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Positive Thinking in Dance: The Benefits of Positive Self-Talk Practice in Conjunction with Somatic Exercises for Collegiate Dancers

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Publication Date

2015

UNIVERSITY OF CALIFORNIA,

IRVINE

Positive Thinking in Dance: The Benefits of Positive Self-Talk Practice in Conjunction with Somatic Exercises for Collegiate Dancers

THESIS

submitted in partial satisfaction of the requirements
for the degree of

MASTER OF FINE ARTS
in Dance

by

Christine Gerena

Thesis Committee:
Professor Jennifer Fisher, Chair
Assistant Professor Kelli Sharp, Co-Chair
Professor Mary Corey
Lecturer Diane Diefenderfer

2015

DEDICATION

TO

My fiancé Joel for being the catalyst of my leap of faith that began this journey.
Your uncanny ability to both lift me up and keep me grounded is why I am the person I am today.

My mother Nilda, for you are the light of my life.
Your unwavering trust in me and my abilities has always been the light at the end of the tunnel.

The men in my life—Peter O. and my brothers Peter and David.
Peter, your boisterous presence in my life reminds me why I must always strive to live a happy and full life. Brothers, your intelligence and humor push me to be the best version of myself; and the sisters you have brought into my life are better than I could have asked for.

And to all of the young dancers aspiring to be something great. It is already within you.

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ACKNOWLEDGMENTS

My deepest gratitude goes first to my family: my parents, brothers, and my fiancé. You believed in me more than I believed in myself at times. I am proud of who I am and what I stand for because you all had a part in developing my character and belief system. You all love me near, far, and fiercely. Thank you.

I want to express sincere thanks to my thesis chair, Dr. Jennifer Fisher. Your immense interest in my topic helped me believe that it was a worthy cause to pursue. Your insight during our conversations proved invaluable to me and I appreciate your guidance. The trust you had in me to take my time was freeing, but you were right there when I needed support.

I want to thank Dr. Kelli Sharp for diving headfirst into my research with me. I cannot begin to express how grateful I am that you believed in me enough to commit so much time and effort to my research. I will take all of your advice to wherever I go in my career. Your energy is invigorating and surely painted my last school year a brighter color.

Huge thank you to my committee members Mary Corey and Diane Diefenderfer. Mary, you have had an immense influence in my growth as an educator. You lead by example and encourage with the utmost support and rationality. Diane, your somatic expertise propelled me to take full hold of my research on this topic. Your grace and humor are refreshing in this academic setting.

I want to thank the members of my thesis study, "Positive Thinking in Dance" Workshop. Our time together was the highlight of my graduate career. I've learned an unmeasurable amount from you. You are dear to my heart and giggly to my knees.

The biggest thanks must be given to my gaggle of grads, the MFA dance candidates of 2015: Alana, Blair, Boroka, Cara, Christian, Colleen, Elke, Leann, Siobhan, Steve, and Yulong. You have all changed me for the better. Our time in this program has been so special. So much so that the people around us stare at us in awe when we're together. I am so excited to see the change that each and every one of you will bring to this field.

ABSTRACT OF THE THESIS

Positive Thinking in Dance: The Benefits of Positive Self-Talk Practice in Conjunction with

Somatic Exercises for Collegiate Dancers

By

Christine Gerena

Master of Fine Arts in Dance

University of California, Irvine, 2015

Professor Jennifer Fisher, Chair

Many dance students suffer from low self-confidence and high anxiety as a result of cultural stressors present in the training environment. Particularly, the tradition of authoritarian-style teaching has been shown to hinder the psychological development of students. This thesis researches teaching methodologies that incorporate psychological skills training and aspects of the Franklin method (a somatic practice) into collegiate dance education. The objective is to equip dancers with the positive self-talk practice necessary to combat cultural stressors in dance training. Along with a survey of published research, the methods for this thesis project included questionnaires and interviews conducted as part of a pilot workshop study. Results of this thesis study conclude that the integration of mental skills training in dance education provides students with valuable skillsets that help promote self-confidence and efficacy.

INTRODUCTION

Dance performance as a profession demands the body and mind of the artist to be in peak performance shape at all times. This requires rigorous physical and psychological conditioning. Although the field of dance medicine has developed into a vital asset for the physical health of dancers, there is still room for expansion in regard to strategies for the mental wellbeing of dancers. In recent years, research across many disciplines has proven that dancers endure tremendous bodily stress in the pursuit of a profession that offers no stability and little gratitude (Stanway, Bordia, & Fein, 2013). Moreover, as a result of the traditional culture of concert dance, many dancers who devote their lives to this profession often suffer from depression, dysfunctional body image, eating disorders, injury, and lack of social support (Marchant-Haycox & Wilson, 1992). Psychological skills training (referred to as PST in short), as defined and practiced in the field of sport psychology, promotes self-regulation of psychosomatic symptoms, attention control, and maintenance of self-confidence (Klockare, Gustafsson, & Nordin-Bates, 2011). Although this type of training is not globally integrated into dance training, it is proposed that dancers, who are athletes as well as artists, can benefit from this type of training.

The primary goal of this thesis is to identify and survey the potential benefits of integrating specific aspects of PST into dance education. In addition to published research, this thesis research also includes a pilot project designed to test aspects of psychological skills training with a small group of college students. The intention of this research is to address the gaps between dance training and mental skills training through the amalgam of psychological skills training and somatics.

Chapter 1 looks at psychosomatic stressors in Western concert dance training that negatively affect dancers' performance, self-esteem, and coping abilities.[1] Traditional teaching-styles, environmental factors such as the mirror, and intra- and inter-personal relationships between students are examined as possible contributors to stress and anxiety. Focus is placed on students enrolled in university dance programs. Sports science literature and conceptual frameworks developed in the field of sport psychology contribute to the analysis of these stressors and their effects. Sources also include the work of dance studies scholars and, occasionally, my viewpoints as a dancer with experience that resonates with aspects of the literature.

Chapter 2 connects the psychosomatic stressors of the training environment to injury occurrence. The stress-injury model of sport psychology in conjunction with recent dance medicine research will support the analysis of dancers' common reactions and psychological recovery from injury.

Chapter 3 consists of an examination of psychological skills training (PST), as developed by sport psychologists. Quantified benefits in the field of sports will be evaluated to measure PST's potential value in dance training. Utilizing somatic techniques to institute these mental skills in dance education will be discussed as a possible teaching method.

Chapters 4 and 5 includes a description and analysis of the pilot study conducted in connection with this research. Quantitative and qualitative data from original surveys, a questionnaire published in the field of sport psychology, and a workshop seminar will be analyzed to gauge the effectiveness of self-talk in conjunction with somatics. It is hoped the results of this study can contribute to the design of a dance wellness curriculum to institute into a university dance program.

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[1] Psychosomatic: of or relating to the interaction of mind and body (Merriam-Webster Dictionary)

CHAPTER 1

Cultural Stressors in Dance Training and their Psychosomatic Effects

The Show Must Go On: The training environment's power over self-confidence, motivation, and anxiety

Although work in other fields such as sport psychology has been the basis for much of dance medicine, there is a distinct set of factors unique to the dance training environment that calls for deeper exploration (Klockare et al., 2011). Stephanie Hanrahan, a sport psychologist who has contributed to dance research, points out the gap between psychology and dance in her 1996 article, "Dancers' Perceptions of Psychological Skills," when she refers to the fact that dance was completely disregarded in the book *The Psychology of Performing Arts* (p. 20). This is alarming since four years prior to Hanrahan's statement, psychologists Susan Marchant-Haycox and Glenn Wilson found in their 1992 study profiling performing artist personalities that,

> Dancers [emerged] as unhappy, anxious, hypochondriacal and low in self-esteem, and…dancers and singers reported suffering from performance anxiety…All except actors suffered from shoulder-ache significantly more than controls [and] an exceptionally high incidence of depression (38%) was reported by dancers (p. 1061).

To begin understanding why these statistics exist, the personality structure must be examined. Working in the field of sport psychology, Robert Weinberg and Daniel Gould define personality as "the characteristics—or blend of characteristics—that make a person unique" with a structure that can be broken down into "three separate but related levels: a psychological core, typical responses, and role-related behavior" (2011, "Defining Personality," para. 1). The

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psychological core is known to be the deepest part of one's personality where values, morals and self-worth reside. The second deepest layer, typical responses, is compiled of adjustments one has learned to make as a result of past experiences and environments. Finally, the most superficial, or most external, layer is that of role-related behavior; which is the result of a person's perception of his/her social situation in the moment (Weinberg & Gould, 2011, "Defining Personality," para. 1). Thus, a person's response to new situations is influenced by the interaction of his/her psychological core and role-related behaviors. When discussing the environment of dance training, it is important to keep in mind how temperament, past experiences, and personal perception in the moment all influence how a person behaves in a situation, especially one that is stressful or difficult.

In order to help dancers learn how to positively respond to challenges, one must determine what aspects of the training environment contribute to the formation of negative personality characteristics. According to dance science researcher Mary Elizabeth Air (2013), these characteristics include a disposition to depression, negative self-image, low self-esteem, and high anxiety. The role-related behavior of "dancer" requires discipline, self-control, pliability, and adaptability. Dance artist and scholar Susan Leigh Foster describes this level of dedication when she writes, "typically, a dancer spends anywhere from two to six hours per day, six to seven days per week for eight to ten years creating a dancing body"(2010, p. 236). Angela Pickard, dance scholar and editor in chief of the journal *Research in Dance Education*, accurately describes an elite dancer's blind absorption into the art form: "I became a dancer through a process of construction that began in early childhood. I could not possibly have known the consequences of regular, intensive training on a body so young and that [the] aches and pains would be with me into adulthood" (2012, p. 25).

As Pickard describes, many concert dancers start their training as young as three years old. The dance teachers and the traditional studio atmosphere significantly influence the development of all three layers of a young dancer's personality. Julia Buckroyd claims in her 2001 article, "The Application of Psychodynamic Ideas to Professional Dance Training," that highly authoritative teachers often fulfill the parental role for their students and regulate a considerable amount of the young dancers' lives. Examples of this regulation include how dancers are told what to wear and how much to weigh. According to Buckroyd, there is also a prohibition of interactive communication between student and teacher. The student must passively receive instructions without debate (Buckroyd, 2001; Pickard 2012). In her article on the culture of western dance training, Robin Lakes, researcher in dance pedagogy and dance history, reasons that, "perhaps in an art form so steeped in respect for one's elders, there is hesitancy about so bluntly questioning their teaching behaviors, as if an act would undermine one's heritage" (2005, p. 3). This silent compliance demands a rigid conformity that forces the students to rely heavily on their typical responses and role-related behaviors. Air (2013) connects the traditions of early training to adults' predisposition to psychological distress when she writes,

> Formal dance training often begins during a critical early phase of psychological development. Fusion of dancers' self-identity with their occupational identity frequently occurs during adolescence. Those who pursue dance as a vocation become best suited to and most influenced by the subculture of the dance world over time...[because of the dancers'] focus on dance to the exclusion of everything else, which diminishes exposure to the potentially balancing forces of the non-dance world (p. 116).

This deep embedding of dance in a person's identity has come up several times elsewhere in literature. The all-consuming passion many dancers feel is a fitting example of what sport psychology defines as "obsessive passion." Obsessive passion is characterized by a "controlled internalization of an activity in one's identity that creates an internal pressure to engage in the

activity that the person likes" (Vallerand, et al., 2003, p. 756). Obsessively passionate individuals often exhibit rigid persistence of an activity that tends to lead to negative emotional responses. Vallerand and colleagues also identify harmonious passion, which occurs when individuals are able to freely and autonomously choose to engage in the activity without negative consequences from internal pressure (2003, p. 756). Wainwright, Williams and Turner refer to obsessive passion as addiction in their 2005 article "Fractured identities: injury and the balletic body." They describe the elite dancers they're observing as being addicted to the "sheer physicality of their working lives – of feeling exhausted, sweaty and out of breath" (p. 49). In the college dance population, it may be difficult for an obsessively passionate person to balance dance with other aspects of his/her college career. A young college dancer who cannot balance priorities may experience high levels of stress.

Dancers often have short dancing careers due to the physical strain on the body and this may be another contributing factor to obsessive passion. When dancers cannot perform due to circumstances out of their control, such as injury or job loss, some will often speak of not having anything to live for or feel that they have no worth (Wainwright et al., 2005). The unpredictability of performance opportunities is common; and this may be why dancers measure high for depression and anxiety (Marchant-Haycox et al., 1992).

The fear of not being able to dance is further exacerbated by the demands of techniques such as ballet and modern, which often require execution of movement that is stressful on the anatomical body. Despite the strain on the body, dancers will persistently practice and risk sustaining injury (Hanrahan, 1996). Useful in terms of understanding the culture of the dance world is Susan Leigh Foster's description of how bodies are imprinted in the studio. For instance, in her article, "Dancing Bodies: An Addendum 2009," Foster identifies the dancer's constant

struggle to match his/her perceived body (result of what one sees in the mirror and other sensory information) with the ideal body (the fantasized body) (2010, p. 237). She summarizes a potentially negative effect on confidence when she writes, "dancers constantly apprehend the discrepancy between what they want to do and what they can do…even after attaining official membership in the profession, one never has confidence in the body's reliability" (Foster, 2010, p. 237). The inconsistency between what Foster calls the perceived body and ideal body, especially at a vulnerable age of development, may lead to negative self-image, low self-esteem, and low self-efficacy.[2]

With the constant battle between the perceived and ideal bodies, it is not unexpected that dancers commonly exhibit high levels of perfectionism in their personalities.[3] Sport psychologists Jennifer Cumming and Joan Duda conducted research on this topic in 2012 and found that the participating dancers exhibited high concern over evaluation from others. The dancers measured self-worth based on their level of success and were overly self-critical of their behavior and achievements (p. 730). Despite being published in different fields of study, Cumming's and Duda's study and Foster's article both refer to the concept of the perceived and ideal bodies. In addition to what Foster originally wrote in 1997, Cumming and Duda explain that dancers' harsh self-criticism is a result of "the perceived discrepancy between their perceived ideal (e.g., high, rigid goals) and their current self/situation (e.g., performance in classes or rehearsals), [and] such individuals will more likely experience negative emotions" (2012, p. 730). This correlation

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[2] According to the American Psychological Association, self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments. Self-efficacy reflects confidence in the ability to exert control over one's own motivation, behavior, and social environment.

[3] Cumming and Duda define perfectionism in their cited study as a "multidimensional personality style characterized by imposing high standards on oneself combined with the tendency to engage in overly and unrealistic critical evaluations of one's achievement" (2012).

supports the need for dancers to be counseled or guided through their training in relation to how they view their self-worth and physical bodies.

Cumming and Duda's study is relevant to the collegiate demographic addressed in this paper because the authors highlight a university-based study published in 2010 by psychologists Patrick Gaudreau (whose research focus is on motivation and perfectionism) and Amanda Thompson (who studies the coping abilities of university students). Gaudreau and Thompson found that many undergraduate students displayed a high amount of negative observable manifestations of a subjectively experienced emotion (affect) and high evaluative concern (as cited in Cumming & Duda, 2012, p. 730). To summarize, Cumming and Duda's work highlighted dancers' struggle with evaluation and perfectionism; while Gaudreau and Thompson found that undergraduate students, in general, struggled with much of the same issues. These studies support the hypothesis that undergraduate dancers in college programs would be more susceptible than the general college population to negative emotional and cognitive states when dealing with challenges and stress.

A dancer's perfectionistic disposition may be heightened by the use of mirrors in technique classes. As Julia Buckroyd describes in her book *The Student Dancer: Emotional Aspects of the Teaching and Learning of Dance*, the tradition of "mirroring" in technique class is heavily engrained in training. While the use of the mirror has its benefits in areas such as alignment correction, scholars such as Julia Buckroyd and Shantel Ehrenberg suggest that the disadvantages to some dancers' confidence and self-image far outweigh the benefits (Buckroyd, 2000; Ehrenberg, 2010). A student self-observes to identify mistakes and inadequacies in effort to try and correct them (Buckroyd, 2010). The negative influence of the mirror in the dance studio is supported by the Objective Self-Awareness Theory of Shelley Duval and Robert Wicklund. As

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summarized by Radell, Adame, and Cole in their study, "The Impact of Mirrors on Body Image and Classroom Performance in Female College Ballet Dancers," this theory postulates that heightened self-awareness can be generated when an object in one's environment, such as a mirror, focuses an individual's attention on his/her self. This state of self-awareness causes a person to compare his or her self to ideals proposed in the environment. If a dance student feels his/her perceived and ideal bodies are not harmonized and that he or she is not meeting the standards of the teacher, negative self-evaluation may occur (Radell et al., 2004, p. 48).

The dancer's self-perceived inadequacies are further aggravated by competition between peers and negative critique from teachers, especially if the teacher is of the traditional authoritarian-style. In her article "The messages behind the methods: The authoritarian pedagogical legacy in Western concert dance technique training and rehearsals," Robin Lakes describes the personality structure of the authoritarian teacher as harboring, "such characteristics as low opinion of human nature…fatalism, contempt for the weak, cynicism, [and] aggression" (2005, p. 4). This type of teacher will primarily use negative reinforcement and criticism routinely (Lakes, 2005). Much evidence in dancers' memoirs and anecdotally among myriad dancer conversations has confirmed the existence of this type of teacher. If a severely negative authoritarian is responsible for the development of young dancers, these dancers may be more prone to having low self-efficacy, dysfunctional motivation and self-image. Research and memoirs have shown that many dancers also exhibit extremely negative self-talk, which is described as "the expression of thoughts or feelings which are counter-productive and have the effect of demotivating oneself" ("What is negative self-talk?" n.d.).

"Mind over Matter": Psychosomatic Manifestations of Stress and its Effect on Confidence

Accordingly, overly passionate dancers in a college program who prioritize dance over everything else and train in an environment that promotes perfectionism and negative self-evaluation may suffer from three major psychological and emotional states: high anxiety, stress, and low self-esteem. These three states are interrelated and may be influenced by an individual's level and source of motivation. According to Weinberg and Gould, motivation refers to the intensity and direction of one's effort (2011, "Defining Motivation," para. 1).[4] Motivation can be a combination of how one person is naturally wired (trait-centered) as well as level of exposure to certain situations (situation-centered) (Weinberg & Gould, 2011, "Defining Motivation," para. 9). If dancers solely experience authoritarianism, they may only know how to respond to negative reinforcement.

Sources of motivation can take several forms. Intrinsic motivation refers to a person being independently motivated by his or her own desires to strive and be competent at a task. Extrinsically-motivated people rely on external rewards to complete a task (Weinberg & Gould, "Intrinsic Motivation and External Rewards," para. 4). Since there is little external reward, such as pay, in the profession, dancers are often intrinsically motivated to pursue this career (Stanway et al., 2013). It follows that college dancers may be extrinsically motivated by recognition and praise from authoritative teachers as there is no reward with pay in the educational environment. This may be especially true for students who suffer from low self-esteem and need external validation of their self-worth. In regards to the training environments, Ehrenberg also connects the

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[4] In motivation, direction refers to whether an individual seeks out approaches, or is attracted to certain situations. Intensity refers to how much effort a person puts forth in a particular situation (Weinberg and Gould, "Defining Motivation" para. 2).

dependency on the mirror to extrinsic motivation (2010, p. 179). In Pickard's work, she interviewed several students whose confidence relied heavily on teacher praise. She found that,

> The dancers also described the ways in which the teacher 'looked' at them as a significant and powerful form of control with consequences for the dancer. As the young dancer strives to achieve technical proficiency and the ballet aesthetic of beauty and perfection, they are constantly looking to the teacher for a particular, positive response (2012, p. 36).

This type of classroom may also lead to competition and ego-oriented motivation where one's sole motivation is to be better at a task than a peer (Weinberg & Gould, 2011, "Motivation and Competitiveness," para. 2). An interview conducted in Pickard's study demonstrates this type of motivation when a student says, "I'm always checking out the bodies of others to see how much they can or can't do. That's what it is about really – being the best is all that I care about. I know that I want to be better than everyone else here and perform" (2012, p. 38). Comparison and competition are instigators for ego-motivation and take away a person's intrinsic motivation to master a skill for one's own purpose and fulfillment. This lack of internal motivation relates to sport psychology's concept of obsessive passion. If a student is only putting effort into something in order to be better than others, then harmonious, or autonomous, passion cannot be established.

If a dancer is dependent on recognition and validation from teachers and receives negative critique, that student may experience high levels of stress and anxiety. A commonly accepted definition of stress is "the relationship between a person and the environment that is appraised as taxing personal resources and threatening well-being" (Krasnow, Mainwaring, & Kerr, 1999, p. 51). If a person has low self-efficacy, he/she will have low cognitive appraisal of his her abilities

to complete the challenge presented.[5] The dancer's cognitive appraisal may be affected by what he/she sees in the mirror or what a teacher has criticized. This dancer will not be able to respond effectively to stressful situations, which results in poorer performance. A dancer's response to stress may include anxiety, which is defined as, "a negative emotional state characterized by nervousness, worry, and apprehension and associated with arousal (Weinberg & Gould, 2011, "Defining arousal and anxiety," para. 3).[6] There are two types of anxiety, trait anxiety and state anxiety. Trait anxiety refers to the inherent level of anxiety a person feels based on temperament; while state anxiety describes moment-to-moment changes in a person's emotional state. State anxiety can be further broken down into cognitive anxiety, characterized by worry and negative thoughts, and somatic anxiety, characterized by physiological changes in the body such as muscular tension (Weinberg & Gould, 2011, "Defining arousal and anxiety," para. 6).

There is one additional type of anxiety easily related to the dancer population, social physique anxiety. This statement is supported by Pickard's work when she discusses two teenage dancers who were both, "conveying anxieties about being seen – they have put themselves in a position to be seen and want and need to be seen, but, at times, it is torturous to be seen" (2012, p. 33). Social physique anxiety is described as the "degree to which people become anxious when others observe their physiques. It reflects people's tendency to become nervous or apprehensive when their body is evaluated" (Weinberg & Gould, 2011, "Identifying sources of stress and

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[5] According to the Encyclopedia of Psychology, cognitive appraisal is a "theory of emotion which implicates people's personal interpretations of an event in determining their emotional reaction. The most important part of this theory is the way we interpret the event (aka, was the event a positive or a negative occurrence?) as well as what we think caused the situation. Cognitive Appraisal can relate to self-efficacy in terms of how one appraises his/her abilities in relation to the challenge presented" ("Cognitive Appraisal Theory," n.d.)

[6] According to *Foundations of Sport and Exercise Psychology,* arousal is a "blend of physiological and psychological activity in a person…highly aroused individuals are mentally and physically activated; they experience increased heart rates, respiration, and sweating" (Weinberg & Gould, 2011, "Defining Arousal and Anxiety" para. 5).

anxiety," para. 10). Because particular aesthetics are so highly regarded in formal dance performance, dancers' bodies are often critiqued and scrutinized.

As demonstrated by the interviews in Pickard's study, if a dancer, particularly one who studies ballet, is prone to this type of anxiety, he or she may have a tremendously difficult time in class and auditions (2012, p. 35). Many U.S. college dance programs require ballet technique as part of curriculum. There is a stigma that if one is not good at ballet, then he/she is not a good dancer (Foster, 2010). This type of thinking has existed in Western concert dance for decades and negatively affects a large population of dancers who do not fit into or choose to be a part of classical ballet performance. If educators approach ballet training as only appropriate for those who fit into the performance world, another type of dancer may reasonably have confidence undermined. To avoid this potential erosion of confidence, a possible intervention in this process might be to develop pedagogical strategies that help teachers guide students' approaches to classical technique training so that they focus on the benefits, regardless of whether or not they will be performing in the genre.

"If you think it, it will happen:" Self-talk and behavioral outcomes

Self-talk, a component of psychological skills training, refers to what a person says to his or her self. The statements may be positive and motivating, or negative and demotivating (Hardy et al., 2005). In the realm of psychology and sport science, in-depth research on the effects of self-talk on behavior began in the mid-20th century. In the early 1960s, psychologist Albert Ellis established the principle in his book *Reason and Emotion in Psychotherapy* that what we say to ourselves affect our behavior. Generally, negative thoughts lead to negative or unideal behavior (as cited by Hatzigeorgiadis et al., 2009, p. 186). In the years since, several subsequent studies

have been conducted utilizing and expanding on Ellis' theory (Hatzigeorgiadis & Biddle, 2000). This idea of linking positive self-talk to behavior and performance is the foundational concept of this thesis because it has been shown that the practice of positive self-talk correlates with improved performance in athletes. There is not enough research confirming the existence of this correlation in the dance population.

In response to the various pressures of dance training, many dancers experience cognitive anxiety (Lakes, 2005; Noh et al., 2003; Wainwright et al., 2005). This worrisome state causes a person to engage in demotivating and catastrophizing internal dialogue, also known as negative self-talk ("Self-talk," n.d.).[7] Negative self-talk is comprised of self-directed statements of worry, doubt, and frustration (Araki et al., 2006). The use of demotivating self-talk in response to stress leads to a cycle of negative reinforcement and performance. If the person doubts his/her abilities to perform, he/she will have negative thoughts that lower confidence and efficacy, which leads to poorer performance (Van Raalte et al., 1994, p. 400). In the field of dance studies, the aforementioned article by Wainwright, Williams and Turner, maintains the premise that dancers often engage in negative self-talk. Self-limiting dialogue creates a negative cognitive-behavioral cycle that diminishes confidence and leads to unhealthy coping skills.[8]

In the 1992 study, "Personality and Stress in Performing Artists," dancers were found to be the most emotionally unstable group (Marchant-Haycox et al. 1992). Compared to actors and musicians, dancers measured to be the unhappiest, most anxious and hypochondriacal, and lowest

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[7] As defined by the Oxford Dictionaries, "catastrophizing" refers to the act of viewing or presenting a situation as considerably worse than it actually is.

[8] According to Andersen and Williams' sport psychology study in 1988, coping resources include a variety of behaviors and social networks that help individuals deal with the "problems, joys, disappointments, and stressed of life" (p. 302). Coping behaviors generally include sleep patterns, nutritional habits, time management, general self-esteem, and, when applicable, study skills (p. 302).

in self-esteem and autonomy (Marchant-Haycox et al., 1992, p. 1066). These statistics suggest that dancers may be more likely to experience performance anxiety. The cognitive and emotional states described in this study, as well as task-irrelevant and/or self-preoccupied thoughts, create what sport psychology defines as a cognitive interference in behavior (Hatzigeorgiadis & Biddle, 2000). This mental distraction, which can include negative self-talk, may have debilitating effects on performance (Ellis, 1962).

Conversely, positive self-talk has been shown to improve performance (Hatzigeorgiadis et al., 2009; Van Raalte et al., 1994; Klockare, 2014). The influence of self-talk on behavior is dependent on a person's response to the direction of his/her anxiety. As sport psychologists Antonis Hatzigeorgiadis and Stuart Biddle explain in their 2009 study, "direction of anxiety refers to the way athletes perceive anxiety symptoms, and in particular whether athletes perceive these symptoms as facilitative (helpful to performance) or debilitative (detrimental to performance)" (Study 1 section, para 1). The results of this study determined that athletes who viewed anxiety as facilitative reported higher uses of positive self-talk, while those who viewed it as debilitative tended to use more negative self-talk (Hatzigeorgiadis & Biddle, 2008). These findings support Ellis' theory that negative self-talk inhibits performance. Additionally, the work of Van Raalte and colleagues further prove Ellis' theory by concluding that negative self-talk was associated with losing, and the players who believed in the benefits of positive self-talk scored more points than those who did not (1994, p. 400). To understand how this applies to dance, an examination of how dancers view their anxiety and respond to it through self-talk will take place in the corresponding pilot study designed for this thesis.

The colloquial phrase, "If you think it, it will happen" seems to be more than a cliché for many performers and athletes. In the field of sport psychology, this phrase has been tested by

scientific methodology. Currently, many researchers are avidly suggesting the need for further research (Klockare, 2014; Van Raalte et al., 1994; Nordin-Bates, 2012). Because many dancers tend to engage in more negative thoughts due to the stressful and demanding culture in which they work, they provide a rich research population. Next, I will focus on the area of dancer injury, which I suggest may benefit from adaptations of positive self-talk practice.

CHAPTER 2

Application of Sport's Stress-Injury Model to Dance Injury

In the mid-1980s, sport psychologists Mark Andersen and Jean Williams introduced the stress-injury model in response to the lack of knowledge linking psychosocial stressors and injury occurrence (Williams & Andersen, 1988).[9] In their article, "Psychosocial Antecedents of Sport Injury: Review and Critique of the Stress and Injury Model," Williams and Andersen explain that,

> The central hypothesis of the model is that individuals with a history of many stressors, personality characteristics that tend to exacerbate the stress response, and few coping resources will, when placed in a stressful situation, appraise the situation as more stressful and exhibit greater physiological activation and attentional disruptions…The severity of the resulting stress response, caused by the increased stress reactivity of at-risk individuals, is the mechanism proposed to cause the injury risk (p. 6).

In other words, a dancer who struggles with one or several of the stressors concurrent with dance training may have a history of stressors similar to what Williams and Andersen describe in this cited study. Williams and Andersen propose that a person's history of stressors may include major life events, daily hassles, and previous injury history (Williams & Andersen, 1988, pg. 8). Donna Krasnow, Linda Mainwaring, and Gretchen Kerr, prominent dance science researchers, explain in their work, "Injury, stress, and perfectionism," that the accumulation of life stressors taxes an individual's coping resources. This increases his or her susceptibility to fatigue, illness, or injury (Krasnow et al., 1999). When studying people in physically demanding occupations such as dance, Krasnow and colleagues argue that it is critical to examine their specific life stressors

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[9] Please refer to Appendix A for Williams' and Andersen's revised diagram of the Stress and Injury Model (1988)

(1999, p. 52). Examples of dance-specific stressors have been examined in the previous chapter. To summarize again, these stressors may include balancing dance with other aspects of life, student-teacher relationships, and peer relationships in the studio.

Research in sport injury suggests that, as a result of these challenges, stress may manifest itself as overtraining, burnout, or injury occurrence (Williams & Andersen, 1988).[10] The results of a study in 1970 concluded that life stress directly correlates with sport injuries similarly to how it does with the occurrence of illness in connection to high life stress. There have been several successive studies in sport supporting the hypothesis that injury occurrence increases in direct proportion with the level of life stress (Williams & Andersen, 1988). To relate this to dance, studies have shown that as many as 97% of dancers have suffered from injury at least once in their career (Air, 2013). With such a high statistic, it can be assumed that the fear of injury would be a major component of life stress for many dancers.

In addition, collegiate dancers who are transitioning from student to professional in the field would presumably experience stress in regards to auditioning and finding stable work. In Barrell's and Terry's 2003 study, "the attitudes of dancers toward their future and continuing careers have been shown to be fairly pessimistic and this may affect coping style" (p. 59). The authors summarize another study of eight dance students who reported that they "felt powerless in a highly competitive field, believed they would never reach a professional level, and battled constantly with physiques they considered inadequate" (Barrell & Terry, 2003, p. 59). These thoughts were highlighted strongly by all of the students, despite their love of dance and strong self-identification as dancers.

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[10] Stress is defined as a "perceived imbalance between demand and capability" (Williams & Andersen, 1988).

These types of beliefs and doubts would leave many training dancers anxious about their futures. Major life stress such as previous injury and negative life events contribute to high anxiety and physiological arousal in stressful situations. This bodily activation leads to increased muscular tension, narrowing of the vision field, drop in attentional focus, and worrisome thoughts (Weinberg & Gould, 2011, "Defining Stress and Understanding the Stress Process," para. 5). The psychosomatic symptoms leave a dancer unfocused and susceptible to traumatic injury. Williams' and Andersen's stress-injury model support this prediction as they found that, "many physiological changes occur during stress, [and] increases in generalized muscle tension (bracing) may be one of the mechanisms behind the stress-injury relationship. [This is because] generalized muscle tension can disturb motor coordination and reduce flexibility, thus contributing to strains, sprains, and other musculoskeletal injuries" (Williams & Andersen, 1988, p. 299).

"No Pain, No Gain:" The Cultural Stigma of Injury

Based on research findings on the psychosocial stressors in sport, psychologists suggest that physically demanding performance occupations promote a "culture of risk." Athletes in sport, gymnastics, and dance have adopted an attitude about injury that prioritizes stoic-ness and resilience (Wiese-bjornstal, et al., 1998). An obsessively passionate dancer whose self-concept and identity relies on his/her ability to dance will continue to dance despite experiencing pain or exhaustion. A study published through the International Academy of Dance Medicine and Science (IADMS) followed dancers in the United Kingdom from 2005 to 2007 to survey what the dancers defined as pain and injury. Dancers in the study associated injury with a certain kind and quantity of sudden pain that produces physical signs such as swelling. Some dancers also believed certain kinds of pain were "good," although the "good" pain felt very similar to what they considered bad

pain (Thomas & Tarr, 2009). It appears that the reason the pain occurs influences how the dancers categorize it. For example, persistent pain as a result of working extremely hard or overstretching for long periods of time is considered worthy by the dancers and not typically viewed as an injury; while pain resulting from landing incorrectly from a jump is considered an injury. To put things into perspective, 46% of the 204 dancers participating in the survey who were experiencing consistent pain did not deem it an injury (Thomas & Tarr, 2009, p. 61-63). This is an alarming number of unresolved injuries occurring in just a fraction of the global dance community. How disturbing would the numbers be if the research survey was expanded?

If and when dancers finally admit that there is an injury, the probability of their being proactive about getting help is low. Research has shown that many dancers tend to refuse seeking any medical treatment. In their *Journal of Dance Medicine and Science (JDMS)* article, "And the Dance Goes On: Psychological Impact of Injury," dance science researchers and professors Lynda Mainwaring, Donna Krasnow and Gretchen Kerr shed light on dancers' disinclination to acknowledge the existence of injury. They explain that the potential blow to the ego from losing a performance opportunity is enough for many dancers to simply dance through the pain; and, as a result, possibly cause permanent physical damage (Mainwaring et al., 2001, p. 108).

In sports, a similar attitude emerges. For example, Chris Conte, professional football player for the Chicago Bears, said in an interview on WBBM radio, "I signed up for this. I'm risking the well-being of my body and mind for something beyond my body and mind, and I'm fully compliant with and conscious of it." He then admits that he would be willing to die 10-15 years earlier in the future for a chance to play professionally now (Baffoe, 2014). Memoirs and interviews with successful dancers, such as Misty Copeland's injury during her performance of *Firebird* and Michaela DePrince's journey in the documentary *First Position*, reverberate this

kind of testimony within the field of dance. The odds of success in both fields are rare and force many people to go to the extreme with personal sacrifice.

If and when dancers do seek help, many commonly seek unorthodox treatment methods (Mainwaring et al., 2001). Studies such as this one suggest that this is because many dancers feel as though traditional medical doctors do not understand the demands and lifestyle of dancers, and, thus, cannot prescribe adequate methods of rehabilitation without significantly affecting the dancer's career (Mainwaring et al., 2001). Mainwaring and colleagues also discuss the distinct psychology of dance injury. A relevant point the authors make is that "if the physical injury is ignored, the psychological impact of injury clearly has not been, and probably will not be, addressed" (p. 108). Interviews in "Fractured identities: injury and the balletic body," reveal that the physical recovery of injury took place at a much faster rate than the psychological recovery (Wainwright et al., 2005). One dancer in the study gave a chilling description of her experience with injury:

> Zelda: Psychologically, it was impossible to cope with…at the beginning it's all a disaster, life is not worth it, you kind of want to jump out of the window...the worst thing is not that you are injured; it's the coming back through the rehabilitation…psychologically it's horrendous because you have no confidence whatsoever, as you have something that's bothering you. The body is in a good state by now, but it doesn't feel like it used to and it takes forever to go back psychologically to where you were (p. 54).

Clearly, the physical and psychological trauma of injury may be equally damaging. Addressing one aspect does not appear to be enough to heal the other. The Mainwaring article lists common emotional reactions of dancers who were interviewed in other research studies. Frustration, fear, distress, anger and depression were among the shared reactions. Several dancers

admitted feeling guilt and jealousy when observing classes while injured. Some cases of psychological trauma were so extreme that one dancer in the study had attempted suicide while others dealt with eating disorders and self-mutilation post-injury (Mainwaring et al., 2001, p. 108). Extreme responses such as these have also been found in sports studies (Wiese-bjornstal, et al., 1998). In dance and sports, the body is the working instrument for success. Once the body fails, many dancers and athletes are unable to emotionally cope with the reality of their conditions.

The emotional impact of injury is also greatly influenced by the presence of social support and/or criticism.[12] As described in the first chapter, many dancers identify wholly with dance and make few connections outside of it. Thus, when stress and injury arise, dancers turn to other dancers, who have also absorbed the "show must go on" mentality. Consequentially, injured dancers who turn to other dancers will most likely be told to continue dancing. For outsiders, it is common to not understand the importance of dance and question why dancers put themselves through that kind of pain and stress. Personal and peer anecdotal evidence has shown that a dancer will often feel misunderstood and ridiculed when speaking to someone who does not share the same passion. Williams and Andersen (1988) found in their study that, "subjects with low social support were more likely to become injured than those with high social support, regardless of life stress levels" (p. 302). Results such as this accentuate the importance of ensuring that young dancers in elite training have strong social support both in and outside the dance field. More specifically, it is crucial for an injured dancer to be surrounded by positive social support during rehabilitation in order to balance the negative thoughts and emotions that can occur.

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[12] Please refer to Appendix B for Wiese-bjornstal's and colleagues' diagram of the integrated model of psychological response to the sport injury and rehabilitation process (1998).

An injured dancer's choice to continue dancing in response to the culture of silence explains why majority of dance injuries are overuse injuries. The authors of "And the Dance Goes On: Psychological Impact of Injury" state:

> It seems reasonable, given that dancers suffer more overuse injuries than athletes, to postulate that dancers, or those who suffer overuse injuries in general, cope quite differently than those who suffer traumatic injuries. Living day to day with pain and discomfort wears on the body and psyche such that it is likely that different coping strategies are developed (Mainwaring et al., 2001, p. 109).

In reference to the cognitive processes of dealing with injury, Mainwaring and colleagues focus on the coping skills of injured dancers. They classify several reactions of dancers as either coping or catastrophizing responses. Compared to athletic studies, it seems as though ballet dancers, in particular, have more catastrophizing, or destructive, responses than athletes (Mainwaring et al., 2001).

In response to the harsh and competitive dance culture described here, the typical responses and role-related behaviors of a dancer, especially one who is injured, have been shown to result in poor coping skills. Dr. Mary Air conducted a study on the psychological distress present in injured dancers. The participating dancers ranged from amateur to academic to professional. It was discovered that, "academy-pre-professional students in this study emerged as a particular group who demonstrated persistently high numbers of clinically referable psychological symptoms" and they also "worsened in somatic and depressive scores, which may suggest perseverative or brooding behavior and poor coping skills" (Air, 2013, p. 130). Studies such as Air's prompted the present research focusing on dancers enrolled in college programs. In an attempt to explore

possible coping tools, mental skills training will be evaluated in the next chapter and applied in the corresponding workshop being conducted as part of this thesis.

CHAPTER 3

Psychological Skills Training and Somatics: The Benefits of Self-talk on Performance

"Now what?": Current suggestions for future research.

In 1982, Jennifer Dunning wrote an article for the *New York Times* highlighting the Performing Arts Center of Health (now known as the Center for the Performing Artist), a non-profit group providing a range of affordable healthcare services to performing artists. The services include psychiatric counseling because, as Dunning writes, "increasingly, it seems, dancers are beginning to feel or admit a need for psychotherapy. No longer do they see themselves as purely physical beings, but there is a growing recognition among them that their minds and emotions are important, too" (Dunning, 1982, para. 3). Although it has been 33 years since this article was published, many dancers continue to struggle with achieving mental wellbeing without access to such services. Given that research has shown dancers experience significant stress and pressure to perform, psychological tools and counseling for dancers would be of great benefit for them,

The field of sport psychology offers to dance psychology extensive groundwork for this topic. Research in sport and performance psychology has led to the development of mental skills strategies for athletes to use in competition and performance. Ellinor Klockare and colleagues point out that "in psychological skills training [referred to as PST in short], different techniques, such as goal setting, imagery, mental preparation, self-talk and relaxation are used for developing and improving psychological skills to enhance performance and/or well-being…Primarily the purpose of PST is to enable the individual to control his or her thoughts and emotions" (Klockare

et al., 2011, p. 278). The goals of utilizing PST are to increase attentional control, regulate arousal, and maintain self-confidence (Klockare et al., 2011).

Only recently has research expanded to examine PST and its presence in dance training. Several studies have been published in the *Journal of Dance Education* and the journal *Research in Dance Education*. While some studies incorporated general psychological skills training (Klockare et al., 2011; Klockare, 2014; Mainwaring et al., 2003), others have focused on specific skillsets such as Harlene Goldschmidt's 2002 article, "Dancing With Your Head On: Mental Imagery Techniques for Dancers." Although these studies yielded marginal results in terms of self-improvement, they all produced similar findings about the participants' desire for additional psychological skills training in dance education. In Klockare's 2014 thesis study, for example, dancers did not incorporate psychological skills training substantially in their practice, but there was an increase in their ability to relax when needed (p. 20). Another study that Klockare published with Gustafsson and Nordin-Bates (2011), as well as Mainwaring's 2003 study, resulted in the participants, which included both students and teachers, developing a more positive view on PST. The teachers in Klockare, Gustafsson, and Nordin-Bates' study wished they had more knowledge about PST to integrate into their teaching (2011, p. 290); while the students in Klockare's thesis study requested more time to practice (2014, p.16). Each study concluded that limitations included the length of study, number of participants, and intensity/frequency of sessions. Still, all of the results were deemed sufficient enough to warrant further research in the area (Mainwaring et al., 2003; Klockare et al., 2011; Klockare, 2014).

The ultimate goal of psychological skills training is to build "mental toughness." Several definitions exist for this term, but all variations reflect the concept that mental toughness refers to an "athlete's ability to cope with stress and resultant anxiety associated with high pressure

competitive situations" (Jones et al., 2002, p. 206). One of the biggest challenges for many dancers is the worry and negative thoughts associated with cognitive anxiety, which often leads to somatic anxiety. It has been proven that the physiological effects of somatic anxiety affect performance, and this may prevent dancers from developing mental toughness (Robson & Gitev, 1991).

Cognitive-behavioral modifications such as self-talk practice as part of psychological skills training have shown to be one of the most effective plans of action when dealing with cognitive anxiety. In support of this notion, a study was conducted in 2009 through the Department of Physical Education and Sport Sciences at the University of Thessaly in Trikala, Greece on 72 tennis players measuring the effect of self-talk on confidence and cognitive anxiety. Based on the results of their study, the team of psychologists summarize that, "self-talk can enhance self-confidence and reduce cognitive anxiety. Furthermore, it is suggested that increases in self-confidence can be regarded as a viable function explaining the facilitating effects of self-talk on performance" (Hatzigeorgiadis, 2009, p. 186). Over the course of five sessions, the participants reported an increase in the use of specific motivating self-talk cues. Manipulation checks were used to test the reliability of the results in conjunction with the analysis of a control group of participants who were not given any information about self-talk (p. 189).

Based on examining cultural stressors commonly found in training environments and the scientific reliability of many studies quantifying the benefits of self-talk practice, it is clear how beneficial it may be to incorporate principles of PST in dance education. In the *Oxford Handbook of Sport and Performance* Psychology, Sanna Nordin-Bates writes, "Although an extensive range of studies in sport have examined psychological skills such as imagery, goal setting, self-talk and relaxation, the same cannot be said for the performing arts. Instead, there are growing literatures on imagery in music and dance, but no studies focused on goal setting, self-talk, or relaxation"

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(Nordin-Bates, 2012, p. 93). Statements such as this one support the need for research on self-talk in dance training.

"A Means to an End:" Introducing psychological skills training in dance education through somatics

Because other studies have noted dancers' struggle with the use of psychology-based terms in dance training (Klockare, 2014) and teachers' difficulty in incorporating certain aspects of PST seamlessly into dance curriculum (Klockare et al., 2011), using somatic technique as a medium in which to channel PST is a credible alternative. Somatic techniques constitute a large part of dance education today (Lobel & Brodie, 2006), particularly, in collegiate training with somatic courses offered as required electives. Many somatic techniques currently incorporate two aspects of PST: imagery training and breath-relaxation techniques (Sellers-Young, 1998). This familiar overlap in the studio opens the door to a more effective exposure to psychological skills training.

One particular technique, The Franklin Method, also incorporates self-talk cues to promote positive thinking. Developed by movement educator and writer Erik Franklin, the Franklin Method "uses dynamic imagery, anatomical embodiment and educational skills to create lasting positive change in [one's] body and mind" (Franklin Method, 2008, para. 1). The Franklin Institute claims that its method "is at the forefront of practical neuro-plasticity; [by] showing [one] how to use [his/her] brain to improve body's function" (Franklin Method, 2008, para. 3). My pilot study in connection with this research will address the cognitive effects of negative self-talk through Franklin Method education with emphasis on psychological skills training. The aim of this study is to help collegiate dancers become aware of their thought patterns through self-talk practice. Once awareness is established, through guidance and support by Franklin Method exercises and PST resources, students can then begin to learn how to alter their thoughts so as to mediate somatic

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anxiety and enhance performance. It is hoped that learning these skillsets will enhance the students' self-efficacy and esteem. The next chapter will give a description of the methods and procedures of the pilot study, followed by an analysis of results with recommendations for future research.

CHAPTER 4

Methods

The primary goal of this research study was to determine if mental skills training, with particular focus on positive self-talk practice, could be a useful tool to alleviate anxiety, stress, and low self-efficacy commonly present in dancers as a result of the traditional training environment. Permission to analyze human subjects using the following outlined methods was granted by the University of California, Irvine's Institutional Review Board (IRB) on November 7, 2014.

Part I: Departmental Anonymous Survey: Design, Recruitment and Eligibility

The pilot study, conducted through the dance department of the Claire Trevor School of the Arts at UC, Irvine (UCI), started with a department-wide anonymous survey to measure dance undergraduate and graduate students' current level of knowledge and content of self-talk with specific regard to how they cope with injury and stress.[13] Research questions being explored through this survey include: What types of thoughts do university dancers commonly regard as self-talk? Are collegiate dancers exposed to self-talk practices and knowledgeable of how to use self-talk as a tool to combat stress and psychological distress? Do the participating dancers tend to use more positive or more negative self-talk? What are the attitudes and opinions of participating dancers in relation to topics such as injury, medical treatment, and physical recovery?

Quantitative data was gathered from the responses to compile documentation grouping the answers in ways that measured any recurrent patterns or themes, as well as differences between

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[13] Please see Appendix D for a sample of the department-wide anonymous survey.

groups categorized by age and level of experience. General demographic information was also collected in effort to delimit the responses into smaller pools of data (i.e.: gender, age, dance background, injury history, etc.). This was in an effort to compare and contrast the level of knowledge and use of self-talk in dancers at varying stages of the academic career. A description of the survey results is outlined in the next chapter.

In the latter half of fall quarter of 2014, an email was sent to all UCI undergraduate and graduate dance students outlining the purpose of my survey with the survey and study information sheet attached, as well location information on where to find and submit the questionnaire in the front office of the dance department. Participating students submitted the anonymous questionnaires in a labeled box located at the front office of the dance department. The survey did not ask for any identifiable information, ensuring the privacy of participating subjects. The nine questions were answered with "yes" or "no" responses or checking all answers that applied. No in-depth details of a person's stressors or challenges were prompted.

In addition, recruitment flyers and reminder emails were posted on bulletin boards throughout the dance department.[14] The submission box was accessible for students until the latter half of winter quarter of 2015. The questionnaire was open for all who exist in the population that serves as the focus of this research: undergraduate and graduate students enrolled full-time in a fully-accredited college dance program. Participation was voluntary for all UCI undergraduate and graduate dancers who were at least 18 years old.

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[14] Please refer to Appendix E for samples of the recruitment email and flyers.

Part II: "Positive Thinking in Dance" Workshop Study: Design, Recruitment, and Eligibility

The aim of the pilot workshop study was to discover any potential benefits of integrating self-talk-based somatic practice into dance training. Research questions that were explored in this qualitative study include: Is there potential for correlation between exposure to self-talk practices via somatics and a decrease in dancers' experienced levels of stress and anxiety? Can the integration of self-talk practice into dance training promote positive self-image, self-confidence, and positive coping skills in dancers? In previous research, self-talk has been shown to enhance self-confidence and reduce cognitive anxiety in athletes participating in sport (Hatzigeorgiadis et al., 2009). The goal of this pilot study was to determine if the same relationship between self-talk, self-confidence, and anxiety can exist within the targeted dance population.

The departmental anonymous survey briefly summarized my research study titled "Positive Thinking in Dance Workshop" and listed my contact information for those students who were interested in participating. Inquiring subjects were given an informed consent sheet to sign and submit to demonstrate agreement of participation. Scheduling of the sessions was carried out via email with an informal meeting one week prior to start of workshop to answer any additional questions students had. Eligibility to participate included the same criteria as the departmental anonymous survey as well as completion of the anonymous survey prior to the start of the workshop.

During winter quarter of 2015, the six-week long workshop took place on campus in university dance studios. Sessions occurred twice a week for an hour and a half, totaling 18 hours for the duration of the study. Because of scheduling conflicts, two sessions were offered each day so participants had two time slot options to choose from. Each time slot per day covered the same material and presented self-talk methods as described in psychological skills training resources in

collaboration with the somatic practice of the Franklin Method. Qualitative analysis of group discussions and interviews and quantitative data from feedback questionnaires conducted at the end of the study measured whether or not participating students noticed any improvements in their mental wellbeing and dance training after the integration of self-talk practice into their current dance regimen. In addition, to support study results, the participants completed questionnaires published by established professionals in the field of sport psychology.[15] A description of the sport psychology and feedback questionnaires will take place in a later section.

Characteristics of Subjects

A total of six subjects were recruited for the workshop. Four of the subjects were women and two were men. To ensure anonymity in this paper, participant names will be withheld. Demographic information about the participants is located in Figure 1 below.

Figure 1	Age	Gender	Year of Study	Years of Training
Subject A	19	Female	1	9
Subject B	19	Female	2	15
Subject C	19	Female	2	14
Subject D	26	Female	5	20
Subject E	25	Male	4	8
Subject F	28	Male	5	10

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[15] Please refer to Appendix G for a sample of the Thought Occurrence Questionnaire for Sport (TOQS) developed by Hatzigeorgiadis and Biddle (2000).

Study Questionnaires: Design and Purpose

During the first session of the study, each subject completed the departmental anonymous survey for a second time, but listed their names for identification in data-collection. According to their answers on the survey and based on group discussions, all participants decided to participate in the workshop because they were each struggling with varying levels of negative self-talk, anxiety, and compromised self-efficacy.

In addition, they completed the Thought Occurrence Questionnaire for Sport (TOQS) developed by Hatzigeorgiadis and Biddle (2000). TOQS was developed to be used as an instrument to assess cognitive interference experienced by athletes during competitions (Hatzigeorgiadis & Biddle, 2000). Without altering the objective and reliability of the questionnaire, descriptive terms in the questionnaire were modified to apply to dance settings (i.e.: "performance" instead of competition). The subjects had to circle all of the statements listed on the questionnaire that echoed what they have experienced during dance classes, rehearsals, or performances. The statements either represented thoughts of task-related worry, task-irrelevant thoughts, or thoughts of escape.

At the end of the study, subjects participated in a group interview discussing their attitudes and opinions of the effectiveness of the workshop and filled out a short feedback questionnaire designed by the lead researcher. The intention was to gather both quantitative and qualitative data that represents the humanistic experience of the subjects in a manner that could still be measured and statistically evaluated. Next, a brief description of what took place during the sessions will take place with complete lesson plans located in the appendix.

Session Breakdown

The workshop material used from Eric Franklin's work is derived from several printed and online workshop resources (Franklin, 2009; Franklin, n.d.); as well as my experience having taken Franklin classes and working with certified Franklin method instructors in New York City and Philadelphia. The Franklin method was chosen because of its inclusion of mental skills training as part of its foundational principles. In his book *Beautiful body, beautiful mind: The power of positive imagery*, Franklin writes, "The training applied to our *Beautiful Body/ Beautiful Mind* program is scientifically researched and includes mental simulation of movement, anatomical and metaphorical imagery, self-talk, goal-setting, motivational techniques, and relaxation" (2009, p. 1). Although he does not specifically categorize it as psychological or mental skills training, all four aspects of PST are listed in this description. In addition, Erik Franklin, a dancer himself, has dedicated numerous books and workshops to dancers' conditioning and wellbeing such as *Conditioning for Dancers*, *Dance Imagery for Technique and Performance*, and dance conditioning workshops for dancers in China and dancers of the Royal Ballet (Franklin method, 2008). For these reasons, it was concluded that the somatic technique of Eric Franklin and its overlap with PST and dance would be an efficient medium to incorporate mental skills training into dance training.

The first session of the study consisted of reading and signing the informed consent sheet followed by an introduction to the study with a printed study guide outlining the goals of the study and expectations of the subjects' participation. The study guide also included a description of major concepts and key terms that would be explored in the study. Each participant kept a journal they would use during and outside of the sessions to write down relevant thoughts, self-talk

patterns, and information covered in the sessions. Also, for each session, the dancers had to come prepared with movement sequences learned from class or rehearsal that they were having difficulty technically executing. Although the movement sequences were not addressed in every session, the goal of this was to have the students become aware of what they were having difficulty with and why. Having this awareness established in conjunction with the skillsets being introduced in the study would give the dancers tools needed to set realistic goals that would help them improve the technical skills demanded in these movement combinations. This, in turn, would potentially increase their level of self-efficacy in relation to dance. After explaining these expectations, the participants completed the questionnaires and were then able to ask questions regarding the study.

Each session began with what Eric Franklin terms as "minute of awareness" (Franklin, n.d.) where each person sits in a comfortable position for 60 seconds, tuning out all distractions and being present in the moment sensing only his or her body. This was followed by an open discussion to talk about any experiences from the last workshop or from daily life in between sessions. All discussions were audio recorded for the sole purpose of transcription.

Under the guidance of dance studies scholar and ethnographer, Jennifer Fisher, I researched several interviewing techniques to effectively direct group discussions.[16] Echoing participant hermeneutics, I asked the students open-ended familiar questions that would encourage the students to find new meaning in their experiences and viewpoints through the process of reflection (Stinson, 1990). I emphasized what Kristina Minister refers to as mutual disclosure by encouraging

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[16] I discovered the concepts of participant hermeneutics and mutual disclosure through Jennifer Fisher's article, "Performance and Collaboration Strategies for the Interviewer in Western Dance World Settings." Much of her ethnographic work, especially her research on the ritualistic connection between the ballet, *The Nutcracker*, and Christmas traditions of North America (Fisher, 2003), is based on these concepts.

participants' disclosure with the sharing of my own experiences (Minister, 1991). I chose the process of mutual disclosure as a way to build trust within what the students later described as a compassionate and non-judgmental environment. I prompted the discussions with questions that encouraged the students to reflect on a range of topics: daily self-talk, responses and reactions to stressful situations that induced anxiety, relationships with peers or authority figures in the field, and the dancer identity.

The discussion would then segue into the introduction of new information about PST, coping skills, and managing social interactions. With the assistance of printed handouts and the students' journal writing, I introduced several concepts, terms, and definitions from clinical psychology, sport psychology, and dance studies that would supplement the intended exercises of the session such as Franklin (2009), Farkas (2012), Foster (2010), Jones (2002), Kirschenbaum (1987), Rushall (n.d.), and Williams and Andersen (1988). The practical exercises in the study incorporated PST and the Franklin method through reflective journaling, dance improvisation, choreography, teaching, and performance. Detailed lesson plans of each session are located in Appendix J.

The first day of the last week of the study consisted of a group interview discussing the participants' opinions of the effectiveness of the workshop on their personal self-talk practice and coping abilities. The second day of that week consisted of an open discussion guided by the participants, improvisation that led to choreography and performance, and a Franklin method exercise that emphasizes the use of self-talk cues to improve mood.[17] The students completed the anonymous survey for a third time, the TOQS questionnaire for a second time, and a short feedback

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[17] Please refer to Appendix I for full description of exercises.

survey. The qualitative information gathered from the discussions and group interviews combined with the quantitative data gathered from the feedback questionnaire are the primary sources of evaluation of these methods. Next, both qualitative and quantitative analysis of the data and summary of findings will take place.

CHAPTER 5

Results

Quantitative Analysis of Departmental Anonymous Survey

Forty-five of the possible 115 students enrolled full-time in the UCI dance program during fall quarter of 2014 returned surveys anonymously by submission box, resulting in a 39% response rate. Demographic description of the participating students can be found in Table A.

Table A: Demographics of Student Responses

[Bar chart with vertical axis labeled "Numerical Value" and the following categories and values:]

- TOTAL NUMBER OF RESPONSES: 45
- MALE: 6
- FEMALE: 39
- MEDIAN AGE: 20
- AVERAGE NO. OF YEARS OF TRAINING: 15
- FIRST-YEAR UNDERGRADUATE: 12
- SECOND-YEAR UNDERGRADUATE: 12
- THIRD-YEAR UNDERGRADUATE: 3
- FOURTH-YEAR UNDERGRADUATE: 5
- GRADUATE: 3
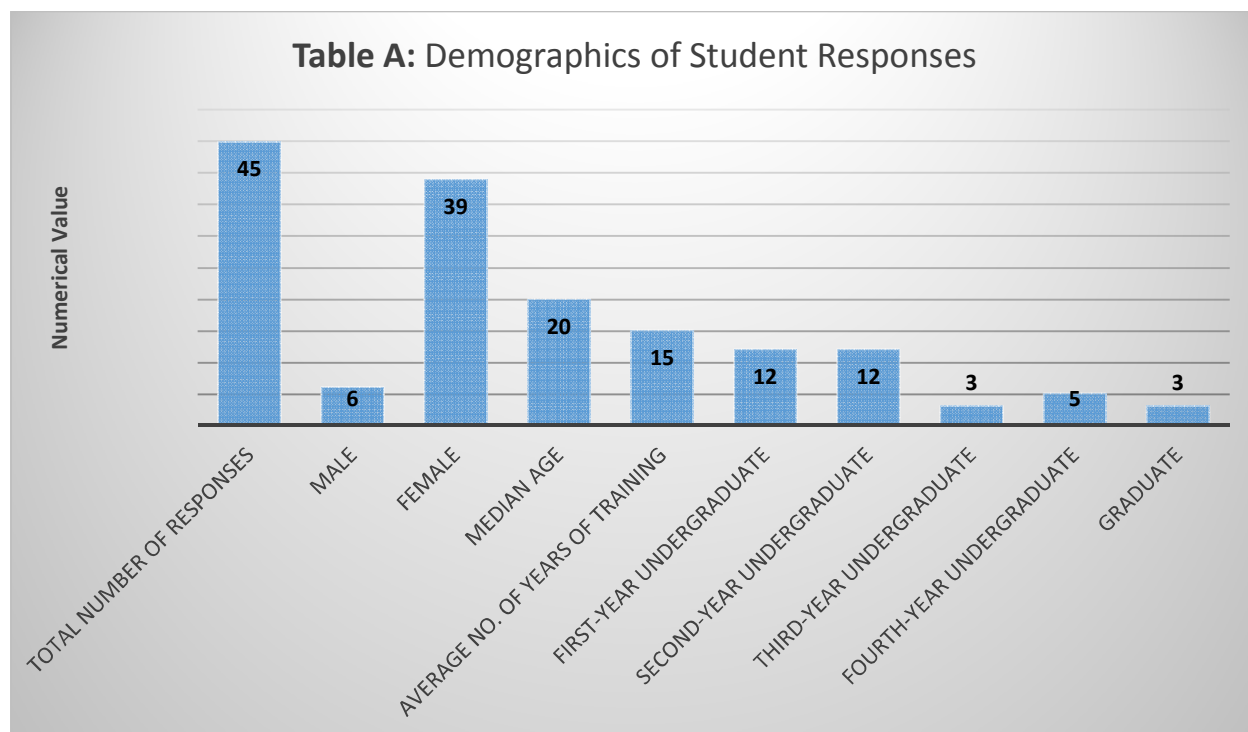
Majority of survey responses came from first- and second-year undergraduates and graduate students. The third- and fourth-year undergraduate populations were not adequately represented by the survey responses. The response trends discovered in this survey represent opposite ends of the spectrum with the experiences of people beginning their college careers and of those returning to school after professional experience.

The overall goal of the survey was to measure students' level of knowledge and type of

Table B: Do You Regularly Use Self-Talk?
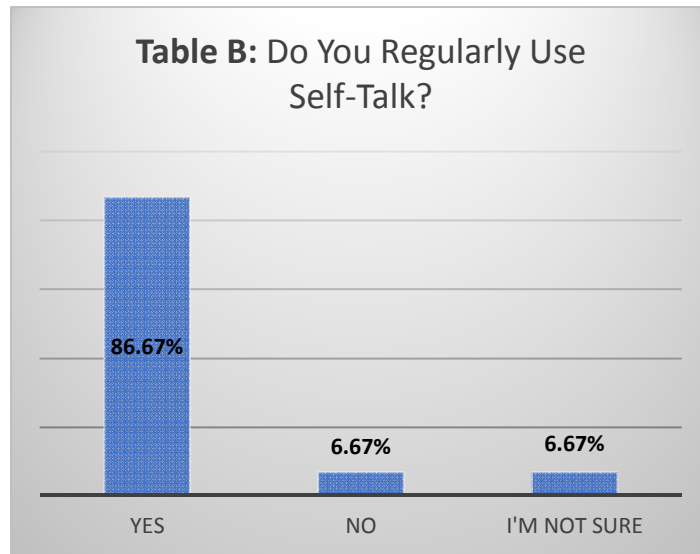
self-talk (Tables B and C). Also, the content of their self-talk in relation to their attitudes on topics such as injury and physical recovery were noted. When asked about their most frequently occurring thoughts or self-talk (Table D), only one answer (choice 4 in survey) was an example of positive self-talk and 56% of students chose this response. Twenty of the forty-five (44%) responses did not contain the example of positive self-talk.

Table C: How Much of Your Self-Talk is Positive or Negative?
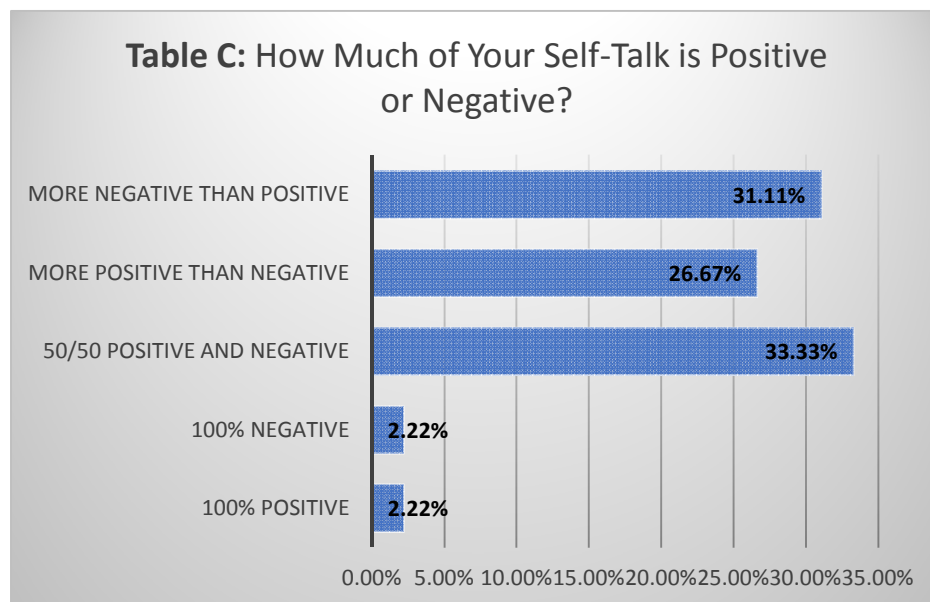
The next portion of the survey addressed the students' level of trust in doctors and general response to medical advice. Twenty-six (58%) students responded that they listen to what doctors have to say, but ultimately choose which non-emergency medical advice to follow; while sixteen (35%) students answered that they take all medical advice seriously and heed all directions. The general theme of responses comprised of high use of negative self-talk and negative attitudes towards injury recovery with remarkably high hesitation to trust and heed doctors' non-emergency medical advice. This student profile mirrors the student perspective and experience gathered from research on the traditional training environment previously addressed.

Table D: Content of Self-Talk and Attitudes about Injury

Statement	Percentage
FEEL MORE DOUBT THAN CONFIDENCE WHEN DANCING	51%
SEEK OTHERS' APPROVAL	49%
EASILY BECOME NERVOUS AND LET THAT AFFECT THEIR DANCING	56%
CONTINUE TO DANCE THROUGH PAIN	56%
WILL BE WORSE DANCERS AFTER INJURY	44%
ARE HESITANT TO RETURN TO DANCE AFTER INJURY	35%
BELIEVE THEY WILL NEVER FULLY RECOVER FROM INJURY	35%

Lastly, the survey measured students' current practice of somatic techniques and their interest in learning new mental skills. Despite having access to somatic courses through the dance department, more than half of the students responded that they do not practice a somatic technique regularly. A wide range of somatic practices were indicated by the sixteen respondents who answered "yes" and are represented in Table E.

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TABLE E: TYPES OF SOMATIC TECHNIQUES

■ Yoga ■ Pilates ■ Feldenkrais ■ Bartenieff ■ Non-somatic technique

[Pie chart showing: 28% Yoga, 36% Pilates, 4% Feldenkrais, 16% Bartenieff, 16% Non-somatic technique]
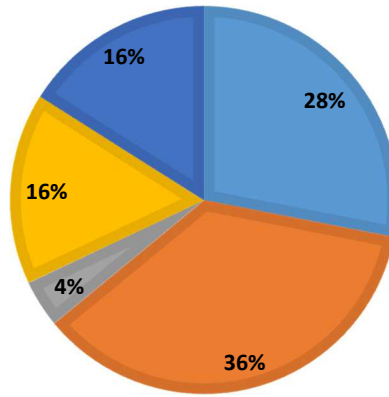
The last section of the survey asked if students held any interest in learning new tools to help them deal with challenges such as injury, stress or anxiety. Ninety-one percent of students answered "yes." Although there was a high percentage of interest, only six students committed to the workshop study. Scheduling conflicts prevented seven additional students from participating. The absence of a somatic technique and overloading in student's schedules make it difficult for them to cross train and condition their mind-body connection. This lack of connection may contribute to student' lack of knowledge on what self-talk is. This may prevent students from knowing how to practice positive self-talk during times of stress. The survey responses reinforced the main premise sparking this research: Student dancers have difficulty effectively dealing with stress and anxiety due to the development of poor coping skills as a result of negative self-talk. The main objective of this thesis research study was to increase students' awareness of their own self-talk patterns. Identifying the current patterns and equipping them with tools to effectively deal with self-talk may potentially improve the students' coping skills and self-efficacy.

Quantitative Pre-Study Analysis of Positive Thinking in Dance Workshop Questionnaires

Anonymous Survey: Second completion with subject identification

As a way to gauge the effectiveness of the workshop in relation to the main objective of this research, the study participants were asked to complete all surveys pre-and post-study (department-wide survey and TOQS), and identified themselves by writing their names. A description of participants may be found in chapter 4. The subjects' most common answers in the anonymous survey are represented in Table F below (for a sample of the anonymous survey, refer to Appendix D).

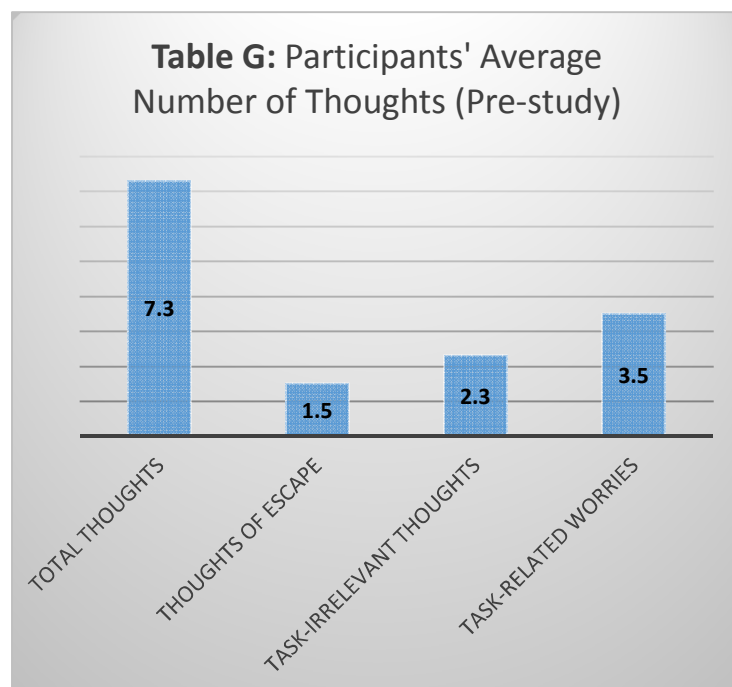Table F: Study participants' most frequent survey responses (pre-study)
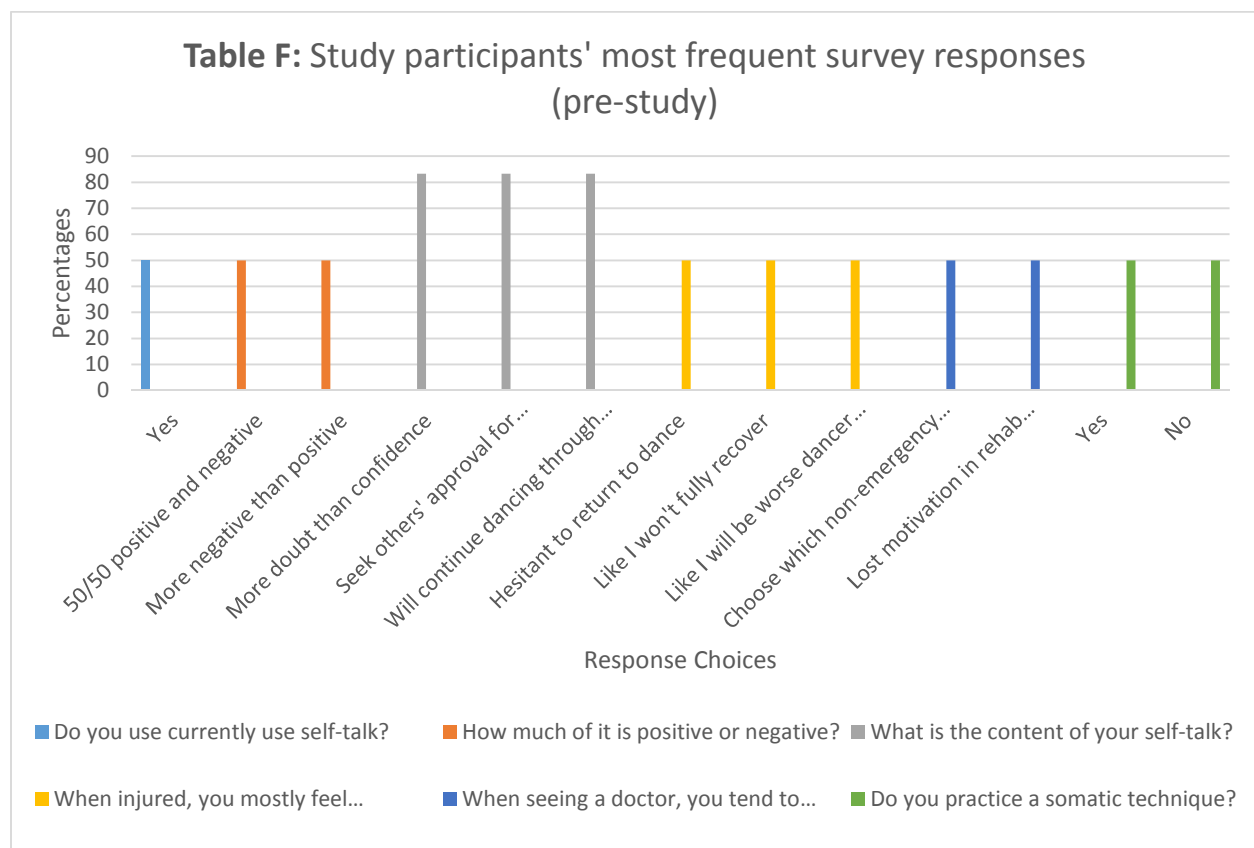
Participants' answers echoed the general themes found in the department-wide survey responses: varied level of self-talk use and somatic practice; negative self-talk most frequently used; catastrophizing (expecting the worst) responses to injury; and hesitation to follow and continue with medical advice. The somatic techniques listed by subjects included Yoga, Pilates, and the non-somatic technique MELT method.

Thought Occurrence Questionnaire for Sport (Hatzigeorgiadis & Biddle, 2000)

In order to develop a better sense of what types of thoughts comprised students' negative self-talk during performances, the Thought Occurrence Questionnaire for Sport (TOQS) was adapted to include dance-specific words (i.e.: change "practice" to "rehearsal" and "sport" to "performance"). TOQS was completed by subjects pre- and post-study. In the TOQS, participants are asked to circle all thoughts they have experienced during their most recent performance.

The examples of thoughts given each fall into one of three categories: thoughts of escape, task-irrelevant thoughts, and task-related worries. In this questionnaire, the term "task" refers to dance performance. Pre-study results (Table G) of the average amount of thoughts across participants show that task-related worries occupied most of their thoughts, representing a potential compromise of self-efficacy for all

Table G: Participants' Average Number of Thoughts (Pre-study)

Category	Value
TOTAL THOUGHTS	7.3
THOUGHTS OF ESCAPE	1.5
TASK-IRRELEVANT THOUGHTS	2.3
TASK-RELATED WORRIES	3.5

subjects in relation to dance. One of the aims of this study was to promote students' development of self-talk cues that improve focus, motivation, and students' generalization of skills (being able to adapt current skills to new situations). Increasing positive self-talk in this way was proposed as a way to increase students' level of self-efficacy. Pre-study results of this survey show that this type of positive self-talk was of potential benefit for the participants. For a listing of specific thought examples given, a sample of the Thought Occurrence Questionnaire for Sport can be found in Appendix G.

Qualitative Analysis of In-Session Group Discussions

As explained in Chapter 1, it can be assumed that students' predisposition to compromised self-efficacy and high anxiety stems from debilitative aspects of the dance training environment. The goal of in-session group discussions was to help students recognize and effectively deal with adverse stressors through the process of reflection. Oftentimes, the topics revolving around experiences and relationships brought up by the students would directly connect to the information scheduled to be discussed later in the session, which allowed for an immediate practical application and synthesis of material.

Various themes began to develop across the sessions' group discussions and will be discussed individually in the following section. The themes reflected many of the training environment issues explored in this research. Examination of these themes derives from direct transcription of audio recording of group sessions and follow-up interviews with students between sessions and post-study. It was discovered that all four aspects of psychological skills training (goal-setting, imagery, self-talk and relaxation) benefitted students' management of these

environmental stressors. The development and practice of self-talk cues provided an avenue for the students to apply the other three skills to their training.

Discussion themes

<u>Self-efficacy: In the moment decision-making and leadership</u>

During the second session of the study, each subject was asked to participate in various improvisation and choreographic exercises as a way to examine their self-talk during different types of performance. Improvisation proved to be difficult for most of them. Once the first improvisation exercise was over, all six of the students immediately asked to journal. During group discussion, each student was asked to choose one word or phrase that describes how he or she felt when his/her name was called. The words "unsure," "self-conscious," and "nervous" came up repeatedly. The most pressing issue for most participants was not fulfilling expectations. Despite these feelings of nervousness, hesitation, and embarrassment, they each made decisions quickly and committed to them despite not feeling confident. Many of the students could not understand why they all felt so nervous about something that they have been practicing for years. Overall, their self-talk did not echo the abundant skills they each held in their field of study.

After applying Franklin's concepts *Four Steps of Creating Change* and *Beginning Inner Dialogue* to their performance, all six students noted that they were significantly less worried about external factors such as people's opinions, fulfilling the assignment, and how they looked while dancing (Franklin, 2009).[18] Subject C shared that there was more interest in the embodied

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[18] Please refer to Appendix I for complete lesson plans and descriptions of Franklin method concepts and exercises utilized in this research study.

experience and enjoyment of the sensation of moving rather than the visual product. Performing the second time reminded many of them why they love to dance.

Relationships in the studio environment

The teacher-student relationship was an overarching issue for all participants throughout the study. Environmental management through re-patterning self-talk was another method used in this study to improve students' confidence and coping skills. Much of their self-talk that occurred while dancing before the workshop was a result of their interaction with teachers and how they believed teachers perceived them. All of the students showed high concern for teachers' evaluations, and their self-talk was influenced by their perception of this evaluation. One subject began experiencing significant burnout during the study period.[19] The individual felt unmotivated and started avoiding certain teachers. The participant reasoned that, "with certain teachers, I really wanted them to like me so I would try really hard, but then I wouldn't get the response I wanted. Their response would be almost ambiguous and it made me feel like I wasn't good enough no matter how hard I tried." It is clear from this statement that external relationships in the studio were significant influences on this person's self-confidence and esteem. By the end of the study, this individual discovered that the most effective technique for re-patterning negative self-talk during burnout was to recognize the symptoms of this syndrome and remind his/her self that it was not a reflection of character.

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[19] Athlete burnout is a syndrome characterized by: "(i) emotional and physical exhaustion; (ii) sport devaluation; and (iii) a reduced sense of accomplishment" (Lonsdale, Hodge, & Rose, 2009)

Other students brought up issues with the negative reinforcement teachers were using in class. One student commented, "Hearing the things that come out of the mouths of the people at the front of the room has been…well, frustrating. This is why this environment is perpetuated. I'll be in class and think to myself, 'they shouldn't talk to anyone like that,' but I realize they're just responding to tradition and whatever they've dealt with." This student noticed the frustration would become a distraction while dancing and the performance would suffer, resulting in lower self-confidence and, at times, high anxiety.

When asked to participate in a teacher-student feedback activity, it became evident that many of the students had difficulty accepting constructive criticism from the person representing the teacher. Even if the teacher was giving helpful corrections, they tended to only focus on the negative words in the teacher's statement. Some of the cues were, in fact, neutral, but, because of past experiences, they automatically assigned negative evaluation to the corrections. As the weeks went on in the study, the students approached this topic in discussion again. This time, their viewpoints were much more objective. One subject ended the discussion with the statement, "I had to realize that they are probably not going to change any time soon…this is reality, yes, but I don't need to reflect this kind of thinking as a teacher." The students were learning how to gain more control over how they received criticism. Towards the end of the study, Subject A, who at first suffered regularly from both cognitive and somatic anxiety in class, noticed a significant decrease in anxiety when called on by teachers to demonstrate. The participant attributed it to the use of "stop" cues when negative thoughts began to enter the mind.

Much of Subject A's early anxiety also stemmed from performing in front of peers. Furthermore, Subject E noted substantial difficulty socializing with peers. This person noticed that the inability to make close friends outside of the studio made it more stressful to be in technique

class. Participants discussed how overwhelming it is to be surrounded by only dancers majority of the time, especially when some of the dancers have adopted the harsh competitive mindset that is often perpetuated in studio environments. The psychosocial effects of peer-to-peer relationships in and out of the studio have caused high anxiety for all participants in technique classes, auditions and performances. Because it is impossible to remove all stressors from the training environment, this thesis study examined ways in which students could healthily cope with the stressors. The first step to achieve this was to guide students in learning how to direct negative self-talk to include less extreme emotional words. In addition, it was an ambition to help students realize that peers do not have control over their performance and do not have to affect their sense of self-worth. This allowed the participants to manage their relationships in the studio environment in a more positive and empowering manner; thus, decreasing their concern for evaluation and the level of anxiety experienced as a result of these peer interactions.

Relationships with perceived and ideal bodies

Self-image as a dancer is compromised daily through the reliance on mirrors in class and teachers' use of negative reinforcement. In effort to improve this image, this study aimed to promote positive self-talk during participants' self-critique. As a way to illustrate Susan Foster's concept of perceived and ideal bodies, recording and watching one's own performance took place during session 6 (please refer to Appendix I for full description of exercise). During the group discussion following the exercise, several topics arose that centered on self-perception, body image, relationships with food, and self-criticism. As a way to provide some distance from potentially serious issues in regard to body image, I guided the conversation in a way that the students would only talk about seeing themselves dance on video. The majority of the participants

mainly focused on what they perceived as negative aspects of their video performance. Participants agreed that they become so caught up with the technical execution of movement and what they believe they should look like, they often lose sight of their passion for dance. Writing down one's negative thoughts to then positively re-pattern them was one method offered to promote self-efficacy. This type of journaling helped the students recognize their capabilities and neutrally address areas for improvement. As a result, the students were able to perceive their capabilities as more sufficient in regard to dance performance. This method proved to be the most effective way for the majority of the students to tackle their negative self-talk.

Struggling to find balance between dance and other aspects of life

It turned out that one prevalent issue for MFA students returning to school was focusing on dance through a student lens while balancing other aspects such as work and family. Three of the oldest students experienced symptoms of burnout and admitted how difficult it is to be in a program where authoritative figures expect full commitment to school-related dance projects. Although it took some time over the course of the study, interviews with these students showed that they eventually understood that it was acceptable to take care of themselves without fear of letting other people down. They realized that valuing one's self and health will ultimately make them more reliable and successful.

Injury and Coping

During the study, two students were faced with issues regarding injury. The injuries prevented them from participating fully in some of the exercises on a physical level, though they

could benefit by sorting through thoughts and feelings challenging them during recovery. One student's most prominent issue with injury coping stemmed from the role this person felt forced to play while being injured. During one session, this participant shared: "In ballet class, I felt like I had to play a role [of being the injured dancer]…I didn't want to emit energy. I'm injured so I'm not present…rather, I don't want to take up room, if that makes sense. I didn't want to take space from those who are capable of being fully present physically." This individual remembered the body not feeling very good while experiencing negative self-talk. Once this person decided to use positive self-talk at the end of class, the body felt better than it had the entire morning.

This moment echoes the first movement session of the study where I introduced Erik Franklin's arm swings (Franklin, n.d.). As they swung, I shared positive feelings and thoughts I wanted them to repeat in their mind. I then approached the swings with negative statements. They all remarked how different their bodies felt with each type of statement. The negative statements brought about very uncomfortable, tense, and almost painful sensations in their bodies while the positive statements sparked a light, weightless, and euphoric feeling. This impacted all of the students greatly. Their awareness of how powerful their minds are over their physical bodies finally awakened. We would return to this moment many times over the course of the study.

For over a year, one subject had struggled with extremely negative self-talk that inhibited dancing. This individual had stopped taking technique class and was figuring out whether or not to continue with dance or pursue something else. The subject complained of racing, repeating thoughts. What has been most effective for this person on the journey back to dance was to use "stop" cues to regain focus, halting the use of self-limiting statements (changing "I can't do this" to "How can I do this?"), journaling, and using positive self-talk to translate how one wants to feel and not letting negative self-talk determine how one feels.

<u>Audition Anxiety</u>

One of the participant's main goals for attending the workshop was to learn how to deal with anxiety while dancing. The psychosomatic anxiety affected this person's dancing mostly in class and auditions, which would lead to negative self-talk and low self-efficacy. Use of "stop" cues and segmenting the performance (staying present in the moment and not focusing on past mistakes) proved to be most effective for this subject when dealing with anxiety.

Halfway through the study, three students attended the audition for the upcoming graduate choreography concert. A brief discussion took place during the session before the audition with a revisit of information covered previously on anxiety reduction and techniques to improve performance (PST: goal setting, use of imagery, positive self-talk, and breath control). All of the exercises thus far were presented in a low-stress environment. I emphasized that the application of self-talk may be more difficult during high-stress situations and it was imperative that the participants continued application of strategies throughout their daily lives in preparation for more challenging situations. We opened the next session with a discussion on their experiences while auditioning. All three students noted that they felt more confident and calm during the process. During the audition, one participant continually repeated the phrase, "Flood yourself with positive thoughts," which encouraged relaxation. The others commented that they didn't feel as negatively affected by the stressful environment. A fourth subject was observing the audition and commented that the three students carried themselves in a calm and confident manner. This individual believed they exuded a different, more positive energy than the other dancers. All three of them revealed that it was their best performance at an audition.

During the final group interview at the end of the study, all participants agreed that the discussions proved to be the most beneficial aspect of the study. Reflecting on one's experience

and sharing in others' allowed the participants to feel more in control of their responses to training environment stressors. The students admitted that it is rare for authoritative figures to ask them to discuss their issues in detail. The opportunity to articulate their thoughts and emotions helped the students comprehend the complexity of their relationship with dance. This increased awareness instigated the students' journey to foster a more positive and healthy relationship with the art form, signifying the achievement of all objectives of this study.

Quantitative Analysis of Pre- and Post-Study Questionnaire Results

<u>Anonymous Survey</u>

Table H: Comparison of Pre- and Post-Study Use of Self Talk
1= I'm not sure 2= No 3= Yes
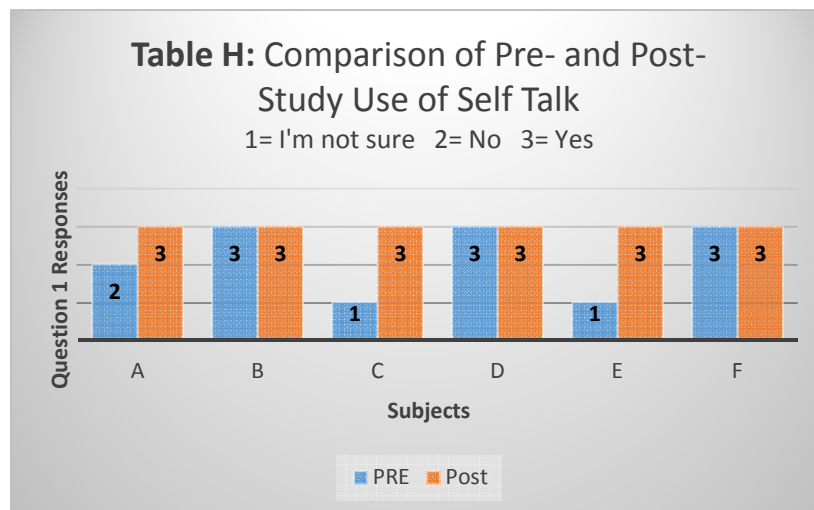
To measure any differences in the subjects' use and type of self-talk in relation to dance, injury, and medical treatment over the course of the study, the participants completed the anonymous survey for a third time at the end of the study. Significant variances are present between the subjects' pre- and post-study results. Most notably, the practice of self-talk improved for all subjects (Table I) as well as an overall increased use of positive self-talk (Table H).

Table I: Comparison of Pre- and Post-Study Type of Self-talk

3 = More Negative than Positive 4 = 50/50 Positive and Negative
5 = More Positive than Negative
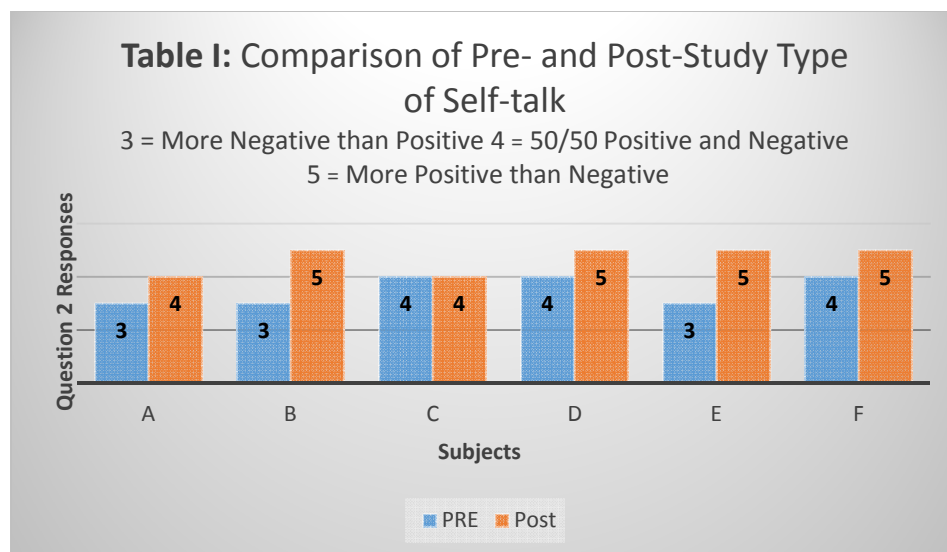
Thought Occurrence Questionnaire for Sport (Hatzigeorgiadis & Biddle, 2000)

To measure the amount of distracting thoughts participants experience during performance, the subjects were asked complete the TOQS. More specifically, to determine if the application of PST improved focus and positive self-talk practice, the amount of distracting thoughts was measured pre- and post-study. A decrease in thoughts occurred post-study for all for participants (Table J), signifying a potential improvement in focus and use of PST. On average, there was a 36% change in the number of total thoughts selected by participants (Individual percent change: A = 27%; B = 77%, C = 33%; D = 14%; E = 9%; F = 57%).

Table J: Comparison of Total Number of Thoughts Pre- and Post-Study

Bar chart comparing Pre and Post values across subjects A–F.

Subject	Pre	Post
A	7	4
B	8	1
C	8	4
D	4	3
E	6	5
F	11	3
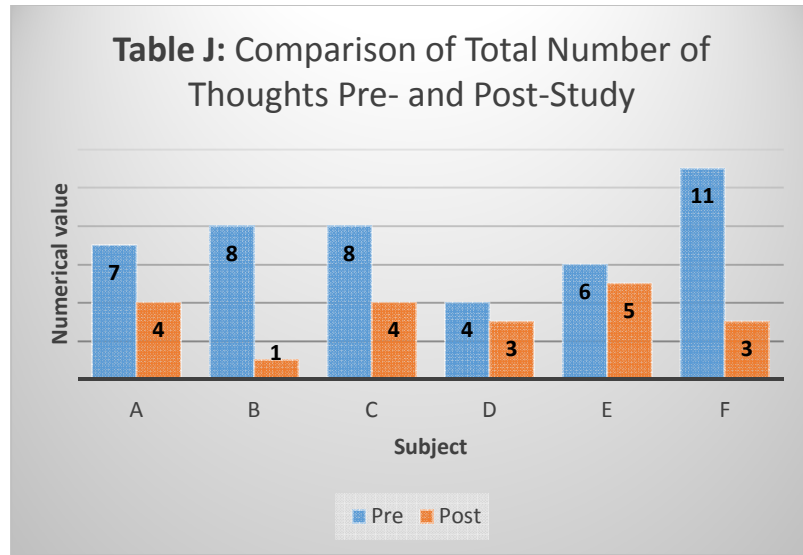
To reiterate, one of the aims of this study was to promote students' development of self-talk cues that improve focus, motivation, and students' generalization of skills (being able to adapt current skills to new situations). The study's purpose was to help increase students' level of self-efficacy through facilitative and motivating self-talk. Because TOQS only included negative self-talk examples, the decrease in students' choices post-study may represent a possible increase in positive and attention-controlled thoughts.

Table K: Comparision of Pre- and Post-Study Types of Thoughts (TOQS)

Bar chart comparing types of thoughts across subjects A–F.

Legend:
- Thoughts of Escape (Pre)
- Thoughts of Escape (Post)
- Task-Irrelevant Thoughts (Pre)
- Task-Irrelevant Thoughts (Post)
- Task-Related Worries (Pre)
- Task-Related Worries (Pre)

| Subject	Thoughts of Escape (Pre)	Thoughts of Escape (Post)	Task-Irrelevant Thoughts (Pre)	Task-Irrelevant Thoughts (Post)	Task-Related Worries (Pre)	Task-Related Worries (Pre)
A	0	0	3	3	4	1
B	3	0	2	1	3	0
C	0	0	3	3	5	1
D	0	0	1	2	3	1
E	2	2	4	0	3	0
F	4	4	5	0	2	1

The most significant change in types of thoughts was a decrease in task-related worries (Tables K and L). As described before, the decrease in performance-related worry signifies an increased in participants' self-efficacy in relation to dance.

Table L	TOQS Types of Thoughts								
Subjects	Thoughts of Escape			Task-Irrelevant Thoughts			Task-related Worries		
	Pre	Post	% Change	Pre	Post	% Change	Pre	Post	% Change
A	0	0	0	3	3	0	4	1	75
B	3	0	100	2	1	50	3	0	100
C	0	0	0	3	3	0	5	1	80
D	0	0	0	1	2	-100	3	1	66
E	2	2	0	0	0	0	4	3	25
F	4	2	50	5	0	100	2	1	50

Analysis of Workshop Effectiveness in Relation to Participants' Goals

At the beginning of the study, the participants discussed what their major goals were for participating in the workshop study. The goals included anxiety/arousal control, increased mind-body connection, increased intrinsic motivation, improved self-efficacy, environmental management, and the pedagogical importance of self-talk practice. Along with a group interview at the end of the study, the subjects had to complete a feedback questionnaire. All subjects held similar views about the effectiveness of the workshop (Table M).

Table M: Feedback Questionnaire Responses
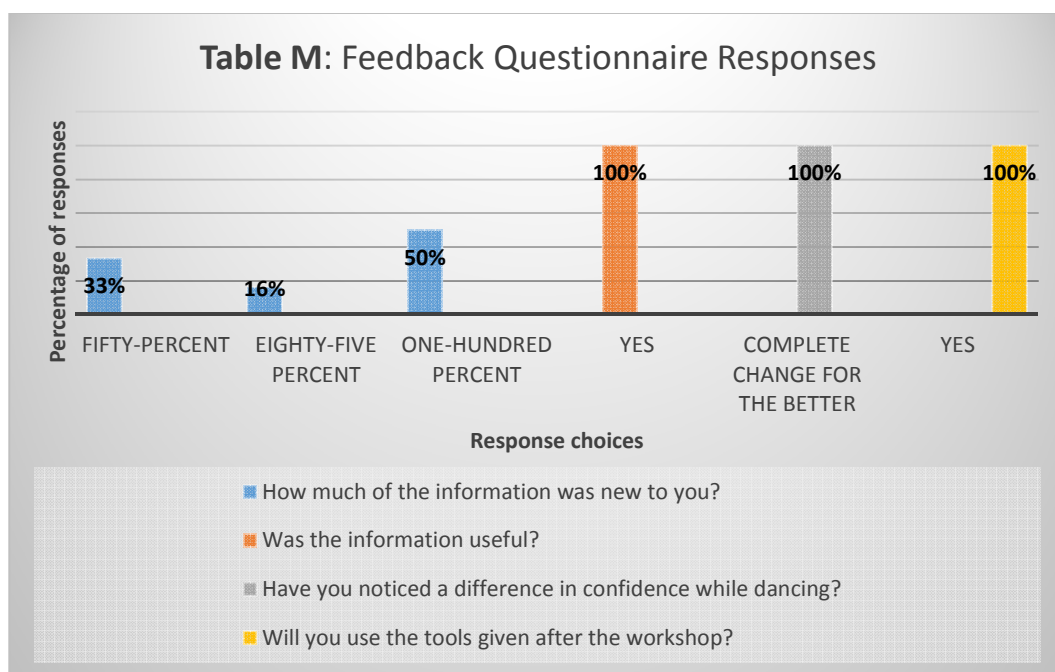
In the feedback questionnaire and the group interview, the study participants noted several aspects

of the study that were most effective for them. These included:

·Use of terminology
·Re-training negative thoughts into positive ones to increase motivation for dance
·Better sense of preparedness to deal with negative or stressful situations
·Increased sense of control over environment

Additionally, participants were asked to give suggestions to increase the effectiveness of

workshop. These suggestions included:

·Increased length of workshop (one full academic quarter as opposed to 6 weeks)
·Greater inclusion of breath relaxation techniques
·Additional study documents with information covered in the sessions

Next, a discussion of findings in relation to the literature review will take place.

CHAPTER 6

Discussion

Although there have been other studies examining the benefits of psychological skills training in dance education (specifically imagery and breath relaxation), this pilot study is one of the first, if not the only, to specifically examine self-talk in relation to dance training. Moreover, the deliberate pairing of self-talk and somatics explores a potential stress and anxiety intervention previously unobserved.

The majority of the anonymous survey responses came from students representing the end ranges of the targeted demographic: students in the beginning stages of their college careers and graduate students returning to school. In particular, it was these groups who supplied answers suggesting a lack of knowledge of self-talk amongst collegiate dancers at this university. For example, when asked about whether or not they use self-talk currently, the students who answered "No" or "I'm not sure" were mostly 1st year undergraduates or graduate students. The students who answered they do not use self-talk later chose "more negative than positive" when asked about the type of self-talk they mostly use. From this, one may surmise that some of the students may not be aware of what self-talk is and that it can be both positive and negative.

On the topic of injury occurrence and treatment, most students answered in the anonymous survey that they will selectively listen to doctors to determine treatment methods. This result correlates with previous research suggesting that dancers often feel misunderstood by doctors and choose to seek non-traditional treatment in order to avoid being told they cannot dance (Mainwarning et al., 2001).

To combat the high statistics of injury among dancers, the development of the dance medicine field also sparked the integration of somatics and dance training. This advancement in improving dancers' health and career longevity is reflected by many university dance programs that now offer a somatic technique as an elective course. The dance program at UCI is a part of this holistic reform and offers Pilates mat and Reformer courses. Results of the survey show that at the time of the study 2nd-year students practiced a somatic technique the most. This may be because 2nd-year students may have chosen to take the Pilates courses offered through the department during this school year; while 1st-year students are relatively new to the program and may only be enrolled in required courses (the survey was distributed during their first quarter of attendance). It could be that the 3rd- and 4th-year students who may have taken the Pilates courses in previous quarters did not continue their practice past the course fulfillment; thus, resulting in just 12% (one student) of the participating 3rd and 4th year students answering yes to practicing a somatic technique. Graduate students measured highest for practicing a somatic technique. Their responses contained the most varied amount of somatic techniques listed. Graduate students tend to be older than undergraduate students and have more experience. This evidence supports Helen Thomas and Jennifer Tarr's research suggesting that older dancers with professional experience tend to have more exposure to somatic techniques than dance students (2009).

Sport psychologist Daniel S. Kirschenbaum's application of the self-regulation theory to sport psychology proved to be the most enlightening and beneficial concept for the workshop study participants. The term self-regulation refers to "goal-directed behaviors in the relative absence of immediate external constraints" (Kirschenbaum, 1987, p. 106). As summarized by Kirschenbaum, the process of self-regulation in the field of sport psychology is comprised of five steps: problem identification (adapting to unexpected factors); commitment (developing a strategy to solve the

problem); execution (carrying out the strategy); environmental management (regulating aspects of the environment to facilitate optimal performance); and generalization (translating skills to new and different situations) (1987). Above all, the practice of environmental management addressed many of the issues and concerns of the study participants. The participants' issues aligned with the environmental stressors explored in this thesis research, confirming the very existence of these stressors. The students in the workshop commented that the inclusion of psychology-based terminology in conjunction with practical Franklin method exercises was the most helpful aspect of the study. Developing a vocabulary that helped them define what they were experiencing allowed the students to gain more control over their thoughts and emotions. This sentiment differs from the results of Klockare's thesis where the use of terminology hindered the subjects' experience (Klockare 2014).

This study design, coupling qualitative analysis with quantitative measurements, responds to a recent study performed in 2013 titled "Psychosocial Stress and Injury in Dance." The authors argue that,

> To increase the understanding of stress in dance environments, researchers need to use qualitative and quantitative methods to explore the main sources of stress in a variety of dance forms. The next step is to examine the efficacy of psychosocial intervention programs, such as social support, coping strategies, and relaxation. Research should base the design of interventions on stressors identified in these qualitative and quantitative studies (38).

Although this is a student-run pilot study conducted on a small pool of subjects, there is the possibility of its framework being expanded upon by professionals in the field to include a larger participant pool. Results of this study conclude that a significant interest exists within this university population in regard to mental skills training and its potential benefit on dance

performance. Although much of the data for the participants' experiences was self-reported, results were substantial enough to deem the study successful. Based on participant feedback, participants' goals were fulfilled in addition to the primary objectives of the workshop: to increase student's awareness of positive self-talk and to guide the students in developing a positive self-talk practice that aids in addressing specific psychosocial issues present in the traditional training environment. These issues are complex, subjective, and cannot be wholly represented by numerical value. For these reasons, it was imperative that the perspectives of the participants were represented through self-reported data. In support of this notion, sport psychologist Graham Jones explains that, "One of the main advantages of qualitative research is that it allows researchers to gain an in- depth understanding of the participants' personal constructs and experiences" (Jones, 2002, p. 207).

One of the reasons why the participants viewed the study as a positive and fruitful experience is because of the presence I represented in their college career. Two of the participants were my peers, and the undergraduate students said that they view graduate students as "middle ground" between peers and faculty. They value the experience we bring to the program, but also feel comfortable enough with graduate students to speak more candidly than with their professors. Participants were surprised that there was a person in the department who wanted to hear about their struggles and needs. They were grateful for someone who was willing to devote time to helping them address these issues. Many of the students felt the faculty weren't very supportive during times of challenge and injury. Consequently, the students believed the faculty weren't as compassionate, and this would taint the students' perspective of authority figures in the dance department. As demonstrated in this paper, the teacher-student relationship in dance education is vastly influential. If the students perceive their association with teachers as negative, the self-talk-behavioral outcome will also be negative. If a mental skills training course existed in a dance

program where faculty and students could communicate about and jointly navigate pressures of the training environment, students might feel much more inclined to seek advice and help from professors when needed. This, in turn, could facilitate a progressive, respectful, and student-centered environment in the studio.

At the end of the study, all of the participants commented that they each felt more empowered, worthy, and capable. The participants dealing with injury and/or health issues learned how to effectively communicate with teachers about their conditions and needs. They no longer felt, as one subject described, unworthy of taking up space. In this study, a shift occurred in what Buckroyd identifies as the student's silent compliance (2000). The practice of positive self-talk gave the students more than just a healthy way to speak to themselves; it gave them voices with which to represent themselves in their education and in the field of dance.

Despite the perceived success of this pilot study, there are limitations that must be addressed by further research. Firstly, the distribution of the department-wide surveys occurred at a hectic point in the school quarter. Students were preoccupied with performances and projects. Despite sending a mass email, making announcements in technique classes, and posting flyers throughout the department, the returned response rate was less than anticipated. Scheduling conflicts also impacted the recruitment of study subjects. Ninety-one percent of the students who returned anonymous surveys expressed interest in the workshop by answering "Yes" to the last question ("Would you like to learn some new tools to help deal with challenges such as injury, stress of anxiety?"), but only six students participated in the study. There were seven additional students who inquired about participating; however, they did not have enough availability to commit to the 3-hour weekly meetings.

Although the small number of subjects allowed for a more intimate and individualized workshop study, effective data analysis requires a much larger pool to provide result reliability . In the future, comparing this research with the results of a similar study with more participants will test the validity of these results. If this research were to be expanded upon, recruiting the aid of an accredited sport psychologist and certified Franklin method educator would provide additional expertise and ensure accuracy of the methods used.

In regards to study logistics, participants responded that they would have preferred the study length to span an entire quarter (10 weeks) as opposed to six weeks. In addition, all members of the study would have preferred that all participants attended the same session. Again, scheduling conflicts prevented an increased length of the study as well as one meeting time for all participants. The physical demand of their daily technique training also affected the students' ability to participate fully in the sessions. Intended exercises that required physical effort often had to be modified to accommodate the dancers' tired bodies. Their limited dancing during the session did not represent their experiences in class, rehearsal, or performance. For this reason, the practical application of self-talk and imagery strategies was not as effective as it could have been. When developing this type of course to be offered in a conservatory-style program, faculty would have to be sensitive to the student workload and assign the course during a time that would be most beneficial for those participating.

CHAPTER 7

Conclusion

As the field of dance evolves, traditions must be reinvented to reflect the ever-changing philosophies progressing the art form. Despite being in its early stages, dance medicine has quickly become a significant part of this progress. Medical science, psychology, and sports medicine have had a beneficial influence on this field. However, it appears that certain pedagogical traditions have perpetuated a training environment that impedes healthy psychological development of young dancers. Because tradition is deeply rooted, change cannot occur simply by the removal of such teachers, even if it were possible. Instead, progressive dance educators, especially those in the collegiate environment, can combat authoritarianism by equipping student dancers with skillsets to improve and maintain self-efficacy and esteem. One way to do this is through the integration of psychological skills training into program curricula.

As demonstrated by the methods and results of the "Positive Thinking in Dance Workshop" study, the first step in this process is increasing students' awareness of how the training environment influences their thoughts, specifically their self-talk. If negative self-talk dominates, students may learn how to control their thoughts and emotions through the practical application of techniques such as positive self-talk practice, imagery, goal setting, and breath relaxation.

There is surely an interest and need for these tools in college student populations, as evidenced by the results of the department-wide survey and the experiences of the students who participated in the study. The potential benefits reach far beyond the minds of the students. They are reflected in the students' relationships with peers and faculty. Through PST and somatics, the students' identities as dancers can evolve to embrace empowerment, integrity, and balance.

REFERENCES

Air, M. E. (2013). Psychological distress among dancers seeking outpatient treatment for musculoskeletal injury. *Journal of Dance Medicine & Science,17*(3), 115-125.

Andersen, M. B., & Williams, J. M. (1988). A model of stress and athletic injury: Prediction and prevention. *Journal of Sport and Exercise Psychology,10*(3), 294-306.

Araki, K., Mintah, J. K., Mack, M. G., Huddleston, S., Larson, L., & Jacobs, K. (2006). Belief in self-talk and dynamic balance performance. *Journal of Sport Psychology*.

Baffoe, T. (2014, December 19). When An Athlete's Self-Awareness Goes Awry. Retrieved February 24, 2015, from https://medium.com/the-cauldron/when-an-athletes-self-awareness-goes-awry-deb9062f3ffd

Barrell, G. M., & Terry, P. C. (2003). Trait anxiety and coping strategies among ballet dancers. *Medical Problems of Performing Artists*, *18*(2), 59-64.

Buckroyd, J. (Ed.). (2000). *The student dancer: Emotional aspects of the teaching and learning of dance*. Princeton Book Company Pub.

Buckroyd, J. (2001). The application of psychodynamic ideas to professional dance training. *Psychodynamic Counselling*, *7*(1), 27-40.

Cumming, J., & Duda, J. L. (2012). Profiles of perfectionism, body-related concerns, and indicators of psychological health in vocational dance students: An investigation of the 2× 2 model of perfectionism. *Psychology of Sport and Exercise*, *13*(6), 729-738.

Dunning, J. (1982, September 3). SOLVING DANCERS' HEALTH AND EMOTIONAL PROBLEMS. Retrieved February 25, 2015, from

http://www.nytimes.com/1982/09/04/arts/solving-dancers-health-and-emotional-problems.html

Eddy, M. (2009). A brief history of somatic practices and dance: Historical development of the field of somatic education and its relationship to dance.*Journal of Dance & Somatic Practices*, *1*(1), 5-27.

Ehrenberg, S. (2010). Reflections on reflections: mirror use in a university dance training environment. *Theatre, Dance and Performance Training*, *1*(2), 172-184.

Ellis, A. (1962). Reason and emotion in psychotherapy.

Farkas, H. (2012, July 22). When Willpower is Not Enough. Retrieved March 10, 2015, from https://chicagobehavioralhealth.wordpress.com/tag/problem-focused-coping/Foster, S. L. (2010). Dancing Bodies An Addendum, 2009. *Theater*, *40*(1), 25-29.

Foster, S. L. (2010). Dancing Bodies An Addendum, 2009. *Theater*, *40*(1), 25-29.

Fournier, G. (n.d.). Cognitive Appraisal Theory. Retrieved February 24, 2015, from http://psychcentral.com/encyclopedia/2008/cognitive-appraisal-theory/

Franklin Method. (2008, January 1). Retrieved February 25, 2015, from http://franklinmethod.com/about

Franklin, E. (2009). *Beautiful body, beautiful mind: The power of positive imagery : With over 80 exercises and a 10-day beauty program*. Highstown, NJ: Elysian Editions.

Franklin, E. (n.d.). Franklin Method Membership Site. Retrieved March 9, 2015, from http://members.franklinmethod.com/mindbodyonly/

Goldschmidt, H. (2002). Dancing with your head on: mental imagery techniques for dancers. *Journal of Dance Education*, *2*(1), 15-22.

Hanrahan, S. J. (1996). Dancers' perceptions of psychological skills. In *Revista de psicología del deporte* (Vol. 5, pp. 0019-27).

Hardy, J., Hall, C. R., & Hardy, L. (2005). Quantifying athlete self-talk. *Journal of Sports Sciences*, *23*(9), 905-917.

Hatzigeorgiadis, A., Zourbanos, N., Mpoumpaki, S., & Theodorakis, Y. (2009). Mechanisms underlying the self-talk–performance relationship: The effects of motivational self-talk on self-confidence and anxiety. *Psychology of Sport and Exercise*, *10*(1), 186-192.

Hatzigeorgiadis, A., & Biddle, S. J. (2000). Assessing cognitive interference in sport: Development of the Thought Occurrence Questionnaire for Sport.*Anxiety, Stress and Coping*, *13*(1), 65-86.

Hatzigeorgiadis, A., & Biddle, S. J. (2008). Negative self-talk during sport performance: Relationships with pre-competition anxiety and goal-performance discrepancies. *Journal of Sport Behavior*, *31*(3), 237-253.

Jones, G. (2002). What is this thing called mental toughness? An investigation of elite sport performers. *Journal of applied sport psychology*, *14*(3), 205-218.

Klockare, E. (2014). A Psychological Skills Training Program for Dancers: Evaluation of the Dancers' Use of Psychological Skills Training Techniques and Possible Effects of the Program.

Kirschenbaum, D. S. (1987). Self-regulation of sport performance. *Medicine & Science in Sports & Exercise*.

Klockare, E., Gustafsson, H., & Nordin-Bates, S. M. (2011). An interpretative phenomenological analysis of how professional dance teachers implement psychological skills training in practice. *Research in Dance Education*, *12*(3), 277-293.

Krasnow, D., Mainwaring, L., & Kerr, G. (1999). Injury, stress, and perfectionism in young dancers and gymnasts. *Journal of Dance Medicine & Science*, *3*(2), 51-58.

Lakes, R. (2005). The messages behind the methods: The authoritarian pedagogical legacy in Western concert dance technique training and rehearsals. *Arts Education Policy Review*, *106*(5), 3-20.

Lobel, E., & Brodie, J. (2006). Somatics in dance–dance in Somatics. *Journal of Dance Education*, *6*(3), 69-71.

Lonsdale, C., Hodge, K., & Rose, E. (2009). Athlete burnout in elite sport: A self-determination perspective. *Journal of sports sciences*, *27*(8), 785-795.

Mainwaring, L. M., Krasnow, D., & Kerr, G. (2001). And the Dance Goes On Psychological Impact of Injury. *Journal of Dance Medicine & Science*, *5*(4), 105-115.

Mainwaring, L., Krasnow, D., & Young, L. (2003). A teacher's guide to helping young dancers cope with psychological aspects of hip injuries. *Journal of Dance Education*, *3*(2), 57-64.

Marchant-Haycox, S. E., & Wilson, G. D. (1992). Personality and stress in performing artists. *Personality and individual differences*, *13*(10), 1061-1068.

Mental Toughness and MTQ48. (2011, July 27). Retrieved April 1, 2015, from http://www.aqr.co.uk/page/mentaltoughness

Minister, K. (1991). A feminist frame for the oral history interview. *Women's words: The feminist practice of oral history. New York: Routledge*, 27-41.

Noh, Y. E., Morris, T., & Andersen, M. B. (2003). Psychosocial stress and injury in dance. *Journal of Physical Education, Recreation & Dance*, *74*(4), 36-40.

Nordin-Bates, S. M. (2012). Performance psychology in the performing arts. *The Oxford handbook of sport and performance psychology*, 81-114.

Pickard, A. (2012). Schooling the dancer: the evolution of an identity as a ballet dancer. *Research in Dance Education*, *13*(1), 25-46.

Radell, S. A., Adame, D. D., & Cole, S. P. (2004). The impact of mirrors on body image and classroom performance in female college ballet dancers.*Journal of Dance Medicine & Science*, *8*(2), 47-52.

Robson, B. E., & Gitev, M. (1991). In search of perfection. *Med Probl Perform Art*, *6*(1), 15-20.

Rushall, B. (n.d.). Mental Skills Training. Retrieved March 10, 2015, from http://brentrushall.com/mental/

Self-talk. (n.d.) *Dictionary of Sport and Exercise Science and Medicine by Churchill Livingstone*. (2008). Retrieved February 24 2015 from http://medical-dictionary.thefreedictionary.com/self-talk

Sellers-Young, B. (1998). Somatic Processes: Convergence of Theory and Practice. *Theatre Topics*, *8*(2), 173-187.

Stanway, A. R., Bordia, S., & Fein, E. C. (2013). Raising the curtain: Exploring dancers' perceptions of obligation through the psychological contract lens. *Arts and Humanities in Higher Education*, 1474022212473523.

Stinson, S. W., Blumenfield-Jones, D., & Van Dyke, J. (1990). Voices of young women dance students: An interpretive study of meaning in dance. *Dance Research Journal*, 13-22.

Thomas, H., & Tarr, J. (2009). Dancers' perceptions of pain and injury: positive and negative effects. *Journal of Dance Medicine & Science*, *13*(2), 51-59.

Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., ... & Marsolais, J. (2003). Les passions de l'ame: on obsessive and harmonious passion. *Journal of personality and social psychology*, *85*(4), 756.

Van Raalte, J. L., Brewer, B. W., Rivera, P. M., & Petitpas, A. J. (1994). The relationship between observable self-talk and competitive junior tennis players' match performances. *Journal of sport & exercise psychology*.

Wainwright, S. P., Williams, C., & Turner, B. S. (2005). Fractured identities: injury and the balletic body. *Health:*, *9*(1), 49-66.

Weinberg, R. S., and D. Gould. 2011). *Foundations of sport and exercise psychology*. Human Kinetics. Kindle file.

What is NEGATIVE SELF-TALK? Definition of NEGATIVE SELF-TALK (Psychology Dictionary). (n.d.). Retrieved February 24, 2015, from http://psychologydictionary.org/negative-self-talk/

Wiese-Bjornstal, D. M., Smith, A. M., Shaffer, S. M., & Morrey, M. A. (1998). An integrated model of response to sport injury: Psychological and sociological dynamics. *Journal of Applied Sport Psychology*, *10*(1), 46-69.

Williams, J. M., & Andersen, M. B. (1998). Psychosocial antecedents of sport injury: Review and critique of the stress and injury model'. *Journal of applied sport psychology*, *10*(1), 5-25.

APPENDIX A

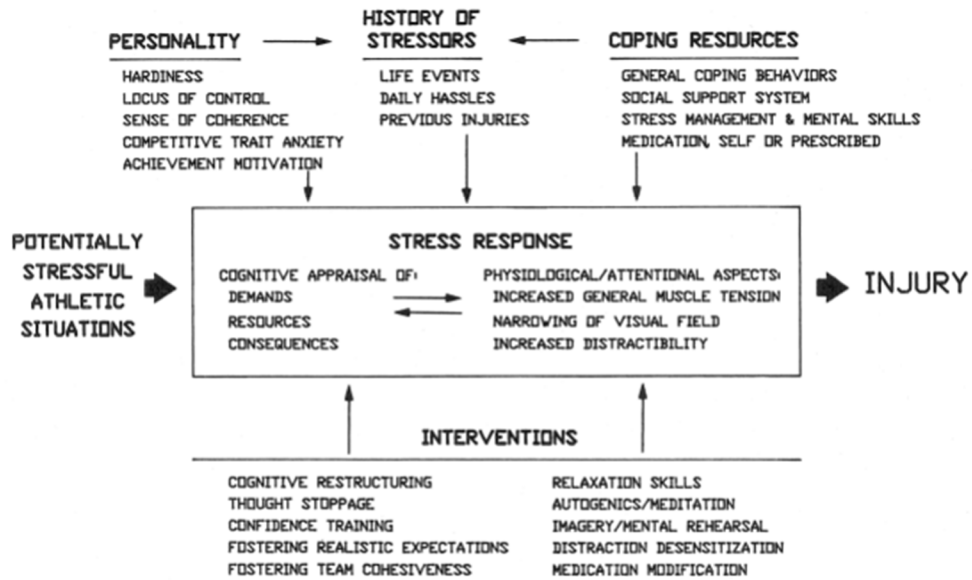## Revised Stress and Injury Model

(Williams & Andersen, 1988)

Figure 1 — A model of stress and athletic injury.

APPENDIX B

Integrated Model of Psychological Response to Sport Injury and Rehabilitation Process
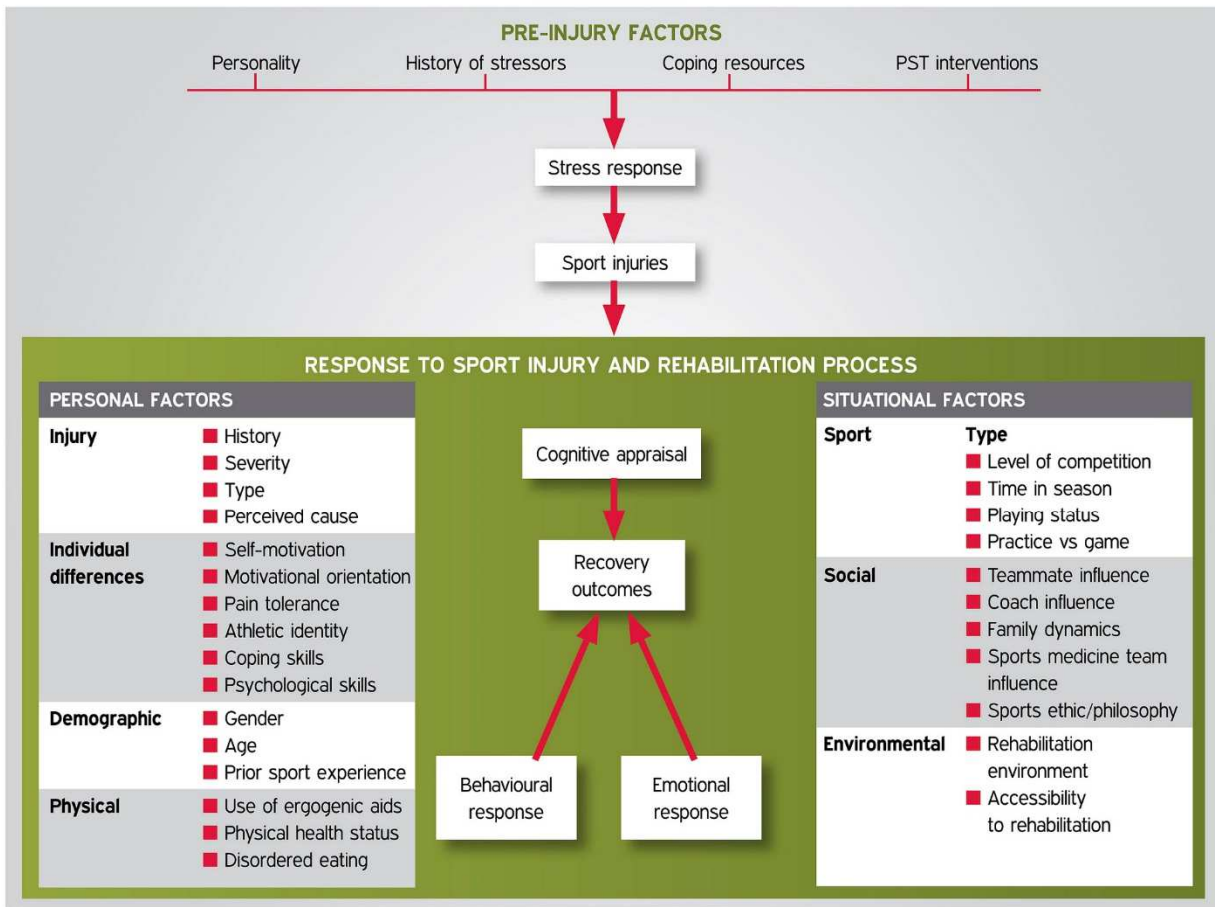
(Wiese-bjornstal et. al., 1998)

Figure 2: Integrated model of response to sports injury and rehabilitation [Adapted from Wiese-Bjornstal et al. 1998 (8)]

APPENDIX C

Part I: Anonymous Survey Study Information Sheet

**University of California, Irvine
Study Information Sheet**

Evaluating the Presence and Content of Self-Talk in Collegiate Dancers and the Effects of Somatic Practice on Positive Self-Talk to Address Common Challenges Found in Dance

Lead Researcher

Christine Gerena, Graduate Student

Claire Trevor School of the Arts Dance Department

(917)-747-9357, cgerena@uci.edu

Faculty Sponsor

Dr. Jennifer Fisher, Associate Professor of Dance

Claire Trevor School of the Arts Dance Department

(949) 824-8449, jjfisher@uci.edu

Co-Researcher:

Dr. Kelli Sharp, Professor of Dance Science

(949) 824-5145, ksharp@uci.edu

- You are being asked to participate in a research study measuring the level of knowledge and use of self-talk methods in collegiate-level dancers enrolled full-time in a college dance program.

- You are eligible to participate in this study if you are enrolled full-time as a dance major at UCI and are at least 18 years of age or older.

- The research procedures involve filling out an anonymous 10-minute questionnaire that will ask general questions regarding personal practices that include dance, somatics, and self-talk.

- Possible risks/discomforts associated with the study are discussing sensitive issues regarding dance, injury, and personal challenges in dance training and performance, which may cause slight psychological discomfort.

- There are no direct benefits from participation in the study. However, this study may explain how one can build positive and healthy skillsets to be used in combatting stress and anxiety that often accompanies dance training and performance.

- You will not be compensated for your participation in this research study.

- All research data collected will be stored securely and confidentially on a password-protected computer that requires fingerprint scanning of the lead researcher. All hardcopies of data will be scanned and destroyed immediately after.

- If you have any comments, concerns, or questions regarding the conduct of this research please contact the researchers listed at the top of this form.

- Please contact UCI's Office of Research by phone, (949) 824-6662, by e-mail at IRB@research.uci.edu or at 5171 California Avenue, Suite 150, Irvine, CA 92617 if you are unable to reach the researchers listed at the top of the form and have general questions; have concerns or complaints about the research; have questions about your rights as a research subject; or have general comments or suggestions.

- Participation in this study is voluntary. There is no cost to you for participating. You may choose to skip a question or a study procedure. You may refuse to participate or discontinue your involvement at any time without penalty. You are free to withdraw from this study at any time. **If you decide to withdraw from this study you should notify the research team immediately**.

APPENDIX D

"Positive Thinking in Dance" Anonymous Survey

Positive Thinking in Dance: Anonymous Questionnaire

Age:_____

Gender: Male_____   Female_____   Do not wish to state _____

Year of Study: 1_____2_____3_____4_____Graduate_____

Numbers of years of formal dance training:_____

Self-Talk is defined as "a person's internal dialogue, which can be positive and motivational or negative and demotivating." (Dictionary of Sport and Exercise Science and Medicine)

Self-talk can be described as giving yourself encouragement and praise and/or talking yourself through what you want to happen. Self-talk refers to the things you tell yourself to help you get through a performance or what you tell yourself before or after a technique class.

_____

_____

- Do you use self-talk regularly while you're dancing in a technique class, rehearsal or performance?

_____ Yes   _____ No   _____ I'm not sure

If yes, how much of it is positive or negative?

_____ 100% Positive

_____ 100% Negative

_____ 50/50 Positive and Negative

_____ More Positive than Negative

_____ More Negative than Positive

- Out of the following options, check all that apply to you majority of the time you're dancing:

_____ I feel more doubt than confidence when I am dancing

_____ I look to others for approval of my performance

_____ I easily become nervous and let that affect my dancing

_____ I tell myself encouraging things when I am struggling in class

_____ I sometimes talk myself out of trying new things or pushing myself

_____ I feel like a "bad" dancer when I become injured

_____ I continue dancing when I feel pain or extreme exhaustion

- When I am injured, I mostly feel…

_____positive and hopeful during the healing process

_____ hesitant returning to dance

_____ like I will never fully recover

_____ like I will be a worse dancer when I return

- If I have to see a doctor and/or physical therapist for dance injury, I…

_____ take their advice seriously and heed all of their directions

_____ listen to what they have to say and choose which direction I will follow

_____ lose motivation to continue with rehabilitation if I don't see improvement quickly

Do you practice a somatic technique regularly?

_____ Yes

_____ No

If yes, which method? _____

How often? _____

-Would you like to learn some new tools to help deal with challenges such as injury, stress, or anxiety?

_____ Yes

_____ No

If yes, you may contact second-year graduate student, Christine Gerena, about taking part in a workshop next quarter titled "Positive Thinking in Dance" as part of Christine's MFA thesis research study. Feel free to approach her in person, or email her at cgerena@uci.edu.

Please return all hard copy questionnaires to the dance office between the hours of 9am-5pm, Monday-Friday. A submission box will be placed on the front office desk with the Study Information Sheet posted next to it. Insert the questionnaire folded through the box opening. If you have any questions or comments, please contact Christine Gerena via email at **cgerena@uci.edu or by phone at **(917) 747-9357**.*

Study Recruitment: Reminder Email and Workshop Flyer

Dancers, have you checked your UCI email recently?

Check your inbox for an email from Christine Gerena with information on how YOU can contribute to exciting new research in the field of Dance Medicine. It will only take you 10 minutes to fill out an anonymous survey to help make a difference in the quality of resources available to you and your fellow dancers.

*Christine is conducting research as part of her MFA thesis work focusing on improving the mindset of dancers in class, in rehearsal, and onstage in effort to help dancers develop a healthier sense of self and approach to this beautiful art form.

Feel free to contact Christine with any questions or comments at cgerena@uci.edu

©Laura Hames Franklin, the Franklin Method

Positive Thinking in Dance

Research Study with MFA Candidate, Christine Gerena

*Ever talk yourself out of a good performance?

*Dealing with an injury and feel like you'll never be 100% again?

*Want to be your own #1 fan for the rest of your dance career?

Take part in this movement-based workshop focusing on adding positive self-talk cues and imagery to your movement practice and feel the difference! Workshop will take place winter quarter for 6 weeks with 3 sessions per week as part of an Independent Study course.

APPENDIX F

Part II: Workshop Study Informed Consent Sheet

UNIVERSITY OF CALIFORNIA, IRVINE

CONSENT TO ACT AS A HUMAN RESEARCH SUBJECT

Evaluating the Presence and Content of Self-Talk in Collegiate Dancers and the Effects of Somatic Practice on Positive Self-Talk to Address Common Challenges Found in Dance

You are being asked to participate in a research study. Participation is completely voluntary. Please read the information below and ask questions about anything that you do not understand. A researcher listed below will be available to answer your questions.

Lead Researcher
Christine Gerena, Graduate Student
Claire Trevor School of the Arts Dance Department
(917)-747-9357, cgerena@uci.edu

Faculty Sponsor
Dr. Jennifer Fisher, Associate Professor of Dance
Claire Trevor School of the Arts Dance Department
(949) 824-8449, jjfisher@uci.edu

Co-Researcher:
Dr. Kelli Sharp, Professor of Dance Science
(949) 824-5145, ksharp@uci.edu

WHY IS THIS RESEARCH STUDY BEING DONE?

The purpose of this research study is to gauge the level of knowledge and use of self-talk methods in collegiate-level dancers enrolled full-time in a conservatory-like college dance program. The Franklin Method, a somatic technique, will be evaluated as a possible alternative for introducing self-talk practice in dance training.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

This part of the study (workshop seminar) will enroll approximately 40 participants.

WHAT PROCEDURES ARE INVOLVED WITH THIS STUDY AND HOW LONG WILL THEY TAKE?

Similar to other dance technique classes, this workshop will be movement-based. It will begin with a warm up consisting of Franklin method imagery exercises and self-talk exercises. Warm up will be followed by learning and practice of a movement phrase with emphasis on integrating self-talk cueing learned during warm up. A discussion will end each session between the participants and lead researcher regarding each person's experience and opinions of the session.

Time Commitment Expected of Participants: You are asked to attend a workshop seminar that will meet 3 sessions per week for 1½ hours, over a 6 week period. In addition, you will be asked to complete a 10 minute survey.

You must meet the following requirements to be in the study: You are a student enrolled full-time as an undergraduate or graduate dance major in the Claire Trevor School of the Arts Dance Department and are an adult 18 years old or older.

WHAT ARE THE POSSIBLE DISCOMFORTS OR RISKS RELATED TO THE STUDY?
There are no known harms or discomforts associated with this study beyond those encountered in normal daily life. While discussing sensitive issues regarding dance, injury, and personal challenges in dance training and performance, possible risks and/or discomforts may include slight psychological or emotional discomfort such as: mild anxiety, embarrassment, and stress. In addition, because identifiable information is collected about you, there is a potential for breach of confidentiality.

ARE THERE BENEFITS TO TAKING PART IN THE STUDY?
Participant Benefits

Workshop participants may learn new skillsets that they may employ during stressful times to combat anxiety.

Benefits to Others or Society

A greater understanding of the need to focus on the mental health and wellbeing of dancers' mindsets in training, performing, and injury recovery is a potential benefit to society. In addition, this study may provide greater health and career longevity for young dancers through the integration of self-talk practices in injury prevention courses in dance academic settings.

WILL I BE PAID FOR TAKING PART IN THIS STUDY?
You will not be compensated for your participation in this research study.

WHAT HAPPENS IF I AM INJURED BECAUSE I TOOK PART IN THIS STUDY?
It is important that you promptly tell the researchers if you believe that you have been injured because of taking part in this study. You can tell the researcher in person or call him/her at the number listed at the top of this form.

If you are injured as a direct result of being in this study, UCI will provide necessary medical treatment. The costs of the treatment may be covered by the University of California or billed to you or your insurer just like other medical costs, depending on a number of factors. The University does not normally provide any other form of compensation for injury. For more information about this, you may call the UCI Human Research Protections unit at (949) 824-6662 or by e-mail at IRB@research.uci.edu

WHAT HAPPENS IF I WANT TO STOP TAKING PART IN THIS STUDY?

You are free to withdraw from this study at any time without any penalty. **If you decide to withdraw from this study you should notify the research team immediately**. The research team may also end your participation in this study if you do not follow instructions, miss scheduled visits, or if your safety and welfare are at risk.

If you elect to withdraw or are withdrawn from this research study, the researchers will discuss with you what they intend to do with your study data. Researchers may choose to analyze the study data already collected or they may choose to exclude your data from the analysis of study data and destroy it, as per your request.

HOW WILL MY PERSONAL INFORMATION BE KEPT?

Subject Identifiable Data

For workshop participants, all identifiable information collected about you will be kept with the research data, but NOT included in the final thesis writing for public view. All identifiable information will only be accessible by authorized study team members.

Data Storage

Research data will be stored electronically on a password-protected laptop computer of the lead researcher. The audio/video recordings will also be stored in the same secure location and transcribed within one (1) year. The recordings will be retained with the other research data and destroyed after 3 years.

Data Retention

The researcher intends to keep the research data for approximately 2 years post-study.

WHO WILL HAVE ACCESS TO MY STUDY DATA?

The research team and authorized UCI personnel regulatory entities such as the Office of Human Research Protections (OHRP), may have access to your study records to protect your safety and welfare.

Any information derived from this research project that personally identifies you will not be voluntarily released or disclosed by these entities without your separate consent, except as specifically required by law. Study records provided to authorized, non-UCI entities will not contain identifiable information about you; nor will any publications and/or presentations without your separate consent.

While the research team will make every effort to keep your personal information confidential, it is possible that an unauthorized person might see it. We cannot guarantee total privacy

WHO CAN ANSWER MY QUESTIONS ABOUT THE STUDY?

If you have any comments, concerns, or questions regarding the conduct of this research, please contact the lead researcher listed at the top of this form.

Please contact UCI's Office of Research by phone, (949) 824-6662, by e-mail at IRB@research.uci.edu or at 5171 California Avenue, Suite 150, Irvine, CA 92617, if you are unable to reach the researchers listed at the top of the form and have general questions; have concerns or complaints about the research; have questions about your rights as a research subject; or have general comments or suggestions.

HOW DO I AGREE TO PARTICIPATE IN THIS STUDY?

You should not sign this consent form until all of your questions about this study have been answered by a member of the research team listed at the top of this form. You will be given a copy of this signed and dated consent form to keep. **Participation in this study is voluntary.** You may refuse to answer any question or discontinue your involvement at any time without penalty or loss of benefits to which you might otherwise be entitled. Your decision will not affect your future relationship with UCI or your quality of care at the UCI Medical Center.

_____ Yes, I agree to allow the research team to video record the workshop seminar I'm participating in

_____ No, I do not agree to allow the research team to video record the workshop seminar I'm participating in (ie, blur my face if peripherally recorded).

_____ Yes, I agree to be identified in publications/presentations.

_____ No, I do not agree to be identified in publications/presentations.

Your signature below indicates you have read the information in this consent form and have had a chance to ask any questions you have about this study.

I agree to participate in the study.

_____   _____

Subject Signature   **Date**

_____

Printed Name of Subject

_____   _____

Researcher Signature   **Date**

_____

Printed Name of Researcher

APPENDIX G

Sample of Thought Occurrence Questionnaire for Sport (TOQS)

Thought Occurrence Questionnaire for Sport developed by A. Hatzigeorgiadis and S. Biddle (2000)

During the performance, I had thoughts... (check all that apply)

1. That I want to quit

2. About other activities (e.g. shopping, having tea, TV)

3. About previous mistakes I have made

4. That I do not want to take part in this competition any more

5. About what I'm going to do later in the day

6. That I'm having a bad day

7. That I want to get out of here

8. About personal worries (e.g. school, work, relations)

9. That the conditions (weather, temperature, pitch, atmosphere) are not good

10. About stopping

1 1. About friends

12. That I am not going to achieve my goals today

13. That I am fed-up with it

14. About what I'm going to do when I'll go home

15. That I am not going to win this competition

16. That I cannot stand it any more

17. That other competitors are better than me

For investigator use:

Scoring Key4
TOQS-W items: 3,6,9,12,15,17.
TOQS-I items: 2,5,8,11,14.
TOQS-E items: 1,4,7,10,13,16.
For team sports 'we are' instead of 'I am'.
Also for Item 15. For team sports 'teams' instead of 'competitors'.
 -W = Task-Related Worries;
-I = Task-Irrelevant Thoughts;
-E = Thoughts of Escape

APPENDIX H

"Positive Thinking in Dance" Workshop Study Guide

<u>Positive Thinking in Dance Workshop</u>

I) <u>Study Information</u>
·Pilot study as part of MFA thesis research
> Lead researcher: Christine Gerena (cell: 917-747-9357; email: cgerena@uci.edu)
> Faculty Chair; Co-chair of researcher's committee: Dr. Fisher (currently on sabbatical);
>> Dr. Sharp

·Length of workshop: 6 weeks (January 27, 2015- March 5, 2015)
·When: Tuesday and Thursday from 4pm to 5:30pm OR 5:30pm to 7pm
·Where: Studio 1130
Please note: video recording may take place during some of the sessions for documentation of teaching methodologies.

Faculty chairs may attend one or part of a session to observe. Lead researcher will announce their presence ahead of time. Participants may choose to accept or reject any outside presence in the studio during sessions.

II) <u>What is expected of volunteer participants during each session:</u>

·Completion of surveys and questionnaires at beginning and end of study

·Participation in warm up exercises, which may consist of light physical movement and/or mental simulation

·Be prepared to work on movement sequences of their choice or ask the lead researcher ahead of time to teach a combination in the chosen technique/style of the participant

·Bring a journal to each session and take notes in and outside of sessions

·Participate in group discussion. If participant does not wish to participate, he/she may choose to speak to lead researcher individually or engage through journal writing.

Participation is completely voluntary. One may elect to drop out of the study at any time with no consequences if discomfort is experienced. If enrolled in an independent study course, outside engagements cannot conflict with meeting times, unless it is of extenuating circumstances and participant approaches lead researcher as soon as possible. Notification in advance is required, if possible.

III) Intended goals of the study:

Please keep in mind that this is a short pilot study with a small study sample. Benefits are not guaranteed and every participant is encouraged to be honest and forthcoming about his/her experience.

·Participants' increased knowledge…

> and recognition of psychosomatic stressors that may be present in dance training and the potential negative effects they may have

> of psychological skills training and the Franklin Method (somatic practice) and their potential benefits on performance

·Participants' awareness of…

> current thought patterns (positive and negative self-talk)

> cognitive interferences present and potential effects on performance (i.e. negative self-talk)

> how one's self currently perceives stressful situations and appraises his/her abilities to meet demands (self-efficacy)

·Participants' development of self-talk practice to address cognitive interferences…

> through consistent practice of somatic exercises found in the Franklin Method

> through consistent practice and reflection of self-talk as part of psychological skills training (PST) with use of cueing, positive self-talk script, and journaling

> beginning with application and practice of mental skills in low-stress situations (daily life, pilot study sessions, class, rehearsal, etc…) in preparation for situations with higher stress (life stressors, performances, auditions, etc…)

Key Concepts and Terms to Know

Self-Efficacy

According to the American Psychological Association, self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments. Self-efficacy reflects confidence in the ability to exert control over one's own motivation, behavior, and social environment.

Cognitive Appraisal

A theory of emotion which implicates people's personal interpretations of an event in determining their emotional reaction. The most important part of this theory is the way we interpret the event (aka, was the event a positive or a negative occurrence?) as well as what we think caused the situation. Cognitive Appraisal can relate to self-efficacy in terms of how one appraises his/her abilities in relation to the challenge presented.

Self-Esteem

Refers to the degree to which one values oneself. There are different sub-categories of self-esteem:

Domain specific (i.e.: your level of esteem as a dancer)
Domain general (i.e.: your level of esteem as a person in society/larger world)
Trait (inherent level of esteem based on character and temperament)
State (i.e.: level of esteem in a given moment)
Social (i.e.: level of esteem in relation to others/in social situations)
Appearance (i.e.: self-image/ body image)

Self-esteem can be affected by your belief in your capacity to accomplish/overcome challenge. You can have high esteem in one area and not the other(s). For example, level of self-efficacy in dance will affect your *domain specific* esteem, but not necessarily your *domain general* esteem. Even further, your *state* esteem may be low in ballet class, but you may have high esteem in your role as a modern or jazz dancer in rehearsal.

Emotional/Psychological states that may affect self-efficacy and esteem:

Anxiety: a negative emotional state characterized by nervousness, worry, and apprehension and associated with arousal. Arousal is blend of physiological and psychological activity in a person…highly aroused individuals are mentally and physically activated; they experience increased heart rates, respiration, and sweating

Stress: the relationship between a person and the environment that is appraised as taxing personal resources and threatening well-being (imbalance between demand and capability)

Ways to combat anxiety and stress:

Psychological skills training:

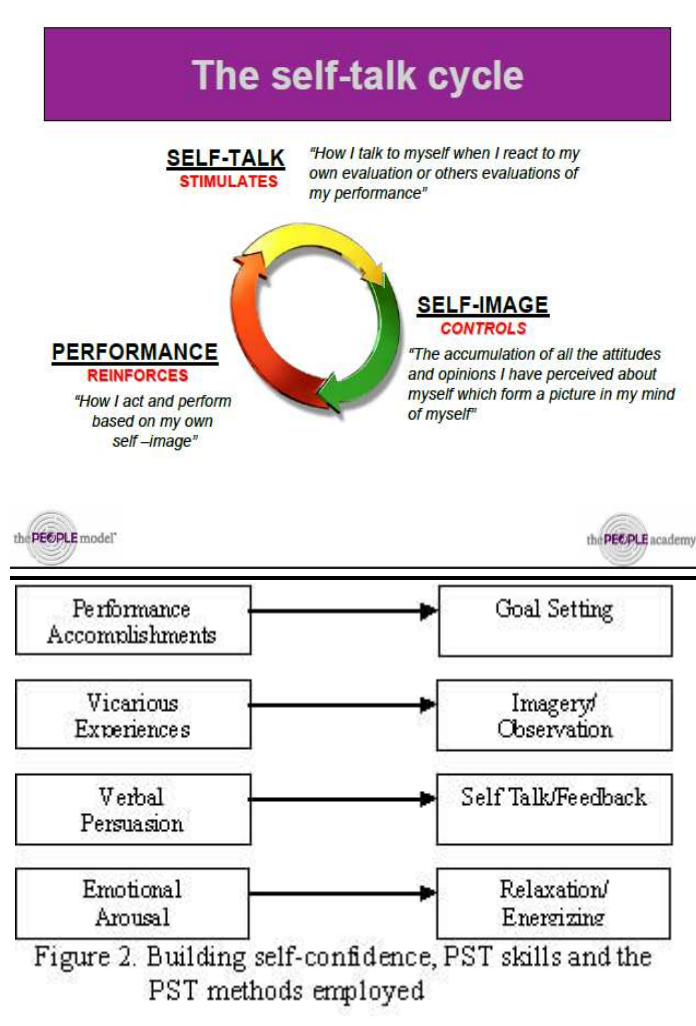·Goal-setting
·Relaxation
·Imagery
·Self-talk* (focus of study): a person's internal dialogue, which can be positive and motivational or negative and demotivating. Turn negative self-talk (known as cognitive interference) into positive self-talk by using cues that help you focus, maintain confidence, and stay calm in stressful situations.

References for General Psychological Skills Training and Self-talk

The self-talk cycle

SELF-TALK
STIMULATES

"How I talk to myself when I react to my own evaluation or others evaluations of my performance"

SELF-IMAGE
CONTROLS

"The accumulation of all the attitudes and opinions I have perceived about myself which form a picture in my mind of myself"

PERFORMANCE
REINFORCES

"How I act and perform based on my own self –image"

the PEOPLE model'

the PEOPLE academy'

Performance Accomplishments	→	Goal Setting
Vicarious Experiences	→	Imagery/Observation
Verbal Persuasion	→	Self Talk/Feedback
Emotional Arousal	→	Relaxation/Energizing

Figure 2. Building self-confidence, PST skills and the PST methods employed

SELF TALK ABC'S...

- **A = Activating Event**
  - No Inherently stressful situations or events
    - " We are not disturbed by things, but by the views of which we take of them" – Epictetus
- **B = Belief about the Event**
  - Athletes attach positive or negative meanings to neutral events based on their highly automatic belief system
- **C = Consequences**
  - Our beliefs about the event lead to positive or negative consequences, both emotionally and behaviorally
- Thus, the meaning that we attach to events can positively or negatively impact our emotions, behaviors, and ultimately our performance

Appendix B

Items in the Type of Self-Talk Questionnaire

You were asked to generate self-talk about the task prior to and during performance. How would you classify the types of self-talk you used? (Please check all that apply)

Type of self-talk	Examples
Calming/Relaxing	"Take a deep breath." "Don't worry, take your time and slow down."
Performance Worry	"I hope I don't do too badly." "This is too hard."
Instructional	"Bend your knees." "Stop, stop! Balance."
Self Doubts in Ability	"I can't do this." "I'm no good at balancing."
Motivational	"Yes! Come on, let's go!" "I know I can do it."
Frustration	"This makes me mad." "Why do I bother?"
Focus	"Don't think about anything, just concentrate." "Focus on your feet and find the best position."

APPENDIX I

"Positive Thinking in Dance" Workshop Lesson Plans

*Session 1 consisted of participants signing informed consent sheets, completing questionnaires, and lead investigator discussing outline of study.[20]

<u>Session 2:</u>

I) Warm-up: Follow the leader

Standing in a circle, lead investigator randomly calls on people to warm up specific parts of the body by leading through range of motion, conditioning, or stretching.

- · Neck, shoulders and arms
- · Spine
- · Hips and legs
- · Heart rate and strengthening
- · Active Stretching
- · *Self-talk prompt*: At the end of the exercise, each person chooses one word that describes how he/she immediately felt emotionally/psychologically when his/her name was called and assigned body regions or tasks.
  *Open group discussion follows where participants share their thoughts and feelings during the experience.

II) Movement and Self-talk Exploration: Improvisation

Choose one technique or style of dance that you are least familiar improvising in (i.e.: ballet)
- · Improvise for 7-8 minutes combining this chosen technique or style with your own movement quality/style and be aware of the types of thoughts that are present in your mind (Participants may write in their journals at any point they feel necessary).

- · At the end of the 7-8 minutes, begin to choreograph a 16-count phrase. Participants have 8-10 minutes to create their movement phrase.

- · On a voluntary basis, each participant performs his/her movement phrase one at a time.

- · *Self-talk prompt*: While observing other performers, notice the thoughts that enter your mind (Participants may write down their thoughts as performers and/or observers at any point).
  *Open group discussion follows where participants share their thoughts and feelings during the experience.

III) Mini-lecture and open discussion: Part I

Topic(s) covered:

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[20] Please refer to Appendix H for *Positive Thinking in Dance Workshop* study guide.

·Franklin method's 4 steps of creating change (Franklin, 2009)
-feedback stage (becoming aware of your thoughts, images and feelings you have about your body, and your emotional)
-creating stage (planning strategy for change)
-feed-forward stage (implementing the plan into action)
-comparison stage (analyzing results and modifying strategy if necessary)

Lead investigator guides participants in Franklin method's swinging arm exercise (Franklin, n.d.):

·Finding a comfortable standing position with one leg forward, begin to shift your body weight forward and back between your feet. Gradually increase the weight shift and let the arms swing forward and back together, creating a steady rhythm. Lead investigator says the phrase, "I feel loose and fragile, I feel light and free." Participants choose to repeat the phrase in their heads or say it out loud in response as the lead investigator repeats the phrase out loud. After several repetitions, the lead investigator begins to repeat the next phrase, "I feel heavy, tense, and knotted up." Again, participants may choose to repeat the phrase in their heads or say it out loud.

·*Self-talk prompt*: Notice how your body feels performing the swings while repeating these two phrase. Is there a difference between the first, more positive phrase, and the second, more negative phrase?
*Open group discussion follows where participants share their thoughts and feelings during the experience.

IV) Applying Franklin method's 4 steps of creating change:
·Lead investigator gives examples of stop cue for negative thoughts (i.e.: "stop," your name, "no"). Over time, participants may try different stop cues to find the one(s) that are most effective for his/herself.

·Participants rehearse their phrases again, but, this time, they must create a self-talk script using the three different types of imagery discussed (metaphorical, anatomical/technical, mood or emotional-based). Lead investigator gives example, "I feel spritely (mood-based) as my pelvis drops into a deep plié (technical), and then I rise like a balloon (metaphorical)." Participants may write their script in their journals for reference.

·Participants perform their phrase again one at a time.

*Open group discussion follows where participants share their thoughts and feelings during the experience and whether or not the script made a difference on their performances.

V) Mini-lecture and open discussion

Topics covered:
Franklin method's outline of 6-month goals (Franklin, 2009, p. 11):
·   In 6 months, how will you feel?

    …what will you be thinking about?
    …how will your joints and muscles feel?
    …how are your inner organs doing?
    …how strong and flexible are you?
     …how will you appear to others and yourself?
*Participants answer these questions in their journals

Franklin method's "Beginning Inner dialogue" (Franklin, 2009, p. 19):
 · Say to yourself, "My body hears my thoughts clearly, my body responds to my inner picture of wellness. My muscles sense my thoughts; my joints sense my thoughts; my organs sense my thoughts. Which thoughts and images are the best and most healthy for my individual body?"

*Introduction of topics leads to open discussion where participants can share thoughts or ask questions, or write in their journal. Participants are encouraged to begin writing down their thoughts so that they can begin their self-talk re-patterning script.

<u>Session 3</u>

Minute of Awareness: Participants find a comfortable position and close their eyes for one minute, focusing on being present in the moment, clearing the mind of all thoughts and paying attention to sensations of the body.

Lead investigator prompts open discussion asking the students why they decided to participate. Encourage the students to analyze how achieving the goals related to the study will help them achieve their 6-month goals, as discussed in session 2.

I) Movement and Self-talk Exploration: Cues to improve technical performance
· Ask the group to come up with and share self-talk cues that could potentially improve technical performance of a plié in second position into chaînés turns (arms in second positon for plié and close to first position for the turns).

· *Self-talk prompt:* Practice each of the cues to determine which type(s) of cue works best for you. The cues could be metaphorical, anatomical/technical (may include technical or movement terms, quality or spatial descriptors), or emotion-based.

*Brief discussion follows where the students share which cues worked best for them and why.

· Apply creation of self-talk script to personal combo that was learned in class or rehearsal. Write script down in journal for reference.
*Open group discussion follows where participants share their thoughts and feelings during the experience and whether or not the script made a difference on their performances.

· After discussion, students may revisit their movement combination and script for modification or revision.

· *Self-talk prompt:* If participants have begun their self-talk journaling (writing down positive or negative thoughts while dancing), they may journal their thoughts while participating in this exercise.

Minute of Awareness (refer to session 3 for full description)

I) Mini-lecture and open discussion

Topic(s) covered:

Franklin method's "Negative Stop, Positive Go" (Franklin, 2009, p. 20):
· "Stop" cue
· Identify goal
· Reflect on how you would like to feel about yourself
· Resume working with chosen thought, image, or objective

Franklin method's embodiment of imagery and self-talk (Franklin, 2009)
· Participants write in their journals this excerpt from *Beautiful body, beautiful mind: The power of positive imagery*, "Imagery and self-talk function best when they are embodied…The more we experience our self-talk as an event originating in the physical self, formulated in the cells even, the more effective it is. Cells, after all—brain cells to be exact—are what allow us to converse with our bodies in this way. The process we are exploring uses a kind of echo principle: When we feel the body's echo in response to our imagery or self-conversation, we have created an effective link" (p. 20).

Sport Psychology's 4 Cs of Mental Toughness (Mental Toughness and MTQ48):

Mental Toughness Scale	What this means … what does MTQ48 assess
CONTROL	*Life Control* I really believe I can do it
	Emotional Control I can manage my emotions and the emotions of others
COMMITMENT	*Goal Setting* I promise to do it – I like working to goals
	Achieving I'll do what it takes to keep my promises and achieve my goals
CONFIDENCE	*In Abilities* I believe I have the ability to do it – or can acquire the ability
	Interpersonal Confidence I can influence others – I can stand my ground if needed.
CHALLENGE	*Risk Taking* I will push myself – I am driven to succeed
	Learning from Experience Even setbacks are opportunities for learning

Self-Regulation: Primary goal of PST (Kirschenbaum, 1987, p. 106-107)
· 5-stage model of self-regulation developed by Daniel S. Kirschenbaum
-Problem Identification

-Commitment to Change
        -Execution of Strategy
        -Environmental Management
        -Generalization

II) Journaling and Sharing

In your journal, write down what you believe is your greatest psychological strength and greatest psychological weakness.

*Open discussion follows focusing on how to generalize psychological strengths to new experiences in effort to improve weaker areas.

Self-talk prompt: List your major stress and/or anxiety symptoms. Take note of whether your symptoms are more cognitive or somatic. Attach mood cues that may potentially disrupt symptoms and write them down in your journal. Refer to them periodically and memorize so that you can remind yourself of the cues during stressful times.

*Tips for self-talk language:
        -Use milder language (replace extreme emotional words to more neutral words for what you say   to yourself as well as when you replay what teachers say to you in class).
        -Change self-limiting statements to questions (i.e.: I can't handle this -> How can I handle this?)
        -Use self-talk in the present tense (Past tense will distract you from the moment and what you   need to do and future tense may cause anxiety if you set unrealistic expectations).

Visual application of concepts:
Sitting in a comfortable position, choose the last event where you felt challenged or stressed. Replay the event in your mind, including your response. Allow that thought to dissipate and then visualize how you would have liked to respond to the challenge or stress using the cues and concepts discussed so far.
*Open group discussion follows where participants share their thoughts and feelings during the experience.

Application of Franklin method's *Inner thoughts for health, love, and beauty* **(Franklin, 2009)***:*

Standing in a comfortable position, perform a body scan, traveling head to feet, attaching mood words to different areas of the body in effort to embody your imagery and self-talk
   · (Example) Say inwardly, "I radiate health, love and joy, from my head."
   · Choose one word at the end to represent what you want to radiate overall and say it out loud.

Session 5

Minute of Awareness (refer to session 3 for full description)

I) Open discussion and mini-lecture:

Participants can share any relevant thoughts or experiences since the last session. This is followed by revisiting symptom list of anxiety in their journals. Last session, students were prompted to be aware of these symptoms during their daily lives. If they need to add or modify their written list, they may do so now. Lead investigator also asks the participants to label the symptoms as either facilitative or debilitative. Use of the "stop" cue is encouraged for debilitative symptoms.

I) Use of imagery and self-talk cues to facilitate learning process and performance

A) Perform movement phrase of your choice (from class or rehearsal) without use of self-talk cues. When done, journal thoughts experienced while dancing. Create a self-talk script compromised of imagery cues that you believe will improve your performance (may be metaphorical, technical, or mood-based). Perform the phrase again and journal thoughts. Compare the thoughts of the first and second performance.

· *Self-talk prompt*: Reflect on effectiveness of self-talk script. Modify the script, if necessary.

B) Lead investigator will teach a new movement phrase. As you are learning the movement, assign imagery you may want to use.

· *Self-talk prompt*: Determine the part of the learning process that works best for you in terms of assigning an image-based self-talk script. (i.e.: as you are learning each movement; every 8 counts of movement, after learning the entire phrase).

*Open group discussion follows where participants share their thoughts and feelings during the experience and whether or not the script made a difference on their performances.

Session 6

Minute of Awareness (refer to session 3 for full description)

I) Open discussion:

Participants can share any relevant thoughts or experiences since the last session. A brief introduction of Susan Foster's work "Dancing Bodies" is introduced with emphasis on her concept of perceived and ideal bodies (2010).

II) Practical Exploration of Susan Foster's Perceived and Ideal Body Concept:

After students warm up on their own, they review a movement phrase they have learned in class or rehearsal that is not their own choreography. Students then develop an image-based self-talk cue list to apply to the phrase. They write the self-talk script in their journal. Lead investigator records each person perform his/her own phrase choice. Students are then placed in pairs where each person teaches the other their movement phrase using the self-talk script as guidance. After all of the students have learned their second phrase, they perform it for their partner. Immediately after watching their partner perform, each student then watches the video recording of his/herself performing.

· *Self-talk prompt*: Notice your thoughts specifically during your performance of your own phrase, observing your partner's performance, and observing your own recorded performance. You may journal your thoughts and add them to your self-talk script, if desired.

*Open group discussion follows where participants share their thoughts and feelings during the experience and whether or not the script made a difference on their performances. Students are asked to reflect on how they critiqued each "body" of performance (their perceived body while performing, their partner's dancing body, and their recorded body vs. their ideal body). The students are urged to show as much respect for themselves during critique as they show for their partner.

Minute of Awareness (refer to session 3 for full description)

I) Open Discussion and Lecture

Participants can share any relevant thoughts or experiences since the last session. Students are asked about their current coping habits (identify the habits and whether they are effective or not).

Topics covered:

· Coping resources: Refers to a "wide variety of behaviors and social net-works that help the individual deal with the problems, joys, disappointments, and stresses of life" (Williams and Andersen, 1988). Coping behaviors may include sleep patterns, nutritional habits, time management, general self-esteem, and study skills (Williams and Andersen, 1988, p. 302).

· Types of coping skills (Farkas, 2012):
  · Emotion-focused coping involves trying to reduce negative emotional responses associated with stress. Helpful when sources of stress if outside of your control. Examples of this type of behavior includes keeping yourself busy, prayer, letting off steam to others, ignoring the problem, distracting yourself, or building yourself up to expect the worst.

  · Problem-focused coping targets the causes of stress in practical ways which tackles the problem or stressful situation. Examples of this type of behavior includes taking control (changing the relationships between yourself and the source of stress through escape or stress removal); seeking information to understand the situation and putting in place cognitive strategies to avoid it in the future; evaluating the pros and cons of different options for dealing with the stressor.

· Efficient Coping Strategies (Farkas, 2012):
  · Be positive (positive self-talk practice)
  · Make the choice not to overreact to stressors and deal with them one at a time
  · Take an objective view of the stressor
  · Communicate
  · Accept yourself and others
  · Make connections with people (building coping networks)
  · Deal effectively with mistakes
  · Deal effectively with successes
  · Develop self-discipline and control
  · Build up maintenance of coping skills by constantly practicing these strategies

Repeat of Visual application of concepts:
Sitting in a comfortable position, choose the last event where you felt challenged or stressed. Replay the event in your mind, including your response. Allow that thought to dissipate and then

visualize how you would have liked to respond to the challenge or stress using the cues and concepts discussed so far.

*Open group discussion follows where participants share their thoughts and feelings during the experience in comparison to first experience.

<u>**Session 8**</u>

Minute of Awareness (refer to session 3 for full description)

I) Open Discussion

Participants can share any relevant thoughts or experiences since the last session.

II) Applying self-talk and imagery to teaching ballet technique

After the students warm up on their own, they are each assigned a part of ballet class that they must choreograph a short class exercise for and teach to the group (i.e.: plié at barre, tendu at barre, center combination, across the floor, petite allegro, pirouette)

· *PST prompt*s: Set a goal for the exercise
            Take note of your thoughts during the process (what you firs thought when you
            heard your assignment, while developing the exercise, while teaching)
            When you teach, articulate with vocabulary, imagery cues, and exercise goals.
            May only demonstrate with the body once.
            Give feedback to group, if applicable

*Open group discussion follows where participants share their thoughts and feelings during the experience and whether or not the script made a difference on their teaching. Students are asked to reflect on how they effective their goals and imagery cues were in relation to the performance of their "students" while teaching. If the students gave feedback, how did they choose what choice of words to use? Would they would give themselves feedback through self-talk in the same manner?

<u>**Session 9**</u>

Minute of Awareness (refer to session 3 for full description)

I) Open discussion and recap of previous material

Topics covered:

· Franklin's 6-month goal questions (Franklin, 2009).
　　· Measure your current level of progress in relation to these goals. Modify goals, if necessary.

· What is your own definition of mental toughness?
　　· Write your definition in your journal and share with the group.

· Have you noticed any successes and/or room for improvement in regard to the generalization process as part of self-regulation (refer to session 8 for full description)?

· Visualize a recent response of yours to a stressful situation that you found positive and helpful. Then, revisit a response that was not as helpful. Using the positive experience as a reference, re-visualize the second experience with the type of response you would have wanted to give.

· Greatest psychological strength and weakness
　　· Revisit this list in your journal. Reflect on how you feel currently in relation to what you wrote.　　Do they still apply? Can you choose a strategy that you think will help improve your weakness?

· What have been the most effective strategies/tools you've learned from this workshop? What is the least effective aspect? What do you need more of?

<u>**Session 10**</u>

Minute of Awareness (refer to session 3 for full description)

1) Warm up:
Each person leads warm up movement for specific parts of the body. Lead investigator randomly calls on people and they choose which body part/area to focus on.

· *Self-talk prompt*: Use one word that describes how you felt while leading. How does this word compare to the second day of the study when you led warm up?

2) Franklin Swings (Franklin, n.d.):

· While swinging, replay in your mind the last time you responded to stress or anxiety in a way that was ineffective. Re-pattern that response in your head after repeating this question to yourself in your head: "Which thoughts and images are the best and most healthy for my individual body? (Franklin, 2009, p. 19).

· Using positive imagery to influence how your body and mind feel (repeat out loud after lead investigator)
      · I am worthy
      · I am capable
      · I, not others, define myself
      · I am healthy
      · I am loved
      · I am supported
      · My body and mind can heal themselves

3) Improvisation with Self-Talk Cues

· Improvise as you think of words (self-talk cues) that describe how you want to feel. Determine which cues will help you get there (mood-based, metaphorical, and technical) and repeat those cues. In addition, take "risks" in your improvisation and see how your mind responds.

· Out of your improvisation, set 16 counts of movement. Create a movement phrase that reflects the progress you have made during this study and who you want to be today. Perform the phrase for the group, one at a time.

*Open group discussion follows where participants share their thoughts and feelings during the experience and whether or not the script made a difference in their dancing.

4) Open discussion

In your journal, answer these questions:
· What are your mental wellbeing goals for the rest of the school year?
· What specific tools will you use to help you achieve these goals?
· What coping networks do you want to nurture in the next few months?

5) Body Scan with Mood Words
Sense how your body parts feel when repeat in your head or out loud:

· I radiate…
    · airiness from my head
    · suppleness from my neck
    · weighted ease from my shoulders
    · vastness from my ribcage
    · soft heaviness from my arms
    · bubbliness from my organs
    · space and breath around my pelvis
    · giggliness from my knees
    · napkin creases at my ankles
    · pancake batter from my feet
    · clarity form my eyeballs
    · sensitivity from my nose
    · kindness from my mouth
    · and compassion from my ears

Session 11

Minute of Awareness (refer to session 3 for full description)

I) Group Interview

As part of evaluating the effectiveness of the study, participants answer out loud the following questions:

1) What was your overall experience during the present study?

2) What is your general opinion of the effectiveness of this study?

3) Which aspects were most helpful? (may include exercises, set up of sessions, etc). Which were least helpful?

4) How did you feel about the group atmosphere of the sessions?

5) Do you believe twice a week for 1.5 hours for 6 weeks was sufficient time for this study? If not, why? What time frame do you believe would have been more helpful?

6) Were the expectations of the study and the exercises given clear?

7) How much time did you devote to the material outside of the sessions? (can measure hours/days of the week)

8) Do you think you will continue to use the tools that you were given after the study is over?

9) What would you change about the study? What parts did you like the most?

10) Do you believe PST and the Franklin Method is useful for dancers/students?

11) Would you recommend this type of workshop to others?

Session 12

Minute of Awareness (refer to session 3 for full description)

I) Open Discussion

The last session of the study consists of an open discussion reflecting on the experiences of the participants. Students can questions about information covered. Also, a brief review of major concepts and strategies is offered.