

Spring 2018

Stress & Dance

Christian Franco

La Salle University, cjf2595@aol.com

Follow this and additional works at: http://digitalcommons.lasalle.edu/honors_projects



Part of the [Applied Behavior Analysis Commons](#), [Cognition and Perception Commons](#), and the [Health Psychology Commons](#)

Recommended Citation

Franco, Christian, "Stress & Dance" (2018). *HON499 projects*. 22.
http://digitalcommons.lasalle.edu/honors_projects/22

This Honors Project is brought to you for free and open access by the Honors Program at La Salle University Digital Commons. It has been accepted for inclusion in HON499 projects by an authorized administrator of La Salle University Digital Commons. For more information, please contact careyc@lasalle.edu.

Honors 499 Project: Stress & Dance

Christian Franco

La Salle University

Stress is a very relatable term that affects everybody. Age or gender doesn't matter when it comes to stress; everybody experiences it, and it affects everyone in different ways. The term has multiple meanings, and isn't just a negative term as it is so often used, as there could be stress that is good as well. Dance performers especially can relate to this term, as stress plays an important role in their perceptions of how they will perform, and even whether they think that they can perform. This paper will look at what stress is, the different generalizations and types of stress, the causes and symptoms of stress (both physiologically and psychologically), ways to cope with stress, and how dance performers and stress are related (i.e. how it can help/hurt them).

Stress is a very broad term. It can be defined multiple ways, but in its most basic form, the word "stress" is defined as "a nonspecific response of the body to any demand placed upon it." (Persson & Zakrisson, 2016) Smith (1993) however is more specific in his definition of stress, as he describes it as being a combination of stimuli, responses, cognitions, and more. On the other hand, a "stressor," as Bright and Jones (2003) define the term, is "something . . . that brings forth the stress response." Stress therefore is the response, whereas a stressor is the trigger. These two terms are important to understand and differentiate, as they will be discussed throughout. Firstly though, it is important to more clearly define stress, or give the best definitions and explanations of stress since stress is such a broad and wide-ranging topic. Though the topic has been studied before this, James (1890) and Lange (1922) first started to actually research the subject of stress. They theorized that emotion and stress are subjective experiences in the presence of arousing stimuli. The threat stimulates our physiological, or bodily, response, and our awareness of the response is out emotion, or perception. (Smith,

1993) These two were the first to give an explanation that stress had two components, a physiological and a psychological. This finding is paramount, as most theorists afterwards expanded upon their theory.

Another important stress theorist is Hans Selye. Selye's General Adaptation Syndrome (GAS), as he described in the *British Medical Journal* (1950), is very helpful in understanding stress, and the functions of how stress works. He found that there were three key elements that happen during stress. The first is the Alarm Stage, which is marked by an alarm reaction in the first presence of the stressor. During this reaction, the body's fight-or-flight response is activated, as hormones such as adrenaline and cortisol are released, preparing the body for action. During this initial reaction, the immune system can become vulnerable. The second phase is Resistance, which is marked by the body getting back to a homeostasis and balance after the alarm stage. Depending on the type of stressor, this can either last a while or very quickly, and does not necessarily need to go into the third stage. During this period, the body can experience reduced energy as it is trying to adapt to the stressor. Finally, the last stage is Exhaustion. This stage occurs when the stress is persistent, and the body can no longer resist anymore. Resistance collapses, and the body becomes weak, tired, and there can also be a major loss of the immune system as well. (Selye, 1950) This third stage is the most dangerous, though only happens when the stress is persistent and becomes too unbearable. Though James and Lange were one of the first to conduct actual research on the topic of stress, Selye was the first to popularize the topic, as others soon followed with their own research on the expanding topic of stress.

In 1962, Schachter and Singer expanded upon the previous theories of stress. They implied that there must be some type of situational context for perception and interpretation of the arousal. (Smith, 1993) This means that they did not think that any type of arousal triggered the stress response, but rather that the response depended on context and perception of the individual. This set the stage for perhaps the most complex explanation of stress, but nonetheless the most thorough: Lazarus and Folkman's Transactional Matrix model of stress. In 1984, Lazarus and Folkman first came up with just the transactional model of stress, which states that "we are under stress when something we need or want is threatened and there is not much we can do about the situation." (Smith, 1993, p. 69) Their early theory emphasized the complexity of stress, and takes into account a person's appraisal or perception of a given stressor. In their model, a person perceives that something endangers their well-being, and are then under stress. They then went into defining "appraisal" more clearly, as they made a distinction between two types of appraisal: primary and secondary. Primary appraisal is how the person thinks that the stressor affects them. (Smith, 1993) This happens when the stress response is triggered due to the person perceiving the stressor as a threat. Secondary appraisal is thinking of options for coping with stress, and thinking of how to deal with the stress. Once a plan is figured out, coping can follow this appraisal, which can then be followed by reappraisal, meaning the person reevaluates their perception of the stressor. (Smith, 1993) They understood that stress is very complex, as it has a lot to do with a person's perception, so they expanded even further upon their theories by coming up with the Transactional Matrix to narrow down three common variables in the stress and coping process. The first types are situational variables, which implies how a person perceives themselves and the world around

them. Some examples of this type of variable are needs or wants, a person's self-efficacy, and how they focus their coping (problem-focused or emotion-focused). The second type are personal variables. These mainly deal with an individual's abilities and how they react to stress due to these abilities. Examples include physical abilities, cognitive abilities, or emotional capability. The last variables are external variables, which have to do with an individual's environment such as finances, work, or family lifestyle. Lazarus and Folkman theorized that due to the complexity of stress, all of these variables, and even more they didn't account for, contributes to stress. (Smith, 1993) Stress is still a highly discussed topic even today, but these past theorists set the stage for these discussions, as the theories became more complex, showing that stress is not just a simple term.

Stress is the general term, but there are two terms that Seyle more specifically distinguished to define stress: eustress and distress. Eustress is the good stress that is "associated, presumably, with positive feelings and healthy bodily states." (Lazarus, 1993, p. 5) This type of stress is the stress that is channeled by the person, and put to good use. An example would be having to study for a huge test, and using the stress as a motivator. For dancers, this applies when they use their stress before a performance to good use as a motivation for them to do their best. On the other end though, there is distress. Distress is the more common of the two, as this is what people usually associate stress with in the first place. Distress is the bad stress that is "associated with negative feelings and disturbed bodily states." (Lazarus, 1993, p. 5) An example of distress for a dancer would be having too much anxiety before a performance. A little anxiety is helpful, as it can get adrenaline flowing, but too much anxiety may lead to an overwhelming experience where the stress seems too much to handle.

Although these two types of stress are important to distinguish between, Lazarus (1993) points out that Seyle does not explain the physiological and psychological differences between these two types. These will be later expanded upon, but nonetheless these two distinctions of stress are important to distinguish between, as it is important to know that stress can be both good and bad.

The National Institute of Health states that there are three types of different stress, most of which are distress, but some can be eustress. The first is stress from pressures from daily life, like school, work, and family responsibilities. The second is stress from a sudden negative change, such as a sudden death or sudden illness. The last type is traumatic stress, when is triggered when one's life specifically is in danger. This could also lead to post-traumatic stress disorder, which is a disorder in which the person relives those traumatic events without control of them. (NIH, 2016) Though the last two types are very important to understand, the first one is mostly related to how stress affects dancers in general. There are many pressures that face dancers as they have a heavy workload and are constantly using their memorization skills. While it is important to note the immense pressures that these dancers face and how this affects their thoughts and performances, it is more important to first understand the causes of stress, and the symptoms of it as well.

There is not one answer to what the cause of stress is. People react differently to different situations, as Schachter and Singer's situational context of stress suggests, so it is hard to pinpoint an exact answer to that question. However, there are commonalities among the causes of stress, which can be both physiological and psychological. The physiological and psychological causes are often intertwined when discussing what causes stress, as James and

Lange first proposed. Though the first type of stress discussed is the most relevant for dancers, the other two cannot be ignored. Going off of the theories of Lazarus and Folkman, the term “caused” implies that it is due to the person’s appraisal, or perception, of a stressor, which ultimately depends upon the individual. (Smith, 1993) As stated, the first type of stress is caused from pressures from daily life. These are any daily stressors that have an impact on one’s self. (NIH, 2016) These include getting stuck in traffic, fighting with friends, having to speak in public, being late for a job, or in the case of a dancer, having to perform in front of a large audience. The list goes on and on for the causes for the first type of stressor, as it is most common. As stated, the stress usually starts in a person’s perception (i.e. the psychological aspect). (Smith, 1993) An example would be that one person may be stuck in traffic and perceive they are in a stressful situation, thinking they will be late for work, while another person stuck in traffic may perceive the situation as a time to calm down and relax, knowing that they can’t do anything about the situation. To put it in dancing terms, one performer may perceive a performance as something scary because a lot of people are watching, while another performer may like the attention, and perceive positivity from being watched. Perception, or the psychological aspect, is the first step in the process, as most of the theories discussed begin with this. Once the dancer perceives a situation to be stressful, the alarm reaction stage is activated, according to Seyle’s GAS Model (1950). During this stage, the physiological aspects happen, as the stressed performer may start sweating and forget what they have to do. The symptoms will later be discussed, but that is how the psychology and physiology are related to the causes of stress. These stressors do not have to necessarily impact them in a negative way

though. They could use that stress and pressure to push themselves to accomplish things they wouldn't normally be able to.

One study by Smollan (2015) looked at the causes of stress in a work environment. Though it mainly looked at workers in hospitals and clinicians, the study can be applied to most work environments, even dancers. Smollan wanted to see the causes of stress before, during, and after a change in organizational change, meaning a change in one's work lifestyle. The "before" aspect relates directly to this type of stressor, as he saw reports of normal, work related stress during this time such as heavy workloads, work-relationship issues, and lack of resources. He states that pre-change stressors usually come from psychological demands, a lack of social support, and job insecurity. (Smollan, 2015) The during and after stressors will be looked at next, but these stressors can be related to dancers, as they also have heavy workloads and have a large amount of pressure put on them very often. The job of a dancer is a physical and psychological one, so there will always be some type of stress affecting them. These fit into this first type of lifestyle stressor because it is expected, and deal with one's daily lifestyle.

The second type of stress is caused by sudden changes in one's life. This is a step more serious than the first type of stressor, as it is not something that would normally happen to a person since the key words for this type are "sudden" and "unexpected." (NIH, 2016) Some examples for the causes of this type of stressor are losing a job, getting kicked off a team, or relating to the topic, suddenly getting injured or not getting the role in a performance you really thought you would get it. Though the causes of the first type of stressor is more common and more abundant especially with dancers, this type of stressor nonetheless affects many

dancers as well. As the example showed, getting injured can be very stressful for dancers, especially if it happens before a big performance. Depending on how the situation is handled, the dancer's stress can be either greatly impacted by this life change, or minimally impacted. Also, the other example used, someone not getting a role they thought they would get, can be a great impact for stress as well. According to the Transactional Matrix, people develop coping mechanisms for stress as they grow older and face similar situations, so when something like this first appears, it can be detrimental for a dancer, especially children, and can immensely stress them out. (Smith, 1993) Similar to daily stress, this type of stress also involves psychological and physiological aspects. Similarly, the first step is the perception of the stressor, as most of the theorists claim, like the performer who becomes stressed when they suddenly don't get the part they wanted. According to the National Institute of Health (2016), this impacts the perception more severely than the first type of stress, as they are not prepared for that outcome, and they may be facing this for the first time. The physiological aspect and symptoms are then more severe than the first type since the perception is more extreme. (NIH, 2016) It is important to know that this is more severe than the stress coming from daily stressors, but less serious than stress from life-threatening stressors.

The last type of stress is caused by fear-of-life situations, or people's perception of fearing for their lives. These causes are the most serious of the three, as they are also the least common. (NIH, 2016) Examples include being in a war, living through a natural disaster, being in a car crash, or being attacked or mugged on the street. This type of stress is highly influenced by the fight-or-flight response in Seyle's Alarm Stage, which is activated when people are in dangerous situations, thus increasing adrenaline. (Seyle, 1950) It is highly dependent on the

physiological aspect of stress, though the psychological aspect is found through the person's perception of whether they think they are in a fight-or-flight situation. This is the most extreme way in which physiological and psychological stress is caused. Thomson and Jaque (2016) researched this topic further, as they looked specifically at Post-Traumatic Stress Disorder (PTSD) and how it can affect dancers. The common symptoms of PTSD are increase of heart rate, flashbacks, blocking out memories, and negative thoughts. These symptoms must be prevalent for more than a month for someone to be diagnosed with the disorder, so this research looked at dancers who suffered from the disorder, and some who did not. The main point of their research was that they wanted to see if creativity and personality traits were similar between the PTSD group and the non-PTSD group. They found that there was no real difference in creativity, but found that the PTSD group had greater anxiety while performing new and creative activities. They also found that the PTSD group had less emotional regulation than the control group, and used more emotion-based coping strategies for stress. (Thomson & Jaque, 2016) From their study, it is important to take notice of this type of stress, as even though it may not be very common, it can nonetheless have a great impact on a dancer. These causes of stress are important to cover since the next step is to define and understand the symptoms of stress.

Like the causes, the symptoms of stress are numerous and dependent upon the stressed person. They vary in degree, though there is agreement in common symptoms, and there is also a connection between the physiological and psychological aspects to the symptoms as well. Stress affects us in three broad categories: physical, emotional, and behavioral. (Hernandez, 2012) Some symptoms of physical stress, which is more physiological, include cramping, high

blood pressure, exhaustion, and loss of energy. The second effect of stress, the one on one's mood, is mainly psychological. Symptoms for this type include anxiety, nervousness, irritability, and depression. The final symptoms are behavioral symptoms. While stress symptoms from the body are mainly physiological, and symptoms of the mood are mainly psychological, behavior is more of a combination of both physiological and psychological. Behavioral symptoms include change in appetite, drug abuse, and alcohol abuse. (Hernandez, 2012) As stress is an everyday aspect of life, it shouldn't be too concerning to experience some of these bodily or mood symptoms discussed. It is very normal for dancers to experience maybe a little muscle tension or anxiety before a big performance. It should become an issue when the behavioral symptoms, such as drug or alcohol abuse, start appearing, or when then other two types of symptoms start manifesting out of control. It is important to understand the symptoms to find ways to help with stress, and find ways to either reduce it or use it to one's own advantage.

Now that the different types of stress and what the causes and symptoms of stress are have all been addressed, it is important to look at how to cope with stress. Without trying to get at least some relief from stress, it can continually add up until it completely takes over a person and overwhelms them to the point of a nervous breakdown. A plan of action is crucial in finding relief from stress, as it not only helps sustain unwanted distress, but also can lead to a better and healthier lifestyle. Hernandez (2012) explains that stress management programs may be extremely beneficial to dancers, as this has been shown to alleviate stress. Other ways of managing and treating stress he advocates for are promoting a positive relationship and body therapy, have a screening for potential risks and injuries, and have stress management in rehab for injured dancers. Hernandez (2012) concludes by stating that dancers can also make

their own stress management plan if others do not work for them. Sometimes setting up a plan, though it is a simple task, is very beneficial as it can give the dancer something to aim for, and help them with their stress levels.

Along with stress management, relaxation is also a healthy and effective way to reduce stress. According to the National Center for Complementary and Integrative Health (NCCIH, 2016), “relaxation...slows the heart rate, lowers blood pressure, and decreases oxygen consumption and levels of stress hormones. ...[v]oluntarily creating the relaxation response through regular use of relaxation techniques could counteract the negative effects of stress.” It is important to use relaxation techniques so the stress doesn’t build up too much. Some relaxation techniques include progressive relaxation, bio-feedback, and deep breath exercises. (NIH, 2016) While having a stress management guide may be helpful, even that may be too stressful, having to look at it so often and then getting worried when you’re not following the plan of action. Relaxation however is a quick and easy step that can be very helpful. For dancers, taking deep breathes before an important performance can help calm the body down and reduce unwanted stress. Even if it doesn’t reduce the stress, the dancer’s mind may be calmer and they can then turn their distress into eustress.

Another form of reducing stress is through cognition. Like many other activities, dancing has a lot to do with cognition and perception. Often times, dancers push themselves too hard, and by doing this may set up stressful and negative thoughts. In one study by Young, Morris, and Andersen (2003), they found that there was a correlation between psychological stress and injury of dancers. They found that dancers with high stress and low social support are more likely to be injured, as they found that most of these dancers dealt with psychological stress.

Despite looking at stress and injury, they found that high social support actually helps moderate stress levels. Like Hernandez, they proposed stress management skills, but more so having to deal with cognition. Some coping mechanisms they mentioned were imagery skills, such as imagining being in a relaxed state before an anxiety-provoking performance, and engaging in positive self-talk, which helps with self-efficacy (i.e. the belief that one is able to accomplish something). Though not directly related to the psychological aspect, they also advocated for an increase in communication skills. Their reasoning is that this will help the dancer increase their social support, thus decreasing stress levels and decreasing the likelihood of getting injured (Young, Morris, & Andersen, 2003). It is important for stressed people, especially dancers and performers, to find a stress relief technique that works for them. It not only helps them relieve unwanted stress for big performances or dances, but can also be used everyday for common life stress as well. It is important for dancers to look into techniques that help them best, as there are numerous ways to relieve stress which can vary depending on the person.

Now that all aspects of stress have been explained in detail, it is important to look at the big picture: how does stress affect a dancer? Though there were numerous examples throughout, it is still important to tie everything in together to see how it all fits in. There are many situations dancers are faced with when stressed. As stated, stress can be either good (eustress) or bad (distress). (Lazarus, 1993) One situation could be a dancer having his/her first solo performance. Every person is different, so depending on the dancer, their perception can either be positive or negative. One dancer may see this as an opportunity to prove themselves and impress an audience all by themselves. However, if it is a young child, more often than not, eustress may not be the type of stress they are feeling. In this case, distress would more often

appear. The symptoms, as Hernandez (2012) pointed out, might show up leading up to the performance, so it is important to note when these symptoms appear. The performance is an easy stress-trigger to target, so if the symptoms appear early, the person should start looking into stress relief techniques, such as the ones suggested by Young, Morris, and Andersen (2003), to help them ease their mind. Another example would be if a dancer got a bad injury from dancing, and then was able to dance again. Would they? Again, it is all dependent on the person's perception as the theorists have shown. They may see the injury as a setback and use it as a challenge (i.e. eustress), but more often there would be some high levels of anxiety of thinking about returning to dancing, especially after an injury. Stress relief would be extremely important for this example, so the person can stop associating dancing with the injury, and begin to focus on the good that comes from dancing. Once the stressor is defined, stress relief is an important step because it could be a game of trial and error. (Young, Morris, & Andersen, 2003) Each person has to pick their own technique that best suits them, and use it to their advantage. Dancers are under a lot of pressure, especially the younger ones who may perceive the task to be a bigger issue than it should be. It is important to understand the stress in order to relieve it.

In conclusion, stress is a very broad term that is often used synonymously with distress. Not all stress is bad, as it can be used to push one's self, but most of the time stress is a problem for all of us. Dancers can be put under a lot of stress, so it is important to look at these causes, symptoms, and stress relief techniques in order to help them. In order to suppress stress, one must come to an understanding of what it is. Knowing these facts can help a lot of people reduce stress in their lives, as even though this subject applies to everyone, dancers can

especially use this type of knowledge to their advantage. While it is important to learn about and look at the facts, the bigger question for a more in-depth look at this topic is how individuals really differ in their perception and responses to stress.

Stress and Dance Analysis

To look further and deeper into my studies on stress and dance, I conducted interviews with current professional dancers and former professional dancers. My aim was to conduct between four to eight interviews to see how my research on stress and its relation to professional dancers that is attached compares to how the participants I interviewed really feel about stress. With some help from my advisor, Dr. Falcone, I developed sixteen questions that would highlight the main points of the research paper, and would also give way for the dancers to explain more of their experiences with stress in detail. I wanted to see similarities and differences between my research and the answers I received, and also hoped for new insights into the subject of stress and dance. I was able to conduct five interviews, and I believe that each dancer gave sufficient answers to the questions that helped me better understand this vast subject. It is best to go through each question and analyze the answers, this way at the end, it is easier to see the overall picture of how the interviews either relate to or differ from the research.

Participants

I interviewed five participants, each of whom have professionally danced at one time in their life, or are still currently professionally dancing. The first participant, Dancer 1, will be referred to as Amy. Amy is 49, and is a mother of two. She has been dancing throughout mostly all of her life, and is a former professional dancer. For about the past twenty years, she has taught dance to younger students, and currently teaches children from first to fourth grade at the Philadelphia Performing Arts Charter School (PPACS). Dancer 2 will be referred to as Nick.

Nick, age 48, also teaches dance at the Charter School, as he has been doing so for about ten years. He was born in Russia, and professionally danced there from his teens until his thirties, when he came to live in the United States. Sasha will be Dancer 3. She is the wife of Nick, is 48 as well, and was also born in Russia. Similar to him, she professionally danced there from an early age until her thirties as well before coming to the United States. For the past few years, she has taught dance at String Theory High School, the adjoining high school to PPACS. Nick and Sasha have one young daughter that attends PPACS. Jen will be Dancer 4. Jen is 42, and is a current professional dancer. Like Amy, she has been dancing throughout most of her life, and has danced professionally for the past twenty years. Apart from being a dancer, she also has a day job as a law clerk. Mary will be Dancer 5. Mary, Amy, and Jen are all friends, and Mary and Amy practically grew up together. Mary is 46, and currently is a professional dancer, and has been for over twenty years. Apart from dancing, she also sings and performs at a few restaurants. These participants all gave interesting takes on each question, and gave good, valuable comments that lined up with the research on dance and stress as well.

1. Name and Age?

As stated, I already gave the name and ages in the “Participants” section. Being that they were all in their forties, this has both positive and negative aspects. It is positive because I can see similarities in how they grew up and how dance was taught to them. It is also positive because I was able to see similar mindsets of their perception of stress, and what they came to know about stress since they grew up in the same generation. The negative aspect is that the interviews give only a limited access to the perceptions of stress and dance, rather than give a

variety of ages to see how younger professionals in their twenties, or even older retired dancers in their sixties, may perceive stress and dance. While their answers may not generalize to all professional dancers, the age limitation does give insight into professional dancers in their forties. Also, it is important to note again that Amy, Jen, and Mary were born and still live in the United States, while Nick and Sasha were born in Russia and currently live in the United States. Though the ages are roughly the same, this is an important piece of information when showing similarities and differences in perception of stress and dance of each dancer.

2. When did you first start dancing? How long have you been dancing professionally?

For the three born in the United States (Amy, Jen, and Mary), all of them answered that they started dancing at three years old. However, for the two born in Russia (Nick and Sasha), they didn't start dancing until they were between seven and nine years old. Despite the fact that the Russians started to dance later than the others, this shows that dancing has been a part of each interviewee's life since early childhood, which helps with this research as they have a lot of experience in dance to answer these questions. Originally, I wanted my interviews to be with current professional dancers, though I did not have access to many, so I interviewed three former professional dancers, who all teach dance now, and two current professional dancers. Though I gave this information in the participants section, it is important to again review this. For the two current professionals, Mary has danced professionally for twenty-two years while Jen has been dancing professionally for twenty years. For the three who currently teach dance, Amy danced professionally for five years, Nick for seventeen years, and Sasha for ten years. Though the former professionals have not danced professionally as long as the current ones,

they are each still very much involved in dance, and know what it is like to have the stress of a professional dancer.

3. Currently, how does dancing make you feel physically and emotionally?

For the physical aspect of how dancing makes these dancers feel, I received mainly the same answers. They mostly all feel healthier, energetic, and youthful. For the emotional aspect, mostly all of them used the word “happy” to explain how they feel emotionally. I also received answers like euphoric by Amy, centered by Mary, and being more aware of what is going on by Jen. These answers show that these dancers love what they do, and stress and strain is not one of the first things that come to their mind when discussing dance. Studies like the ones from Hernandez (2012) and Young, Morris, and Andersen (2003) show that these are typically normal answers for dancers to give for a question like this, being that none seem to be under really any stress or strain from dance at the time. The two studies mainly focused on what happened to dancers when stress is introduced into the dancer, as this will be the basis for later questions.

4. Do you feel that you have a good understanding of what stress is? How would you define it?

For this question, mostly every dancer gave me a good definition of what stress is, while one, Nick, admitted that he were not completely sure of what stress really is. For these answers, I received the same responses by Amy, Jen, and Mary saying that stress is feeling out of control and feeling constricted. The other two answers were that stress is a difficult and nervous feeling from Nick, and that stress is something that hurts the self, both physically and

emotionally from Sasha. From seeing these answers, it seems that most thought of stress as a negative term (i.e. distress), and practically none thought of it as something that can be good (i.e. eustress). Despite the lack of knowledge of eustress that these dancers have, the three answers that defined stress as feeling out of control paralleled nicely with Lazarus and Folkman's transactional model of stress definition, which is that "we are under stress when something we need or want is threatened and there is not much we can do about the situation." (Smith, 1993, p. 69) All five answers related to the first appraisal of a stressor, which is how a stressor affects the person. Each gave their own definition relating to how stress, or more clearly, distress, makes them personally feel, so it was a positive to see their appraisal of stress. This was meant to be a general question, as I wanted to go into specific stressors in other questions.

5. How often do you feel stressed during the day?

I received a few different answers from the dancers for this question. Amy and Sasha stated that they feel stressed throughout most of the day. Nick and Jen stated that it depends on the day, and depends if anything stressful is approaching. Mary however stated that she does not feel too much stress during the day, as she often practices stress relief techniques. Nick and Jen's answer paralleled with the research by Smollan (2015), in that he looked at the causes of stress in a work environment when it is expected that a stressful situation was about to occur. His study shows that due to this perception of an oncoming stressor, workers can develop stress due to psychological demands, which can also be applied to dancers. Nick and Jen's example shows that for dancers, when an upcoming perceived stressor is close, this can

lead to even more stress and strain than Smollan (2015) saw in his research, as he stated that he only observed normal, work-related stress. Overall though, these answers show that most of them feel at least some kind of stress during the day, and so my next questions aimed to look more in depth into what their stressors were, both outside of dance and within dance.

6. What stresses you outside of dance?

Most of the answers I received for this question related to other jobs that the dancers had. I also received a few answers relating to how family problems can be stressful, mainly from Jen and Mary. Sasha gave answers like disorganization, and constantly explaining yourself to others who don't understand, while Mary said that finding solutions to help other people stresses her. Overall though, these answers mirror the first type of stressor discussed by the National Institute of Health (2016), the daily stressors. None of these are very sudden, and none are traumatic, so they fit into the daily stressor category. The interviewees described these stressors as nothing major, but rather just annoying hassles they have to deal with throughout the day. This lines up nicely with the research, as it shows that these are the most common stressors that affect mostly everybody. They may be hassles, but they can add up to be something more out of control. It seems though that the dancers have some sort of handle on these stressors, as they did not explain that one specifically was dominating their lifestyle.

7. What stresses you within the confines of dance as a profession?

The answers for this question were very much similar. Amy, Sasha, and Mary stressed the importance of perfection in relation to dance, this being their number one stressor in the

profession. The other two, Nick and Jen, also brought up the need for perfection, though they gave other answers as well. Some include not feeling inspired, having a certain timetable to learn and finish dances, and to not forget things like choreography. Despite other answers, clearly the biggest stressor within the confines of dance is the need and strive for perfection. This is a type of psychological stress due to the fact that it is the *thought* of perfection, something that almost cannot be physically achieved since it is a psychological construct. Again, as stated by Lazarus and Folkman, the psychological aspect of stress is very important to the reaction of that stressor, due to the importance of the way the person perceives the stressor (Lazarus, 1993). While most of their stressors outside of dance come from life hassles, it is important to note for later questions and analysis that mostly all of them answered the need for perfection as the thing that mainly stresses them within the confines of dance.

8. Do you feel motivated to dance when stressed? Why or why not?

For the responses to this question, they were all answered predominantly “yes,” with only Nick saying not really, but also admitting that dance can at times help let off stress. The others answered yes mainly because they all said that dance is a type of escape. It helps them let off steam, let go of inhibitions, and helps to get rid of any stress. Jen and Mary described dancing while stressed as a way to become more self-focused, self-aware, and helpful for the mind and body. Amy described dancing as a type of euphoria, so she doesn’t feel stress when she dances. This question was to mainly see if the dancers use their stress in a positive way, i.e. eustress. The answers show that stress for a dancer while they are dancing is used as a type of eustress, lining nicely with the definition given by Seyle in Lazarus’ (1993) research. The

eustress helps them forget about any other stressors, and lets them become free while dancing. However, in question 4, most answered that stress is only a negative term. The answers given in this question contradict those statements, but the dancers may not have realized that by using negative stress in a positive way, they are creating eustress. When first prompted with the question of what stress is, the dancers all thought of it as a negative, but when prompted to describe it relating to dance, they showed that it can be a positive thing. Again, eustress does not seem to be a common term amongst the dancers as they describe what it here but seem to only know limited information on its use.

9. Do you feel stress impairs dancing? If yes, how so?

I received mixed answers for this type of question, with Nick, Jen, and Mary saying yes, Amy saying no, and Sasha saying it depends. For the three that answered yes, they all explained how mainly psychological stress can impair dancing. They described how nervousness, overthinking about their skill set, and a lack of self-trust and self-confidence relates to stress impairing dancing. Amy conversely said that stress enhances dancing. She said that the more stress, the better at dance she becomes, and she does not really feel stress while dancing. Sasha, who said that it depends, said that when you are first starting out dancing it can impair it because you are mainly afraid of failure, but as you go further on, you learn to deal with these stressors, and so stress doesn't really impair dancing. Though most of them answered that they do feel motivated to dance when stressed in the prior question, it is interesting to see that even though they do feel motivated, sometimes an overbearing amount of stress can still impair them in some way. Again, these type of stressors for questions 8 and 9 are mostly concerned

with the first type of stressor, i.e. stress from daily life pressures. I thought the more serious stressors should be within another question, as I just wanted to get an idea of general stress for these first few questions.

10. Does everyday stress outside of dance affect your dance? If yes, how so?

Most of the interviewees answered no for this, all except one: Amy. Amy said that it can affect her dance because at times when it becomes too much, the stress feels as though it puts a border on her artistic self, and can block the ability to dance. However, the other answers showed that most think that dancing helps get rid of their everyday stress problems by getting lost in the dance, as again Jen and Mary said it was like getting away from reality. The two described dance as a way to get away from stress, and this helps relieve some outside stress, since they did comment and say that there is still the stress within the confines of dance that is more prevalent than outside stress. These answers show that for the most part, everyday stress does not affect these dancers' occupations, as most describe it as a type of relief for everyday stress. This also aligns with the research by Smollan (2015), in that when he looked at stress in a workplace, he noticed that the main causes of stress were from work-related stressors. Though everyday stress affects all of the dancers, it is important to see that most do not let outside stress affect what happens to them during dance, as this seems to relieve symptoms of stress for them.

11. Have you ever experienced an extremely stressful moment in your dancing career? If so, how did that type of stress feel? How long did it last? How did you handle it?

The answers I received for this question were very good examples of the second type of stressor discussed in the research, i.e. the stress from sudden changes in one's life. Most events were described as perhaps the most stressed that the dancers ever felt, so it is worth looking at each one. While most of the answers differed, two, Sasha and Mary, actually answered that they went through depression early in their dancing careers, which caused them a lot of stress. Mary's was due to an injury, and Sasha's was due to lack of interest and not seeing her next goal. Mary, who had the injury, claimed that the stress made her want to eat more, made her have a lack of self-care and care about others, and constantly felt stress and strain. She said it lasted until after the injury, which was about a year. Mary said she handled the stress and got over it by being around dancers, and doing other things related to dance. This made her feel at least partially connected to dance, and helped relieve some of the stress and helped her get over it. Sasha claimed that her stress from depression lasted about a year and a half. She was able to handle it and overcome it though through practicing more dance, and just focusing on improving their dancing skills. Amy described the time she was getting ready for a college audition dance. The whole situation made Amy feel very nervous and overwhelmed, and she felt like she couldn't handle the stress. The stress heavily began two weeks before the audition, and stopped when the audition was over. Amy did not do well though, as the stress became too much to handle. Even though she didn't really handle it well, she got through the stress by just going through with the audition, knowing that it would be over after that. Nick answered that when he was a teenager, he forgot the choreography for a big show while on stage. He had to make up his own dance, and felt extremely nervous knowing the amount of people watching his every move. The stress lasted a while, even after the event, but Nick was able to handle it by

practicing more and getting more confident. The last dancer, Jen, said that two minutes before going out on stage for a big dance, she broke her ankle and still had to perform. The stress felt insurmountable, knowing how bad of a situation it was with both physical and psychological symptoms appearing for her. The stress lasted about an hour, until the show was over. Jen was able to handle it by just going through with the dance, similar to Amy, knowing it would soon be over. From these responses, most of these issues were very serious, and resulted in an unhealthy amount of stress. Though the depression ones were more chronic, the other three stressors were more sudden, as even with Amy with the audition, the stress didn't set in until two weeks before. Jen, who was suddenly injured before her performance, exactly parallels the example given in the second type of stressor in the research (NIH, 2016), as it was a very sudden stressor that impacted her life directly. The length of the stressor seemed to be highly dependent on their perception of the stressor, as the two dancers who had performances, Amy and Jen, were able to get over it after the performance since they knew it was over. Nick, who messed up, was able to get over it through practice and self-confidence boosting. Finally, the two with depression, Mary and Sasha, were able to handle it through being around dance and making themselves better, which can take more time. These events show Lazarus and Folkman's theory more clearly, as the dancers described their primary appraisal (how they perceived the stressor), and then their secondary appraisal (how they thought about coping or handling it) (Lazarus, 1993). The responses give a more personal, in-depth look as to how the theory works, and how the dancers can be affected by extremely stressful situations.

12. What physical symptoms do you feel when stressed? Do the symptoms differ within dance and outside of dance?

The physical symptoms were fairly consistent across the responses. Most of them gave the answers of shaking, heartaches, and shortness of breath as their most pervasive physical symptoms. Other symptoms include feeling weak and getting headaches. Amy, Nick, and Mary answered that the symptoms differ, while Sasha and Jen answered that they do not differ. For the ones that said they do differ, they explained that this is because their stress isn't the same type of stress within and outside of dance. Though in Hernandez' (2012) research he gives many examples for physiological stress, the emphasis seems to be shaking, heartaches, and shortness of breath for dancers, as mostly all of them answered with at least one of these three symptoms.

13. What psychological symptoms do you feel when stressed? Do the symptoms differ within dance and outside of dance?

The most prevalent psychological symptom would have to be nervousness and anxiety, as mostly all gave these answers. Other answers include being emotionally drained, getting emotional breakdowns, difficulty thinking, and worrying. For these symptoms, Nick, Sasha, and Mary claimed that the symptoms are different within and outside of dance, while Amy and Jen said that they are the same. Both Nick and Sasha explained that the psychological stress is worse during dance, while Mary explained that the psychological stress is worse outside of dance. For Mary, she gave her reasoning by explaining that there is some level of control within dance, whereas stress outside of dance is more uncontrollable. These symptoms match up

directly to the ones that Hernandez (2012) describes in his research, as he too claimed the main psychological symptoms to stress are anxiety and nervousness. It is interesting to see that for the physical symptoms, the dancers' overall answers gave new insights into perhaps the types of physical symptoms that affects dancers specifically, while the psychological symptoms were very general and seemed to apply both within and outside of dance.

14. Do you practice any stress relief techniques? If so, what are they and how helpful are they?

I received different responses from each dancer for their stress relief practices. Some of these include common ones such as meditation, going to the gym, and deep breathing exercises. Nick said that he relied on his dance teacher when he was younger for stress relief, as he thought of his teacher as a therapist. He said that talking out problems and talking about his stress to the teacher was very helpful and very encouraging. This also helped Nick get over his stress from messing up the choreography, as he described in his most stressful moment. Along with trying to make himself better at remembering in this situation, he also experienced relief from stress through talking things over with his teacher. Amy said that obsessively cleaning helps her relieve stress, as it puts her attention elsewhere. It also helps her perceive stressors more efficiently and calmly. Another more peculiar answer was that Sasha imagines a black curtain closing. She imagines herself being on stage, and having a black curtain close in front of her, putting up a barrier between the audience and herself. She said this helps her get rid of negative thoughts, as it seems to symbolize putting a border between herself and negative stress. All of the dancers said that their methods are very effective, and do help alleviate their

stress. A few dancers also gave examples of relaxation techniques, like the examples given by the NCCIH (2017), such as deep breathing and meditation. Most gave the answer of exercise though, showing that even though this is a high-paced and high-level activity, it can help the dancers alleviate their stress.

For Nick, who relied on his teacher for stress relief, this corresponds to the studies done by Young, Morris, and Andersen (2003), in that they advocated for an increase in communication skills, which they said should help stress. Nick claimed that by talking out his problems to his teacher, he was able to relieve his stress and make it more manageable, tying nicely into the Young, Morris, and Andersen (2003) research as well. Sasha, who imagined the black curtain, was the only one to use imagery to relieve stress, another method described in the Young, Morris, and Andersen (2003) study. As stated, using imagery is very important, as the stress that comes with dancing is heavily psychological. These methods give a good glimpse into how each dancer perceives how they can handle stress, and all of them said that it is through their experience as a dancer for so long that they were able to come up with the right type of stress relief technique.

15. Do you know about other stress relief techniques? If so, how did you find out about them? If not, why do you not pursue any techniques?

Most answered that they do know about other stress relief techniques. A few gave examples like having a set plan, breathing exercises, yoga, meditation, and listening to music, some of which were used by the other dancers as their stress relief techniques. Most also gave the answer that they learned about these techniques through colleagues, seminars, and just

common sense. All of them said that even though they are aware of other techniques, they are very comfortable with their techniques that they use, and find them very helpful. This could possibly be due to the age of the group, as all of them are in their forties, and all of them had ample amount of time to discover techniques and find what works for them. It would be interesting to see answers to a younger generation of dancers to see how they deal with stress, and how often or not that they try new stress relief techniques. Overall, the answers the dancers gave for this question also align with some stress management techniques offered by Hernandez (2012) in his research.

16. Do you think learning about stress more would be beneficial to you? If so, how do you think it would help you?

All of the dancers responded yes to this question, as even though most knew a good bit about stress, they said it would be beneficial to learn more. Nick, Sasha, and Mary answered that the information would help them so they can pass on to colleagues and students of theirs, hoping that others around them can learn techniques and find stress relief, while Amy and Jen answered that it would be easier to deal with stress for themselves by learning more about it. Though the availability of the information on stress is abundant, it does not seem that it is prevalent, especially in the younger generation since most of the dancers want their students to learn more about it. This shows that simply knowing what stress means is not enough. The information on it should be given more freely to people through school and classes.

Summary

Overall, the answers given by the dancers fit nicely with the research, giving a more personal type of data to see how stress really affects dancers. The ages of the dancers contained both a positive and negative aspect. It was positive to see that the answers given were from dancers in their forties, as this showed that all of them have been dancing for a long time, and helped show their generation's generalized knowledge of stress. However, I would have liked to see how younger professional dancers' answers would have differed or if they would have been consistent. From seeing their answers as to how they defined stress, it is important to see that most think of stress as a negative term. In the interviews, only one or two of them discussed using stress to dance as a positive, while most just thought of it as something that affects them negatively. It is important to note this, as the term "eustress" should be emphasized more in the topic of stress in general. Daily stressors seemed to be the most prevalent among the dancers, as this corresponds to the research showing that it is the most common no matter what profession. For the stress outside of dance, though the answers varied, most claimed that it was due to other jobs and family responsibilities, showing again how daily stressors are the most common. For the stress within dance, it was interesting to see that the need for perfection was the most common answer. This shows a high concentration of psychological stress within the confines of dance, and places an important need on stress relief for dancers. The extremely stressful moments helped show the most amount of stress the dancers felt, showing both acute and prolonged stress, and how it affected each dancer. Though a couple answered they were able to get through the stress by just going through with their stressful event, the others showed that by surrounding themselves with dance and working their way to bettering themselves, they were able to overcome their stress. The

physical and psychological symptoms matched nicely with the research, while more so the physical symptoms gave new insight into common physical stress symptoms felt by dancers, being that most were relatively the same and were not really given in the examples in the research. The stress relief techniques showed good ways that the dancers were able to experience relief, mainly through relaxation and some cognition, but the importance of exercise seemed to be emphasized as an important method, as this too was not discussed in the research. The knowledge of stress seems however to be limited, as the ones who are teachers claimed that it is not taught enough or emphasized enough in a regular classroom. This helped show that these dancers want to help spread the knowledge of the importance of stress, and wanted more insight on it for both themselves, their colleagues, and their students. Hopefully, this analysis helps to give that insight, as it along with the research gives ample information on stress, and how the information can be useful and helpful to dancers of all ages.

Conclusion

Overall, what I was looking for in these interviews was to see how the research on stress and dance was either similar or dissimilar to the answers from the interviews. Generally, the answers were fairly consistent with the research, with only a few examples deviating slightly from the research. For how the dancers felt physically and emotionally, most answered in a way that paralleled with the research by Hernandez (2012) and Young, Morris, and Andersen (2003), in that most felt physically and emotionally healthy when asked this, showing that without stress this is a normal answer to be given from dancers. For the definitions on stress, the answers were very much aligned with Lazarus and Folkman's definition from their transactional

model of stress (Lazarus, 1993). A lot of the answers dealt with how stress is feeling like you are out of control, almost exactly matching Lazarus's definition. The question on how often the dancers feel stressed showed that there is more stress for an upcoming stressful event than Smollan (2015) showed in his research. Though he did not look at dancing specifically, his work aimed to generalize to different occupations, though with dancing, the stress seems to be more prevalent than what he saw in his studies in the workplace. Mostly all of the dancers said that their stressors they experience are daily stressors, as this aligned the first type of stressor described by the NIH (2016), in that it is the most common, and affects almost everyone. This also corresponds to Question 9, as this question too does not deal with major stressors, but rather more common, everyday stressors. Question 7 on what stresses dancers within the confines of dance aligned with Lazarus and Folkman again, in that most placed a heavy importance on psychological stressors in dance, as Lazarus and Folkman (1993) explain perception and appraisal plays a significant part in how stress affects someone. The answers from Question 8 on being motivated to dance when stress showed Seyle's theory on eustress. He explained that when negative stress is used positively, this is eustress (Seyle, 1950), and this corresponds to the answers most dancers gave for this question. The question on whether outside stress affects the dancers during their profession supports the research by Smollan (2015). His research showed that the most common stressor in the workplace is work-related, similar to what most dancers said. The extremely stressful moments that the dancers gave parallel with the research from the NIH (2016) on the second type of stressor, showing that it is more serious and makes a larger impact than the first type of stressor. This question also helped show different appraisals from the dancers, showing Lazarus and Folkman's theory

more clearly. The physical symptoms described by the dancers differed slightly from the research by Hernandez (2012), in that they emphasized shaking, heartaches, and shortness of breath, all of which were not stressed too much by Hernandez. However, for the psychological symptoms, the dancers' answers aligned perfectly with the research by Hernandez (2012), in that they both showed that the most common symptoms were anxiety and nervousness.

Finally, questions 14 and 15 gave insightful ideas for coping with stress, some of which were shown in the research by Hernandez (2012), and Young, Morris, and Andersen (2003), including the importance of communication and use of imagery. However, unlike the research by the NCCIH (2017), which stressed the importance of relaxation, most dancers gave the answer of exercising and working out to relieve stress. This gave new insight in that it might be useful for dancers to use and more helpful than relaxation, being that they are so used to moving around anyway. In conclusion, it was good to see that a lot of the research aligned with the answers given by the dancers. Though some answers differed slightly from the research, overall the interviews help to give a more personal account of the theories of stress, and help to give new insights into not only the types of stress that they faced, but also how they managed to handle their stress.

References

- Bright, J., & Jones, F. (2003). *Stress: Myth, Theory and Research*. Prentice Hall.
- Hernandez, B. M. (2012). Addressing occupational stress in dancers. *Journal of Physical Education, Recreation & Dance*, 83(6), 3-5,50. Retrieved from <http://dbproxy.lasalle.edu:2048/login?url=https://dbproxy.lasalle.edu:6033/docview/1033210273?accountid=11999>
- Lazarus, R. (1993). "From Psychological Stress to the Emotions: A History of Changing Outlooks." *Annual Review of Psychology*, vol. 44, no. 1, pp. 1–21., doi:10.1146/annurev.psych.44.1.1.
- NCCIH: National Center for Complementary and Integrative Health. (2017). "Stress." *National Center for Complementary and Integrative Health*, U.S. Department of Health and Human Services. Retrieved from nccih.nih.gov/health/stress.
- NIH: National Institute for Mental Health. (2016). "Stress: MedlinePlus." *MedlinePlus Trusted Health Information for You*. NIH, Web. 26 Feb. 2017.
- Persson, P. B. and Zakrisson, A. (2016). Stress. *Acta Physiol*, 216: 149–152. doi:10.1111/apha.12641
- Selye, H. (1950). "STRESS AND THE GENERAL ADAPTATION SYNDROME." *BRITISH MEDICAL JOURNAL*, pp. 1383–1992., Retrieved from doi:<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2038162/pdf/brmedj03603-0003.pdf>.
- Smith, J. (1993) *Understanding Stress and Coping*. Macmillan.
- Smollan, R. K. (2015). Causes of stress before, during and after organizational change: A qualitative study. *Journal of Organizational Change Management*, 28(2), 301-314. Retrieved from <http://dbproxy.lasalle.edu:2048/login?url=https://dbproxy.lasalle.edu:6033/docview/1671991071?accountid=11999>
- Thomson, P., & Jaque, S. V. (2016). Visiting the muses: Creativity, coping, and PTSD in talented dancers and athletes. *American Journal of Play*, 8(3), 363-378. Retrieved from <http://dbproxy.lasalle.edu:2048/login?url=https://dbproxy.lasalle.edu:6033/docview/1814065200?accountid=11999>
- Young, E. N., Morris, T., & Andersen, M. B. (2003). Psychosocial stress and injury in dance. *Journal of Physical Education, Recreation & Dance*, 74(4), 36-40. Retrieved from <http://dbproxy.lasalle.edu:2048/login?url=https://dbproxy.lasalle.edu:6033/docview/215759647?accountid=11999>