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## Dancing toward a Better Life: How Dance Enhances an Understanding of Cura Personalis

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## DANCING TOWARD A BETTER LIFE: HOW DANCE ENHANCES AN UNDERSTANDING OF CURA PERSONALIS

A thesis submitted to
Regis College
The Honors Program
in partial fulfillment of the requirements
for Graduation with Honors

by

**Emma Shewmaker** 

May 2015

## Thesis written by Emma Shewmaker

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## **Falling in Love**

As I parked my car on the corner of 22<sup>nd</sup> and California in downtown Denver one crisp, Sunday night in March of 2012, I could hear the music blaring from the building across the street. My excitement blossomed as I opened the door to the Mercury Café and ascended the steep staircase. I could feel the bass drum vibrate in my chest and the energy buzzing in the air. Red and white Christmas lights hung from the ceiling, tables lined the perimeter of the room, and dancers gracefully twirled around in the middle. Little did I know, I was about to fall in love.

My first time dancing at the Mercury Café—lovingly referred to as the Merc—marked the beginning of a transformative experience for me. This dance venue provided me with the opportunity to grow and flourish—and ultimately to become the person that I am today. What started off as simply a fun hobby gradually became a way of life and a part of my identity. When I was in middle school and high school, I had convinced myself that I could not dance. Over the course of my college career, I have become a dancer. Now, if someone asks me about my experience with dance, they cannot get me to stop talking. It has become one of my biggest passions, to the point where it, in part, determined where I studied abroad and eventually became the focal point of my Honors Thesis.

To those who have never danced before, it may seem silly to say that dance changed my life and made me a different person, but it has. Dance provided an enjoyable form of exercise. Coming from someone who refuses to go to the gym or go for a run, this aspect is especially important. It keeps me active, but not miserable. In fact, it is the most enjoyable form of exercise for me. After a long night of dancing, particularly lindy

hop, I could be drenched in sweat, ready to collapse from exhaustion, and no longer able to stand because my feet hurt so badly, but I will still say I had the time of my life. I reach a "dancer's high" that can last anywhere from a couple hours to a day or two. This particular effect may be temporary, but I have experienced more permanent effects as well.

When I first started dancing during my freshman year of college, I was a quiet, easily intimidated, unsociable girl that balked at the mere thought of asking another person to dance. I would stand on the edge of the dance floor, partially hoping someone would ask me to dance, but partially hoping they would not. Now, a little more than two years later, I have reached a confidence level that allows me not only to ask someone to dance, but to do so without fear or hesitation. My gains in confidence have also extended past the dance floor and made their way into my everyday life. I no longer walk with slumped shoulders and head down, but with a sense of self-assurance. While I did not experience a complete personality makeover, I feel more confident in my ability to socialize with others, rather than constantly being the wallflower at a dance event or any other social gathering. This is still an ongoing process, but with each new dance experience, I gain a bit more self-confidence.

In addition to my newfound confidence, dance has provided me with a creative outlet for stress. At the beginning of my freshman year, I did not have any effective ways of handling stress. Now, at the end of a long week, I always know that the best thing I can do is dance. When I walk in the front door of the Merc, I leave my troubles at the door. I allow myself a few hours to think about nothing except how to express myself through movement and how to connect with my dance partners and the music. The dance floor

becomes a sanctuary and a safe haven, free from all of the concerns awaiting me at home. If nothing else, I leave the dance feeling at ease for the night, with a much happier heart than I had on the drive downtown.

If dancing at a Jesuit university has taught me one thing, it is the importance of *cura personalis*, a Latin phrase meaning, "care for the whole person." This core value is ubiquitous in the Society of Jesus, and consequently, it is just as widespread within Jesuit universities. It is not simply a catchphrase, but rather a way of life. It is a central focus in answering the question of how we ought to live, in regards both to others and to ourselves. Dance helps me take care of myself physically, providing me with a form of exercise that I am thrilled to do. It allows me to care for myself emotionally: without fail, it leaves me happier at the end of the night, every single time that I go. It allows me to take care of myself socially: I can better connect with individuals both on and off the dance floor because of dance. It takes care of me mentally: I can give my mind a break from the stress of school, work, and life in general and just dance. Because of all these things, I am literally able to dance my way to a better life.

Reflecting on the immense importance and impact of dance in my own life is what eventually led to the topic of my thesis. I know that dance has been an integral part of the lives of many of the people in the dance communities I have encountered, and I wanted to explore this further. So I began with research on scientific studies of the physical and psychological benefits of dance, specifically in the context of dance/movement therapy. These two areas of research that follow are also accompanied by some of my own research. I wanted to include the experiences of everyday people in the general population, so I turned to members of the local dance community and gave

them a chance to share their stories. Unsurprisingly, the results from the interviews I conducted nicely reflected the findings of the literature on physical and psychological benefits. The literature provided a framework within which the interviews could operate.

## The Body

In evaluating the role that dance plays in living out *cura personalis*, it is necessary to consider the effects it has on the body. Taking care of our bodies is, to a large extent, essential to our existence. This chapter investigates how dance interventions assist with managing a physically healthy lifestyle.

One important part of maintaining physical health is managing a healthy weight. According to the 2014 Healthy Bodies Study, an annual web-based survey regarding physical and mental health distributed to participating college and university students, 56% of women and 20% of men (40% of all students surveyed in college) reported experiencing the "Freshman Fifteen." Similarly, 75% of women and 52% of men (65% of all students) reported a desire to lose weight (HBS, 2014). Approximately two thirds of Americans over the age of 19 are overweight or obese (Reslan & Saules, 2010). Despite health care providers' big push for their clients to engage in more physical activity, only 35% of Americans actually exercise (Alpert, 2010). Many people view exercise as boring, painful, or even torturous. In order to promote a healthy lifestyle, health care providers and exercise trainers need to present these kinds of people with an alternative method of exercise that is simultaneously healthy and perceived as enjoyable.

Dance is one option for an alternative method of exercise that is both healthy and enjoyable. It is an activity that many people find fun and its origins can be traced back

centuries to Greek and Egyptian history as a method of emotional and physical expression (Alpert, 2010). Like other physically rigorous activities, dance requires skills that engage both psychological and physiological elements. There is a wide range of options of dance styles, many of which place a physical demand on dancers. A few styles of dance that do not require a partner include ballet, jazz dance, and modern dance. For the people that would rather participate in partner dance, their options include ballroom dance, such as waltz, tango, and swing, and Latin American dances, such as rumba, salsa, and bachata. All of these dance styles require varying degrees of muscle strength, flexibility, and endurance, making it a good form of exercise. Because of the fun and social nature of dance, it provides an alternative way for people who normally dislike traditional exercise (Alpert, 2010).

Due to the lack of adequate physical activity in adolescents, two studies investigated the effects of dance interventions on levels of physical activity (Maloney et al., 2008; Romero, 2012). One of these studies consisted of a total of ten Latin Active hip hop dance sessions in five weeks (Romero, 2012). The girls showed a statistically significant increase in vigorous physical activity over the course of the study, but the boys did not. Prior to the intervention, the girls engaged in limited amounts of physical activity. The girls also experienced a significant increase in self-efficacy to break-dance (Romero, 2012). Self-efficacy, or the belief that one can successfully complete the activity that he or she intends to do, is important because it is a predictor of weight loss (Byrne, Barry, & Petry, 2012) and increases intrinsic motivation to dance (McAuley, Wraith, & Duncan, 1991). The other study took a different approach and used Dance

Dance Revolution (DDR), an active, dance-based video game, to increase physical activity in children (Maloney et al., 2008). The children in the intervention group also experienced a significant increase in vigorous physical activity from the beginning of the intervention to the end. When other researchers interviewed teenagers and young adults about their experience with dance, they reported that they had developed a greater sense of respect for physical activity (Gardner, Komesaroff, & Fensham, 2008).

While the idea of dance as a sport is up for debate, there is little argument about the physical rigor of dance. Unlike using a stationary bike or walking on a treadmill, many different dance styles engage the entire body in the workout, which results in aerobic fitness and tones the whole body. Continuous movement allows dancers to burn between 200 and 500 calories in a single hour, depending on the number of steps taken during the dance (Alpert, 2011). In addition to increasing weight loss and reducing obesity, recreational dance and in-school dance programs have prevented overweight and obesity in both children and young people (Burkhardt & Brennan, 2012; Lissau, 2007).

While weight loss and increasing physical activity may be the most visibly obvious health benefits of dance, there are several other benefits expressed in the literature that are not as immediately evident to a casual observer. One benefit that was very prominent in the literature is the effect that dance has on balance. Because the elderly are most at risk for falls, the research focuses primarily on dance therapy interventions for older adults. The studies revealed

that participants in the dance groups performed better on balance tests after participating in a dance intervention program (Alpert, et al., 2009; da Silva Borges et al., 2014; Eyigor, Karapolat, Durmaz, Ibisoglu, & Cakir, 2009; Fernández-Argülles, Rodríguez-Mansilla, Antunez, Garrido-Ardila, & Muñoz, 2015; Hackney, Hall, Echt, & Wolf, 2013; Hui, Chui, & Woo, 2009; Keogh, Kilding, Pidgeon, Ashley, & Gillis, 2009; Krampe, 2013). Some of the research also showed a significant decrease in the number of falls that the participants experienced (Bräuninger, 2014; da Silva Borges et al., 2014; Eyigor et al., 2009; Fernández-Argülles et al., 2015; Keogh et al., 2009). This improvement in balance was evident after a single dance lesson (Guzmán-García, Johannsen, & Wing, 2011) and older social dancers have also been found to have better balance than older non-dancers (Verghese, 2006). This improvement in balance has also been demonstrated in children with mild intellectual disabilities (Boswell, 1993), as well as individuals with Parkinson's disease (Batson, Migliarese, Soriano, Burdette, & Laurienti, 2014; Hackney & Earhart, 2010b; McKee & Hackney, 2013) and Multiple Sclerosis (Salgado & de Paula Vasconcelos, 2010). Along the same lines, dance interventions have also shown improvements in gait (Hackney et al., 2013; Fernández-Argülles et al., 2015; Keogh et al., 2009; Verghese, 2006), mobility (Krampe, 2013), and posture (Coubard, Ferrufino, Nonaka, Zelada, Bril, & Dietrich, 2014; Hackney et al., 2013; Zhang, Ishikawa-Takata, Yamazaki, Morita, & Ohta, 2008). All of these results improve walking ability and decrease the number of falls in older adults and other populations at risk of falling.

In addition, dance-based exercise has a positive effect on heart health. In a study investigating the effect of an aerobic dance program on cardiovascular functioning in

adults with intellectual disabilities, participants in the dance group showed significant improvements in cardiovascular fitness and endurance compared to the control group (Cluphf, O'Connor, & Vanin, 2001). Other studies have demonstrated that interventions have decreased resting heart rates and increased cardiopulmonary function (Hui et al., 2009), served as a rehabilitation program for individuals who had recently been hospitalized for a cardiac problem or had undergone coronary artery bypass surgery (Maskarinec et al., 2015), and reduced the risk factors associated with cardiovascular health, including cholesterol and triglyceride (Keogh et al., 2009; Kim, June, & Song, 2003). This research indicates that dance is an effective method to improve multiple areas of overall heart health.

Although these findings demonstrate the various physical benefits that occur as a result of dance interventions, one study noted that the significant effect of dance may not be maintained after the end of the research studies (Cluphf et al., 2001). This is likely due to the fact that the participants did not further engage in a dance program after the conclusion of the study. In order to maintain these benefits, the participants need to continue dancing. One study that focused specifically on adolescent girls and their parents in the UK investigated the factors that would increase both recruitment and retention in a dance program (Jago et al., 2011). Both the girls and their parents noted that support from friends would make the girls more likely to attend. Once they were in the program, the type of dance, the type of music, and the chance to have input regarding the class material would determine whether or not they stayed in the program. The parents stressed the importance of goal setting, the level of enjoyment, and having a

reliable, understanding dance teacher. These factors are all crucial to consider in implementing a successful dance intervention to increase the physical activity of adolescents and adults alike.

Assuming dance programs are successful in recruiting and retaining participants, the resulting physical and physiological effects can be very beneficial to participants of a wide range of age and skill level. Though some of the effects take place after a single lesson, others take a longer time to come to fruition, which can serve as a lesson in persistence and perseverance. While the process of living out *cura personalis* is not short, I believe the first step is taking care of the body. The Bible refers to the body as a "[temple] of the Holy Spirit" and instructs us to "honor God with your bodies" (1 Corinthians 6:19-20). Dance allows us to do just that: take care of our bodies and honor God in the process. While taking care of one's weight, heart health, and other physical aspects is an important part of quality of life and well-being, taking care of another part of the body—the mind—is just as important. To continue the theme of *cura personalis*, the next area of research to consider is the psychological perspective.

#### The Mind

Mental health is an area of concern for both individual clients and medical professionals. Therefore, the psychological aspect of dance is an area of interest for professionals in the field of dance/movement therapy (DMT), which is often used in various clinical populations. The American Dance Therapy Association operates on the idea that the body, mind, and spirit are all interconnected. Using this empirically supported idea as its basis, DMT uses psychotherapeutic movement in order to further integrate an individual's emotional, cognitive, physical, and social wellbeing. Body movement is used to express, adapt, and communicate in either an individual or group setting (ADTA, 2014). Even though DMT is a relatively new field of study, there is extensive research on its wide range of applications. From mental illnesses to self-esteem, DMT has proven to be an effective form of therapy for all sorts of patients. Therapists use DMT for people of all ages and races and for individuals with all kinds of developmental, physical, medical, social, and psychological impairments. Both dance therapy and dance-based exercise programs have demonstrated significant improvements in general health and well-being (Alpert, 2011; Bräuninger, 2014; Heiberger et al., 2011; Hui et al., 2009; Lima & Vieira, 2007) as well as quality of life (Bräuninger, 2014; Eyigor et al., 2009; Hackney & Earhart, 2010b; Heiberger et al., 2011; Lima & Vieira, 2007; Neto, Menezes, & Carvalho, 2014). All of these areas of improvement incorporate both the physical and psychological aspects of health.

The range of use for dance/movement therapy is quite vast. Research has shown the significant benefits of prescribing DMT as an intervention and treatment for stress.

The literature indicates that participants in DMT treatment groups experienced a significant decrease in stress levels over the course of a long, less intense dance intervention, as well as improvements in psychological distress, psychopathology, and stress management (Bräuninger, 2012). A shorter, more intense dance intervention program found that stress levels decreased significantly over time and that the treatment groups had lower stress levels than the control groups (Pinniger, Thorsteinsson, Brown, & McKinley, 2013b).

Similarly, in regards to stress and anxiety, researchers have compared dance/movement therapy interventions to other forms of treatment, such as meditation and types of exercise other than dance (Pinniger, Thorsteinsson, Brown, & McKinley, 2013a). All three interventions resulted in significant reductions in stress relative to the control group one month after the intervention concluded. Additionally, dance has a positive effect on general anxiety (Burkhardt & Brennan, 2012; Jeong, Hong, Lee, Park, Kim, & Suh, 2005; Kline, Burgoyne, Staples, Moredock, Snyder, & Ioerger, 1977; Koch, Kunz, Lykou, & Cruz, 2014; Lesté & Rust, 1990; Pinniger et al., 2013a, 2013b; Ritter & Low, 1996), phobic anxiety (Bräuninger, 2012; Jeong et al., 2005), and test anxiety (Erwin-Grabner, Goodill, Hill, & Von Neida, 1999; Koch et al., 2014; Topp, 1989).

In addition to stress and anxiety, another common area of study in dance/movement therapy is the effect of dance on depression. The literature supports the claim that dance and DMT are effective in significantly reducing levels of depression (Bräuninger, 2012; Eyigor et al., 2009; Haboush, Floyd, Caron, LaSota, & Alvarez, 2006; Hackney & Earhart, 2010a; Jeong et al., 2005; Kiepe, Stöckigt, Keil, 2012; Koch et al.,

2014; Murrock & Graor, 2014; Pinniger et al., 2013a, 2013b). Contrary to other findings, this decrease in depression was found to be unique to dance; exercise alone was not enough (Koch, Morlinghaus, & Fuchs, 2007). There is som unique, third variable that dance incorporates—perhaps social and/or physical connection—that makes it a more effective intervention than traditional exercise. The various studies on DMT and depression indicate that perhaps dance provides a more holistic treatment alternative to antidepressant medications, and is a more effective treatment option than exercise alone.

To further investigate the relationship between dance and depression, Jeong and colleagues (Jeong et al., 2005) looked at dance/movement therapy specifically as an alternative treatment modality to prescribed medications. They examined both the emotional responses and the modulation of neurotransmitters in adolescents with mild depression. At the end of a 12-week treatment session, the DMT participants demonstrated significant improvement in negative psychological symptoms, including somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. The control group did not participate in the therapy sessions and did not show these improvements. The reduction of depression and the improvement of other negative symptoms in the DMT group may be due to the change in the participants' neurotransmitter levels. Plasma serotonin concentration increased and dopamine concentration decreased. These changes mimic the results that are commonly seen after a patient has been taking antidepressant medication. This finding indicates that the desired results of antidepressant drugs can possibly be achieved solely through DMT, though more research in this area is necessary.

While dance/movement therapy has shown to be a helpful intervention for people with clinical diagnoses, research has also demonstrated its use in participants that do not necessarily have a psychiatric diagnosis. Two of these non-clinical benefits are increases in self-esteem and body image. Increases in self-esteem as a result of dance or DMT have been found in healthy children and adolescents (Connolly, Quin, & Redding, 2011; Rasmussen & Laumann, 2013), obese adults (Meekums, Vaverniece, Majore-Dusele, & Rasnacs, 2012), cancer patients (Dibbell-Hope, 2000; Ho, 2005), and healthy adults (Ritter & Low, 1996). Improvements in body image were also found for these same populations (Burkhardt & Brennan, 2012; Connolly et al., 2011; Dibbell-Hope, 2000; Fonseca, Thurm, Vecchi, & Gama, 2014; Kiepe et al., 2012; Koch et al., 2014; Meekums et al., 2012; Muller-Pinget, Carrard, Ybarra, & Golay, 2012). In obese women, the improvements in well-being related to self-esteem and body image were found to be independent of weight loss. Even though both the control groups and the DMT group lost weight, only the DMT group experienced these improvements of well-being (Meekums et al., 2012). This indicates that strictly losing weight does not necessarily lead to improvements in self-esteem and body image, but participating in a dance intervention does.

Although dance/movement therapy has a wide range of applications, the research suggests that some of the most common interventions are for stress, anxiety, depression, self-esteem, and body image. Based on my own life experiences, observations, and interactions with other people, I have found that these issues are also some of the most common mental health problems in the everyday life of the general population,

particularly for college students. Even though much of the literature focused on various clinical populations, the combination of the research and my own observations indicate that dance could prove to be beneficial for stressed out, anxious, depressed members of the general population or people with low self-esteem and poor body image. Improving mental health is yet another step on the journey of caring for the whole person. Because *cura personalis* is important for the everyday, average person in addition to clinical populations, the next chapter incorporates interviews with dancers and discusses to an even further extent how dance can benefit the general population.

#### The People

Though my own dance history is a relatively brief one, I have witnessed some of the many benefits of dancing over the past two and a half years. While several of these benefits occurred in my own life, I heard about even more in the stories people told.

When I started researching the impact of dance-movement therapy, I knew I was going to need something more than the evidence I found in the literature. The scientific research is compelling, without a doubt. However, a research article will never quite compare to the power of a story that moves me to tears, like the stories I have heard at the Merc so many times.

The next obvious step for me was to turn to dancers in the local community, to give them a chance to share their stories. I interviewed ten different people: Elizabeth, Drew, Alice, Carter, Chloe, Andy, Felicity, Brent, Danielle, and Bri. Their dance histories were rich and varied, but several common threads among all their stories emerged, weaving in and out and linking them all to one another. Together, they present a beautiful tapestry of the power of dance.

\* \* \*

All of the interviewees' names were changed to maintain their confidentiality.

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When people ask me about my passion for dance, I get a lot of "W" questions:

What exactly is lindy hop/blues dancing? When did you start? Where do you go? Who do
you dance with? These questions are easy. It's the final "W" question—Why do you

dance?—that is more difficult to put into words. To keep my answer short and simple, I tell the story of how I started. When I was in high school, a friend of mine knew how to swing dance. From time to time, we would dance together. He would twirl me around while I fumbled my way through the steps, having no idea what I was doing, but enjoying myself nonetheless. When I came to college, I joined the swing dance club, learned how to dance, discovered the Mercury Café, and found my new favorite hobby. But telling people how I started is not quite the same thing as telling them why I dance.

When I asked my fellow dancers why they dance, I knew it would not be an easy question. Fortunately for me, they were better than I am at answering the "W" questions. For starters, everyone I interviewed has fun when they are dancing. Bri expressed that dancing simply makes her happy. On the nights where she does not particularly feel like dancing, she makes herself go anyway and returns home feeling better. A couple people mentioned the benefits of exercise and the enjoyment that comes from moving their bodies. If an activity is both good for your health and fun to do, it makes sense to continue doing it.

The reason behind the passion and love for dance went a little deeper for several of the interviewees. Andy and Carter, like many others I have met in the Denver dance community, went into the field of engineering. For them, dance provides a creative outlet—a chance to use their brains in ways that differ from their typical use at work. But this is not unique to engineers. Danielle was raised in a rather emotionally closed off family. They tended to discourage the expression of any negative emotions, and instead embraced the idea of "[rubbing] some dirt on it." Growing up as a dancer provided her

with the opportunity to express and process confusion, hurt, joy, or anything else she was feeling. Similarly, Brent and Elizabeth describe dance as a way to express a part of themselves or to find a voice in areas of their daily lives where they are typically unable to express and voice what they are feeling. Elizabeth also spoke about the personal development that dance provides. It gives her the tools to work on areas of her life that could use improvement, to develop relationships, and to communicate more effectively.

While the fun, exercise, and freedom of expression are certainly part of the reason why I dance, the social aspect that came up resonates with me even more. As an introvert, I am very selective when it comes to social gatherings. Dancing is the one situation where I can be surrounded by people, whether friends or strangers, and almost never get drained. Some of my closest friends are people I met or got to know better because of dance. Participants in the dance/movement therapy research also report socializing as an important factor of their dance experience (Bräuninger, 2014; Gardner et al., 2008; Jago et al., 2011; Lima & Vieira, 2007) Dancers often describe themselves as the kind of people who will welcome anyone and everyone into the community, as long as they are respectful. For Carter, this open, supportive environment was a crucial part of maintaining his interest in the beginning of his dance career. After a horrible breakup, he found dancing as a source of comfort and a chance to escape his problems. Entering this dance community gave him the second chance that he needed. He walked into a space where no one knew him, which gave him the freedom to transform himself into the person he wanted to be. The people who were suddenly in his social sphere had created a safe atmosphere for exploration and for healing. He found that dancers were empathetic

people who were interested in helping others thrive in numerous areas of their lives.

Because of this helpful atmosphere, Carter was able to figure out who he wanted to be and to become that man.

Over the past few years, I have discovered that, not only do dancers welcome people into their community, they will even welcome people into their homes. It is not uncommon to see dancers hosting people they have never met who are in town for a dance event or simply driving through. Carter describes it as, "the best couch surfing network in the world." Granted, not every single dance scene is like this, but from my experience, dancers tend to be exceptional at making sure people feel like they belong. During my five-month stay in New Zealand, I quickly found and joined the local swing dance community. Even though I had never set foot in their studio before, the organizers of the dance scene made me feel like a member of their family. Between that scene and the Denver dance scene, my social skills—particularly with strangers—and my confidence in social settings skyrocketed. Over the past two years, I have transformed from a shy girl, anxious at the thought of conversing with others to someone who eagerly approaches a stranger to ask for a dance. I have gained confidence in how I present myself. I walk a little taller, hold my head up a little higher, and feel more secure in who I am. Brent repeatedly expressed the same benefits. Now that he has been dancing for several years, he is considerably more confident in himself as a dancer and as a person in general. The numerous social benefits he and I have both experienced over the past couple of years are all thanks to dance.

As human beings, we are social creatures. The survival of infants depends on care from and contact with other humans, and even introverts like me need to be around other people from time to time. Interacting with other human beings is essential to life. But there is something different about the social setting that the context of a dance scene creates. It provides an appropriate space for human connection in three distinct ways: physically, socially, and personally. The first way—physically—is the most obvious form of connection between two people. Elizabeth spoke about the power of physical touch and how fulfilling human connection can be. Partner dance opens up the door for physical touch, allowing it to be either platonic or romantic, depending on what both partners want. Very few situations grant the freedom to engage in extended physical touch without the expectation of anything happening beyond the given moment. In other words, what happens on the dance floor stays on the dance floor. It provides a safe environment with boundaries and rules on how to be in contact with people. The dance scenes of which I am a part are currently working to create explicit guidelines regarding consent for both dancing and anything more as well as what behavior is appropriate and what is inappropriate. By putting clear and straightforward expectations in place, the organizers create an environment where dancers feel safe and comfortable engaging in physical contact. There have been nights that I have gone to the Mercury Café and had dances with people where the unromantic physical connection was beyond what I had ever expected. It is astounding to me how the slightest movement from one partner can communicate a message to the other partner, resulting in a beautiful, fluid motion. The even more amazing part is that this communication occurs without a single utterance. The

message is conveyed solely through the nonverbal communication and the physical connection between two people.

Another form of connection that partner dance perpetuates is social connection. Several of the people I interviewed expressed this particular form of connection as one of the positive impacts dance has had on their lives. It is a scene that allows as much or as little social interaction as desired and engages introverts and extraverts alike. For Alice, connecting with other women was always a challenge. Making friends with men was relatively easy for her and came more naturally than it did with women. Now, as a dancer, she has found a way to connect with people regardless of their gender. Dance also strengthens personal connection, the ability to connect with one's own body and mind. This connection is the most important of the three forms of connection. It is not uncommon for teenagers and twenty-somethings, especially females, to feel uncomfortable with their own bodies. Often, this discomfort stems from low self-esteem, poor body image, and an inability to express what they are feeling. Fortunately, as we have seen, the literature supports the claim that dance can improve self-esteem and body image (Burkhardt & Brennan, 2012; Connolly et al., 2011; Dibbell-Hope, 2000; Fonseca et al., 2014; Ho, 2005; Kiepe et al., 2012; Koch et al., 2014; Meekums et al., 2012; Muller-Pinget et al., 2012; Rasmussen & Laumann, 2013). Being able to reconnect with oneself through dance has proved invaluable for three of the young women I interviewed.

At 13 years old, Danielle was struggling with some difficult situations. She reached a point in her life where she no longer wanted to live. As a young teenager, she was unable to use words to express what she was feeling, so she used dance instead. One

day in dance class, she broke down crying in the middle of a routine. She had found the emotional outlet necessary to release some of the pressure that had been building up inside her for so long. Her teacher encouraged her to talk with someone about everything going on in her life, and fortunately she did. Expressing her emotions physically through dance eventually allowed her to express them verbally. On more than one occasion, dance provided Danielle with the opportunity and the ability to reconnect with herself and her own emotions, expressing them in a way that she had not been able to do outside of dance. Dance may very well have saved her life.

In addition to Danielle, Bri also discovered the life-changing powers of dance. She first started dancing socially on a regular basis shortly after being diagnosed with anorexia. She wanted to get out of the house, engage in more social activities, and focus on something other than her recent diagnosis. It was quite challenging for her to be in a situation where people are surrounding her and forcing her to think about her body. She felt disconnected from her own body, and she had stopped listening to what she felt it was trying to tell her. Early on in her dance experience, she was too stiff and she struggled with relaxing her body enough to move it in the way that is necessary to dance freely. She did not know how to discover and understand what her body wanted to do. As a young woman struggling with an eating disorder, she was not comfortable with herself, which manifested itself as stiffness and rigidity in her body movement.

In the summer of 2014, Bri's friend invited her to go blues dancing again. She had done it before, but did not love this particular dance style. Blues dancing forced her to figure out the best way for her body to dance and to dance how she wanted, but she

craved the rigid rules of salsa and tango. If she could follow the rules, she did not have to face the challenge of discovering and understanding the wants and needs of her own body. After agreeing to try blues dancing once more, she discovered that it was incredibly fun. Between regular Tuesday Night Blues at the Mercury Café and a particular blues dancing event in the mountains, she found that this scene was a nonjudgmental environment. Not only did the people around her not judge her, but more importantly, she learned to stop judging herself. She discovered that, with blues dancing, "you're not focusing on doing it correctly. You're finding the right way to dance for yourself." This realization allowed Bri to gain back some elements of body awareness she had previously lost when developing the eating disorder and to reconnect with her body once more.

Like Bri and many other young women, Elizabeth also struggled with low selfesteem and body image. She got married young and soon discovered that her husband
was very controlling. She stopped dancing and he restricted her from expressing herself
and having freedom in various areas of her life. She lacked the necessary communication
tools and analytical tools for maintaining a healthy relationship. After seeking to end her
relationship with her husband, Elizabeth found dance as a place of comfort and healing.
She describes dance as a way of helping her find herself: "I was born as a person and I
was born as a dancer when I discovered dance." Since creating her identity as a dancer,
she has continued to grow. Dance provides her with the freedom of self-expression, gives
her a voice that she never had before or during her marriage, and empowers her to
recognize that she has value in many different aspects. Her life has improved

significantly and she feels healthier as a person. Because of dance, she reconnected with herself and to found value and a voice that she never knew she had.

For Elizabeth, dance held the power to heal her after ending a broken and dysfunctional relationship. Similarly, dance allows people to create relationships and to save them before they break. Felicity, like many other dancers, first met her current boyfriend, Eric, through dance. They both attended the same university and met through the school's ballroom dance club. After graduation, they both moved to the same city, but because they were no longer going to the same school, they did not see each other as much. One night, not too long before I interviewed her, Felicity and her boyfriend were having a difficult conversation. They were on the verge of breaking up, so she asked Eric if she could dance with him one last time before they permanently ended the relationship. After they danced, they both realized that breaking up was a "stupid" idea and decided to work through their problems. As engineers, they both get caught up in the logic of a situation, using their brains instead of their hearts, so to speak. However, dance helps them connect emotionally and still express their emotions when words fail them.

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Of all the benefits people have experienced through dance, only a few of them were immediately noticeable. A lot of people report feeling a "dancer's high" after dancing for just a short amount of time. Much like marathon runners will describe a "runner's high," a "dancer's high" is the bliss that stems from the muscle exhaustion, fatigue, and chemicals coursing through the bloodstream. While the effect sets in

relatively quickly, it is only a temporary feeling. The elevated levels of happiness only last for a couple hours, or in some circumstances, for a day or two after dancing at most. This tradeoff, however, goes both ways. Most of the benefits of dance that the interviewees reported became noticeable over the course of a longer period of time, but they also seemed to be the long-lasting effects as well. Learning how to control your body, building confidence, personal growth, improved social interaction, feeling comfortable in your own skin, and figuring out who you are as a person are subtle changes. It is always an ongoing process, and often the outsiders notice the change in their friend before the person realizes the change in himself or herself. However, the benefit of these changes taking so long is that they generally last much longer than the initial, temporary ones. Only a few of the interviewees said that some of the effects were temporary, but every single person I talked to agreed that at least some of the impacts were long-lasting, including the people who hardly ever dance anymore. Dance is so much more than just an activity that people enjoy. It is about making changes and forming habits that eventually transform lives.

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Though my pool of interviewees was limited to only ten people, eight of them have experience teaching dance. Through them, I was able to catch a glimpse of the impact that dance has had on a larger population through their experiences with their students. While I certainly enjoyed hearing their individual stories about the impact of dance, it was even more gratifying to hear them talk about the growth they had seen in their students. Their faces lit up with excitement as they explained how they were "blown

away" by witnessing the "magical" and "amazing" power that dance can have in a person's life. One of the fascinating things I got to see as the researcher was how the growth they observed in their students reflected the growth they had undergone themselves. The themes of confidence, social interaction, emotional expression, figuring out how to move in one's own body, safe physical connection, and many more all reappeared in the anecdotes relayed by the teachers.

Aside from seeing their students experience immense change and growth, all the people who have taught dance expressed their own benefits that came from teaching. As dancers, teaching forced them to learn the dance moves even better in order to efficiently break it down into pieces that the students can easily understand. As persons and professionals, teaching helped them improve in a wide range of areas. Danielle learned how to be explicit and intentional in the words she used with elementary-aged girls. Carter learned how to project with his voice, as well as how to create an entertaining and engaging environment. This skill transferred over to his professional life, in which he does training for his place of work. His experience as a dance instructor has trained him to be entertaining enough to get across the information he is trying to teach, which he now gets to do in his trainings. Additionally, it boosted his self-esteem when one of his own dance instructors (who is also an internationally renowned dancer) called him, saying he had danced with one of Carter's students and that Carter had done an excellent job as a teacher. For Drew, teaching dance requires him to "fill in the gaps of [his] knowledge," and to be more socially expressive and outgoing. It also placed him in a leadership position where people look up to him and he has the chance to change the

dance scene for the better. In teaching fellow students, Felicity learned how to read people and their physical or emotional limitations and how to communicate effectively with people she does not know very well. Andy learned the importance of being a good role model and recognizing what he has to offer to his students. When he first began teaching, he participated in a dance competition in which some of his students were also competing. He did not even come close to placing and his students nearly won. It was a struggle to place lower than his students, but he came to the realization that he still had something to offer his students in the way of connection rather than competition style dancing. Teaching has proven to be a valuable experience for all of these people.

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While I obviously believe in how incredible dance is and the difference that it can make in people's lives, I recognize that not everything about it is flawless. Like any other activity, dance comes with its own set of challenges. The first several dance lessons that any given person attends are usually the most difficult. You have to follow the rhythm of the music, remember the steps you just learned, keep your balance, and focus on a dozen other things at the same time, all while trying not to bump into the people next to you or step on your dance partner. It is stressful and overwhelming from the start, especially when you start thinking that people may be judging you and your movement to some extent. Upon overcoming the initial struggles of learning how to dance, there are numerous other obstacles to overcome.

One of the challenges that several of the young women I interviewed expressed is body image. Upon hitting puberty, Danielle grew into a body type that was incompatible with her dream of becoming a ballerina. Chloe struggled with the costumes required for her routines and being comfortable on stage in minimal clothing. Bri, having been diagnosed with anorexia, still felt uncomfortable in her own body and was obsessed with the perfection that often accompanies eating disorders. For Felicity, Alice, and me, it is less an issue of what our bodies look like and more a struggle with how our bodies feel in movement. I am a bit clumsy, especially when I dance, and Felicity admits to falling from time to time while dancing. Like Bri, after more than two and a half years of dancing, I still have a hard time connecting to my own body. When I try out a new move or stylization, it feels awkward and unnatural until I have practiced it hundreds or thousands of times.

Though many challenges that come with being a dancer are physical, there are other types of obstacles as well. For example, Andy talked about a learning plateau. Early on in the process, most people have to learn a large amount of material in a very short amount of time. The progress in new dancers is often astounding, but after a certain point, most people hit a plateau. The rate of progress and learning that take place starts to decline quickly. Recently, I struggled with this plateau in my swing dancing abilities. For a while, I was stuck in a lindy hop slump. I felt like I was going nowhere in the dance, and it was no longer enjoyable for me. But the beautiful thing about dance is that there are so many different styles, so I focused on the dance styles where I was still improving. It took some time to remind myself that, in the beginning, learning happens so quickly

because that is when I have the most to learn. Over time, I fell back in love with lindy hop, but it took several months to come to terms with my plateau experience.

While a lot of the challenges I've experienced and witnessed are internal, some of the challenges are external. The main problem dancers encounter with regards to non-dancers is not being taken seriously. Alice, as a student majoring in dance, constantly meets people concerned about her life beyond dance. They want to know how she is going to make money as a dancer or what her "real" profession will be, as if being a dancer is completely preposterous. Drew, being a college graduate, faces the same concerns. His parents and other family members skeptically ask him, "Shouldn't you be using your degree?" While making a living off dance is not an easy task, that by no means invalidates its importance.

The other issue that is common in the dance world is that of gender roles.

Traditionally in partner dance, males lead and females follow. Carter told me a story of his experience in the early blues dance scene in Denver. He and a handful of other men in the community had to fight to dance together without it being considered an expression of their sexual orientation or love for their dance partner. He and a good friend of his with whom he really enjoyed dancing used to be "forcibly separated by women on the floor, who demanded that there weren't enough leaders in the room." He was irritated by this restriction, because the women could learn how to lead just as easily as he learned how to follow. Fortunately, that rigidity of traditional gender roles and stereotypes is beginning to dissipate and instructors and event organizers are focusing on being open-minded to different interpretations of gender and gender roles. Many instructors have switched from

saying "guys and girls" to "leads and follows." They structure the lessons so that everyone participates in both roles of leading and following. Outside of the lesson, no one is forced to dance any particular role, and people are more than welcome to settle into their traditional gender roles should they want to do so. However, teaching the lessons this way provides dancers with the opportunity to learn and dance whichever role they prefer and broadens the range of people with whom they can dance as well. I often judge the openness and approachability of a dance scene based on the presence of women leading and men following—or the lack thereof. Fortunately, all of the scenes in which I have spent more than one day are open in terms of bending—if not breaking—the traditional gender roles.

Another challenge that stems from within the dance community is the combination of faith and dance. Elizabeth often struggles with figuring out how to reconcile her identity as a Christian with her identity as a blues dancer. The number of Christian blues dancers in Denver is limited, so she and I do not have a role model to look up to in this regard. At times, it appears that these two identities are, "at odds with each other... and then there are these times when they just beautifully align." Some of the values that accompany many blues scenes tend to clash with those of Christianity, making it difficult to support and live in both areas simultaneously. Elizabeth commented on how she found herself, "using lewd language or making crude jokes more easily among dancers than Christians." More importantly, when she was going through her divorce, she expected to find a support system in her church. Unfortunately, they did not meet that expectation, but dancers became her support network instead. For me, the

struggle is a bit different. My Christian views on matters like sex and romantic relationships differ drastically from that of the dance world. Additionally, when I am struggling with stressful or painful life circumstances, I often turn to dance instead of my faith to work through my issues. It is quite a challenge to figure out which areas of my life I am willing to compromise to reconcile my two identities and in which areas I need to stand my ground.

While all of these challenges are still prevalent in my dance life and the dance lives of nearly every dancer I know, there is hope. With each solved problem, another problem arises, but as we have seen, continuing to dance is a crucial part of resolving and overcoming these challenges. In the words of Danielle, "dance gave me a problem, but dance helped me get my way out of it too." So we all continue to dance, encountering obstacle after obstacle, but surmounting each of them and growing stronger because of it.

## So What?

Throughout the whole process of writing my thesis, the question of "So what?" constantly came up. Just because I care about how dance has significantly improved my life and the lives of people around me that does not automatically mean that everyone else should care too. So what is the purpose of writing this thesis (aside from the fact that it has the potential to look good to graduate schools and future employers)? My answer, like my thesis, kept coming back to *cura personalis*.

Before I began interviewing the local dancers, I was under the false impression that I was the primary beneficiary of the interviews. These people gave up their time to help me with my research, and as the informed consent form stated, "Participants will be volunteers and will not receive compensation." So it made sense to think that I was the only one who would be getting something substantial out of the interview. I discovered very early on, after the first interview in fact, that this was not true. After I had finished all of my intended questions, Bri and I were discussing the interview as well as my hopes and plans for my thesis. She thanked me for the opportunity to participate and shared some of her own thoughts about the experience. She expressed how helpful it was for her to sit down and think concretely about how dance has impacted her own life. Before the interview, she had a vague idea of the impact but had not fully fleshed it out. Because I spent the time asking her these questions, she was able to come to a conclusion about the

answers both for me and for herself. This conversation with Bri helped me realize that these interviews were not just for me anymore. They may have been intended for me at

the start, but by the end of the whole process, I think they were for the people participating just as much.

Like most of the other interviewees, Carter had previously answered these questions for various purposes. For that reason, he did not experience the same benefit from the interview as Bri. However, he experienced something that, for him, was even more beneficial than simply pondering the impact that dance has had on his life. He told me a story about a friend of his who decided that he was not going to go out dancing very often upon beginning a relationship with the woman who is now his wife. When Carter asked why, the friend replied, "'Well, you know, I'm quite content to only dance with her in the kitchen. I don't need to drive all the way across town and pay five dollars to listen to loud music and be interrupted by other people. That doesn't sound like fun." At the time, Carter just blew it off, because he did not fully understand what his friend was trying to explain. Now, things have changed. He has met and entered into a relationship with someone who is making him question whether or not he wants to continue dancing, for exactly the same reasons as his friend. He said, "So after this most recent [relationship], dance had had a very big question mark over the top of it for a long time, because it had taken on a new meaning." However, he noted that participating in the interview and having to explain to someone else why he started and continued dancing helped convince him that his love for dance is not gone.

Hearing these stories from Bri and Carter gave me an even stronger motivation, desire, and purpose for these interviews. Even if my thesis were to do nothing but sit on a shelf and gather dust after I had finished writing it, at least I know that I helped care for

these people in one way or another. For a piece of writing with a focus on *cura personalis*, I would say that caring for other people in the process of researching and writing is more important than anything I could actually put on paper. The words on these pages certainly have the potential to impact the life of a reader, but the work I did in the interviews can already provide evidence of the impact they had.

While the interviewees experienced benefits that I did not expect to witness, I also reaped some unexpected benefits. One surprising but important realization I came to during my writing process was that dance is not for everyone. As much as I would love for all of my friends and family members to love dance as much as I do, I recognize that this is not only unrealistic, but also inconsiderate. I can encourage people to dance and share all of my research on the benefits of dance for the rest of my days, but I cannot force them to enjoy it. Doing so would be a blatant rejection of their own wants and needs as well as a rejection of the message of *cura personalis*. At that point, my thesis would be moot. So I continue to consider what the people around me need and I care for them the best way I know how, whether that involves dance or not. For the people who do not find dance beneficial, the important message is to find something—a sport or some other activity—that cares for their well-being in more ways than one.

Another beautiful and valuable benefit I experienced was how much the stories that these people shared moved me. I have known most of the interviewees for over a year, and yet this was the first time I got to truly see some of their hearts. Their honesty and vulnerability in sharing their stories amazed me. It gave me a renewed perspective on how I ought to view and treat the people around me. The whole interview experience

reminded me to be sensitive to the needs of others, to extend them grace whether I think they deserve it or not, and to withhold judgment, especially when I do not know the entire story. Not only does this contribute to the care for the whole person of those around me, but it also equips me to be a woman for others.

An even more important impact was what I learned about myself throughout the whole process. As a result of all the research I did, I gained a greater appreciation and a deeper understanding of my love for dance. Having empirically supported claims of the positive impacts of dance allows me to better explain my answer to the "W" question—why do you dance?—that I struggled with so much before I wrote my thesis. Initially, I loved how fun it was and the pure pleasure I got from doing it. Now, I also love it for the things it does for my body and mind that I may not have realized at first. On top of that, writing this thesis enhanced and deepened my understanding of *cura personalis* in regards to my own well-being. To some extent, I have had an understanding of the importance of self-care for several years. Now I recognize just how dance can fulfill many of the aspects of caring for my whole self. Now, I am able to use this knowledge to my advantage and get the most out of my dance experience. I can also use this information to care for others through dance. Caring for and serving others is the most important thing we can do in life, and dance has allowed me to do just that.

## References

- ADTA. (2014). About dance/movement therapy. Retrieved April 15, 2015.
- Alpert, P. T. (2010). Alternative exercise may be attractive to more individuals. *Home Health Care Management & Practice*, 22(4), 301-304. doi:10.1177/1084822309357006
- Alpert, P. T. (2011). The health benefits of dance. *Home Health Care Management & Practice*, 23(2), 155-157. doi:10.1177/1084822310384689
- Alpert, P. T., Miller, S. K., Wallmann, H., Havey, R., Cross, C., Chevalia, T., & ...

  Kodandapari, K. (2009). The effect of modified jazz dance on balance, cognition, and mood in older adults. *Journal of the American Academy of Nurse*Practitioners, 21(2), 108-115. doi:10.1111/j.1745-7599.2008.00392.x
- Batson, G., Migliarese, S. J., Soriano, C., Burdette, J. H., & Laurienti, P. J. (2014).
  Effects of improvisational dance on balance in Parkinson's disease: A two-phase
  fMRI case study. *Physical & Occupational Therapy in Geriatrics*, 32(3), 188-197.
  doi:10.3109/02703181.2014.927946
- Boswell, B. (1993). Effects of movement sequences and creative dance on balance of children with mental retardation. *Perceptual and Motor Skills*, 77(3, Pt 2), 1290. doi:10.2466/pms.1993.77.3f.1290

- Bräuninger, I. (2012). Dance movement therapy group intervention in stress treatment: A randomized controlled trial (RCT). *The Arts in Psychotherapy*, *39*, 443-450. doi:10.1016/j.aip.2012.07.002
- Bräuninger, I. (2014). Dance movement therapy with the elderly: An international Internet-based survey undertaken with practitioners. *Body, Movement and Dance in Psychotherapy*, 9(3), 138-153. doi:10.1080/17432979.2014.914977
- Burkhardt, J., & Brennan, C. (2012). The effects of recreational dance interventions on the health and well-being of children and young people: A systematic review. *Arts & Health: An International Journal of Research, Policy and Practice*, *4*(2), 148-161. doi:10.1080/17533015.2012.665810
- Byrne, S., Barry, D., & Petry, N. M. (2012). Predictors of weight loss success: Exercise vs. dietary self-efficacy and treatment attendance. *Appetite*, *58*(2), 695-698. doi:10.1016/j.appet.2012.01.005
- Cluphf, D., O'Connor, J., & Vanin, S. (2001). Effects of aerobic dance on the cardiovascular endurance of adults with intellectual disabilities. *Adapted Physical Activity Quarterly*, 18(1), 60-71.
- Connolly, M. K., Quin, E., & Redding, E. (2011). Dance 4 your life: Exploring the health and well-being implications of a contemporary dance intervention for female

adolescents. *Research in Dance Education*, *12*, 53-66. doi:10.1080/14647893.2011.561306

- Coubard, O. A., Ferrufino, L., Nonaka, T., Zelada, O., Bril, B., & Dietrich, G. (2014).

  One month of contemporary dance modulates fractal posture in aging. *Frontiers in Aging Neuroscience*, 6.
- da Silva Borges, E. G., de Souza Vale, R. G., Cader, S. A., Leal, S., Miguel, F.,

  Pernambuco, C. S., & Dantas, E. H. (2014). Postural balance and falls in elderly
  nursing home residents enrolled in a ballroom dancing program. *Archives of Gerontology and Geriatrics*, 59(2), 312-316. doi:10.1016/j.archger.2014.03.013
- Dibbell-Hope, S. (2000). The use of dance/movement therapy in psychological adaptation to breast cancer. *The Arts in Psychotherapy*, 27(1), 51-68. doi:10.1016/S0197-4556(99)00032-5
- Erwin-Grabner, T., Goodill, S. W., Hill, E. S., & Von Neida, K. (1999). Effectiveness of dance/movement therapy on reducing test anxiety. *American Journal of Dance Therapy*, 21(1), 19-34. doi:10.1023/A:1022882327573
- Eyigor, S., Karapolat, H., Durmaz, B., Ibisoglu, U., & Cakir, S. (2009). A randomized controlled trial of Turkish folklore dance on the physical performance, balance, depression and quality of life in older women. *Archives of Gerontology and Geriatrics*, 48(1), 84-88. doi:10.1016/j.archger.2007.10.008

- Fernández-Argüelles, E. L., Rodríguez-Mansilla, J., Antunez, L. E., Garrido-Ardila, E. M., & Muñoz, R. P. (2015). Effects of dancing on the risk of falling related factors of healthy older adults: A systematic review. *Archives of Gerontology and Geriatrics*, 60(1), 1-8. doi:10.1016/j.archger.2014.10.003
- Fonseca, C. C., Thurm, B. E., Vecchi, R. L., & Gama, E. F. (2014). Ballroom dance and body size perception. *Perceptual and Motor Skills*, 119(2), 495-503. doi:10.2466/25.PMS.119c26z1
- Gardner, S. M., Komesaroff, P., & Fensham, R. (2008). Dancing beyond exercise: Young people's experiences in dance classes. *Journal of Youth Studies*, *11*(6), 701-709. doi:10.1080/13676260802393294
- Guzmán-García, A., Johannsen, L., & Wing, A. M. (2011). Dance exercise for older adults: A pilot study investigating standing balance following a single lesson of danzón. *American Journal of Dance Therapy*, *33*(2), 148-156. doi:10.1007/s10465-011-9114-6
- Haboush, A., Floyd, M., Caron, J., LaSota, M., & Alvarez, K. (2006). Ballroom dance lessons for geriatric depression: An exploratory study. *The Arts in Psychotherapy*, *33*(2), 89-97. doi:10.1016/j.aip.2005.10.001
- Hackney, M. E., & Earhart, G. M. (2010a). Social partnered dance for people with serious and persistent mental illness: A pilot study. *Journal of Nervous and Mental Disease*, 198(1), 76-78. doi:10.1097/NMD.0b013e3181c81f7c

- Hackney, M. E., & Earhart, G. M. (2010b). Effects of dance on balance and gait in severe Parkinson disease: A case study. *Disability and Rehabilitation: An International, Multidisciplinary Journal*, 32(8), 679-684. doi:10.3109/09638280903247905
- Hackney, M. E., Hall, C. D., Echt, K. V., & Wolf, S. L. (2013). Dancing for balance: Feasibility and efficacy in oldest-old adults with visual impairment. *Nursing Research*, 62(2), 138-143. doi:10.1097/NNR.0b013e318283f68e
- HBS. (2014). Data for Researchers. Retrieved April 18, 2015, from http://healthymindsnetwork.org/research/data-for-researchers
- Heiberger, L., Maurer, C., Amtage, F., Mendez-Balbuena, I., Schulte-Mönting, J., Hepp-Reymond, M., & Kristeva, R. (2011). Impact of a weekly dance class on the functional mobility and on the quality of life of individuals with Parkinson's disease. *Frontiers in Aging Neuroscience*, 3doi:10.3389/fnagi.2011.00014
- Ho, R. H. (2005). Effects of dance movement therapy on Chinese cancer patients: A pilot study in Hong Kong. *The Arts in Psychotherapy*, 32(5), 337-345. doi:10.1016/j.aip.2005.04.005
- Hui, E., Chui, B. T., & Woo, J. (2009). Effects of dance on physical and psychological well-being in older persons. *Archives of Gerontology and Geriatrics*, 49(1), e45-e50. doi:10.1016/j.archger.2008.08.006

- Jago, R., Davis, L., McNeill, J., Sebire, S. J., Haase, A., Powell, J., & Cooper, A. R. (2011). Adolescent girls' and parents' views on recruiting and retaining girls into an after-school dance intervention: Implications for extra-curricular physical activity provision. *The International Journal of Behavioral Nutrition and Physical Activity*, 8doi:10.1186/1479-5868-8-91
- Jeong, Y., Hong, S., Lee, M. S., Park, M., Kim, Y., & Suh, C. (2005). Dance movement therapy improves emotional responses and modulates neurohormones in adolescents with mild depression. *International Journal of Neuroscience*, 115, 1711-1720. doi:10.1080/00207450590958574
- Keogh, J. L., Kilding, A., Pidgeon, P., Ashley, L., & Gillis, D. (2009). Physical benefits of dancing for healthy older adults: a review. *Journal of Aging and Physical Activity*, 17(4), 479-500.
- Kiepe, M., Stöckigt, B., & Keil, T. (2012). Effects of dance therapy and ballroom dances on physical and mental illnesses: A systematic review. *The Arts in Psychotherapy*, *39*(5), 404-411. doi:10.1016/j.aip.2012.06.001
- Kim, C., June, K., & Song, R. (2003). Effects of a health-promotion program on cardiovascular risk factors, health behaviors, and life satisfaction in institutionalized elderly women. *International Journal of Nursing Studies*, 40(4), 375-381. doi:10.1016/S0020-7489(02)00102-5

- Kline, F., Burgoyne, R. W., Staples, F., Moredock, P., Snyder, V., & Ioerger, M. (1977).

  A report on the use of movement therapy for chronic, severely disabled outpatients. *Art Psychotherapy*, *4*(3-4), 181-183. doi:10.1016/0090-9092(77)90034-5
- Koch, S., Kunz, T., Lykou, S., & Cruz, R. (2014). Effects of dance movement therapy and dance on health-related psychological outcomes: A meta-analysis. *The Arts in Psychotherapy*, 41(1), 46-64. doi:10.1016/j.aip.2013.10.004
- Koch, S. C., Morlinghaus, K., & Fuchs, T. (2007). The joy dance: Specific effects of a single dance intervention on psychiatric patients with depression. *The Arts in Psychotherapy*, 34, 340-349. doi:10.1016/j.aip.2007.07.001
- Krampe, J. (2013). Exploring the effects of dance-based therapy on balance and mobility in older adults. *Western Journal of Nursing Research*, *35*(1), 39-56. doi:10.1177/0193945911423266
- Lesté, A., & Rust, J. (1990). Effects of dance on anxiety. *American Journal of Dance Therapy*, 12(1), 19-25. doi:10.1007/BF00844312
- Lima, M. S., & Vieira, A. P. (2007). Ballroom dance as therapy for the elderly in Brazil. *American Journal of Dance Therapy*, 29(2), 129-142. doi:10.1007/s10465-007-9040-9

- Lissau, I. (2007). Prevention of overweight in the school arena. *Acta Paediatrica*, 96(Suppl454), 12-18. doi:10.1111/j.1651-2227.2007.00164.x
- Maloney, A. E., Bethea, T. C., Kelsey, K. S., Marks, J. T., Paez, S., Rosenberg, A. M., & ... Sikich, L. (2008). A pilot of a video game (DDR) to promote physical activity and decrease sedentary screen time. *Obesity*, 16(9), 2074-2080.
  doi:10.1038/oby.2008.295
- McAuley, E., Wraith, S., & Duncan, T. E. (1991). Self-efficacy, perceptions of success, and intrinsic motivation for exercise. *Journal of Applied Social*\*Psychology, 21(2), 139-155. doi:10.1111/j.1559-1816.1991.tb00493.x
- McKee, K. E., & Hackney, M. E. (2013). The effects of adapted tango on spatial cognition and disease severity in Parkinson's disease. *Journal of Motor Behavior*, 45(6), 519-529. doi:10.1080/00222895.2013.834288
- Meekums, B., Vaverniece, I., Majore-Dusele, I., & Rasnacs, O. (2012). Dance movement therapy for obese women with emotional eating: A controlled pilot study. *The Arts in Psychotherapy*, *39*, 126-133. doi:10.1016/j.aip.2012.02.004
- Muller-Pinget, S., Carrard, I., Ybarra, J., & Golay, A. (2012). Dance therapy improves self-body image among obese patients. *Patient Education and Counseling*, 89, 525-528. doi:10.1016/j.pec.2012.07.008

- Murrock, C. J., & Graor, C. H. (2014). Effects of dance on depression, physical function, and disability in underserved adults. *Journal of Aging And Physical Activity*, 22(3), 380-385. doi:10.1123/JAPA.2013-0003
- Neto, M. G., Menezes, M. A., & Carvalho, V. O. (2014). Dance therapy in patients with chronic heart failure: A systematic review and a meta-analysis. *Clinical Rehabilitation*, 28(12), 1172-1179. doi:10.1177/0269215514534089
- Pinniger, R., Thorsteinsson, E. B., Brown, R. F., & McKinley, P. (2013a). Tango dance can reduce distress and insomnia in people with self-referred affective symptoms.

  \*American Journal of Dance Therapy, 35, 60-77. doi:10.1007/s10465-012-9141-y
- Pinniger, R., Thorsteinsson, E. B., Brown, R. F., & McKinley, P. (2013b). Intensive tango dance program for people with self-referred affective symptoms. *Music and Medicine*, *5*, 15-22. doi:10.1177/1943862112470143
- Rasmussen, M., & Laumann, K. (2013). The academic and psychological benefits of exercise in healthy children and adolescents. *European Journal of Psychology of Education*, 28(3), 945-962. doi:10.1007/s10212-012-0148-z
- Reslan, S., & Saules, K. K. (2013). Assessing the prevalence of and factors associated with overweight, obesity, and binge eating as a function of ethnicity. *Eating and Weight Disorders*, *18*(2), 209-219. doi:10.1007/s40519-013-0022-2

- Ritter, M., & Low, K. G. (1996). Effects of dance/movement therapy: A metaanalysis. *The Arts in Psychotherapy*, 23(3), 249-260. doi:10.1016/0197-4556(96)00027-5
- Romero, A. J. (2012). A pilot test of the Latin active hip hop intervention to increase physical activity among low-income Mexican American adolescents. *American Journal of Health Promotion*, 26(4), 208-2011. doi:10.4278/ajhp.090123-ARB-24
- Salgado, R., & de Paula Vasconcelos, L. A. (2010). The use of dance in the rehabilitation of a patient with multiple sclerosis. *American Journal of Dance Therapy*, 32(1), 53-63. doi:10.1007/s10465-010-9087-x
- Topp, R. (1989). Effect of relaxation or exercise on undergraduates' test anxiety.

  \*Perceptual and Motor Skills, 69(1), 35-34. doi:10.2466/pms.1989.69.1.35
- Verghese, J. (2006). Cognitive and mobility profile of older social dancers. *Journal of the American Geriatrics Society*, 54(8), 1241-1244.
- Zhang, J., Ishikawa-Takata, K., Yamazaki, H., Morita, T., & Ohta, T. (2008). Postural stability and physical performance in social dancers. *Gait & Posture*, 27(4), 697-701.