

RESOURCE PAPER FOR DANCERS AND TEACHERS

Mirrors in the Dance class: Help or hindrance

SALLY A. RADELL MA, MFA, WITH THE IADMS DANCE EDUCATORS' COMMITTEE, 2019.

CONTENTS:

1.	HIGHLIGHTS	2
2.	INTRODUCTION	2
3.	MIRROR USE AND PERFORMANCE	2
4.	LEARNING HOW TO TRUST THE BODY	3
5.	MIRROR USE AND BODY IMAGE	4
6.	THE DANCER IN THE MIRROR	5
7.	MOVING FORWARD: FINAL CONSIDERATIONS ON THE MIRROR	6
8.	TAKE AWAY POINTS	7
9.	REFERENCES & RECOMMENDED READING	7

HIGHLIGHTS

- The purpose of this paper is to explore the use of the mirror in the dance studio and whether it helps or hurts dancers' body image and technical growth in the classroom.
- Students use the mirror as a source to provide immediate visual feedback on their performance and to compare themselves to others in the classroom while teachers use it as instructional tools to facilitate teaching.
- Frequently the visual image is more powerful than felt, proprioceptive experience. As a result, a dancer cannot refine and learn to trust her proprioceptive self, and her growth in technical performance can be impeded.
- Research shows that dancers taught without mirrors, especially higher skilled dancers, felt better about their bodies. Dancers taught with mirrors, on the other hand, felt worse about the appearance of their bodies.
- Education on how to use the mirror in a beneficial way in class has not proven effective in combating the negative impact a mirror can have on a dancers' body image. The potency of the mirror is just too powerful!

INTRODUCTION

At first it was known as “the flattering glass,” “the see-face,” or “that which is in eternity,”¹ and for thousands of years people have gazed into mirrors' reflecting surfaces to ask questions about themselves and their world. The history of the mirror is a long one. The earliest known manufactured mirrors date from 8000 years ago in Anatolia, now south central Turkey. Yet even before that time the very first mirrors were pools of water in natural bodies of water or vessel containers. Men as well as women stared at themselves either to admire their appearance or to see how to correct it. Because a mirror seemed to show how one looked from the outside, it has often been connected with the human experience of self-consciousness and also the desire for self-improvement: Who is the person I see looking back at me? What do I look like? How can I make that person look younger or smarter, more graceful, more confident, more beautiful?

Dancers too use mirrors for the same reasons, although historically the genesis of mirror use in dance training is not clearly documented. Their use likely began with ballet training sometime in the eighteenth century² where the mirror was used to compare one's reflected image with the perceived ideal image of the performance of a given step or phrase, and today they are present in most westernized dance studios to support the learning environment.

MIRROR USE AND PERFORMANCE

Picture a group of dancers during rehearsal for a performance. At one end of the studio is positioned a large mirror that takes up nearly the entire wall. This mirror, as Helena Wulff writes in *Ballet Across Borders*,³ will normally be located so as to approximate where the audience will be seated during a performance. In the mirror, in other words, dancers see themselves as the audience will see them; thus, for many the mirror serves to show how dancers are viewed by others. Many dancers tend to feel that the mirror is crucial for their success and serves as an important tool for technique training.

There are some positive reasons to use a mirror in dance training. For dancers, the mirror provides immediate visual feedback; it allows them to evaluate the height and shape of their movement, to correct their placement, and to assess the line of their bodies. For teachers, the benefits of using mirrors as instructional tools also includes the opportunity to easily situate themselves to view many students at one time. When facing the mirror, a teacher can demonstrate material with the same facing as the dancers which allows students to follow easily and is an efficient use of time when instructing short classes. Conversely, when a teacher does not use the mirror, it usually requires the instructor to face the students directly and perform a mirror image demonstration. This can be more difficult for students (especially beginners) to follow and also requires more concentration and focus for the teacher. Very little research has been conducted in this area and more is needed.

Dance instructors frequently have reservations about the use of the mirror in the dance studio. 4-11 Wendy Oliver 12 describes the mirror as a tool which provides constant feedback about a dancer's body and performance. However, Oliver also addresses the negative aspects of having a mirror in the classroom, where a dancer pays too much attention to the image she sees of herself in the mirror, this self-consciousness may overpower her own internalized sense of her body as it moves through space. Only a small amount of research looks at the overall impact that classroom mirrors have on dancers' performance and body image. This type of research is interdisciplinary and generally involves teams of professionals with a broad range of expertise in statistics, dance pedagogy, health education and dance science (not to mention psychology), making the collection of useful information complex and costly. Here, dance science can draw from other disciplines, such as motor learning and psychology to better understand the importance of how we set up environments for learning.

LEARNING HOW TO TRUST THE BODY

How a movement looks may be less important than how it feels. The felt understanding of exactly where one's body is and what it is doing is called "proprioception," and it is a critical ingredient to being a technically skilled, aware, and expressive dancer. Glenna Batson 13 and Barbara Montero stress the importance of proprioception (sometimes called "the sixth sense") in dance instruction: As Montero writes,

[L]ooking at oneself in the mirror is often not the best guide to self-correction (to say nothing of the futility of looking at one's body directly). Not only can turning one's head to look in the mirror destroy the desired effect of the movement, but a trained dancer often trusts proprioception more than vision when it comes to evaluating aesthetic qualities of his or her movements and positions.

14

If dancers practice dancing with a mirror for too much of their training, without developing other sensory systems, they may see detriments to their skill development when they are then required to work without the mirror. The mirror can become a "crutch" which inhibits dancers from fully developing their kinaesthetic sensibilities and thus inhibits their full potential as performers. 15 In this case, the removal of the mirror during training, argues Wulff, 3 allows dancers to focus more on their internal kinaesthetic feedback, which in turn may elevate their performance level. They progress from technique to artistry because they have a feeling for the movement, rather than being dependent on 'seeing', and perhaps being distracted by their image in the mirror. As their movements become less self-conscious, they become more fully expressive.

Professionals disagree as to how the mirror is effective at different levels of a dancers' technical training. Much of the information on the use of the mirror in teaching dance comes from either motor learning

specialists or dance instructors who have extensive experience teaching in the dance studio. Kimmerle and Côté-Laurence in *Teaching Dance Skills* 16 report that the mirror can offer valuable assistance early in a dancer's training, but they caution that it should not be used to the point where it interferes with dancers' developing an awareness of their kinesthetic sensibilities. Gretchen Ward Warren in *Classical Ballet Technique* 17 recommends no mirror use in a beginning level class. She reports that without the use of a mirror, students commit the new movements and positions of the body to "muscle memory" much faster and learn them by "feel" more quickly and not by "visual imitation." However, Ward acknowledges that the mirror is an important tool in an upper-level dance class because the dancers use it constantly to assess their positions and line in the mirror. Rory Foster in *Ballet Pedagogy* 11 describes the importance of having dance classes taught with either a side or rear placement of the mirror towards the dancer's body. This way the mirror would only be able to be periodically used to apply a teacher's correction to a movement. He comments that only when dancers reach an advanced level is it appropriate to allow them to face the mirror in class. At this point, he says, the dancers have developed the experience to use a mirror as a tool, and they are not likely to become mesmerized and thus overpowered by their physical image to the point of distraction. In general, mirrors tend to be used more often in codified and traditional forms of dance that place high value on line and positions, as in ballet. The mirror seems to be used less in contemporary dance forms or in improvisations that tend to focus on sensations of ones' body and how movement is affected by them.

There have been a handful of scientific research studies with university dance students which explore how mirrors affect dancers' performance in the dance studio. One study 18 reported that university dance students who learned a dance phrase with the use of the mirror had better movement retention over a two-week period than students who learned the phrase in a non-mirrored dance classroom. It was also found that the use of the mirror for dancers with less than ten years of dance training may be distracting and delay the learning process 19. Other researchers 9-10 found that beginning ballet students who learned and practiced an adagio phrase without the mirror developed stronger technical skills in their performance of the phrase than a comparable group of students who learned and practiced the same adagio phrase using a mirror. Perhaps this was because there was more opportunity for students to be distracted by watching themselves in the mirror while performing the slower adagio phrase. The researchers also saw no difference in technical growth between the mirror and non-mirror class in their classroom performance of the quicker allegro phrase. These researchers ultimately concluded that the use of a mirror tended to retard technical improvement in the classroom performance of an adagio phrase.

MIRROR USE AND BODY IMAGE

Every time we look in a mirror we are confronted with an image of our body, and what we see may or may not be the image we have—or would like to have—of ourselves. Hence the concept "body image," (a term from psychology) which refers to the perception, thoughts, and feelings we have about our bodies. 20 A dancer's personal vision of her body is an important part of her psychological health and well-being, and it can help or hinder her dance performance in the studio. Heightened self-consciousness can sometimes cause a dancer to become overly critical of the way she looks. As a result, dance students frequently develop negative feelings about their bodies. This is a reality that many dance teachers understand from experience and witness on a daily basis. For instance, it is not uncommon for a dance teacher to observe a student standing in front of the mirror in a leotard with shrugged shoulders, looking down at the ground, seemingly feeling bad about herself.

Mirrors entice individuals to see themselves externally as objects and to imagine how others view them in comparison with others. Jill Green 7 interviewed university dance students and found that the use of mirrors heightened their self-consciousness; the more they looked at their images in a mirror, the more they increased both their tendency and their capacity to see themselves as objects. In a dance class, students regularly stare at their external image in the mirror; they attempt to achieve a precise “look” while being corrected. Depending upon factors such as the technical difficulty of the dance phrase, the experience level of the dancer, and the degree of stress experienced when learning a phrase, this heightened self-consciousness may have positive or negative psychological effects. The dancer’s perceived “ominous” presence in the mirror results in physical self-evaluation, behavior regulation, body objectification, and competition. Repeated often enough, the experience can be dehumanizing.

Research 21 has shown that opportunities to take advantage of the sensations of movement in their bodies to catalyze technical growth for students is not always possible as their concentration is focused on the reflections of their individual body parts in the mirror. In the scientific literature this concept involving the mirror, objectifying oneself, comparing oneself and body parts to others, and potential negative self-evaluation is called the Theory of Objective Self-Awareness. 22 This process can lead to poor body image in dancers.

Research 4, 8, 10 shows that dancers taught without mirrors, especially higher skilled dancers, felt better about their bodies. Dancers taught with mirrors, on the other hand, felt worse about the appearance of their bodies. Dancing without the mirror, for the higher-skilled students, may encourage them to be less self-critical, less distracted and thus feel more satisfied with their bodies. When using the mirror dancers can be self-conscious and compare themselves to others and ultimately feel bad about their bodies. In addition, research 4 suggests that higher skilled dancers, who have a more developed ability to access their technical progress, can be more critical of their bodies than less experienced dancers who may not yet have developed skills to accurately evaluate their progress in technique training. Reel and associates 23 did a study looking at body image concerns of dancers and reported the biggest stress point for dancers in the studio is using the mirror. This list was followed by wearing tight dance clothes, a desire to be thin, and comparing ones’ body to others in the room. These factors are only magnified by having a mirror in the studio.

There has been some research 24 done which compares the impact of the mirror on body image between beginning level modern and ballet students in both mirrored and non-mirrored classrooms. Both the modern and ballet students who were taught in a mirrored studio felt worse about their bodies at the end of the semester. However, the modern and ballet students taught with no mirror felt better about their bodies. This tends to suggest that the negative effects of the mirror on a dancers’ body image can transcend styles, at least between modern and ballet. Overall, research to date indicates that the effect of mirrors on dancers’ body image may be dependent on varying factors such as performance skill level, comparing oneself to others, and level of material taught. The relationship between these individual factors is complex and unique for each student.

THE DANCER IN THE MIRROR

Most students, especially those at the beginning levels, welcome the opportunity to view themselves in the mirror during dance class. In fact, many feel the mirror is an essential tool in a serious dance class; this is especially true in ballet. However, research 4 shows that in dance classes where a mirror is not present only about half of the students miss it, and some actually feel relieved not to have to address the potent and complex relationship between their self-perception and the reflection of their bodies they see in the mirror.

This conflict between what a dancer sees in the mirror and their bodily felt sensations while moving is acknowledged in the dance literature. Both Kimmerle and Côté –Laurence¹⁶ and Gay Cheney⁵ make reference to the scenario in the dance classroom where students become overly concerned with looking at the image of themselves dancing in the mirror rather than focusing on the internal kinetic sensations necessary to perform a movement correctly. Shantel Ehrenberg²⁵ conducted a study which explored students' conflicting and contradictory relationships with the mirror. Ehrenberg observed two variables in communication with each other when dancers discussed using a mirror: the kinaesthetic experience of the movement and the visual image in the mirror. She labels the interaction of these variables the 'dancer-mirror feedback loop'. This 'dancer-mirror feedback loop' can become dysfunctional when a dancer corrects herself in the mirror, is able to feel the correction kinaesthetically, but then quickly loses the kinaesthetic sensation and is unable to retain the corrected movement. Frequently, especially with beginning dancers, the visual image is more powerful than felt, proprioceptive experience. As a result, a dancer cannot refine and learn to trust her proprioceptive self, and her growth in technical performance can be impeded. Another way to look at this relationship is to compare the two-dimensional image in the mirror with the three-dimensional body in motion. When using a mirror, dancers struggle to learn to negotiate between these dual perspectives, and this conflict can easily detract from their ability to focus in class. In Ehrenberg's study, for instance, some of the students commented that the mirror caused them to lose "flow" or associated the mirror with a "demand for perfection." Others were intimidated by the mirror, and it provoked negative thoughts about their bodies or their performance. Dance counsellor Julia Buckroyd²⁶ discusses a teenage dance student's emotional level of development. According to Buckroyd, a student who looks in a mirror cannot see an accurate image of herself, or even detach herself from the image to the point that she can use the information constructively.

MOVING FORWARD: FINAL CONSIDERATIONS ON THE MIRROR

One might wonder if education on how to use the mirror in class is the way to avoid the negative impact that mirrors can have on a dancers' body image? A recent study²⁷ was done comparing the body image scores of beginning and advanced-level ballet dancers and the impact of the mirror over the course of a semester. When interviewed, the beginning dancers enthusiastically reported using the mirror in class while the advanced level students talked about the hazards of over dependence on the mirror and reported using the mirror minimally in favor of focusing on the physical sensations of the movement to stimulate their technical growth. Interestingly enough, both groups of students felt worse about their bodies by the end of the semester. It is important to note that the advanced level dancers started and ended with lower body image scores than the beginning dancers. Perhaps this suggests that negative body image can grow with training over time and even using the mirror sparingly in class is not an effective way to avoid the negative impact on a dancers' body image? The mirror may be too powerful a tool to be used effectively at any level of dance training.

Dance educators need to recognize the instructional challenges and less desirable consequences of using the mirror in the classroom. Students develop individual relationships with the mirror, and these relationships directly influence how they feel about themselves in the classroom and how they perform. The image students see of themselves in the mirror and the feedback it provides can frequently overpower the kinaesthetic feedback students feel in their bodies and must learn to interpret to become technically strong and fully expressive dancers. In many situations the mirror can bring about undesirable levels of self-consciousness or self-criticism and even retard technical growth.

As research in the area of mirror impact on body image and performance grows, evidence is mounting on the potency of the mirror and its capacity to harm a dancer's body image beyond the confines of ballet. Dance teachers are encouraged to think more broadly and deeply about their teaching methods, reconsider their use of the mirror in the classroom, and explore alternate methods of achieving what the mirror seemingly offers. Without a mirror in the classroom dancers can fully focus on their proprioceptive learning and the sensation of movement in their bodies. This will ultimately keep them "fully focused" in their bodies which is what is needed most for feeling good about themselves, their bodies, and for optimum technical advancement.

As dance teachers, we need to understand the backgrounds, goals and needs of our student population; be clear about the goals of our classes; and work to develop new strategies in our teaching that support these goals. For example, some strategies are to find ways to emphasize the long-term value of kinaesthetic feedback (proprioception) in our teaching; use more verbal imagery and include other somatic approaches so the mirror is no longer viewed as an essential learning tool in the classroom.

TAKE AWAY POINTS

The biggest stress point for dancers in the studio is the mirror. It can become a "crutch" which inhibits dancers from fully developing their kinaesthetic sensibilities and thus inhibits their full potential and growth as performers.

The heightened self-consciousness that the mirror can create can sometimes cause a dancer to become overly critical of the way she looks. As a result, dance students frequently develop negative feelings about their bodies.

Without a mirror, only about half of students miss it, and some actually feel relieved not to have to address the potent and complex relationship between their self-perception and the reflection of their bodies they see in the mirror.

Educators are encouraged to find alternate strategies to find ways to emphasize the long-term value of kinaesthetic feedback (proprioception) in our teaching; use more verbal imagery and include other somatic approaches so the mirror is no longer viewed as an essential learning tool in the classroom.

REFERENCES & RECOMMENDED READING

1. Pendergrast M. *Mirror/Mirror: A History of the Human Love Affair with Reflection*. New York: Basic Books, 2003.
2. Foster SL. *Dancing Bodies*. In: Desmond JC (ed.) *Meaning in Motion*. Durham, NC: Duke University Press, 1997.

3. Wulff H. *Ballet Across Borders*. New York: Oxford International Publishers, 2001.
4. Radell SA, Adame DD, Cole SP, Blumenkehl NJ. The impact of mirrors on body image and performance in high and low performing female ballet students. *J Dance Med Sci*. 2011;15(3):108-115.
5. Cheney, G. *Basic Concepts in Modern Dance*. Princeton, NJ: Princeton Book Company, 1989.
6. Nagrin D. *Dance and the Specific Image*. Pittsburgh, PA: University of Pittsburgh Press, 1994.
7. Green J. Somatic authority and the myth of the ideal body in dance education. *Dance Res J*. 1999;31(2):80-100.
8. Radell SA, Adame DD, Cole SP. Effect of teaching with mirrors on body image and locus of control in women college ballet dancers. *Percept Mot Skills*. 2002;95:1239-47.
9. Radell SA, Adame DD, Cole SP. The effect of teaching with mirrors on ballet dance performance. *Percept Mot Skills*. 2003;97:960-4.
10. Radell SA, Adame DD, Cole SP. The impact of mirrors on body image and classroom performance in female college ballet dancers. *J Dance Med Sci*. 2004;8(2):47-52.
11. Foster R. *Ballet Pedagogy*. Gainesville, FL: University Press of Florida, 2010.
12. Oliver W. Body Image in the Dance Class. *J of Phys Educ, Recrea & Dance*. 2008;79, (5):18-41.
13. Batson G. Proprioception. Resource Paper, International Association for Dance Medicine & Science, 2008
14. Montero B. Proprioception as an aesthetic sense. *J Aesthetics and Art Criticism*. 2006;64(2); 231-242.
15. Noll-Hammond, S. *Ballet Basics*. New York: McGraw-Hill, 2004.
16. Kimmerle M, Côté-Laurence P. *Teaching Dance Skills*. Andover, New Jersey: J. Michael Ryan Publishing, 2003.
17. Warren, G. *Classical Ballet Technique*. Tampa: University Press of Florida, 1989.
18. Dearborn K, Ross R. Dance learning and the mirror: Comparison study of dance phrase learning with and without the mirror. *J Dance Ed*. 2006: 6(4):109-115.
19. Dearborn K, Harring K, Young C, O'Rourke E. Mirror and phrase difficulty influence dancer attention and body satisfaction. *J Dance Educ*. 2006;6(4):116-23.
20. Grogan S. *Body Image: Understanding Body Dissatisfaction in Men, Women and Children*. New York: Routledge, 2007.

21. Radell SA, Keneman ML, Adame DD, Cole SP. My body and its reflection: a case study of eight dance students and the mirror in the ballet classroom. *Res Dance Educ.* 2014;15(2):151-78.
22. Duval S, Wicklund RA. *A Theory of Objective Self-Awareness.* New York: Academic Press, 1972.
23. Reel JJ, SooHoo S, Jamieson KM, Gill DL. Femininity to the extreme: Body image concerns among college female dancers. *Women Sport Phys Activ J.* 2005;14(1):39-51.
24. Radell SA, Mandradjieff MP, Adame DD, Cole SP, (2018). Impact of mirrors on body image in beginning modern and ballet students, presented at International Association of Dance Medicine & Science conference, Helsinki, Finland, 2018.
25. Ehrenberg S. Reflections on reflections: mirror use in a university dance training environment. *Thea, Dance and Perfor Training.* 2010;1(2):172-184.
26. Buckroyd J. *The Student Dancer.* London: Dance Books Ltd., 2000.
27. Radell SA, Keneman ML, Mandradjieff MP, Adame DD, Cole SP, Comparison study of body image satisfaction levels between beginning and advanced-level female ballet students, *J Dance Med Sci.* 2017;21(4):135-143.