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Too busy to start cross-training?

It can feel like dance keeps you active enough, but to avoid injury and keep up with current requirements for contemporary choreography, you really need to find time for strength training.

by José Argueta

We've all read an article at some point telling us about the importance of cross training or have had a teacher tell us that we need to supplement our practice with some form of exercise. But do we all do it? No. Should we? I'm going to say a definitive yes. I know what you might be thinking: You want me to add another thing to my schedule? And you wouldn't be the first one to have this thought.

Dancers are already extremely busy. In fact, a study showed that lack of time was the number one barrier listed by dancers when it comes to cross training (Long, 2021). But there are so many positives to cross training, such as injury prevention, increased upper and lower body strength, higher jumps, and it can even improve your mental health by reducing the risk of depression and anxiety, improving your sleep, cognitive function, and your overall happiness (Oral et al, 2024). The best thing is that you can start with short workouts, you don't need to commit hours in your day to get started or go to an expensive gym. It can be done at home, at the park, or anywhere.

To make cross training work, I argue, it has to become a habit, just like anything else. We often shift our schedules around, having to fit in different courses and rehearsal times each quarter or semester, so why not fit in new exercises and cross training? As a Certified Personal Trainer and a Pilates instructor, I've found that lack of time has always been the number one excuse among clients. It takes a lot of discipline to commit to an exercise regime, but the benefits you get from committing to one is worth the work. Take it from someone who has gone through this! Sometimes, it just takes some planning, like making sure you have your gym clothes packed in your car or in your backpack or setting a reminder on your phone that it's time to go.

For dancers, another excuse might be that strength training might build bulky muscles that interfere with what a dancer should look like. Maybe in the past, it was thought that muscles should somehow be invisible, but times have changed. Think of dancers like Carlos Acosta, the director of the Birmingham Royal Ballet, or Misty Copeland, who is absolutely ripped and an accomplished dancer. A recent study found that dancers find value and importance in strength training for both men and women and see the need for it (Farmer & Brouner, 2021). Although the dancers feel this way, there may be some teachers who do not, the study results suggest. Some may still hold to older views of what a "dance aesthetic" should be.

My argument is that dancers should look the way they want to look, and I believe that hiding muscles should never be a priority. Dance is a highly physical art form, and muscles will develop as a response to that. Keep in mind different styles of dance value different body types, but even in the conservative ballet world, the "dance aesthetic" is changing as the demand for inclusivity increases. It's time to retire and throw away this idea of the ideal body, and instead concentrate on making sure your body is capable of the physical feats you would like to accomplish. So, what exercise regime is right for dancers?

In a study where dancers took part in a neuromuscular training program, it was found that most of them lacked upper body strength (Long et al, 2021). It's hard to ask someone to partner or lift another person if they never once held a weight over their head, and it can be dangerous as well. The study also demonstrated that lower body strength was not the best, although the participant's cardiovascular endurance was high. Single leg dynamic stability was shown to be a particular challenge, and so the dancers in the study enjoyed and appreciated exercises that challenged them to work on that. Also, consider the current demands of the

dance world. How often are you doing an inversion in your modern or contemporary class? Partnering is no longer, or should no longer, be gendered, so anyone can be asked to lift someone or share weight with another. Are you doing more floor work in your classes and having to support your weight in the low space with either your arms or a deeper plié? This is where strength training becomes a must.

So, what are the right exercises to improve dynamic stability, and upper and lower body strength? For leg strength, plyometric training has been found to increase overall lower body strength. Plyometric exercises can be anything that involves jumping or explosive movement (Ngo et al, 2024). Some examples include box jumps, jump rope, squat jumps, and even single leg jumps/hops. Many injuries in dance happen when landing on a single leg, so training in a way that prepares our bodies in more settings than just the dance studio will better equip us to avoid injury. Not only do plyometric jumps improve lower body strength, they've also been found to increase vertical jump height, something I argue could close the gap of what's expected from men and women, particularly in ballet where men are given slower variations to encourage high jumps. I also argue it could give dancers equal opportunities to display strength in their performance (Girald et al, 2015). Plyometric exercises mirror a lot of what we do in dance, but the mechanics are a little different.

As a bonus, the explosive nature of plyometric exercises helps to increase your overall stamina, something I discovered when I first started doing them a couple of years ago. It makes a big difference when you do a long combination and notice others around you are winded, but you are not. The same study also found that plyometric jumps did not result in the legs getting significantly bigger, which might be good news to some dancers, depending on your overall goal.

When it comes to increasing upper body strength, there are many routes you can go. Because dancers are increasingly asked to bear weight on their arms, lift partners overhead, or counter-balance weight with someone else, you can start with exercises that involve pushing, pressing, and pulling, which build muscle to do just that. To build upper body strength, use progressive loading of resistance, meaning you gradually increase the amount of weight you lift, starting with a recommended 5 sets of 8 repetitions (Koutedakis, 1966). Another training suggestion is 3 sets of 10-12 reps for multi-joint exercises (such as squats, bench press, lunges, shoulder press, etc.) and 2 sets of 12-15 reps for single-joint exercises (such as bicep curls, seated leg curls, cable triceps push downs, etc.), and abdominal exercises (Sanders et al, 2020).

Still nervous about your form when starting these exercises? Then I would also suggest starting with stable, seated machines. These machines will not challenge your balance so much, but they can help set a foundation. Once, this is mastered, then move on to cable machines and lastly to free weights. If you don't have access to a gym, then grab a chair at home and start with lifting some full water bottles. You can progress with strength training the say way that we progress in a dance class lifting off from two legs to one leg and then we jump.

To recap, cross training is often discussed as a something we need in dance, and at the same some dancers are advised to not compromise the "dance aesthetic," but I argue that we should not be concerned with this idea of the "dance aesthetic." Build muscle if you want—you'll need it. Like anything else, you must find balance, a balance between keeping your mobility while building strength and muscle. Remember, the goal is to supplement what you are already doing in the studio with exercises that can enhance your practice. Think deeper into what muscles you work when you dance, and then find the exercises that complement that.

Does cross training take time and effort? Sure, but don't forget what you get in return, including the positive effects on mental health. Wellness isn't just physical, it's both the mind and the body, so why not tackle both at the same time? Make time for some cross training and chances are you will end up falling in love with the process. I know I have!

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References

Farmer, C, Brouner J. (2021). Perceptions of Strength Training in Dance. Journal of Dance Medicine & Science. 25(3):160-168. doi:10.12678/1089-313X.091521a

Girard, J., Koenig, K., & Village, D. (2015). The effect of strength and plyometric training on functional dance performance in elite ballet and modern dancers. Physical Therapy Reviews, 20(4), 233–240. https://doi.org/10.1179/1743288X15Y.0000000017

Koutedakis, Y., Cross, V., & Sharp, N. C. C. (1996). The effects of strength training in male ballet dancers. Impulse, 4(3), 210-219.

Long, K. L., Milidonis, M. K., Wildermuth, V. L., Kruse, A. N., & Parham, U. T. (2021). The impact of dance-specific neuromuscular conditioning and injury prevention training on motor control, stability, balance, function and injury in professional ballet dancers: A mixed-methods quasi-experimental study. International Journal of Sports Physical Therapy, 16(2), 404–417. https://doi.org/10.26603/001c.21150

Ngo, J.K., Lu, J., Cloak, R., Wong, D.P., Devonport, T. and Wyon, M.A. (2024), Strength and conditioning in dance: A systematic review and meta-analysis. European Journal of Sport Science. https://doi.org/10.1002/ejsc.12111

Oral, O., Rezaee, Z., Nomikos, G. N., Thapa, P., & Enser, M. (2024). A comprehensive review on the effect of exercise on healthy life in the improvement of quality of life. Journal of Scientific and Technical Research. 56(2). doi: 10.26717/BJSTR.2024.56.008840

Sanders, D.J., Cardaci, T.D., McFadden, B.A., Walker, A.J., Bozzini, B.N., Cintineo, H.P., & Arent, S.M. (2020). The effects of an 8-week resistance training intervention on muscular strength, power, and body composition in collegiate female dancers. Comparative Exercise Physiology, 16(4), 277-284. https://doi.org/10.3920/CEP190074