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A Developmental, Biopsychosocial Model for the Treatment of Children with Gender Identity Disorder

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This article provides a summary of the therapeutic model and approach used in the Gender Identity Service at the Centre for Addiction and Mental Health in Toronto. The authors describe their assessment protocol, describe their current multifactorial case formulation model, including a strong emphasis on developmental factors, and provide clinical examples of how the model is used in the treatment.

KEYWORDS gender, gender identity, gender identity disorder, gender identity disorder of childhood, gender identity disorder of adolescence, gender variance, transgender, transsexual, treatment

In this article, we will outline the therapeutic approach for children that has evolved in the Gender Identity Service, Child, Youth, and Family Program at the Centre for Addiction and Mental Health in Toronto. Since our clinic was established in the mid-1970s, we have evaluated a total of 590 children (age range, 2–12 years) who were referred to our service. In organizing this article, we will attempt to address the majority of questions provided to the contributors by the guest editors.

WHAT CONSTITUTES AN ASSESSMENT?

Tables 1–2 show the assessment protocol that we currently use in our clinic. As is the case for most children referred for a psychiatric and psychologic

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TABLE 1 Clinical assessment protocol

Interview schedule	Approximate duration
Telephone intake interview	.5–1.5 hours
Family interview	3 hours
Individual interviews with parents	2–5 hours/parent
Psychological testing of the child	4 hours
Individual interview with child	1 hour
Feedback session	1–2 hours

Note. In Canada, there is universal health care coverage. When a child is seen in a hospital setting, the Canadian health care plan covers the entire cost. A psychiatrist bills directly the health care system for all face-to-face contact. Psychologists who work in a hospital setting are paid an hourly rate, but do not bill the health care plan. For child psychiatrists in private practice, they also bill the health care plan for all face-to-face contact. Psychologists in private practice operate on a fee-for-service basis. Clients pay the psychologist directly. If they have private health insurance, at least some of the costs are covered by the individual health care plan.

TABLE 2 Psychological testing protocol and parent-completed questionnaires

Test/task/questionnaire	Comment/reference
Child measures	
IQ test	WPPSI-III or WISC-IV
Quality of attachment (mother-child observation)	Used with children 3–6 years of age. Cassidy and Marvin (1992)
Feelings, Attitudes, and Behaviors Scale for Children	Used with children 6–10 years of age. Beitchman (1996)
Youth Self-Report Form	Used with children 11–12 years of age. Achenbach and Edelbrock (1986a)
Rorschach	Zucker, Lozinski, Bradley, and Doering (1992)
Draw-a-Person test	Zucker, Finegan, Doering, and Bradley (1983)
Free play task	Zucker, Doering, Bradley, and Finegan (1982)
Playmate and Play Style Preferences Structured Interview	Fridell, Owen-Anderson, Johnson, Bradley, and Zucker (2006)
Color preference task	Chiu et al. (2006)
Gender Identity Interview for Children	Wallien et al. (2009) and Zucker et al. (1993)
Parent/teacher measures	
Separation Anxiety Interview schedule	Used for boys only. Zucker, Bradley, and Lowry Sullivan (1996)
Child Behavior Checklist	Achenbach and Edelbrock (1983)
Teacher's Report Form	Achenbach and Edelbrock (1986b)
Temperament questionnaire	Zucker and Bradley (1995)
Games Inventory	Bates and Bentler (1973)
Gender Identity Questionnaire for Children	Johnson et al. (2004)
Symptom Checklist-90	Derogatis (1983)
Dyadic Adjustment Scale	Spanier (1976)
Recalled Childhood Gender Identity/Gender Role Questionnaire	Zucker et al. (2006)

Note. We no longer use the two gender constancy assessment measures reported on by Zucker et al. (1999). The Children's Depression Inventory is used on an ad hoc basis.

assessment, a referral is invariably initiated on the part of parents or a health professional (e.g., the pediatrician, a family physician, a teacher or a mental health professional currently involved in the care of the child and the family). Upon receipt of the referral, the first phase in our assessment protocol is to conduct an intake telephone interview with a parent or another primary caregiver (e.g., a child protection worker). In this intake telephone interview, which varies between 30 and 90 minutes, parents provide information about why they have contacted us, their concerns, and their goals. We collect information about their child's gender development (asking questions about behaviors that correspond to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR, American Psychiatric Association, 2000) diagnosis of Gender Identity Disorder), whether there are other concerns about the child's socioemotional development (including other *DSM* diagnoses), previous mental health contacts, the child's physical health, and whether or not there is a family history of psychologic problems/psychiatric disorders. If a child has had previous mental health contacts, this information is requested for review prior to our own assessment. An intake interview is as follows:¹

An intake telephone interview was conducted with Zack's mother, lasting approximately 45 minutes. Ms. Aziz appeared to be quite distracted during the phone call, often excusing herself to attend to her children, who were heard screaming in the background. Zack, age 3, lives with his parents and 6-month-old sister. Both parents are employed full-time as managers of business firms.

Ms. Aziz explained why the referral to our clinic was initiated. She described Zack as exhibiting an array of behaviors that she believes to be female-typical. For example, he will color his fingernails to mimic nail polish, will wear her shoes, wrap a blanket around himself to make a skirt, and appears to be very fascinated by jewelry. She said that she first noticed these behaviors just over a year ago and that they have increased since then. Ms. Aziz said that she initiated contact with our clinic to learn how to deal with these behaviors.

Ms. Aziz stated that she believes that Zack knows that he is a boy and has a penis. She thinks that he notices the anatomical differences between himself and his sister. She said that she saw him "pushing his penis in" about 3 months ago. In terms of gender identity statements, Zack has said that he is a girl and that he wants to be a girl. Ms. Aziz said that she has responded to these statements by asking Zack, "Why?" Ms. Aziz explained that Zack is not able to express himself very well through speech, so has not been able to answer this question with clarity.

Ms. Aziz said that Zack displays a range of behaviors, acting in a gender-typical fashion at times. He enjoys playing with other children and has both male and female friends. It was reported that Zack's best friend is a boy and, together, they will play in a rough-and-tumble manner. However, Ms. Aziz believes that Zack likes being around same-aged

girls more. With girls, Zack is said to be less active, sitting back and watching them with a look of fascination. He has made comments about liking the clothing of the girls in his class.

In terms of the feedback Zack has received regarding his cross-gender behaviors, Ms. Aziz said that she believes they have been inconsistent. Starting at the age of 1.5 years, Zack attended a daycare run by a woman, who Ms. Aziz thinks encouraged and taught some of his female-typical behavior because she found it “entertaining.” For example, at this daycare, Zack was taught how to belly dance. Ms. Aziz sees the movements involved in belly dancing as being quite feminine and said that Zack enjoys showing them off. Zack’s teachers have noticed some cross-gender behaviors but do not discourage them unless they are potentially harmful. For example, they will only intervene if they see him painting on his own skin.

Ms. Aziz said that her family identifies as Muslim. She explained that cross-gender behaviors are unacceptable in the Muslim faith, but said that their family is not very observant. Ms. Aziz has seen her husband get quite agitated by Zack’s female-typical behavior and said that he “hates the idea” of Zack being girly. Mr. Aziz has made disapproving comments to Zack, like “you look silly” when he dresses up like a girl.

Ms. Aziz believes that she has contributed to Zack’s gender confusion herself somewhat. Until recently, she has read him fairy tales like Cinderella, with female characters that Zack has seemed to really connect with. At first, she tried to ignore his cross-gender tendencies and not make any comments. However, she said that since reading online about Dr. Zucker’s approach, she has tried to replace the feminine things that Zack is interested in with more masculine things. For example, she has taken away fairy tales and replaced them with stories about male characters, like Diego. Zack reportedly pays some attention to the newly introduced items, but appears to miss the female-typical things. Ms. Aziz said that he will throw a tantrum when something he likes is removed. For example, when his makeshift skirt was taken away, he cried and expressed that he wanted it back. She said that she still tries to remain neutral on the subject because she does not want to “cause harm,” but has told him many times that he is a boy and has a penis.

Within the family, Zack is said to be closest with his mother, who has been his “primary caregiver.” Ms. Aziz said that she has always been responsible for Zack’s daily routine and she described Zack as being very attached to her. She has noticed separations from her, like when he goes to daycare, as being difficult for him. Zack is also said to be quite close with his grandmother, who is said to be very female typical. He often appears to be fascinated by her jewelry and makeup. She said that he just appears to like having someone around, even if he is playing by himself. He is also said to have a good relationship with his father. Together, they will read stories, build blocks, and ride bikes in the summer. Ms. Aziz said that Zack seemed to hate the idea of having a younger sister when she was pregnant. For example, he made a comment about sending the baby on a train to go to his aunt’s house. Zack appears to have gotten used

to the idea of having a younger sister. Ms. Aziz stated that Zack loves his sister and will sometimes appear to be frightened that something bad might happen to her.

Ms. Aziz said that her relationship with her husband has been contentious at times. When Zack was 1.5 years old, Ms. Aziz and her husband had their biggest fight. Ms. Aziz described this fight as “traumatic,” as Zack witnessed his father hold a gun to his mother’s chest. As a result, the police were involved. Ms. Aziz said that she is not sure if Zack remembers this incident because he has not said anything about it, but she believes it might have affected him. This fight was an isolated episode in terms of magnitude, but there have been other instances of argumentativeness. Zack is said to always take his mother’s side in these arguments, asking his father why he is being “bad to mommy.”

Ms. Aziz’s pregnancy with Zack was the result of in vitro fertilization. He has been exposed to three languages all at once, so she believes that his speech has been slow to progress as a result. When asked why she thought Zack displayed these cross-gender behaviors, Ms. Aziz cited many environmental explanations. She said that she thinks it is likely related to his attachment to her. She noted that he sees her all the time and that she has always been the one to take care of his routine. She said that, although she does not see herself as being very “girly,” she thinks that she has encouraged his identification with females by reading him fairy tales. Ms. Aziz also believes that his daycare provider is somewhat responsible for teaching and encouraging female-typical behaviors. Finally, she thinks that he is more likely to behave in this way if he is “lacking attention” or bored.

Prior to the assessment, parents are provided with information about the temporal course of the assessment (typically 3–4 visits) and what it will involve. Parents are asked what they will inform their child about the assessment, who they are going to see, and why they are coming to see us. In our experience, this is an important phase in the assessment process in terms of establishing appropriate assessment rapport, particularly with anxious parents. For the majority of parents, they do not have a particular difficulty or problem in explaining to their child that they are coming to see some “talking doctors who know a lot about families” (a script that we suggest). They are able to frankly discuss with their child that they are coming to see a talking doctor to understand better why their child wishes to be of the other gender. This is usually because the issue has been on the table within the family environment.

There are, however, a minority of parents who are very uncertain and torn about what to tell their child. A common comment is, “I don’t know what to tell him. I don’t want him to think that there is anything wrong with him.” Our suggestion for these parents is to, first, state that the issue is not a matter of right or wrong. Rather, the issue is to understand better why their child feels the way that he or she does and the purpose of the assessment is to determine how to best help them and their child. For these parents,

we have found this suggestion to usually be helpful and they might be able to say something like, “You know how you have been telling mommy that you want to be a girl, that you like ‘girls’ toys,’ that you like to dress-up in mommy’s clothes? Well, mom and dad want to understand better how you are feeling about yourself and we are going to go and see some talking doctors who know a lot about kids.” In our experience, almost all reluctant parents who contact us are able to provide this information. However, for the very small minority who cannot provide this information due to severe anxiety or ambivalence, we will meet only with the parents. If after meeting us, they are comfortable bringing their child, the usual assessment protocol follows. If not, the assessment is conducted only with the parents. Since 1975, only five assessments were conducted only with parents.

The assessment protocol usually allows us to acquire enough information to decide whether or not the child meets the DSM criteria for Gender Identity Disorder (GID) and any other psychiatric disorder. Multiple sources of information are used, including the open-ended material gleaned from the clinical interviews, a review of the psychological testing of the child, and an examination of the relevant parent-report questionnaires. The assessment also attempts to understand the general functioning of the family matrix (e.g., the parent’s relationship, parent-child relationships, sibling relationships, etc.) and how the child is functioning at school, in the peer group, etc. An effort is made to gain an understanding of how the parents have made sense of their child’s gender development (e.g., its origins), how the parents have responded to their child’s cross-gender behavior prior to the assessment, what goals the parents have with regard to their child’s gender development, and so on.

ON WHAT BASIS IS IT DECIDED THAT TREATMENT IS INDICATED?

Prior to providing parents with feedback, we have a case formulation conference among the team members involved in the assessment. It is obvious that a case formulation requires some type of conceptual model to guide it. Accordingly, we will comment here on some of the parameters that underlie what we would like to characterize as a developmental, biopsychosocial model that we use in case formulations and in generating treatment decisions and recommendations. It is a model informed by a variety of theoretical and empirical advances that have emerged in the clinical and scientific literature over the past several decades.

1. Is gender identity fixed and unalterable in childhood? For the vast majority of children, it is probably safe to say that gender identity is a stable trait. A girl who “has” a female gender identity at age 3 is very much likely to have a female gender identity at age 13, at age 23, and so on

throughout the life course. In this sense, one might argue that the gender identity at age 3 was fixed and unalterable. But, for most children, no one tries to alter their gender identity after it is first expressed, for a host of psychological and social reasons. To formally answer the question of whether or not a young child's gender identity is fixed and unalterable, one would have to conduct a randomized psychosocial trial in which, for half the children, some type of intervention was attempted to alter the child's gender identity. It is unlikely that such an "experiment of nurture" would attract many volunteer parent participants.

For children who present clinically with the diagnosis of GID, long-term follow-up studies suggest that their gender identity is not necessarily fixed. The majority of children followed longitudinally appear to lose the diagnosis of GID when seen in late adolescence or young adulthood, and appear to have differentiated a gender identity that matches their natal sex (Drummond, Bradley, Badali-Peterson, & Zucker, 2008; Green, 1987; Singh, Bradley, & Zucker, 2010; Wallien & Cohen-Kettenis, 2008; Zucker, 2008a).² In this sense, one could argue that their childhood gender identity was alterable—that there was plasticity and malleability—although the mechanisms that underlie this change are far from fully understood. Thus, when we provide feedback to parents about their child's gender identity, we make use of the empirical information that is currently available about "natural history."

2. In our view, gender identity development can be best understood using a multifactorial model that takes into account biological factors, psychosocial factors, social cognition, associated psychopathology, and psychodynamic mechanisms. In the model, biological factors (e.g., possible genetic factors, prenatal sex hormones, temperament) are conceptualized as possible predisposing factors for the expression of a particular gender identity phenotype. They are not conceptualized as fixed factors leading to invariant gender identity differentiation across developmental time. The other parameters can be conceptualized as predisposing, precipitating or perpetuating factors.

Biological Factors

Let us use a dimension of temperament (activity level; AL) as an example of a possible predisposing biological factor. Activity level, the propensity for intense physical energy expenditure and the proclivity for rough-and-tumble play, is a sex-dimorphic trait, with likely genetic and prenatal hormonal influences (Campbell & Eaton, 1999; Eaton & Enns, 1986). Via a parent-report measure, we have shown that AL is inverted in children with GID: Boys with GID have a lower AL than control boys and girls with GID have a higher AL than control girls. Indeed, girls with GID have a significantly higher AL than boys with GID (Zucker & Bradley, 1995). If one construes

AL as a temperamental trait, one could conceptualize, for example, a boy with a low AL to find the behaviors of girls, on average, as more compatible with his own temperamental style than the behaviors of boys and could, conceivably, lead to a greater affiliation with girls regarding sex-of-playmate preference. In turn, this could lead to a greater interest in the toys and activities of girls which could, in theory, have a feedback effect on the child's gender identity, especially during early development when cognitive reasoning is fairly rigid and black and white.

Frank was a 7-year-old boy who met the *DSM* criteria for GID. In contrast to his two brothers, Frank was described by his parents as more sensitive and emotional. He had a long history of an avoidance of rough-and-tumble play, complaining that other boys were both mean and aggressive. Indeed, one of his brothers, who had a history of severe disruptive behavior, had often been mean and aggressive towards him. The problematic relationship with his brother appeared to generalize to Frank's view of all boys, as he complained that all boys were mean. He affiliated primarily with girls and, with them, engaged in a variety of stereotypical feminine activities. By age 5, he began to voice the wish to be a girl, stating that if he were a girl, then all of his problems would be solved.

If one conceptualized Frank's sensitive temperament as a predisposing, presumably biological factor, one could argue for an intervention that, in part, would focus on helping Frank recognize that there are a variety of ways to be a boy and that there are likely some boys in his social environment who are not pervasively mean or aggressive. Exposure of Frank to other boys whose temperament was more a match to his own could, in theory, help him to develop a more nuanced understanding of gender: that there are different ways to be a boy, that one does not have to be a girl as a fantasy solution to cope with his difficulties with his aggressive brother or the more boisterous boys in the school environment, and so on.

Psychosocial Factors

Psychosocial factors constitute a second parameter in case formulation. One example pertains to the parental response to cross-gender behavior as it emerges early in development. In our view, it is common for the initial parental response to cross-gender behavior to be either neutral or encouraging (reinforcement). Early cross-gender behavior is often viewed by parents as either cute or only a phase.³ For some parents, they seek out a clinical assessment only after some kind of threshold is crossed, and they now no longer believe that the behavior is cute or only a phase (Zucker, 2000). The threshold might pertain to emergent social ostracism in the peer group, the child's intense verbalization that he or she either is or wants to be the

other gender, or other factors. In our case formulation, parental neutrality or encouragement of cross-gender behavior is viewed as a perpetuating factor (in relatively rare cases, in which, e.g., the mother overtly cross-dresses her son, acting out her desire for a daughter, such behavior could be viewed as a precipitating factor).

Roy was a 4.5-year-old boy with a two-year history of pervasive cross-gender behavior. At the time of assessment, Roy did not express the wish to be a girl; rather, he insisted that he was a girl. Since he first began to display signs of cross-gender behavior, the parental response was to “go with it.” They bought him stereotypical girls’ toys, allowed him to wear his mother’s clothes on a daily basis, and would often videotape his activities when he dressed up as a girl. Apart from his gender identity development, the parents identified one other major concern about his socioemotional development, namely that he would have intense and extremely disorganized temper tantrums when frustrated. During these episodes, he was experienced as inconsolable. By history, the parents reported that they had never “challenged” Roy when he insisted that he “was” a girl. They came to the assessment wanting to know if this was “really who Roy was” and if they were doing the “right thing” by allowing Roy to consistently enact behaviors that allowed him to, in effect, see himself as a girl.

Social Cognition

In the literature on normative gender development, it has long been noted that young children do not have a full understanding of gender constancy. Gender constancy refers to a child’s cognitive understanding that gender is an invariant part of the self. It has been argued that in the early stages of gender constancy (e.g., the capacity to self-label oneself as a boy or a girl or to understand the constancy of gender over time) that children do not fully understand its invariance. Until children develop the capacity for concrete operational thought, typically between the ages of 5 and 7 years, they often conflate gender identity with surface expressions of gender behaviors (Kohlberg, 1966; Ruble, Martin, & Berenbaum, 2006). Thus, it is not particularly unusual for a 4-year-old girl to express the belief that, if she wore boys’ clothes and engaged in boys’ activities, then this would mean that she was a boy. It has also been reported in the normative gender development literature that younger children tend to have more rigid beliefs than older children about what boys and girls can do or should do (Ruble et al., 2006). In our own research, we have reported that children with GID appear to have a developmental lag in gender constancy acquisition (Zucker et al., 1999). Although it is unclear if this developmental lag can be understood as a predisposing factor, it can certainly be understood as a perpetuating

factor (e.g., pervasive enactments of surface cross-gender behaviors could contribute to the maintenance of cognitive gender confusion).

In some respects, gendered social cognition provides a window into how children with GID construct a subjective sense of self as a boy or as a girl. For example, when asked why he wanted to be a girl, one 7-year-old boy said that it was because he did not like to sweat and only boys sweat. He also commented that he wanted to be a girl because he liked to read and girls read better than boys. An 8-year-old boy commented that “girls are treated better than boys by their parents” and that “the teacher only yells at the boys.” His view was that, if he was a girl, then his parents would be nicer to him and that he would get into less trouble at school. One 5-year-old boy talked about having a “girl’s brain” because he only liked Barbie dolls. In this particular boy’s treatment, he created drawings of his own brain, writing in examples of what made his brain more like a girl’s brain and what made his brain more like a boy’s brain (e.g., when he developed an interest in Lego). Over time, the drawings of the size of his girl’s brain shrunk and the size of his boy’s brain expanded.

It could, of course, be argued that gendered social cognition is merely an epiphenomenon of a more fundamental developmental process pertaining to gender identity, that is, it is simply a way that children attempt to explain to themselves their gender identity. On the other hand, it could be argued that young children’s limited understanding of gendered social cognition calls for caution in assuming how fixed their gender identity is and that, with development, some children will develop a more flexible understanding that there are different ways one can be a boy or a girl.

Co-Occurring Psychopathology

When there is co-occurring psychopathology in children with GID, it can be understood in several ways: a) as a result of social ostracism; b) as related to generic family risk factors for psychopathology; and c) as a possible cause of the GID. Regarding this last possibility, Coates and Person (1985), for example, argued that severe separation anxiety preceded the expression of feminine behavior in GID boys, which emerged in order “to restore a fantasy tie to the physically or emotionally absent mother. In imitating ‘Mommy’ [the boy] confuse[s] ‘being Mommy’ with ‘having Mommy.’ [Cross-gender behavior] appears to allay, in part, the anxiety generated by the loss of the mother” (p. 708).

In recent years, various clinicians working with children with GID have noted that some of these youngsters also appear to show signs of autism spectrum disorder (ASD), particularly at the high-functioning end of the spectrum. This clinical observation, which is now supported by some systematic empirical data (de Vries, Noens, Cohen-Kettenis, van Berckelaer-Onnes, & Doreleijers, 2010), opens up another avenue regarding the role of

associated psychopathology in children with GID. In our experience, children with GID generally show intense, if not obsessional, interests, in cross-gender activities. This propensity for intense interests may be magnified even further in those youngsters with a co-occurring ASD. Thus, a bridge between GID and ASD may be the predisposition for obsessional or focused interests and extreme rigidity in thinking. Moreover, any attempt to interfere with the obsessionalism may evoke intense anxiety. It is common for parents of these youngsters to report a series of obsessions (e.g., with a particular color, with a particular book that must be read over and over in ritualistic fashion, with specific objects, such as washing machines, vacuum cleaners, etc.).

Gender can become a site for obsessionalism, perhaps a magnification of intense interests in typically developing children (DeLoache, Simcock, & Macara, 2007). One 5-year-old boy with co-occurring GID and ASD had many obsessional interests that preceded his gender obsession. Unlike his earlier obsessions, which the parents tried to ignore, they were less certain if they should ignore his gendered obsessions and, thus, bought him an array of girls' toys and allowed him to wear his mother's clothes on a daily basis. At the time of assessment, this youngster had been insisting that he was a girl and, at school, where gendered line-ups were common, would join the girls in their line. In the course of the assessment, the mother reported that he was now developing a new obsession: "He now thinks that he is a computer." She thought that this was preferable to him believing that he was a girl. The child psychiatrist who has followed this youngster reported that, at age 12, the symptoms of GID had remitted. At age 12, this youngster had an "obsession" with male heavy metal rock stars (a particular musical genre) and wore his hair long to emulate them.

David was referred at the age of 5 by a child psychiatrist, following remarks to his parents that he wished to be a girl and to cut off his penis. Apart from a GID, David had a number of socioemotional difficulties, including persistent and pervasive struggles with self-regulation, behavioral rigidity, obsessive behaviors, anxiety, and poor social functioning. In our assessment, we concluded that he met criteria for Asperger's Disorder. Play therapy was initiated to help explore David's gender dysphoria. As appropriate, additional therapeutic strategies were drawn upon in order to support the development of self-regulation (e.g., with regard to sexualized behavior directed towards the therapist, temper tantrums), social skills, and the management of areas of obsessive focus. In the therapeutic context, struggles with the parent-child relationship, self-concept, peer relations, and anger and guilt were consistent themes.

Over the course of four years in therapy, David evidenced a strong tendency towards obsessions/restricted interests (e.g., trains, airports, certain television shows, and book series), with each lasting between 3 to 6 months in duration. The gender-related preoccupation stood out in terms of its relationship to identity. The gender dysphoria began to

wane around age 7. At age 9 years, in the 112th therapy session, David initiated discussion about his history of obsessions/restricted interests. He requested that his therapist write out each of his areas of interest (in chronological order) and he proceeded to summarize the “rationale” behind each. Early in the list placed his preoccupation with cross-gender materials. David paused on this area and reflected it had carried special meaning for him. He went on to say that this may have been more than just an interest in this topic area, and that, in fact, he had wanted to *be* a girl. He reflected on the reinforcing aspects of many of the feminine interests and behaviors (e.g., the feeling of pretend long hair, how “beautiful” things looked, etc.), with a focus on the associated visual and tactile stimulation. When asked about his understanding of his involvement in therapy, starting at age 5 years, David reflected that his parents may have been concerned about his desire to be a girl, as they knew that he was “really a boy.” He recalled his parents’ efforts to curtail his cross-gender behaviors by limiting his time and access. He discussed his belief that this was not the right approach, and that they should have just allowed him to grow out of this interest, as he had all of the previous and subsequent ones.

In reflecting on his development of gender dysphoria, David discussed his experience of bullying from peers for his gender atypical areas of interest. He speculated that, in many ways, his desire to become a girl may have been an effort to avoid the bullying from peers. David again reiterated the very reinforcing aspects of many of his female-typical interests. Finally, he reflected on his negative feelings about himself and his behavior and we considered his gender dysphoria as an effort to cope with these feelings. David continues to demonstrate a tendency towards preoccupations but, at present, has no symptoms characteristic of GID. He continues to benefit from therapeutic support for self-regulation, social skills, and management of his restricted interests/preoccupations.

Psychodynamic Mechanisms

Psychodynamic mechanisms can be understood, in part, as a transfer of unresolved conflict and trauma-related experiences from parent to child. Sometimes these kinds of experiences are consciously recognized by parents (but, nonetheless, acted out), but certainly not always. Children, themselves, may vary in their understanding of what drives their behavior.

Tom was a 4-year-old boy with an approximate one-year history of pervasive cross-gender behavior, including the repeated wish to be a girl. Tom’s mother was an intense, volatile, and extremely anxious woman, with strong narcissistic personality traits. She viewed Tom as a perfect child, until he began to express the desire to be a girl. She then experienced Tom as less than perfect, which, for her, was a severe narcissistic

injury. Tom's father played little role in his day-to-day life, working 18-hour days, 7 days/week.

We understood Tom's GID to develop in the context of the birth of his younger sister when he was just shy of his third birthday. He felt abandoned by his mother, who seemed to transfer much of her psychologic investment to the sister. She adorned the baby sister in pink (in early therapy sessions with Tom, he only used the color pink in his numerous drawings). In part, we conceptualized Tom's GID as the result of feeling an intense psychologic abandonment by his mother and an intense jealous rage towards his sister ("If you could be a girl like Suzie, then mom would pay more attention to you"). In our view, one of the factors in helping Tom work through his gender identity conflict was to make him more conscious of his jealous feelings and how they organized his day-to-day life within the family matrix.

Rose was a 9-year-old girl with a long history of cross-gender behavior, including the strong desire to be a boy. Rose was raised by her biological mother. At the age of 4, Rose discovered her mother's body at the bottom of the staircase. She had been murdered by a boyfriend. For various reasons, there were no biological relatives to care for Rose and so she was adopted at the age of 6.

At the time of assessment, Rose looked like a boy, based on her hairstyle and clothing style. During the assessment, Rose commented that she wanted to be a boy because boys were stronger than girls. She told her adoptive mother that when they walked down the street together that her mother need not be afraid, because "I look like a boy and no one will hurt you." Rose acknowledged that she has had the recurring thought that, had she been a boy, then she would have been able to protect her mother from the boyfriend because "boys are stronger than girls."

We conceptualized Rose's desire to be a boy as an unusual symptom emanating from a Post-Traumatic Stress Disorder. Perhaps due to the rigid normative social cognitions about gender, Rose had constructed, for herself, an unusual fantasy solution: had she been a boy ("because" boys are stronger than girls), she could have saved her mother's life.

In the case of Roy described above, one issue that was discussed in the case formulation conference was why the parents had never attempted to tell Roy that he was, in fact, "a boy." We wondered about why the parents were so "paralyzed" in this regard. One element of the family history that seemed relevant was that his mother had been subject to a long history of psychological and physical abuse by her father. We wondered if any signs of more boy-typical behavior on Roy's part might be conflated with viewing him as an "abuser-in-the-making," like her own father. In addition, Roy's mother had been subject to very severe peer ostracism during her own childhood (e.g., being made fun of because she wore glasses, had dental problems, etc.). These experiences were extremely difficult for her and she cried profusely (30 years

later) as she described them. She worried that, if she said anything to Roy about his insistence that he was a girl, he would experience this in the same traumatic way that she experienced the peer group teasing in her own childhood. Roy's father also had had a lot of difficult experiences in the peer group because of a speech impediment and he was also extremely worried that if he said anything to Roy about his girlish behaviors that Roy would experience this as representing a "defect," just like he experienced his speech problem as a defect.

Jim was the last of four boys born to a middle-class family. When seen at age 4, he had a strong desire to be a girl. Jim's mother acknowledged a very strong wish for a daughter, as she knew that this was her "last chance." Although rare, Jim's mother's reaction to giving birth to a fourth son was consistent with what we have characterized as pathological gender mourning (Zucker, Bradley, & Ipp, 1993). She became deeply depressed after his birth, wanting little to do with the baby for a couple of weeks. She had florid dreams about having given birth to a daughter. When Jim was a year old, her female friends bought her a life-sized female baby doll. As far as we could tell, Jim's mother had little insight into the significance of this gift. She asked plaintively, "Do you think it's because my desire for a daughter was so apparent to my friends?"

In the case formulation conference, we wondered whether or not it would be useful to organize treatment for the mother around helping her to understand the meaning of the wish for a daughter and what it represented for her and to help her mourn the loss of having given birth to a child of the non-preferred gender. We also wondered how the mother's disappointment/despondency might have been transmitted to Jim across his development.

WHEN TREATMENT IS INDICATED, WHAT ARE
THE RATIONALES AND GOALS FOR TREATMENT AND,
AS SPECIFICALLY AS POSSIBLE, HOW DOES
TREATMENT PROCEED?

When treatment is recommended, it might include the following: a) weekly individual play psychotherapy for the child; b) weekly parent counseling or psychotherapy; c) parent-guided interventions in the naturalistic environment; and d) when required for other psychiatric problems in the child, psychotropic medication. The goals for treatment are formulated on a case-by-case basis. In some cases, the focus might be only on the child's GID, as the child shows little in the way of associated psychopathology and the parents are generally functioning well. In other cases, the focus of treatment is much broader: If the child has other significant socioemotional problems

and if the parents have significant psychopathology or marital discord, then these issues also need to be addressed.

If the parents are clear in their desire to have their child feel more comfortable in their own skin, that is, they would like to reduce their child's desire to be of the other gender, the therapeutic approach is organized around this goal. Any co-occurring psychopathology is also treated and the approach depends heavily on the understanding of the sources of the associated psychopathology. If parents are uncertain about how best to address their child's *GID*, we offer to address this further in the course of therapeutic sessions and will suggest to the parents that we hold off on making any specific decisions about intervention options. Table 3 provides a summary of treatment recommendations and disposition for 26 children evaluated in 2008.

When we conduct open-ended play psychotherapy (or simply talk therapy) with children, like any psychotherapeutic intervention for any issue, therapy begins with educating the child about the reason that they are in therapy. This is tailored to the child's developmental level and cognitive sophistication. Some children are simply told that they are going to meet with an individual therapist to understand better their gender-related feelings and, during sessions, they are free to play with whatever they want (boys' toys, girls' toys, dress-up clothing, neutral and educational activities, etc.), to draw, to talk about day-to-day life, to report on their dreams, and so on. Principles of confidentiality are reviewed.

For other children, they have a very sophisticated understanding of why they are in treatment and the educative process is less formal. One 4-year-old girl, for example, had actually asked her parents to take her to see a therapist (she was very intelligent) because she was confused about why she wanted to be a boy. After the assessment, she seamlessly entered into a therapeutic process about her gender feelings. Other children are substantially more guarded and require a much longer period of time before they are comfortable discussing their feelings. One 3-year-old boy, for example, in the course of a two-year treatment, was never able to talk about his day-to-day life with his therapist: It was all enacted literally via play with repetitive family scenarios in which he labeled the characters as himself and his parents. In both of these cases, the *GID* remitted in full.

Individual open-ended psychotherapy enables many children with *GID* to discuss and to play out their gender identity issues, it affords them the opportunity to make sense of their internal representational world, and, in general, to master various developmental tasks with which they may be struggling. There is a reasonably large psychoanalytic case report literature on *GID*, for which the interested reader can glean some good examples of the process of open-ended psychotherapy (see Zucker, 2006a, 2008b; Zucker & Bradley, 1995).

TABLE 3 Treatment recommendations for cases evaluated in 2008 ($N = 26$)

ID	Sex	Age	Individual Therapy	Parent Therapy	Medication	Other	Comment
1	F	10	No	Yes	On Concerta for ADHD prior to assessment	Support provided to child by school psychologist	Diagnosed with ODD and ADHD Outpatient services difficult to access in community
2	F	7	Yes	Yes	Consult recommended for ADHD	Feedback provided to school psychologist	Dropped out of treatment; mother sought advice from a nurse practitioner who specialized in naturopathy; significant discord between parents, who were separated; diagnosed with ODD and ADHD
3	F	5	Yes	Yes	No		Mourning the sudden death of father was one focus of treatment
4	M	6	Yes	Yes	Consult recommended for ADHD	In day treatment for behavioral problems (diagnosed with ODD and ADHD)	Father seen in counseling; mother refused treatment (has bipolar disorder and on long-term disability); parents separated; father has custody
5	M	9	No	No	No		Sibling of ID 2; subthreshold for GID; feminine behaviors of no concern to mother; father "denies" observing any feminine behaviors
6	M	5	No	Yes	No	Feedback provided to school psychologist and to child protection agency	Subthreshold for GID; behavioral problems at school; in foster care

7	M	3	No	No	No	Recommendations to parents for interventions in naturalistic environment	Family lives in a small town, with no mental health resources available
8	M	7	No	No	No	Recommendations to parents for interventions in naturalistic environment	Parents wanted to try interventions on their own prior to considering formal therapy
9	M	6	Yes	Yes	No	Recommendations to parents for interventions in naturalistic environment	When informed that the "odds" of persistent gender dysphoria were quite low for the patient, the mother "sobbed" with relief. She did not feel that formal therapy was, therefore, required, that she could "handle the rest" on her own.
10	M	8	Yes	Yes	No		Referred for immediate surgery for undescended testicles
11	F	12	Yes	Yes	On Celexa, Strattera, and Seroquel prior to assessment		Patient had transitioned to living as a boy prior to assessment; diagnosed with PDD-NOS
12	M	8	Yes	Yes	No		Raised by maternal grandmother; both biological parents were drug addicts; father diagnosed with Schizophrenia

(Continued)

TABLE 3 (Continued)

ID	Sex	Age	Individual Therapy	Parent Therapy	Medication	Other	Comment
13	M	7	Yes	Yes	No	Consult recommended for pharmacologic treatment for anxiety	Diagnosed with ASD prior to our assessment; referred to a child psychiatrist in private practice
14	M	6	No	No	No	Recommendations to parents for interventions in naturalistic environment	Parents wanted to try interventions on their own prior to considering formal therapy
15	M	7	Yes	Yes	No		Parents, who were separated, refused treatment; parent-initiated a social gender change in child after assessment; diagnosed with Separation Anxiety Disorder query ODD
16	M	6	Yes	Yes	No		adopted
17	M	4	Yes	Yes	No		Parents wanted to try interventions on their own; query ASD; r/o chronic motor tic disorder; local mental health resources not available
18	F	10	Yes	Yes	No		
19	M	6	Yes	Yes	No	Recommendations to parents for interventions in naturalistic environment	

20	M	3	Yes	Yes	No	Co-occurring disorder of sex development (46,XX ova-testicular DSD); male gender assignment shortly after birth; speech and language delay; significant behavior problems adopted at 20 months from Russia; language delay; Reactive Attachment Disorder (in remission); query PDD-NOS; significant behavior problems (one brief in-patient hospitalization) Marfan syndrome; significant obsessional behavior; query Separation Anxiety Disorder; significant family stress, including OCD in older sister; discontinued treatment because of distance and family stress; referred to local resources for continued therapeutic support
21	F	10	Yes	Yes	Yes	On Concerta prior to assessment; Risperdal recommended
22	M	6	Yes	Yes	No	
23	M	4	Yes	Yes	No	Parents agreed to therapy, but then did not follow up
24	F	5	Yes	Yes	No	
25	M	4	Yes	Yes	No	
26	F	5	No	Yes	No	Referred mother for local mental health support

Note. F = natal female; M = natal male; ADHD = attention-deficit/hyperactivity disorder; ASD = autism spectrum disorder; ODD = oppositional defiant disorder; OCD = obsessive-compulsive disorder; PDD-NOS = pervasive developmental disorder not otherwise specified.

With parents, the focus of treatment that is specific to GID considers two issues: a) the potential role of parental factors in the genesis and maintenance of the GID, and b) naturalistic interventions. For parents for whom there may be significant psychodynamic and interpersonal factors in the genesis/maintenance of GID, we attempt to work on these issues. For example, we have posited that “identification with the aggressor” may be one factor involved in GID in girls (Zucker & Bradley, 1995). One 7-year-old girl, for example, had a long-standing conflicted relationship with her father. Her father was extremely critical, abrasive, and mean to this her. She had numerous socioemotional problems: extreme oppositional behavior with the parents, intense jealousy directed toward a younger sister, many sensory sensitivities that resulted in ritualistic behaviors, and was, in general, a very challenging child to parent. A large part of the treatment with the father focused on discussing how his rage toward his child was not helpful and likely made matters worse.

When parental psychopathology revolves around a gender-related axis, effort is made to explore the impact of this on their feelings toward the child. One mother of an 8-year-old boy wanted little to do with him. She was extremely depressed and withdrawn from her parenting role. She had been date raped as an adolescent and recalled that she dealt with this by becoming promiscuous (“Better to fuck them than to get fucked”). She acknowledged that she hated men. The only maneuver this boy could use to be close to his mother was to comb her hair (she was a hairdresser). In our view, these kinds of pathological processes require a long time to work on in psychotherapy with parents and are not particularly amenable to brief interventions.

When parents have significant reservations about setting limits on their child’s cross-gender behaviors and to provide alternative activities, this requires considerable discussion. In our work, we emphasize that authoritarian limit setting is not the goal (limit setting per se is not the goal of treatment, but part of a series of interventions); rather, the goal is to help the child feel more comfortable in his or her own skin. Limit setting is discussed in context of the overall case formulation. If, for example, a young boy is driven by the desire to cross-dress, we explore with parents their understanding of what might underlie it.

For example, one 8-year-old boy was cared for by his mother (the father had died in a car accident) who worked two jobs. He was often left in the care of a neighbor while his mother worked the swing shift. In this context, he began to cross-dress and created a transitional mother object that he slept with. Helping the mother understand the possible link between his separation anxiety and his gender identity issues motivated her to spend more time discussing with him why she needed to work long hours, provided him with pictures of her to sleep with while she worked, called him a couple of times prior to his bedtime, and made more of an

effort to be with him on her days off. This resulted in a significant reduction in both the separation anxiety and his desire to be a girl. In general, our approach with parents is to make the point that the surface behaviors of GID are, in effect, “symptoms” and that symptoms can best be helped if the underlying mechanisms are better understood. As an example, we might explain to parents of girls that forcing them to wear dresses or other feminine clothing (which creates severe anxiety in many girls with GID) should not be the focus of treatment and that it would likely be unhelpful. Instead, it would be more helpful to focus on the underlying gender dysphoria.

In the naturalistic environment, we typically target the improvement of same-sex peer relations, since peer relationships are often the site of gender identity consolidation (Maccoby, 1998; Meyer-Bahlburg, 2002). For young children, this can be implemented via parent-arranged play dates with temperamentally compatible same-sex peers; with older children, this can be implemented via enrollment in community activities, such as gymnastics, drama clubs, and team sports. The goal here is to see if children with GID are able to develop a broader range of friendships that include same-sex peers. For parents who are free of major life stressors or significant psychopathology that interferes with their parenting role, this task can be implemented fairly easily; however, when parents are overwhelmed with their own difficulties, they often feel depleted and unable to work on these kinds of interventions.

WHAT IS THE DISPOSITION OF REFERRED CASES FOR WHICH NO CLINICALLY SIGNIFICANT GENDER-VARIANT BEHAVIOR IS OBSERVED?

In our clinic, we almost never receive a referral in which we conclude from the intake interview that the case is a false positive. About 70% of the children we evaluate meet the complete *DSM* criteria for GID; the remainder of referrals are subthreshold (gender variant), some of whom had met the full criteria when younger. Of the 26 cases evaluated in 2008 (Table 3), only one youngster (ID 6) showed no signs of GID although he had voiced to the referring child psychiatrist a strong wish to be a girl. Psychological testing confirmed the absence of clinically significant gender identity issues. In this case, this youngster was dealing with the stressor of having been placed in foster care because of maternal neglect and had significant behavior problems at school and at home. Another youngster (ID 5) was the sibling of ID 2 and was subthreshold for GID. As noted in Table 3, the mother did not have any concerns about his feminine behavior and the father denied observing any. Because his sister had a severe GID, oppositional behavior, and ADHD, and because the parents had significant relational discord

(they were separated), the focus of the recommendations were directed elsewhere.

The question posed by the guest editors of this special issue of the *Journal of Homosexuality* is relevant especially for children who are subthreshold for GID. Do these youngsters still have clinically significant gender identity issues that need to be monitored or even treated? In our view, the answer is sometimes yes and sometimes no. Some children may be subthreshold for GID, yet, the clinical impression is that these children may well be struggling with their gender identity and, for these children, a trial of therapy can certainly be beneficial to explore the issue further. If they have substantial other psychologic or psychiatric issues, these can also be a focus of treatment. One could argue that some children who are subthreshold for GID may be at risk for the later development of a full-blown GID (e.g., see Zucker, 2004, 2006b).

HOW ARE THE RELATIVE RISKS AND BENEFITS OF TREATMENT AS WELL AS THE IMPACT OF TREATMENT ON OUTCOME EXPLAINED TO CAREGIVERS?

In providing feedback to parents, we attempt to articulate our case formulation in a manner that is understandable. We identify the factors that we have found useful in understanding the child and the family. Parents vary in their psychologic sophistication and capacity for reflective functioning, so feedback is done in a way that is client centered. We provide a rationale for our treatment recommendations.

In the era of the Internet, some parents are quite familiar with the controversies about treatment of children with GID; others are not. For parents who are interested in discussing the philosophical differences among care providers, we discuss the varying perspectives. Benefits of treatment that we argue in favor of include the reduction in gender dysphoria, the attendant social ostracism that can ensue from GID persistence, the complexities of sex-reassignment surgery and its biomedical treatment, and the importance of reducing family psychopathology and stress, when it is present. The risks of treatment are discussed: Perhaps the child will not respond to the treatment; perhaps the parents will find it too stressful to attempt naturalistic interventions. As noted earlier, we explain that the goal of treatment is not to prevent the child from developing a future homosexual sexual orientation. For some parents, this is a non-issue; for other parents, it remains their goal. One concern parents have is that their child may go underground with his or her gender dysphoric feelings. We are mindful of this concern (the development of a false self in the Winnicottian sense) and emphasize that this is not a good outcome—the goal is to help the child work through their gender dysphoric feelings.

IS PREVENTION OF ADULT TRANSEXUALISM
A REASONABLE TREATMENT GOAL, AND GIVEN THE LOW
FREQUENCY WITH WHICH GID PERSISTS INTO ADULthood,
HOW IS IT POSSIBLE TO DETERMINE THE EFFICACY OF
TREATMENT IN ATTAINING THAT GOAL?

... we cannot rule out the possibility that early successful treatment of childhood GID will diminish the role of a continuation of GID into adulthood. If so, successful treatment would also reduce the need for the long and difficult process of sex reassignment which includes hormonal and surgical procedures with substantial medical risks and complications. (Meyer-Bahlburg, 2002, p. 362)

Relatively little dispute exists regarding the prevention of transsexualism, though evidence about the effectiveness of treatment in preventing adult transsexualism is also virtually nonexistent. (Cohen-Kettenis & Pfäfflin, 2003, p. 120)

The guest editors of this special issue have posed a provocative question about the prevention of transsexualism (GID) in adulthood. Here, we can pose an ancillary question to illustrate, in part, the centrality of social values: Is prevention of homosexuality a reasonable treatment goal? On this point, most secular clinicians would answer "no." In our own clinic, we have never advocated for the prevention of homosexuality as a treatment goal for GID in children. At the same time, we are sensitive to the fact that some parents bring their child to the clinic, in part, because they are worried that their child will grow up to be gay or lesbian (for all the reasons one might imagine—parental homophobia, worries about social ostracism, worries about HIV/AIDS, worries that this will result in a more difficult life, cultural factors, religious factors, etc.).

Over the years, our approach has been a psychoeducational one and also a pragmatic one: a) we explain to parents that there are no empirical studies that suggest that alteration of a child's gender identity will also alter their eventual sexual orientation; b) that homosexuality per se is not considered a mental disorder; c) that gay men and lesbians can lead productive and satisfying lives (as banal as this sounds) and that, over time, if their child develops a homoerotic sexual orientation, then it will be their job (and ours) to support their child in adapting to whatever stressors may be associated with their sexual identity. In our experience, the majority of parents are satisfied with this psychoeducational approach and, for some, it involves mourning the loss of the expected heterosexual child and whatever fantasies and aspirations are associated with this. Many of the parents that we work with do not have a particular problem if their child were to grow up gay or lesbian. Many of these parents do, however, hold the aspiration

that they would like their child to be comfortable in his or her skin. In other words, they can see that growing up transsexual or transgender may augur a more complicated life.

Although we do not have a particular quarrel with the prevention of transsexualism as a treatment goal for children with GID, we believe that this should be contextualized. If, for example, children with GID who persist in their desire to be of the other gender showed a better psychosocial adjustment and adaptation than children with GID who desist (e.g., become gay or lesbian or heterosexual without gender dysphoria), then one could, quite reasonably, question the prevention of transsexualism as a legitimate treatment goal. If a child grew up comfortable in their own skin, but was generally miserable otherwise, one could hardly argue with unabashed enthusiasm for the prevention of transsexualism.

From a developmental perspective, we take a very different approach when we work with adolescents with GID than when we work with children with GID. This is because we believe that there is much less evidence that GID can remit in adolescents than in children. Whether this is due to different populations of clients seen in adolescence versus childhood or whether this is due to a narrowing of plasticity and malleability in gender identity differentiation by the time of adolescence is open to debate. But, if the clinical consensus is that a particular adolescent is very much likely to persist down a pathway toward hormonal and sex-reassignment surgery, then our therapeutic approach is one that supports this pathway on the grounds that it will lead to a better psychosocial adaptation and quality of life (Zucker, Bradley, Owen-Anderson, et al., 2011).

Because the treatment literature is lacking in terms of rigorous comparative evaluations (e.g., Treatment X vs. Treatment Y or Treatment X vs. no treatment, etc.), one has to rely on a patchwork of empirical evidence about natural history. Thus, for example, natural history data suggest, to date, a much higher rate of desistance of GID in child samples than in adolescent or adult samples (Zucker et al., 2011).

The guest editors have made reference to the low frequency with which GID persists into adulthood and the implications of this fact in the evaluation of treatment efficacy. Persistence rates have varied fairly substantially in long-term follow-up studies. For example, Green (1987) reported that only 1 of 44 previously feminine boys appeared to be gender dysphoric at the time of follow-up. In contrast, Wallien and Cohen-Kettenis (2008) reported that 50% of 18 GID girls were persisters at follow up. In our own follow-up studies, we have found a persistence rate of 12% for GID girls ($n=25$; Drummond et al., 2008) and a persistence rate of 13.3% for GID boys ($n=135$; Singh et al., 2010). Thus, there is a fair bit of variation in persistence rates.

How can this variation be understood? One possibility is sampling differences. Another possibility pertains to the degree of GID in childhood.

Both Wallien and Cohen-Kettenis (2008) and Singh et al. (2010) showed that several metrics of GID severity in childhood predicted persistence at follow-up. Another possibility is to contextualize the natural history data.

Is there really such a thing as natural history for GID or does its developmental course vary as a function of contextual factors? If, as in our clinic, treatment is recommended to reduce the likelihood of GID persistence, perhaps the data can only be interpreted in that context. In any event, we require more comparative data to draw conclusions about the natural history of GID in children and its relation to contextual factors.

WHAT CONSTITUTES A SUCCESSFUL OUTCOME? WHAT CONSTITUTES A TREATMENT FAILURE?

If one goal of treatment is to reduce the gender dysphoria, then, by definition, a successful outcome would be its remission and a failure would be its persistence. If, however, a successful outcome also takes into account a child's more general well-being and adaptation to various developmental tasks, then the definitions of success and failure must be broader. Consider, for example, the vignette described earlier of the 7-year-old girl who had an extremely strained relationship with her father. Six years after therapy commenced (and still continues), the GID has fully remitted and there has been a lessening of the sensory sensitivities and rituals. Although this now young adolescent girl functions reasonably well at school and has friends, parent-child relations remain severely strained and there continues to be substantial parental psychopathology (in each parent and in their marriage). Success? Failure? In between?

For Tom, the 4-year-old boy who experienced his younger sister's birth as an extreme threat to his relationship with his mother, at the age of 13 his GID has remitted fully. In the course of many years of therapy, he has intermittently struggled with various issues (episodic encopresis, peer conflicts, behavioral compliance with parental expectations), but he functions extremely well at school and has many close friends. Although his development has been marked with various stressors and challenges, we would gauge his current outcome as pretty successful.

For children whose gender dysphoria persisted into adolescence or adulthood, some are functioning quite well; others are not. One natal male, originally seen at age 5, was seen for follow up at age 35. At follow up, she was living as a woman, but had elected to neither take exogenous female hormones or to have genital reassignment surgery ("A woman does not need a vagina to be a woman"). Because this individual was quite overweight, idiopathic gynecomastia was sufficient for the appearance of female breasts. She had a boyfriend who was sexually attracted to "she-males." She engaged in sex work, also attracting men interested in she-males. She used,

on a daily basis, oxycontin and heroin. She was on long-term psychiatric disability, with various diagnoses: ADHD, bipolar disorder, and adult baby syndrome (she and her boyfriend planned on getting an apartment and creating a baby's room for her). Apart from the ADHD, the patient had no complaints about her life. Success? Failure?

Another natal female was originally seen for assessment at the age of 12 years and followed up at the age of 26. He had transitioned to the male gender in adolescence, but had not sought out either hormonal suppression or cross-sex hormonal therapy. He was very content living as a man. Ben worked full time, owned his own house, and had had long-term relationships with women. However, he struggled with severe alcohol abuse, abused recreational drugs, had been frequently arrested for getting into fights while intoxicated, and was occasionally suicidal. Success? Failure? In between?

Our long-term follow-up studies of both girls and boys with GID suggest that many of these youngsters, regardless of their later gender identity and sexual orientation, are a psychiatrically vulnerable group (Drummond, 2006; Drummond et al., 2008; Singh et al., 2010). Although some of this vulnerability might be understood in relation to the stressors associated with an atypical gender identity and/or sexual orientation, it is our belief that it is also related to other risk factors, including biological and psychosocial parameters within their families.

NOTES

1. We have used Clift's (1986) guidelines for confidentiality in reporting clinical material.
2. These children are sometimes referred to as *desisters*, while those who do not "lose" the diagnosis are referred to as *persisters*.
3. There are more parents nowadays who interpret the cross-gender identification as a marker of the child's "essential" gender identity (Brill & Pepper, 2008; Dreger, 2009; Kilodavis, 2009).

REFERENCES

- Achenbach, T. M., & Edelbrock, C. (1983). *Manual for the Child Behavior Checklist and Revised Child Behavior Profile*. Burlington, VT: University of Vermont: Department of Psychiatry.
- Achenbach, T. M., & Edelbrock, C. (1986a). *Manual for the Youth Self-Report and Profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T. M., & Edelbrock, C. (1986b). *Manual for the Teacher's Report Form and Teacher Version of the Child Behavior Profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Bates, J. E., & Bentler, P. M. (1973). Play activities of normal and effeminate boys. *Developmental Psychology*, 9, 20–27.
- Beitchman, J. H. (1996). *FAB-CTM: Feelings, Attitudes, and Behaviors Scale for Children*. Toronto, ON, Canada: Multi-Health Systems.

- Brill, S., & Pepper, R. (2008). *The transgender child: A handbook for families and professionals*. San Francisco, CA: Cleis Press.
- Campbell, D. W., & Eaton, W. O. (1999). Sex differences in the activity level of infants. *Infant and Child Development*, *8*, 1–17.
- Cassidy, J., & Marvin, R. S., with the Attachment Working Group of the MacArthur Network on the Transition from Infancy to Early Childhood. (1992). *Attachment organization in three- and four-year-olds*. Unpublished manual, University of Virginia at Charlottesville.
- Chiu, S. W., Gervan, S., Fairbrother, C., Johnson, L. L., Owen-Anderson, A. F. H., Bradley, S. J., & Zucker, K. J. (2006). Sex-dimorphic color preference in children with gender identity disorder: A comparison to clinical and community controls. *Sex Roles*, *55*, 385–395.
- Clift, M. A. (1986). Writing about psychiatric patients: Guidelines for disguising case material. *Bulletin of the Menninger Clinic*, *50*, 511–524.
- Coates, S., & Person, E. S. (1985). Extreme boyhood femininity: Isolated behavior or pervasive disorder? *Journal of the American Academy of Child Psychiatry*, *24*, 702–709.
- Cohen-Kettenis, P. T., & Pfäfflin, F. (2003). *Transgenderism and intersexuality in childhood and adolescence: Making choices*. Thousand Oaks, CA: Sage.
- de Vries, A. L. C., Noens, I. L., Cohen-Kettenis, P. T., van Berckelaer-Onnes, I. A., & Doreleijers, T. A. H. (2010). Autism spectrum disorders in gender dysphoric children and adolescents. *Journal of Autism and Developmental Disorders*, *40*, 930–936.
- DeLoache, J. S., Simcock, G., & Macari, S. (2007). Planes, trains, automobiles—and tea sets: Extremely intense interests in very young children. *Developmental Psychology*, *43*, 1579–1586.
- Derogatis, L. (1983). *SCL-90: Administration, scoring and procedures manual for the revised version*. Baltimore, MD: Clinical Psychometric Research.
- Dreger, A. (2009). Gender identity disorder in childhood: Inconclusive advice to parents. *Hastings Center Report*, *39*, 26–29.
- Drummond, K. D. (2006). *A follow-up study of girls with gender identity disorder*. Unpublished master's thesis, Ontario Institute for Studies in Education of the University of Toronto.
- Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. *Developmental Psychology*, *44*, 34–45.
- Eaton, W. O., & Enns, L. R. (1986). Sex differences in human motor activity level. *Psychological Bulletin*, *100*, 19–28.
- Fridell, S. R., Owen-Anderson, A., Johnson, L. L., Bradley, S. J., & Zucker, K. J. (2006). The Playmate And Play Style Preferences Structured Interview: A comparison of children with gender identity disorder and controls. *Archives of Sexual Behavior*, *35*, 729–737.
- Green, R. (1987). *The “sissy boy syndrome” and the development of homosexuality*. New Haven, CT: Yale University Press.
- Johnson, L. L., Bradley, S. J., Birkenfeld-Adams, A. S., Kuksis, M. A. R., Maing, D. M., Mitchell, J. N., & Zucker, K. J. (2004). A parent-report Gender Identity Questionnaire for Children. *Archives of Sexual Behavior*, *33*, 105–116.

- Kilodavis, C. (2009). *My princess boy: A mom's story about a young boy who loves to dress up*. Seattle, WA: K D Talent LLC.
- Kohlberg, L. (1966). A cognitive-developmental analysis of children's sex-role concepts and attitudes. In E. E. Maccoby (Ed.), *The development of sex differences* (pp. 82–173). Stanford, CA: Stanford University Press.
- Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge, MA: Harvard University Press.
- Meyer-Bahlburg, H. F. L. (2002). Gender identity disorder in young boys: A parent- and peer-based treatment protocol. *Clinical Child Psychology and Psychiatry*, 7, 360–377.
- Ruble, D. N., Martin, C. L., & Berenbaum, S. A. (2006). Gender development. In W. Damon & R. M. Lerner (Series eds.) and N. Eisenberg (Vol. ed.), *Handbook of child psychology (6th ed.)*. Vol. 3: *Social, emotional, and personality development* (pp. 858–932). New York, NY: Wiley.
- Singh, D., Bradley, S. J., & Zucker, K. J. (2010, June). *A follow-up study of boys with gender identity disorder*. Poster presented at the University of Lethbridge Workshop, The Puzzle of Sexual Orientation: What Is It and How Does It Work?, Lethbridge, AB, Canada.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38, 15–28.
- Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47, 1413–1423.
- Wallien, M. S. C., Quilty, L. C., Steensma, T. D., Singh, D., Lambert, S. L., Leroux, A., . . . Zucker, K. J. (2009). Cross-national replication of the Gender Identity Interview for Children. *Journal of Personality Assessment*, 91, 545–552.
- Zucker, K. J. (2000). Gender identity disorder. In A. J. Sameroff, M. Lewis, & S. M. Miller (Eds.), *Handbook of developmental psychopathology* (2nd ed.; pp. 671–686). New York, NY: Kluwer Academic/Plenum.
- Zucker, K. J. (2004). Gender identity disorder. In I. B. Weiner (Ed.), *Adult psychopathology case studies* (pp. 207–228). New York, NY: Wiley.
- Zucker, K. J. (2006a). I'm half-boy, half-girl": Play psychotherapy and parent counseling for gender identity disorder. In R. L. Spitzer, M. B. First, J. B. W. Williams, & M. Gibbons (Eds.), *DSM-IV-TR casebook, volume 2. Experts tell how they treated their own patients* (pp. 321–334). Washington, DC: American Psychiatric Publishing.
- Zucker, K. J. (2006b). Gender identity disorder. In D. A. Wolfe & E. J. Mash (Eds.), *Behavioral and emotional disorders in adolescents: Nature, assessment, and treatment* (pp. 535–562). New York, NY: Guilford Press.
- Zucker, K. J. (2008a). On the "natural history" of gender identity disorder in children [Editorial]. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47, 1361–1363.
- Zucker, K. J. (2008b). Enfants avec troubles de l'identité sexuée: y-a-t-il une pratique la meilleure? [Children with gender identity disorder: Is there a best practice?]. *Neuropsychiatrie de l'Enfance et de l'Adolescence*, 56, 358–364.
- Zucker, K. J., & Bradley, S. J. (1995). *Gender identity disorder and psychosexual problems in children and adolescents*. New York, NY: Guilford Press.

- Zucker, K. J., Bradley, S. J., & Ipp, M. (1993). Delayed naming of a newborn boy: Relationship to the mother's wish for a girl and subsequent cross-gender identity in the child by the age of two. *Journal of Psychology and Human Sexuality*, *6*, 57–68.
- Zucker, K. J., Bradley, S. J., Kuksis, M., Pecore, K., Birkenfeld-Adams, A., Doering, R. W., et al. (1999). Gender constancy judgments in children with gender identity disorder: Evidence for a developmental lag. *Archives of Sexual Behavior*, *28*, 475–502.
- Zucker, K. J., Bradley, S. J., & Lowry Sullivan, C. B. (1996). Traits of separation anxiety in boys with gender identity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, *35*, 791–798.
- Zucker, K. J., Bradley, S. J., Lowry Sullivan, C. B., Kuksis, M., Birkenfeld-Adams, A., & Mitchell, J. N. (1993). A gender identity interview for children. *Journal of Personality Assessment*, *61*, 443–456.
- Zucker, K. J., Bradley, S. J., Owen-Anderson, A., Singh, D., Blanchard, R., & Bain, J. (2011). Puberty-blocking hormonal therapy for adolescents with gender identity disorder: A descriptive clinical study. *Journal of Gay & Lesbian Mental Health*, *15*, 58–82.
- Zucker, K. J., Doering, R. W., Bradley, S. J., & Finegan, J. K. (1982). Sex-typed play in gender-disturbed children: A comparison to sibling and psychiatric controls. *Archives of Sexual Behavior*, *11*, 309–321.
- Zucker, K. J., Finegan, J. K., Doering, R. W., & Bradley, S. J. (1983). Human figure drawings of gender-problem children: A comparison to sibling, psychiatric, and normal controls. *Journal of Abnormal Child Psychology*, *11*, 287–298.
- Zucker, K. J., Lozinski, J. A., Bradley, S. J., & Doering, R. W. (1992). Sex-typed responses in the Rorschach protocols of children with gender identity disorder. *Journal of Personality Assessment*, *58*, 295–310.
- Zucker, K. J., Mitchell, J. N., Bradley, S. J., Tkachuk, J., Cantor, J. M., & Allin, S. M. (2006). The Recalled Childhood Gender Identity/Gender Role Questionnaire: Psychometric properties. *Sex Roles*, *54*, 469–483.