

## GETTING INSIDE A DANCER'S HEAD - STRESSES AND JOYS OF CREATIVITY

*Thomas E. Backer, PhD*

*“Pillow Talk” - Jacob’s Pillow Dance Festival - August 4, 2001*

*Marge Champion & Celeste Miller - Discussants*

Walt Whitman in his “Song of Myself” says:

*“Do I contradict myself?  
Very well then I contradict myself.  
(I am large. I contain multitudes.)”*

I’m here today to guide us through a discussion about some of the magnificent contradictions inherent in dance - the stresses and joys of the creative process that makes dance and fuels the dancer’s work. Exploring these contradictions also involves the relationship between artist and audience - magnificent contradictions also abound on the other side of the stage. Indeed, art exists in large part because it illumines the contradictions we all experience in the acts of living and dying, of being human.

Twenty-two years ago I shared another stage in Los Angeles with Marge Champion, in my UCLA course on the relationship between artist and audience. As a psychologist, exploring that relationship has been part of my life’s work. I’ve worked with gifted artists in counseling and teaching relationships, and with arts organizations and their funders on the challenges of cultural participation - not just addressing that inelegant phrase, getting “butts in the seats,” but using behavioral sciences to understand better why art matters in our lives and how to change our actual behavior as audiences for the arts. My colleague Jerry Zaltman at Harvard has people cut ads out of magazines to assemble picture essays about what art means to them - and in a sense that’s what we’re about to do: cut pictures out of our minds about what dance means for dancers and for us as an audience.

And I have to say up front, as a happy member of the audience for the last 35 years, that the relationship between audience and artist is a vital part of what makes art. Dancers need us as much as we need them, and what we learn about dance and about dance audiences in explorations like this creates a more focused, high-energy relationship between artist and audience for tonight’s performances of flamenco and urban tap, and on into the future.

What I’m about to say may not have many surprises in it for an audience of dance artists and enthusiasts, though you may be surprised to find out that there’s some science to confirm things you may have witnessed or believed for years. I’m hoping to amplify the overall context in which you experience dance, and to do that I’ll start by reminding us all of some of the joys of being a dancer:

*1 - the joy of sheer movement* - as Jules Feiffer’s dancer in her odes to spring, dance has been part of the human experience since we were in the caves; and even animals move in rhythm.

*2 - the chance for self-expression* - to bring something into being is the bedrock of creativity; in

psychology for some years now we've been studying how to measure creative ability for dance. It is part of what we generally refer to as "physical genius," the term used by journalist Malcolm Gladwell, author of *The Tipping Point*, in a recent *New Yorker* article. We use approaches that come out of research like that of Howard Gardner at Harvard University, who has studied multiple intelligence for many years.

3 - *the chance to master a highly creative, challenging skill* - we're learning from psychological research that what's called "self-efficacy," our sense of mastery of our environment, is strongly related to psychological and physical health, and even to longevity, because it has survival value.

4 - *the chance to fulfill the creative vision of the choreographer* - from Graham to Balanchine, great choreographers have inspired incredible loyalty from dancers who experience wonderful fulfillment when their work manifests the creative intent of the dance.

5 - *the opportunity to bring pleasure and the challenge of discovery and learning to the audience* - like all performers, dancers can sense the audience out there in the dark and their response to the work being presented on stage.

6 - *the chance to be part of a profession* - and sometimes make a living at it!

7 - *the chance to increase personal creativity* - this one may not be so obvious; a recent study at City University of New York, found that the act of dancing increases creativity. One main reason is that we know physical movement stimulates creative flow both for dancers and non-dancers.

8 - *the chance to reduce personal stress* - there's now good science to show that movement like dance reduces stress, whether one is a professional dancer or not, and anything that reduces stress also elevates creativity. University of Maryland dance researcher Judith Hanna has written an entire book on the uses of dance to reduce stress. In my work on stress management for creative people, I constantly preach that 30 minutes of large muscle movement exercise is the best thing one can do for stress reduction, but of course I don't need to say that for dancers!

Former Feld Ballet dancer Buffy Miller summarizes it well: "Dancing engages your body, mind and spirit in such a complete way that it's thoroughly exhausting and thrilling. It uses your whole self - that's what I love about it." Dancers bring all these joys to the stage every time they perform.

When we put a dance concert into this larger context of all that's happening for the dancers on stage, we increase the energy we as the audience bring to it. This is a European way of thinking about art: I have a wonderful 80ish friend in Los Angeles, a Romanian coach of concert pianists named Dusi Mura, who for each of her master classes tells the audience the larger historical context for the music we're about to hear - what else was happening in politics, society, and other arts at the time the music was composed. It's like putting salt on watermelon - makes it sweeter!

For dance, that means understanding what's happening for the dancer, and also something about the history of the work and of the type of dance you're experiencing. Lectures like this and good program notes can help with this process - the audience has to be on pointe too, so to speak, if dance is to have maximum impact on the audience, and vice versa.

But this isn't supposed to be a grim, pedantic exercise, either for the artist or the audience. As Harriett Fulbright, a great arts leader and widow of the Senator who established the Fullbright fellowships, said in a recent speech: art means risk taking and playfulness - a sense of fun about discovery is what brings all this together.

However, we do have to look at the dark side too, at the stresses dancers face:

*1 - dancing means doing what the human body is not supposed to do* - this is especially true in classical ballet, but also for other forms of dance (for instance, 3-inch heels for salsa and samba dancers). Long training and enormously hard work is required to go against the rules of nature.

*2 - professional dancing has significant injury risk* - about the same as for contact professional sports such as football, according to recent research at the University of Washington. Studies also show that injury is more likely under stress, fatigue, low self-esteem that in turn leads to unwise risk-taking, and also poor nutrition (which reduces bone strength, among other things). And dancers don't always get or give themselves the best circumstances for dealing with injury - a recent University of Utah study showed that ankle injuries in dancers are not usually treated aggressively enough, and they can disable the dancer if left untreated. One injury can sideline a dancer for months or end a career.

According to the science on this subject emerging from special medical centers such as the Gilbert and Kitty Miller Health Care Institute for Performing Artists at St. Lukes-Roosevelt Hospital in New York City, women have more problems with their knees than men because they have wider hips, so more pressure is put on the knees when they land after a jump. Men have more problems with muscle, tendon and ligament tears, so they need to stretch more.

*3 - Smoking and other substance abuse is a particular problem* - smoking because it is used by dancers as a dieting aid and stress releaser. Sometimes other substances are abused as well; this is particularly likely with pain medication, and for touring dancers, sleep medications and stimulants because of poor sleeping conditions. Substance abuse problems of dancers were dramatically described by ballerina Gelsey Kirkland in her autobiography, *Dancing On My Grave*.

*4 - Dancers face a short career even under the best of circumstances* - Pacific Northwest Ballet has counseling to develop a second career while dancers are still in dance school.

*5 - Financial woes are also common* - it is rare to be with a company that is viable enough to provide real living salaries for dancers, and financial rewards are small except for the few "stars."

*6 - The field is intensely competitive* - and there are few openings for fulltime dancers.

*7 - Dancers especially in classical ballet need to be below average body weight* - and this can lead to problems with eating disorders, delayed menstruation for women, and other problems. Recent research both in Germany and Australia with young female dancers shows a greater incidence than in the general population of young women of eating disorders like anorexia, and more preoccupation with thinness. In a recent issue of *Dance Teacher*, dance researcher and counselor Linda Hamilton of Adelphi University urges teachers to learn about safe dieting methods they can pass along to their

students, and about hidden signs of eating disorders.

Ella Baff says that in most dance companies there is more of a healthy attitude now. Dancers are not likely to be weighed every day, and a wider range of body types has become more acceptable. But it is still a challenge. Jane Bonbright, executive director of the National Dance Education Organization and former prima ballerina, works with many schools and dance companies to deal with undiagnosed eating disorders among female dancers.

More dance companies are working with hospitals so that dancers in distress can seek out counseling. The dancer's education now is rich in science, medicine, physical therapy, counseling and mind-body alternative therapies. For instance, the National Ballet School in Canada has two eating disorders specialists from Toronto General Hospital.

We have to remember too that most dancers have been through years of training in dance school, and most started very young. This sometimes means they missed out on certain pleasures and learning experiences of typical childhoods, resulting in social and intellectual challenges as adults. Some dance schools like North Carolina School of the Arts, National Ballet School in Canada and Pacific Northwest Ballet School are very much attuned to psychological needs of young dancers - but others aren't.

It is important not to see dancers as victims because of these challenges, as Toni Bentley, a former New York City Ballet dancer, wrote in a recent *LA Times* editorial. That's where the balancing of the joys and stresses of dancing comes in - the larger context we've been talking about here involves both, as magnificently contradictory as that may be.

One last point - in addition to supporting dance through coming to dance concerts, all of us need to look at ways in which our communities can nourish dancers, choreographers and dance companies. A community-wide effort over a period of time can make an enormous difference. Recently I heard the great creativity expert Mihalyi Csikszentmihalyi speak at Claremont University, where he now teaches. He used as a metaphor for how communities need to support creativity the competition in 1401 for the building of the glorious doors to the baptistry in the cathedral of Florence. For 50 years the city financially supported the making of these great works of art, as part of the life of the community.

I'll close with a small personal example. In the 1970's, when Valery and Galina Panov defected to the US and performed in Los Angeles, I knew their story of living in house arrest in a tiny apartment in USSR. I came to see them when I had the flu and a 103 degree temperature, but for the entire time they were dancing I was not sick and felt wonderful. That's my gold standard for being transported by art!

The more we're inside a dancer's head, not doing psychoanalysis, but feeling the experience of dance as the dancer may feel it, the more we get out of dance - like a virtual reality machine. That energy incontrovertibly communicates itself to artists on stage - we are part of the making of art as we sit in the audience. There is actually science now about how this happens - through sounds, odors and ambient energy transmission, but we've always known this was the case. The relationship between artist and audience is a complicated one, and it can be quite profound on both sides. I hope

I've given you a few thoughts to ponder about this subject today.

## **Selected Literature on the Psychology of Dance**

- Abraham, S. (1996). Eating and weight controlling behaviours of young ballet dancers. *Psychopathology*, 29(4), 218-222.
- Abraham, S. (1996). Characteristics of eating disorders of young ballet dancers. *Psychopathology*, 29(4), 223-229.
- Backer, T.E. (1992). Workplace creativity: Psychological, environmental and organizational strategies. *Creativity Research Journal*, 5(4), 439-443.
- Backer, T.E. (1983). Beating the stress syndrome. *ADWEEK*, February 14, 20.
- Backer, T.E. Coping with stress. (1980). *Screen Actor Newsletter*, 4-5.
- Bentley, T. (2001). Critic's argument for heftier dancers is thin. *Los Angeles Times*, April 16, F3.
- Bettle, N., Bettle, O., Neumarker, U. & Neumarker, K. (1998). Adolescent ballet students: Their quest for body weight change. *Psychopathology*, 31(3), 153-159.
- Bonbright, J.M. (1995). *Developing screening and education programs for detecting and preventing eating disorders at the sub-clinical level in young dancers*. Arlington, VA: National Dance Association.
- Adame, D., Radell, S., Johnson, T. & Cole, S. (1991). Physical fitness, body image and locus of control in college women dancers and nondancers. *Perceptual Motor Skills*, 72(1), 91-95.
- Archinard, M., Scherer, U., Reverdin, N., Rouget, P. & Allaz, A.F. (1994). Dance training and eating disorders. *Schweiz Archives of Neurological Psychiatry*, 145(20), 23-27.
- Benson, J., Geiger, C. Eiderman, P. & Wardlaw, G. (1989). Relationship between nutrient intake, body mass index, menstrual function and ballet injury. *Journal of the American Dietetic Association*, 89(1), 58-63.
- Braisted, J.R., Mellin, L., Gong, E.J., & Irwin, C.E.J. (1985). The adolescent ballet dancer: Nutritional practices and characteristics associated with anorexia nervosa. *Journal of Adolescent Health Care*, 6(5), 365-371.
- Brooks-Gunn, J., Warren, M.P. & Hamilton, L.H. (1987). The relationship of eating problems and amenorrhea in ballet dancers. *Medicine and Science in Sports and Exercise*, 19(1), 41-44.
- Druss, R.G. & Silverman, J.A. (1979). Body image and perfectionism of ballerinas. *General Hospital Psychiatry*, 2, 115-121.
- Evans, R.W. et al. (1998). Survey of injuries among West End performers. *Occup Environ Med*, 55,

585-593.

Evers, C. (1987). Dietary intake and symptoms of anorexia nervosa in female university dancers. *Journal of the American Dietetic Association*, 1, 66-68.

Garner, D.M., Garfinkel, P.E., Rockert, W. & Olmstead, M.P. (1987). A prospective study of eating disturbances in the ballet. *Psychotherapy and Psychosomatics*, 48, 170-175.

Gondola, J.C. (1987). The effects of a single bout of aerobic dancing on selected tests of creativity. *Journal of Social Behavior and Personality*, 2(2), 275-278.

Hamilton, L., Brooks-Gunn, J., Warren, M. & Hamilton, W. (1988). The role of selectivity in the pathogenesis of eating disorders in ballet dancers. *Medicine in Sports and Exercise*, 6, 560-565.

Hamilton, L., Hamilton, W., Meltzer, J., Marshall, P. & Molnar, M. (1989). Personality, stress and injuries in professional ballet dancers. *American Journal of Sports Medicine*, 17(2), 263-267.

Hamilton, L., Brooks-Gunn, J. & Warren, M.P. (1985). Sociocultural influences on eating disorders in professional ballet dancers. *International Journal of Eating Disorders*, 4, 465-473.

Hamilton, L. (2000). The skinny on eating disorders. *Dance Teacher.com*, September.

Hanna, J.L. . (1988). *Dance and stress*. New York: AMS Press.

Holderness, C., Brooks-Gunn, J., & Warren, M. (1994). Eating disorders and substance use: a dancing vs. a nondancing population. *Med Sci Sports Exercise*, 26(3), 297-302.

Katch, F. (1993). The Body Profile Analysis System (BPAS) to estimate ideal body size and shape: application to ballet dancers and gymnasts. *World Review Nutrition Diet*, 71, 69-83.

Le Grange, D., Tibbs, J., & Noakes, T. D. (1994). Implications of a diagnosis of anorexia nervosa in a ballet school. *International Journal of Eating Disorders*, 15(4), 369-376.

Macintyre, J. & Joy., E. (2000). Foot and ankle injuries in dance. *Clin Sports Med*, 19(2), 351-368.

Maloney, M. (1983). Anorexia nervosa and bulimia in dancers. Accurate diagnosis and treatment planning. *Clin Sports Med*, 2(3), 549-555.

Martin, C., & Bellisle, F. (1989). Eating attitudes and taste responses in young ballerinas. *Physiol Behavior*, 46(2), 223-227.

McLennan, D. (2001). The breaking pointe. *Artspatron.com*, June 14.

Meermann, R. (1983). Experimental investigation of disturbances in body image estimation in anorexia nervosa patients, and ballet and gymnastics pupils. *International Journal of Eating Disorders*, 2(4), 91-100.

- Micheli, L., Gillespie, W., & Walaszek, A. (1984). Physiologic profiles of female professional ballerinas. *Clinical Sports Med*, 3(1), 199-209.
- Neumarker, K., Bettle, N., Neumarker, U. & Bettle, O. (2000). Age- and gender- related psychological characteristics of adolescent ballet dancers. *Psychopathology*, 33(3), 137-142.
- Pekkarinen, H., Litmanen, H., & Mahlamaki, S. (1989). Physiological profiles of young boys training in ballet. *Br J Sports Med*, 23(4), 245-249.
- Pierce, E. F., Daleng, M. L., & McGowan, R. W. (1993). Scores on exercise dependence among dancers. *Perceptual Motor Skills*, 76(2), 531-535.
- Sanchez-Cardenas, M., & Paruit Portes, C. (1996). Eating disorders and suicide attempts in 2 dance students. *Arch Pediatr*, 3(1), 51-54.
- Sandri, S. C. (1993). On dancers and diet. *International Journal of Sport Nutrition*, 3(3), 334-342.
- Solomon, R., Brown, T., Gerbino, P.G. & Micheli, J. (2000). The young dancers. *Clin Sports Med*, 19(4), 717-739.
- Stensland, S., & Sobal, J. (1992). Dietary practices of ballet, jazz, and modern dancers. *Journal of the American Dietetic Association*, 92(3), 319-324.
- Szmukler, G. I., Eisler, I., Gillies, C., & Hayward, M. E. (1985). The implications of anorexia nervosa in a ballet school. *Journal of Psychiatric Research*, 19(2-3), 177-181.
- Taylor, J. & Taylor, C. (1995). *Psychology of dance*. Champaign, IL: Human Kinetics.
- Vaisman, N., Voet, H., Akivis, A., & Sive-Ner, I. (1996). Weight perception of adolescent dancing school students. *Archives of Pediatric Adolescent Medicine*, 150(2), 187-190.
- van Marken Lichtenbelt, W., Fogelholm, M., Ottenheijm, R., & Westerterp, K. (1995). Physical activity, body composition and bone density in ballet dancers. *British Journal of Nutrition*, 74(4), 439-451.
- Weeda-Mannak, W. L., & Drop, M. J. (1985). The discriminative value of psychological characteristics in anorexia nervosa. Clinical and psychometric comparison between anorexia nervosa patients, ballet dancers and controls. *Journal of Psychiatric Research*, 19(2-3), 285-290.