).

The DSM-IV diagnostic criterion B for GID makes no clear differentiation between dissatisfaction with one's biological sex and dissatisfaction with gender roles. This distinction is important because a child who feels disgusted or alienated from his or her body organs would probably exhibit symptoms similar to those of body dysmorphic disorder (BDD), which is characterized by a preoccupation with either an imaginary or slight physical anomaly that causes significant distress or impairment of functioning. Furthermore, if the dominant clinical symptom is a persistent discomfort with one's own sex, treatment should focus on ways to aid the child to accept and come to terms with his or her body, assuming that drastic surgical or hormonal interventions are not tenable at that point in development. For those situations in which hormonal treatments are indeed appropriate, however, Cohen-Kettenis developed a protocol for treatment of GID in adolescents desiring sex-reassignment (21). The protocol guidelines distinguish between three types of physical interventions: wholly reversible, partly reversible and irreversible ones. Wallien and Cohen-Kettenis suggest that in order to decide upon the appropriate physical intervention (32), it is clinically important to discriminate between children with persistent GID and children who will eventually cease experiencing GID.
If the dominant symptom is cross-gender identification or discomfort with assigned gender roles, treatment is far more multifarious and complex. Because discomfort with one’s biological sex is not an obligatory condition for criterion B, it is disconcerting that a diagnosis of GID is sometimes based exclusively on cross-gender behaviors. Therefore, it is highly recommended to conduct an extensive intake to comprehensively assess both the child’s and the parents’ difficulties and to formulate the treatment goals accordingly. The fundamental principle guiding treatment is the child’s well-being, which does not necessarily imply changing his or her gender behaviors.

It should be borne in mind that a diagnosis of GID can subject the child to the social stigma associated with being labeled mentally ill (39). At the same time, some scholars argue that psychiatric labeling confers meaning to an otherwise inconceivable behavioral pattern, thereby reducing stigma, conflict and atrocities (40). Clinicians are advised to take these advantages and disadvantages of psychiatric labeling into account when making a diagnosis of GID or any other DSM-related disorders.

**CLINICAL ASPECTS OF TREATMENT**

There are 13 single-case reports of behavioral interventions for GID, all based on an environmental approach to gender development with a focus mainly on sex-typed play behaviors (21). Entirely apart from ethical considerations, behavioral interventions have been found to be clinically ineffective. Some of the treated children reverted to cross-sex play in the absence of the reinforcing adult. Moreover, there was little generalization to untreated cross-sex behaviors (21).

Various individual and group psychosocial interventions for children and adolescents have been reported. These focused primarily on acceptance, support and self-esteem enhancement in addition to psychoeducation for both the children and their parents (for example, see 41). Treatment goals included reducing preoccupation with thoughts of gender identity issues, social ostracism, body dysphoria and possible psychiatric comorbidities and dealing with negative thoughts and emotions related to a possible future homosexual orientation. Targeting the objective to the individual child and family according to the intake information is highly recommended.

The question of how to identify “right” and “wrong” gender behaviors is very much an educational issue. Thus, even if the therapist does not advocate changing sex-typing behaviors as a treatment goal, it is his or her duty to provide the parents with the clinical and research literature, so they can decide for themselves the best way to cope with the situation. The therapist must also accept the parental choice, provided it is not harmful to the welfare of the child.

The involvement of the parents in therapy is also crucial to preventing or alleviating problems in the parent-child relationship that derive from the child’s cross-gender behaviors. In addition, the parents themselves often report feelings of shame, blame and helplessness. Seeing a therapist on a regular basis may help them understand and handle such feelings, eventually leading them to accept their child more fully.

Zucker (17) suggested that parents be trained in setting limits to the child’s cross-gender behaviors by encouraging gender-neutral or sex-typed activities. Parents can be shown how to encourage their child to find alternative activities they consider more gender-appropriate, such as same-sex peer interaction. Parents must be cautioned, however, to be aware of the difference between empathic encouragement and harsh imposition. Others suggested that when parents bring a child exhibiting gender variant behaviors to treatment in the fear that the child will develop a homosexual orientation, the appropriate change-orientated intervention should target the parents rather than the child (39).

For those who oppose conceptualizing cross-gender behavior as pathological the treatment goal is not to change the child’s non-conforming behavior. Rather, the central objective of treatment should be to change the environment, in particular the parents, to accept and support the child’s success in coping with negative social response to cross-gender behaviors (42). In addition to seeking to increase parental acceptance and support of their child’s cross-gender behavior, some researchers and organizations have called for programs aimed at teaching other children to accept and support cross-gender behaviors in their peers (43).

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