

What is Gender and Who is Transgendered?

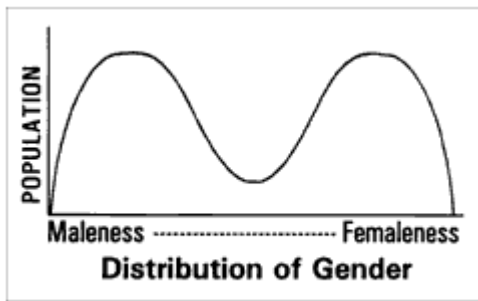
by Carl W. Bushong, PhD, LMFT



Dr. Carl W. Bushong, known as "Dr. B." to many, is the originator of a new style of long-distance transsexual and transgender services having helped hundreds fully transition. Since the early 1990's, his pioneering efforts broke the mold of the few remaining gatekeeper-style gender clinics by establishing the progressive *Tampa Gender Identity Program* which allowed access to a variety of transition services including hormone therapies, electrolysis and guidance to be readily available under one roof. *Dr. B. continues to innovate by removing the need to travel great distances for many transition services such as guidance, hormone therapy, laboratory review and recommendation through his web site, doctorbushong.com.*

When we speak of gender, in a context other than language, it is a recent concept in our culture, both lay and professional. It was not until 1955 that John Money, Ph.D. first used the term "gender" to discuss sexual roles, adding in 1966 the term "**gender identity**" while conducting his gender research at Johns Hopkins. In 1974, Dr. N.W. Fisk provided our now familiar diagnosis of Gender Dysphoria. Previously, one's sexual role was considered one of two discrete, non-overlapping congenital attributes—male **or** female determined by one's external genitals. These two mutually exclusive categories allowed for no variation. Of course, we acknowledged the cultural differences in sexual roles, but there still could be only two modes of expression - of being.

We then began to see one's gender as a continuum, a blending, analogous to a "gray scale." But, our distribution of gender was still bimodal, that is, most people are lumped at the two ends (see graphic) with only a minority in the middle. The great majority would be either male **or** female with all that implies.



But, my review of current research and experience with gender dysphoric, gay and traditional clients has led me to see gender not as a bimodal male or female dichotomy but as a **matrix—a possible mix of male and female development within the same individual.**

From research and observation, I have developed a list of five semi-independent attributes of gender, as a map to help you to understand this complex often hotly emotional issue of gender.

Consider sexual identity/behavior (gender) springing from five semi-independent attributes:

- **Genetic Gender** — Our chromosomal inheritance.
- **Physical Gender** — Our primary and secondary sexual characteristics.
- **"Brain Gender"** — Functional structure of the brain, along gender lines.
- **"Brain Sex"** — Love/sex Patterns, How we relate to others on a social and interpersonal as well as sexual level. "Love Maps."
- **Gender Identity** — Our subjective gender, our sexual Self-Map, how we feel ourselves to be: male or female.

It is my contention that it is possible for an individual to view oneself and function as male or female to varying degrees in each of the five sub-categories independent of the others.

From a few weeks after conception until two to three years of age, our brains develop gender in at least three independent dimensions which I have called "Brain Gender." [How the brain is wired along gender lines.] "Brain Sex" How we perceive sex, relationships and goals along male or female sets] and Gender Identity [how we perceive ourselves-male or female.]

Not only are these three dimensions independent of each other, but of one's Physical Gender as well. That is, a person can have a male body, male Brain Sex and Identity, but have female Brain Gender. [In fact, most writers and artists do.] Such a person would look, act and feel male, but have a female's sensitivity to emotions, words and sensations: Although, they may

overcompensate in public and in interpersonal relationships [e.g., Ernest Hemingway]

Like our Genetic and Physical Gender, our Brain Gender, Gender Identity, and Brain Sex, expression usually remains constant from childhood throughout one's life.

Since each of these independent attributes is graded, it is easy to see the possible combinations and degrees number in the thousands. *With regard to gender, we can be in a category of one—ourselves.*

Perhaps only individuals who are homogeneously male or female at the highest degree in all five attributes could convincingly describe themselves as only a single gender— the rest of us are a matrix [a mixture].

As for the transgendered, they appear to be uniformly one gender in all three brain dimensions, but of the opposite gender, both physically and genetically.

Genes and Gender

The first sub-category, **Genetics**, is only beginning to be understood. What mechanism and to what degree does genetic influences effect one's expression of gender? We do know that besides the traditional XX chromosome of a typical female and the XY of a typical male, that there are other combinations such as XXY, XYY, and XO.

A XXY combination results in 47 rather the 46 chromosomes. This condition is called Klinefelter's syndrome and occurs in one in every 500 births. Individuals with Klinefelter's are sterile, have enlarged breasts, small testicles and penis, and a eunuch body shape much like the "Pat" character on "Saturday Night Live." They show little interest in sex.

Another 47-chromosome occurrence is XYY Syndrome. In this syndrome, the hormonal and physical appearance of the individual are evidenced as a normal male, but behavior is effected. Typically, XYY Syndrome people are bisexual or paraphilic (pedophilia, exhibitionism, voyeurism, etc.), and show very poor impulse control.

Where Klinefelter's and XYY Syndrome are examples of an *extra* chromosome, Turner's syndrome is a case of a *missing* sex chromosome. These individuals possess 45 chromosomes (written as XO), are unable to develop gonads, and are free of all sexual hormones, except that crossing over from the mother during fetal life.

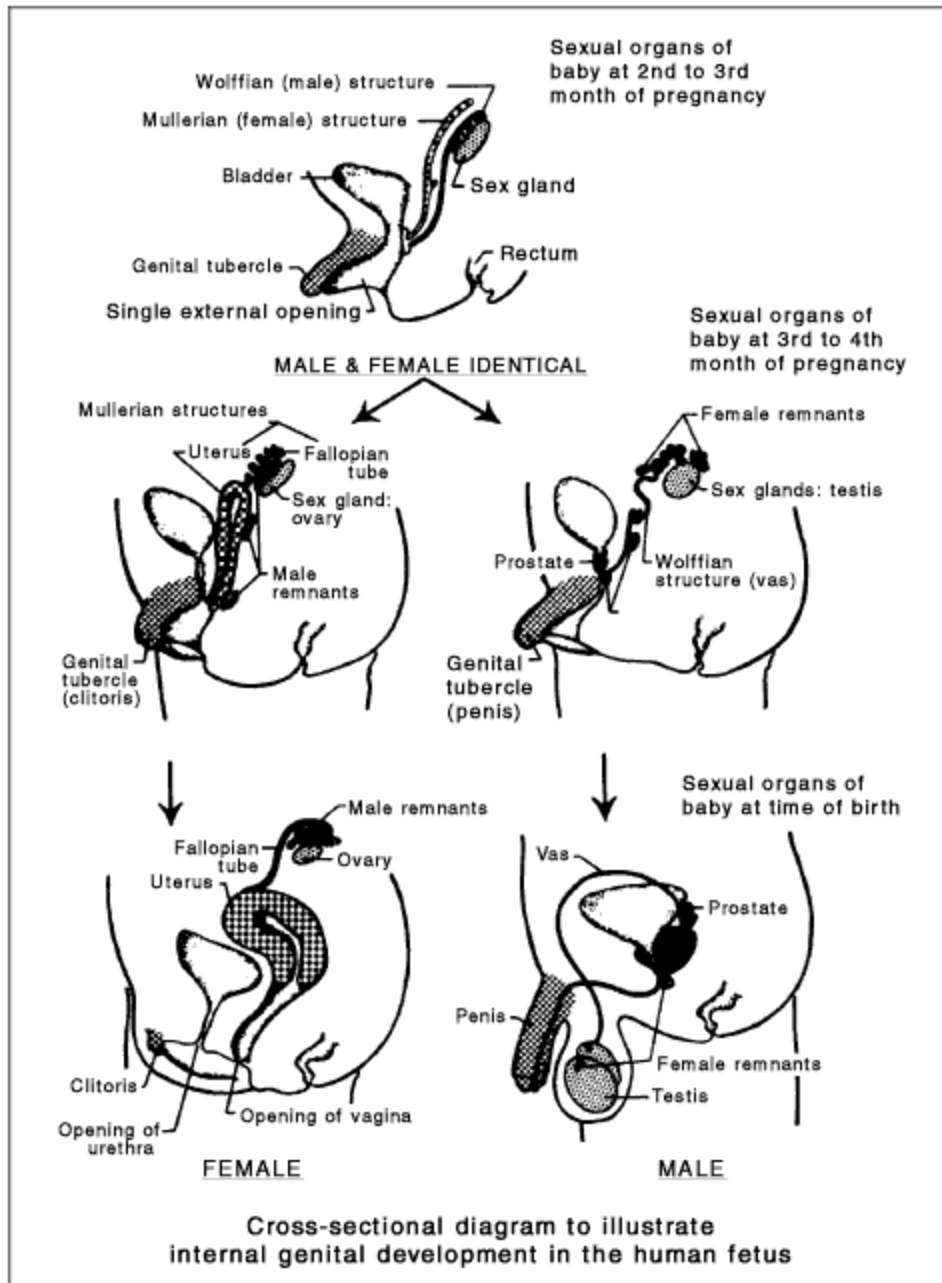
Turner's Syndrome people have external sex organs approximating a female, and their behavior is characterized as hyper-feminine, baby care oriented, and showing very poor spatial and math skills. The Turner's personality, free of all influence from testosterone, tends to be in direct opposition to the typical set of "Tom Boy" traits.

But, none of the above conditions describes the transgendered individual. Transgenderism is far more subtle, involving probably only a few genes on a single chromosome.

Physical Gender

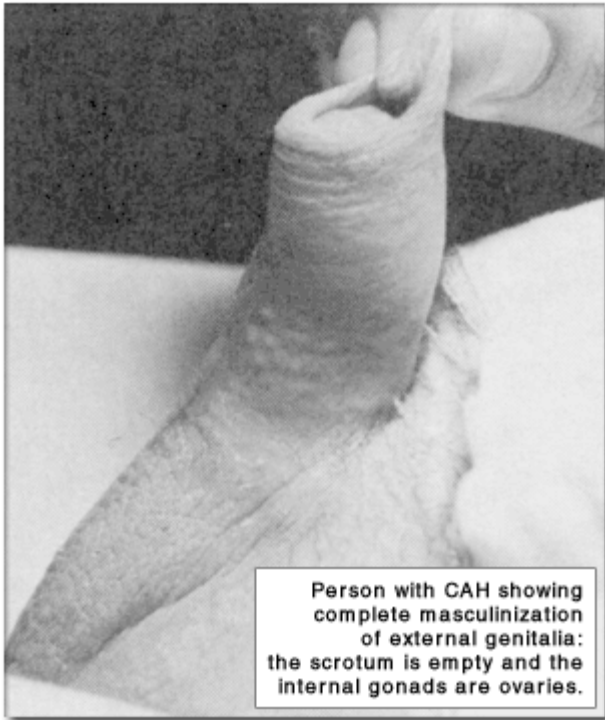
To discuss this aspect of gender we need to examine hormonal involvement, in particular testosterone. During fetal life, the amount present, or the absence of testosterone and other androgens determines our sexuality — physically, mentally and emotionally. There are key times or periods during development when the fetus will go towards the male or the female depending on the level of testosterone. These windows of opportunity may be only open for a few days and if the needed level of testosterone is not present, a basic female orientation develops regardless of the testosterone levels before or after this critical period, and the resulting sexual imprint.

The first critical period is at conception when the presence of the SRY gene (Sex-Determining Region of the Y chromosome) will determine our physical gender. The SRY gene is normally found on the short arm of the Y chromosome, but can detach making for a XY female (the Y missing its SRY gene) or a XX male (the SRY attaching to the X).



The SRY gene causes the fetus to release TDF (Testes Determining Factor) which turns the undifferentiated gonad into testes. Once testes have formed, they release **androgens** such as testosterone, dehydrocorticosterone, and anti-mullerian hormone.

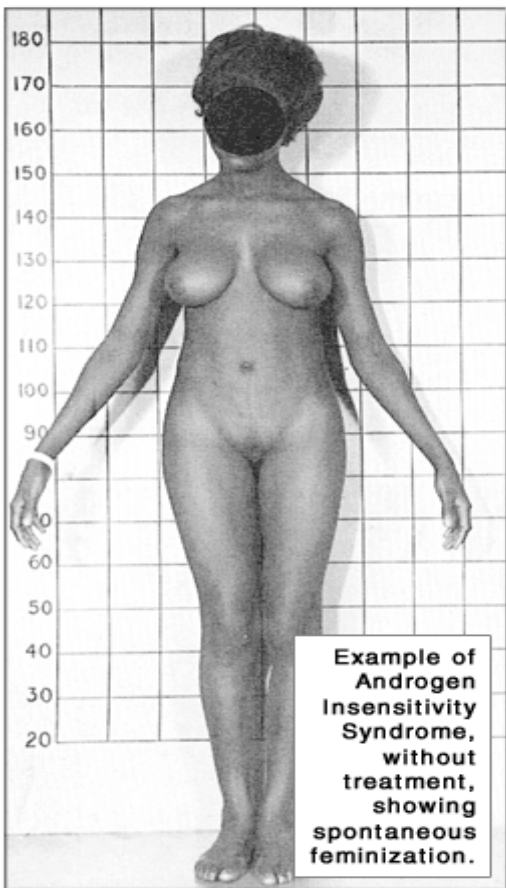
Before the release of TDF, the developing fetus has two tiny structures, the mullerian and wolffian ducts, and two small-undifferentiated gonads, neither testes nor ovaries. **Without** the influence of TDF and testosterone, the gonads form into ovaries and the mullerian duct forms into the female internal sex organs, the wolffian duct disappears and the external sexual tissue becomes the labia major, clitoris, labia minor and clitoral hood. **With** the influence of TDF, the gonads become testicles and the wolffian duct forms the male internal sex organs, the mullerian ducts dissolve and the external tissue develop into the penis, scrotum, penile sheaths and foreskin. In other words, without testosterone all fetuses develop into females. *Adam springs from Eve, not Eve from Adam.*



Person with CAH showing complete masculinization of external genitalia: the scrotum is empty and the internal gonads are ovaries.

As the primary sexual differentiation proceeds towards our physical gender, sometimes deviations occur. These anomalies are sometimes called "experiments of nature." One such "experiment" is a condition termed **congenital adrenal hyperplasia (CAH)** when the female fetus releases a steroid hormone from her adrenal glands which resembles testosterone. The resulting child often has confusing genitals ranging from deformed female genitals to an appearance of male genitals. If the child is raised as male, following any "adjusting" surgery and given male hormones at puberty, the individual develops as a "normal" but sterile male with XX chromosomes. On the other hand, if the infant is surgically corrected to female and given female hormones, there is a 50/50 chance of lesbian or transgender expression. This "correction" is the source of much unhappiness, and most "intersexed" individuals have this condition.

Another revealing "experiment of nature" is **Androgen Insensitivity Syndrome**. In this case, there is a normal amount of testosterone circulating in a XY chromosome fetus, but each cell of its body is unable to react to it. This is similar to Turner's Syndrome in that neither the mullerian or wolffian ducts (see above) mature and the external genitalia develops into an approximation of normal female genitals, but differs in that TDF stimulates the gonads into becoming functioning testicles in a XY chromosome body. The child is raised as a girl and is seen as a normal female until she fails to menstruate because she has no uterus. If her testes produce enough estrogen (excess testosterone is converted into estrogen), she develops into a completely normal appearing (but lacking a uterus and upper vagina), sterile female with XY chromosomes and internal testicles.



Example of Androgen Insensitivity Syndrome, without treatment, showing spontaneous feminization.

Brain Gender

Dr. Simon LeVay, in his book, "The Sexual Brain," argues that one's brain receptors for hormones may also play a significant role in our gender development. Dr. LeVay writes, "There is much to recommend...that there are intrinsic, genetically determined differences in the brain's hormone receptors. This would provide a mechanism that involves hormone-induced brain differentiation (along gender lines) but does not require there to be differences in the actual levels of hormones, and there is opportunity for selective effects on different brain systems."

At all times keep in mind that Physical Gender does not always indicate "Brain Gender," while most physical male and female infants have Brain Gender matching their physical gender, a significant (but unknown) percentage do not. And in transgendered individuals, the Physical and Brain Gender are the opposite, and begin to express themselves at birth.

Even a few hours after birth, significant behavioral differences are noted between morphologically "normal" boys and girls. Newborn girls are much more sensitive to touch and sound than their male counterparts. Several day old girls spend about twice as long looking back at an adult face than boys, and even longer if the adult is speaking. A girl can distinguish between the cries of another infant from other extraneous noises long before a boy. Even before they can understand language, girls do better at identifying the emotional context of speech.

Conversely, during the first few weeks of infant life, boys are inattentive to the presence of an adult, whether speaking to the infant or not. However, baby boys tend to show more activity and wakefulness. At the age of several months, girls can usually

distinguish between the faces of strangers and people they know—boys usually do not demonstrate this ability.

As infants grow into children, the differences seem to intensify and polarize. Girls learn to speak earlier than boys and do a better job of it. Boys want to explore areas, spaces and things, girls like to talk and *listen*. Boys like vigorous play in a large space where girls like more sedentary games in smaller spaces. Boys like to build, take things apart, explore mechanical aspects of things and are interested in other children only for their "use" (playmates, teammates, allies, etc.). Girls see others more as individuals—and will likely exclude a person because they're "not nice," and will more readily include younger children and remember each other's names. Girls play games involving home, friendship, and emotions. Boys like rough, competitive games full of "*zap, pow' and villainy*." Boys will measure success by active interference with other players, preferring games where winning and losing is clearly defined. In contrast, girl play involves taking turns, cooperation and *indirect* competition. Tag is a typical boy's game, hopscotch is a girl's game.

As we grow into adults, these differences become both more subtle and entrenched.

Female brained individuals are naturally socialized, tend to prefer cooperation, group discussions and compromise, but are rigid rule followers. Male brained individuals need to be forced into a social conscience, see everything as winning or losing, and are very territorial (my idea, my place, my person, etc.). Competitive and keenly aware of their place in the pecking order, males view rules as something to avoid, ignore or use against others. (The legal profession is very male.)

Female brained individuals are very aware of emotional states, both in themselves and others, and have a gift for, and need to express themselves in language. These two needs/abilities combine so that there is a great deal of discussion and description of everyday things (food, experiences, involvements and other people) with an emotional context and value judgment.

Male brained individuals have great difficulty identifying emotional states of any kind beyond anger, fear and lust, either in themselves or others. Language tends to be restricted and used sparingly, and hardly ever to describe emotional states. But male brains do have superior spatial and non-verbal skills, such as mathematics, map reading, 3-D conceptions, and with increasing intelligence, abstractions.

In fact, for reasons not understood (at least by this writer), gender differences seem to decrease as our IQ points increase. One study indicated that one-third of physical females in graduate school had brains wired more like a typical male brain.

Transgendered folk tend to be born with a female brain gender, but shortly after eight years of age begin to forsake it for a makeshift male brain type of response. It is like abandoning a four-lane highway and taking a little dirt road beside it -- and making the best of their choice. Why do such a thing? To fit in. Around eight or nine years of age, the differences between male and female behavior become obvious. In order to fit in, the physical male with a female brain begins to mimic and then perfect (as much as they can) a male response, leaving their natural female self unexpressed or underdeveloped.

Some transgendered physical males are very good at this subterfuge and produce a flawless macho male persona. Others are less successful, and some produce a "Swiss cheese" persona where glimpses or whole chunks of their natural female thinking showing through. But, no matter how efficient an individual is in hiding their natural gender from others, they will always be aware (at least at times and to some degree) of it themselves.

The non-transgendered would typically be able to live with their female gendered brain (most writers, artists, actors), forming some sort of truce or overcompensation which even they would usually come to accept as being true. But, alas, the transgendered also have a female gendered Brain Sex and Identity.

Brain Sex

There appears to be a male and female pattern of psychosexual behavior. These are modes of behavior -- one male, one female which are laid down, like Brain Gender, in early life and seem to be independent of environment (how, where, and by whom we are raised) and can be independent of both Physical Gender and Brain Gender.

Before I delve into what Brain Sex is, let me state what it is not -- it is not sexual orientation. While sexual orientation can be an attribute of Brain Sex, it is not a primary one. More on this later.

What is Brain Sex? Brain Sex is the primary hard-wired patterns which dictates how we view and relate to others on a social, interpersonal and sexual level. Although, like Brain Gender, most physical females will have female Brain Sex and physical males, male Brain Sex. But, this is far from absolute, and in the case of transgendered folk, it is the reverse. **A physical male transgendered person will have female Brain Sex as well as female Brain Gender.**

When referring to female and male brained individuals in this section, I will be referring to their Brain Sex regardless of the physical or Gender Brained states.

Female brained individuals cannot and do not separate how they feel about a person (good, bad, nice, boring, etc.) and how they see them sexually. They must feel positive about a person as an individual in order to sexually desire them. Male brained individuals have a *distant disconnect* between feelings about a person as an individual and as a sex object. Males can easily, sometimes preferably, have sex with a person they don't know, don't like or even actively dislike. Love and sex are two different worlds for the male brained. These two worlds can come together, and for most this is preferred, but it is not necessary, and for some, not even desired.

For female brained individuals, environmental factors are very important when it comes to sexual contact. Such things as

lighting (candles, soft lighting), smells, sensual bedding, music and a "romantic" ambiance are important to erotic feelings and fantasies. Males can have sex anywhere, any time, any place with equal gusto. Sex in the bed, car or dark room with a stranger are all equivalent.

While environmental concerns are low on the male totem pole of desires, sensual attitudes come very high. How their partner looks, feels, even smells, is very important. Males prefer their partner young (or with young features), smooth and "sexy." Looks and sensual components are much less important to the female brain, with social status and acceptance given greater weight.

The importance given to the senses in males and their disconnect between romantic feeling and sex objects, help explain male interest in pornography and their ability to have sex to orgasm almost indiscriminately (sex dolls) and often counter to the stated attributes of a desired partner (sex in prison).

While female brained individuals are highly influenced by what society expects or rejects in regard to their general and erotic behavior; males are often most influenced by what display value and "bragging rights" their behavior and partner possesses.

As for sexual orientation, this is an attribute which I feel to be limited to male brained individuals. I know this is heresy and very socially incorrect in some circles. But, allow me to illustrate my point. While male brained persons are capable (at least while young) of having sex with almost anything (animal, vegetable, or mineral), they are from an early age romantically and sexually drawn to a specific physical type, male or female. No matter what their socially influenced sexual activity may be, or for how long, their basic attraction (even if denied) is not acted on, their orientation does not change.

Female brained individuals, on the other hand, appear to be much more fluid and less physically restricted in their choice of sexual partners. Women routinely become romantically attached to each other, but physical expressions remain atypical for most. While periods of lesbian experimentation is not rare among women, for a straight male to become romantically involved with another male in mid-life without previous gay feelings unexpressed is all but unknown.

Female brained persons are far more influenced by a person's personality and "niceness" than their body, and being great rule followers, they are highly influenced by what "society" expects of them. This society can be anything from the greater society to their neighborhood, family, friends, religious or social group. If a female brained individual meets an emotionally compatible woman in a socially accepting or nurturing environment, a romance can take place. A male might have sex, but never romance.

Because transgendered physical males have female brain sex, they lack a hard-wired sexual orientation. Therefore, while some transgender women retain a "lesbian orientation," the majority, in spite of their behavior, feelings and expectations before transition, develop an attraction to males and desire a "normal" romantic and sexual relationship with a man. They follow the rules first as a physical male later as a physical woman.

Gender Identity

The last of our five attributes, **Gender Identity**, is the last to be identified, and the least understood and researched. Gender identity is one's subjective sense of one's own sex. **Like pain, it is unambiguously felt but one is unable to prove or display it to others.** One's subjective gender is just as real and immalleable as one's physical gender but unfortunately not recognized in our culture. When one's **Gender Identity** does not match their **Physical Gender**, the individual is termed Gender Dysphoric. Like minority Sexual Orientation, Gender Dysphoria is not pathological, but a natural aberration occurring within the population, like blue eyes. As with minority sexual orientation, the percentage of the population having gender dysphoria is in dispute, with estimates ranging between one in 39,000 individuals up to three percent of the general population. My experience leads me to feel that the higher figure

Crossdresser—

Those individuals with a desire to wear the clothing of the other sex but not to change their sex are termed crossdressers. Most crossdressers view themselves as heterosexual men who like to wear women's clothing in private or in public, and may even occasionally fantasize about becoming a woman. Once referred to as a transvestite, crossdresser has become the term of choice.

Transgenderist—

Transgenderists are men and women who prefer to steer away from gender role extremes and perfect an androgynous presentation of gender. They incorporate elements of both masculinity and femininity into their appearance. Some persons may see them as male, and by others as female. They may live part of their life as a man, and part as a woman, or they may live entirely in their new gender role but without plans for genital surgery.

Transsexual—

Men and women whose gender identity more closely matches the other physical sex are termed transsexual. These individuals desire to rid themselves of their primary and secondary sexual characteristics and live as members of the other sex.

Transsexuals are diagnostically divided into the sub-categories of Primary or Secondary. Primary transsexuals display an unrelenting and high degree of gender dysphoria, usually from an early age (four to six years of age). Secondary transsexuals usually come to a full realization of their condition in their twenties and thirties, but may not act on their feelings until they are much older. Typically, secondary transsexuals first go through phases that would be self-assessed as being a "crossdresser or transgenderist."

(3%) is closer to the actual prevalence.

Physically male gender dysphoric individuals have been described, either by themselves or by others, as falling into three distinct groups: **crossdressers**, **transgenderists** and **transsexuals**.

While these categories are the generally accepted classifications both within the gender community and among helping professionals, during my work with gender folk I have come to the belief that there is only one cause, one conflict, one condition — but there are many reactions and adjustments to it. I have gradually come to the conclusion that one's coming to terms with the conflict between one's knowledge of their true gender and one's need to be "normal" fosters the same conflict in all gender folk. Because a child's greatest desire is to be normal (like everybody else), the great majority of transgendered individuals create an artificial self which meets this goal. They are often so successful at this that they not only fool everyone else but themselves as well — at least part of the time, in some way.

Once created, physically male gender folk live in their male role — a 3-D personality with its own goals, likes and dislikes, values, hobbies, etc. Although indistinguishable from the "real thing," it isn't themselves. It is an artificial creation for them to be able to *fit in*. This is achieved at the expense of denying, locking away, their natural female self. (See Brain Gender and Brain Sex.) Their desire to be "normal" has denied them their natural selves. But, as the nagging reality of the deception becomes harder and harder to suppress, one has to express their **true gender** somehow, in some way.

For most, dressing is the obvious compromise. If one cannot **be female**, one can at least express femininity. But the more one expresses one's true self, the desire for more becomes greater. Some individuals continue expressing themselves more and more, others panic and purge only to start again later.

One's gender identity classification (crossdresser, transgenderist, transsexual, etc.) is due to each individual's adjustment to first the conflict between one's natural gender and their need to be "normal," and later to the conflict between one's natural gender and their "male persona." There is no objective "best solution," only a subjective, personal best solution.

After years or decades of living, working and building within their male persona, it is often too "expensive" to give up the life, perks, family, etc., one has built up—in order to go back to basics and have an emotionally 12 year old girl grow up—and live in a once male 40+ year old body. But no one is too old to transition. I have had many people in their 40's and 50's transition very successfully. I have even had some clients in their 60's and 70's.

However far one is able to go toward dismantling the male persona and allowing their female subjective gender to develop, one generally seems to have the following three levels of transition:

1. **Recognition that one's Brain Gender is different from one's Physical Gender** —This first phase comprises the majority of transgendered persons (75 – 95%) and can take the form of seeing one's self as a "woman trapped in a man's body," a need to express one's "feminine side," etc. This stage is mainly concerned with physical/surface changes such as crossdressing, passing, makeup, wigs, etc. In this first part, many gender folk don't even venture from their own home in female attire or restrict their expression to undergarments (bra, panties) in public. They often have a juvenile (before age 15) and later, an adult phase. There is often years or decades between the two phases. This level is filled with confusion, conflict, guilt, panic, and purging. The so called "Primary Transsexual" is an individual who never constructs a male persona and therefore never accepts their male genitals or challenges their female Self Map/subjective gender.

2. **Accepting one's True Self**— This stage is much more varied than the first, and has less emotional turmoil. This is the stage where one begins to accept their female self in some way and to make lifestyle changes to accommodate this acceptance. One may only accept the need to appear female, still denying their female true self (crossdresser) or begin to accept their true female self, but concentrating on a superficial physical level of change (transsexual, transgendered).

The self-identified crossdresser may begin to bring his significant other into his dressing, begin going to crossdresser meetings and events, or even going out into public. Those individuals more accepting of their true self will start to look for help in physical transitioning, such as hormones, electrolysis, and surgery, as well as wigs, makeup and clothes.

The major insight lacking at this stage is that they are still under the control of the male persona with all of its unnatural fears, drives, expectations, and knowledge. Even their view of their "female self" is his view, not their freed and autonomous female self. **They are still trapped in the belief that physical form alone determines gender.**

3. **Becoming one's True Self** — This is the last but unfortunately least experienced part of transitioning. This is the stage when that little girl trapped inside an artificial male persona in order to fit in, breaks free, grows up and has her own life — often with markedly different values, temperament and interests.

It has been my observation that the female self needs little help in growing up and developing if the overpowering weight of the male persona is removed from it. The transgender individual has spent years, decades developing, reinforcing and living in their male role. Dismantling the male persona takes a great deal of time, effort and outside help. **But, an individual's sense of happiness and success is directly parallel with the degree they have dismantled their male identity, not on their age, physical size, hormones, surgery, etc.**