

Why IWBC 2012?

compiled by Lin Foulk, co-host

"The arts, including music, allow us to work through many of life's issues and conflicts in symbolic yet real ways."

--Anthony Kemp in *The Musical Temperament*

Think about your local university or conservatory: how many female brass players are music majors? Now think about the brass sections of major symphony orchestras. How many women are performing in these roles? Here are recent statistics:

Brass/Percussion Personnel in Selected U. S. Orchestras 2009					
orchestra	horn	trumpet	trombone	tuba	percussion
Atlanta	1/5	0/3	0/3	0/1	0/4
Baltimore	3/6	0/3	0/4	0/1	0/4
Boston	0/5	0/2	0/2	0/1	0/4
Chicago	1/6	0/4	0/4	0/2	2/4
Cincinnati	2/6	0/4	0/2	0/1	0/4
Cleveland	0/6	0/3	0/3	0/1	0/6
Dallas	2/7	0/4	0/3	0/1	0/4
Detroit	0/5	0/4	0/3	0/1	0/2
Indianapolis	2/5	0/3	0/3	0/1	0/4
Los Angeles	1/6	0/4	0/3	0/1	0/3
Milwaukee	1/5	0/3	1/3	0/1	1/4
Minnesota	1/5	0/4	0/3	0/1	0/4
National	3/5	0/4	0/3	0/1	0/4
New Jersey	3/4	0/3	0/3	0/1	0/2
New York	0/5	0/4	0/1	0/1	0/2
Oregon	2/5	0/3	0/4	0/1	1/4
Philadelphia	2/5	0/4	0/4	1/1	1/2
Pittsburgh	0/6	0/4	1/4	0/1	0/3
St. Louis	0/5	1/4	0/4	0/1	0/2
San Francisco	2/6	0/4	0/3	0/1	0/5
Seattle	1/6	0/4	0/3	0/1	0/2
Utah	0/5	0/4	0/3	0/1	0/4
Total	22/119	1/79	2/68	1/26	5/77
% Female	18.5%	1.3%	2.9%	3.8%	6.5%

*statistics collected by Amy Louise Phelps, DMA student at the University of Iowa, and compiled by Lin Foulk

Something is preventing all of these female university and conservatory graduates from breaking through into the highest professional ranks. Even in our present day, it is still assumed by many that women brass players are at a disadvantage when compared to men. Arguments commonly cited include women's lack of strength, lung capacity, aggression, and taste for competition. It is often assumed that women's impaired abilities in these areas are biologically fixed. Recent brain research shows that the differences between boys and girls are actually very small and are exaggerated through environment and lifetime experience. These differences are learned.

IWBC exists to “educate, develop, support & inspire all women brass musicians.” Everyone is invited to help serve and support this mission. Outlined below are challenges female brass players have faced in the past and present and ways these obstacles to their success can be overcome.

Sexist language

I was told numerous times in my development that I was playing a phrase “like a girl” (used derogatorily) or that I played a particular passage “with balls” (used as a compliment). Even though he apologized, former Boston Symphony Orchestra trumpeter Rolf Smedvig’s sexist critique of a female brass trio in a masterclass at Boston University (as quoted in the *Boston Globe* in 1991), is indicative of the kind of language that still occasionally exists in brass pedagogy: “Boys, I mean, we grow up at the age of 5, you know, and we’re playing in the dirt and you guys are playing with dolls. I’m sorry to say that, but...some women brass players have a really tough time leaving those womanly traits behind and getting more aggressive. You came out there and it looked like you had your doily dress on and you were going to tiptoe through the tulips, you know, and play this...You can’t do that when you have a trumpet in your hands.”

Jackson Katz, project director of the Mentors in Violence Prevention Project at the Center for the Study of Sport in Society at Northeastern University in Boston says in *Crashing the Old Boys’ Network*, “One way to look at this is that society has taught young boys for centuries that to be female is to be second class. Little boys are told ‘You throw like a girl,’ as an insult. Or parents will tell their own daughters, ‘You throw like a boy,’ and mean it as a compliment.”

Using sexist language in brass pedagogy suggests that to be female or feminine is inferior and unsuited to brass-playing. Even though both men and women possess both male and female characteristics (each of us to varying degrees), this can suggest to impressionable young girls that female brass players are inherently flawed. This inferiority complex is unnecessary and can be changed if brass teachers use non-sexist language, such as “play more aggressive here” and “be more assertive with your air.” Girls need to be reminded: “No one can make you feel inferior without your consent” (Eleanor Roosevelt).

Strength

It is true that the average man is stronger than the average woman. Most of this is attributed to the differences in average heights. But this is too simplistic. There is a lot of variation within each gender and the most highly trained and strongest women have enough strength to excel at most athletic tasks and set world records. In *Women in Sport*, Carol Christensen says, “It should be noted that the quality of muscle is identical in men and women...This means that, given muscles of equal size, men and women would be equally strong. Despite these differences and generalities, women who strength train and compete in power lifting have achieved weight lifting feats which would be beyond the ability of most men.”

Researcher Marian Lowe noted, "There is growing evidence that differences in physical strength could come as much from difference in life experience as from innate factors." Boys and men are expected to develop muscular strength and are expected to use it more throughout their daily life than women. Sport statistics indicate the gap between the track and swimming records of males and females has been closing fast over the past 20-30 years since professional athletic pursuits have been open to women.

It also depends on how muscular strength is measured. At West Point Military Academy, rapidly scaling an eight-foot wall is one measure of physical competence. Jancie Yoder, in an article called "Women at West Point: Lessons for token women in male-dominated occupations," recalled that this exercise was particularly difficult for women because it was designed for the male physiology, which favors upper-body strength. Women were provided boosters, but using a booster reduced their overall score. Yoder noticed one-day that instead of pulling with her arms, a woman grabbed with her fingertips and then used her legs to walk herself up the wall. Once her legs were level with her fingers she could pull her pelvis over the wall, capitalizing on an asset of the female physiology: lower-body strength. Playing a brass instrument requires muscular strength throughout the body.

Muscular strength is only one of several factors that contributes to successful brass playing. Give the strongest man in the world a trumpet and it is not a given that this man will play the trumpet well. And being muscularly strong does not imply strength in other areas such as flexibility, coordination, and mental and emotional strength, which all contribute to our success as brass performers. Picking an area where women on average are weaker than men (such as muscular strength) and using that to justify women's inferiority or exclusion is an exaggerated and weak argument.

Vital Capacity (Lung Capacity)

Vital capacity, which is the amount and speed of air flow in the lungs, is a factor used to distinguish male and female brass players. The strength or volume of vital capacity is dependent upon a number of factors besides gender. Height, weight, age, ethnicity, whether or not a person smokes, and whether a person lives at high altitudes all affect vital capacity. If all of these things are equal, women on average have about a 78 percent capacity of average men. However, as discussed in the previous section on strength, there is a lot of variation within each gender and many trained female brass performers have vital capacities that allow them to excel at playing a brass instrument. Vital capacity, though important, is only one part of playing a brass instrument. The greatest number in regards to vital capacity does not equal a greater player. We should take from this statistic that people (men or women) with smaller vital capacities aren't inferior and shouldn't be discouraged from playing brass instruments professionally. Instead they must be trained to be efficient and use a higher percentage of their capacity to match that of someone with a naturally larger capacity.

Testosterone and Aggression

Brass-playing does require a certain amount of aggression and assertiveness and it is well-known that higher levels of testosterone play a role in stronger expressions of these behaviors. However, recent brain research that suggests elevated testosterone levels don't *cause* aggression; elevated levels are a *response to* aggression. As neuroscientist Lise Eliot points out in her recent book *Pink Brain, Blue Brain*, "Although there's some suggestion that men with constitutionally higher testosterone levels are more inclined to try to dominate others, researchers are increasingly finding that testosterone works the other way around in adults: it's more the *consequence* of male competition and aggression rather than the cause...Boys will be boys, but only as far as they are allowed or encouraged to be." Cultural tolerance for more aggressive behavior in boys and men causes more elevated levels of testosterone. As an aside, testosterone rises in women as much as men in high-stress situations (for example in a sports contest or high-status job), but women's baseline testosterone is just a fraction of men's.

Eliot also notes, "Testosterone is not the only neuro-chemical involved in aggression. Growing evidence suggests that the neurotransmitter serotonin is actually a better marker than testosterone for aggression and violence. Ironically, low serotonin levels are linked to both violent aggression and clinical depression in humans. Though seemingly opposite extremes, these two responses may simply reflect the different ways society sanctions men and women to cope with feelings of low self-esteem or stressful life events." Therefore, "Males are not slaves to their circulating steroids, nor are women immune to the aggressive impulses fostered by similar hormonal circuitry."

Physical assertive and aggressive behavior is rewarded in boys and men but discouraged in girls and women. "In the female brain, the circuit for aggression is more closely linked to cognitive, emotional, and verbal functions than is the male aggression pathway, which is more connected to brain areas for physical action," says neuropsychiatrist Louann Brizendine in *The Female Brain*. To balance cultural conditioning, female brass performers need to be encouraged to be more assertive physically. Biological factors are not a cause or an excuse.

Competition

Women do compete, but it's often covert because girls learn early on that it's not feminine to openly compete. Women also typically compete for different rewards than men (connection and acceptance rather than winning for its own sake). Neuroscientist Lise Eliot says, "Empathy is another factor [in competition]. Girls may lose their taste for competition because they don't like feeling responsible for others' losing. Competition also interferes with girls' more intimate friendships, and it contrasts with the nurturing style they experience with their mothers and teachers." Said another way, Kathleen DeBoer, author of *Gender and Competition: How Men and Women Approach Work and Play Differently* says that in general, boys and men are motivated by the score and by winning (no matter the cost) in

competitive situations; girls and women are taught winning is not necessarily better than losing if someone gets hurt in the process. Girls need to be taught that winning and succeeding create stronger connections and strengthen people. A balance between competition and cooperation should be encouraged for both sexes. Fear and risk-taking need to be encouraged as much in boys as in girls. Not tolerating fearfulness in boys (“don’t be a sissy”) helps them be more fearless—we need to do this for girls too.

Neuroscientist Lise Eliot says about competition and the brain: “There’s nothing rational about the gender gap in competition. While some men are undoubtedly glad to escape the schoolyard ethos, males as a group are simply more comfortable than women are with overt contests of all sorts—sports, games, spelling bees, and, most important, vying for a prestigious job or valuable promotion...Men and women have different tastes for competition...If talented women are avoiding competition, they’re simply not going to land the highest positions and best-paying jobs.”

DeBoer closes her book with this wisdom: “In the long run, the value of participation in sports has little to do with running, jumping, or throwing. The ultimate merit is in teaching females to appreciate battle and males to value bonding. At its best, sports teaches us how to be whole people...” Brass playing can do the same if we encourage this balance by teaching reticent girls and women that open competition is o.k. and necessary and teaching boys and men that winning isn’t everything.

Expectations

Physically we must expect the same from female brass musicians as we expect from male brass musicians. Research shows that parents have higher expectations for boys’ physical skills as toddlers than girls. Moms estimated the maximum steepness of a slope that they thought their toddler could descend. The study revealed that baby girls actually had more courage to descend a steeper slope, but while mothers were able within 1 degree of accuracy to predict how steep their sons could descend, mothers of girls underestimated their daughters’ abilities by an average of 9 degrees. Underestimation of female physical ability in brass playing puts women at a disadvantage.

Sex versus Gender

Sex describes the biological and physiological characteristics that define men and women. Gender describes the social roles and expectations in terms of male and female, masculinity and femininity. Sex and gender are two very different descriptors. Masculine and feminine behavior is learned very early in infancy. Studies show that parents and care-givers respond to baby boys and girls differently, such as ignoring a boy’s crying to “toughen him up” and repressing a girl’s anger. Even before babies speak they understand gender and can distinguish between male and female faces. In *Pink Brain, Blue Brain*, author Lise Eliot describes how the brain is plastic and pliable, meaning it changes in response to its own experience. “Every physical feature of the human nervous system responds to life experiences and is continually remodeled to adapt to them. The brain changes

when you learn to walk and talk; the brain changes when you store a new memory; the brain changes when you figure out if you're a boy or a girl; the brain changes when you fall in love or plunge into depression; the brain changes when you become a parent."

There are true innate differences between the sexes, but Eliot says these differences are way over-exaggerated and the male/female differences that have the most impact in life (cognitive skills such as speaking, reading, math, mechanical ability and interpersonal skills such as aggression, empathy, risk taking, competitiveness) are heavily shaped by learning. In fact, men and women share 99.8 percent of the same genes. Experiences, role models and reinforcement heavily shape cognitive and interpersonal development. "As universal as some differences [between the sexes] appear, none is as hard-wired as commonly portrayed. Like every other brain function we've considered, the social and emotional differences between boys and girls begin as tiny seeds planted by evolution and nourished by hormones but blossoming only under the hot sun of our highly gendered society" (Eliot).

Anthony Kemp in *The Musical Temperament* says, "Because we are all conditioned, to some extent, to perceive masculine and feminine behavior patterns as two separate clusters, we see the musician's androgyny [possessing both feminine and masculine characteristics] taking the form of two independent and contrary dispositions. The first one, more commonly associated with femininity, concerns a cluster of traits that involves the predisposition of a person to respond to musical experiences with sensitivity, feelingfulness, insight, and intuition. The second cluster of traits relates to introversion and independence, autonomy, and the motivations necessary for musical progress to be made and which can be viewed...as being masculine. In other words, we might wish to speculate that these two groups of attributes, so frequently perceived as opposites, are task requirements of being a successful musician of either gender...In artists, and in musicians in particular, we may well find that these two sides of their nature are fully reconciled." All brass musicians should strive to achieve and exhibit in their music the best in the full spectrum of masculinity and femininity.

Why isn't there an International MEN'S Brass Conference?

There certainly *could* be. As discussed above and in numerous other books and articles, there have been centuries of male focus and male affirmation in virtually every professional field. Being girlish or feminine has less status and over-emphasizing the differences between men and women has become a power-struggle and a competition for domination. To think that the most recent women's movement has equalized the balance between male and female ignores the amount of time it has taken to ingrain these male/female dichotomies and overestimates where we currently are in that balance historically. Brass playing has not been immune to this. The fact of the matter is that many brass conferences today still feature mostly male performers.

Because there are currently distinct sociological differences between men and

women (even though these differences are mostly learned), many women have expressed to me that their experience of playing a brass instrument is unique to the experience that many men have. As shown above, physical differences such as lung capacity, overall strength, and temperament (nurtured by cultural and societal norms), need not be limiting factors for those of either sex or gender. IWBC 2012 is a conference intended for both men and women who want to celebrate brass-playing by female musicians. It is powerful to see entire ensembles of women brass players onstage! The purpose of the conference is to encourage girls and women to be and play their very best even if they have been discouraged from playing in the past (by men or women). Attending IWBC 2012 is one way you can support female brass performers. Anyone and everyone are welcome to join in the celebration!

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