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Psychological Aspects of Dance

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Abstract

The purpose of this article was to review a range of psychology-related topics in dance including anxiety and dance performance, body image, eating disorders, and injury. While most of those were already present in the extant sport and exercise psychology literature, this article tried to discuss those as they specifically relate to dance and the psychology of it. Many findings showed overlaps with sports domains. For example, ballet dancers and other aesthetic athletes may frequently present body image and eating disorders issues. Psychological interventions can be very beneficial for group cohesion, self-confidence, and anxiety management. Educational interventions providing information on nutrition, exercise, and disordered eating are critical to decreasing depression, drive for thinness, body dissatisfaction, and maturity in dancers. Future research needs to examine the differences between dance styles, and further scientific research on psychological aspects of dance is required.

Keywords: dance, anxiety, body image, eating disorders, injury

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Introduction

Dancers work hard and spend extensive practice hours to reach their maximum physical capabilities and show optimal performance on stage. The nature of dance environments is not only physically demanding but also highly competitive and psychologically taxing. For example, auditioning for schools and jobs, casting for roles, and performing in front of audiences all add to the challenging nature of dance. As a result, there is growing recognition that psychological aspects in dance are as important as physical and artistic aspects, and dance psychology has developed as an area of scholarly inquiry within the last decade (Mainwaring, Krasnow, & Kerr, 2001). However, scientific research on the psychology of dance is still limited (Hanrahan; Nordin-Bates, 2012).

This paper reviews a range of psychology-related topics in dance including anxiety and dance performance, body image, eating disorders, and injury. While we note that most of those are already present in the extant sport and exercise psychology literature, our purpose is to discuss those as they specifically relate to dance and the psychology of it. To this end, we initially introduce anxiety and dance performance.

Anxiety and Dance Performance

Since performing in front of others is part of being a dancer, at some point, most dancers have experienced performance anxiety (Hanrahan, 2005; Helin, 1989). While the term “competitive anxiety” has commonly been accepted and used in sports, other terms have been interchangeably used with anxiety in dance. For example, stage fright was commonly used and defined as anxiety for performing artists (Hanrahan, 1996; Wilson, 1985), but for dancers, it was specifically considered “a state of being completely frozen and unable to move” (Hanrahan, 2005, p.114). Although intensity is rarely used, Taylor and Taylor (1995) used the term to introduce and explain anxiety in dance. Performance anxiety as well as competitive anxiety has been recently studied in dance research.

Several authors have found that dancers suffer from anxiety both before and during performances. This is important because researchers have shown that anxiety can hinder performance (Barrell & Terry, 2003; Helin, 1989; Lench, Levine, & Roe, 2010; Singer, 2004; Walker & Nordin-Bates, 2010). In a 10-week longitudinal study by Lench et al., dancer’s trait anxiety was found to be an indicator of physical health. That is, “greater trait anxiety predicted poorer health” (p. 163).

There is a large number of intra- and interpersonal environmental factors provoking performance anxiety, and some anxiety-provoking factors are unique in dance as compared to other sports. For instance, the partnering of two dancers would be an anxiety-provoking circumstance. In a study by Hanrahan (1996), in partnering, when one dancer has performance anxiety, the other dancer could

have a loss of trust, resulting in increasing anxiety and poor performance for both partners.

Attending auditions can also provoke anxiety that can negatively affect performance in dancers (Hanrahan, 1996). Uncertainty could be one of the many factors that affect anxiety during an audition. (Hanrahan, 2005; Monsma & Overby, 2004; Walker & Nordin-Bates, 2010). However, unless dancers participate in auditions or competitions, no one objectively evaluates their performance, especially for professional dancers. The audience could affect performance anxiety as an interpersonal and environmental factor (Nordin-Bates, 2012; Walker & Nordin-Bates, 2010). When families, friends, and teachers are present in the audience, dancers tend to become more anxious (Hanrahan, 1996).

Eating Disorders

Many studies have found a relationship between occupational stress and eating disorders in dancers (Barrell & Terry, 2003; Hamilton, Brooks-Gunn, & Warren, 1985). When dancers suffer from an eating disorder, they have been found to be significantly more depressed, impulsive, maladjusted, isolated, and alienated from their work. They have also been found to be more vulnerable to injury due to the lack of adequate nutrients in their diets (Barrell & Terry, 2003).

There is a distinct difference between disordered eating (DE) and eating disorders (EDs). Those with DE may have somewhat abnormal eating habits or mild to moderate psychological pathology but does not meet the diagnostic criteria for a mental illness, whereas EDs are a mental illness (Dunford & Dolye, 2015). Those with EDs have a very hard time focusing on anything else besides weight and food. EDs can lead to serious physical problems, and sometimes even death. DE occurs more frequently than EDs. The symptoms are the same but occur less often. Dancers and athletes may have stressors that encourage these behaviors, which can lead to an unhealthy relationship with food. However, this would not be considered an ED unless it was diagnosed as a psychiatric illness (Pereira & Alvarenga, 2007). The amount of time dancing has been found to be unrelated to EDs in adulthood. Rather, learning about thinness while in dance class was related to EDs (Annus & Smith, 2009) and was shown to be a predictor of EDs (Penniment & Egan, 2012).

Dancers tend to have no risk of an ED (Toro, Guerrero, Sentis, Castro, & Puertolas, 2008) and a higher risk of an ED (21.74%) than non-dancers (12.00%) (Hidayah & Bariah, 2011). In general, there is a greater prevalence for females to have an ED than males in the regular population (Ravaldi, et al. 2003), as well as dancers (Ravaldi, Vannacci, Bolognesi, Mancini, Faravelli, & Ricca, 2006). Dancers tend to engage in ED behaviors, such as binge eating and purging (Ringham, Klump, Kaye, Stone, Libman, Stowe & Marcus, 2006; Thomas, Keel, & Heatherton, 2011). However, the type of dance plays a role in the prevalence of these disorders. For example, there is a higher prevalence

of ballet dancers having an ED than modern dancers (Schluger, 2010). Dancers typically possess a lower body weight, Body Mass Index (BMI) and body fat percentage than non-dancers (Hidayah & Bariah, 2011). More specifically, many ballet dancers (44.3%) are underweight and have a very low BMI (<17.5) that places them at high risk for anorexia nervosa (Herbrich, Pfeiffer, Lehmkuhl, & Schneider, 2011). There are eating disorder traits, but they are due to the stressors coming from dance. Body image disturbance is typically a critical factor in the development of an ED (Ravaldi, et al. 2003).

Professional and amateur dancers differ on three body image variables: fitness orientation, body area dissatisfaction, and overweight preoccupation. Pollatou, Bakali, Theodorakis, and Goudas (2010), found that professional dancers are more physically fit, value fitness more, are more satisfied with their bodies, and are more occupied with their body weight than amateur dancers. Heiland, Murray, and Edley (2008) found that in Los Angeles, the main location for commercial dancing and entertainment, dancers' body images are heavily influenced by the media, society (i.e., family and teachers), and a culture of eating disorders. Body image can also be negatively affected by the culture of Los Angeles, which leads to an increased prevalence of EDs (Heiland, Murray, & Edley).

Body Image

Body image is defined as "an obscure, mental representation of body shape, size, and form which is influenced by a variety of factors that operate over varying time spans" (Pollatou et al., 2010). Body image is an important factor of influences on one's psychological health and well-being and can mediate performance in dance, as a result (Radell, Adame, & Cole, 2004). Dancers at the elite level are often concerned about their weight, which can lead to body image worries and a preoccupation with being overweight (Pollatou et al.). This worry has been found to occur more frequently at the elite level of professional dancing, likely due to the fact that they spend the most numbers of hours training.

In addition to being preoccupied with weight, Pierce and Daleng (1998) found that professional female dancers have a high level of distorted body image. It is very common for professional dancers to have negative feelings about weight (Ackard, Henderson, & Wonderlich, 2004; Bettle, Bettle, & Neumärker, 1998) which can in turn increase the risks for eating disorders (Ackard et al.). When compared to adolescent, non-dancing peers, Bettle et al. (2001) found that ballet dancers view themselves as less lovable, less attractive, less confident, and less desirable. Even after dancers had quit, Tiggemann and Slater (2001) found that they had higher self-surveillance and disordered eating when compared to their peers.

Many elite dancers will enroll in a professional or competitive ballet school at a young age. These schools are training the young dancers to have a successful career in dance. Therefore, a lot of the research on body image concerns is conducted on these dancers in particular. (Ackard et al, 2004). To be thin in ballet is often both the norm and expectation (Pickard, 2012). Ballet is extremely competitive (Druss & Silverman, 1979) and the students, especially female, are under a great amount of pressure to have the ideal body shape (Lowenkopf & Vincent, 1982). In order to meet this idea, it has been found that female ballet students intend to have a Body Mass Index (BMI) that is below the 5th percentile (<82% of normal weight) (Bettle et al., 2001).

Dancers have higher self-objectification than non-dancers (Tiggemann & Slater, 2001). Mirrors could be one possible reason for this increase in self-objectification. When dancers are learning a new piece of choreography, the mirrors are a distraction if the combination is simple (Dearborn, Harring, Young, & O'Rourke, 2006). While learning a more complex dance phrase, the dancers need to focus their attention more and are therefore not distracted by the mirrors. In addition to being a distraction in learning, the mirrors increased students to focus on other students and perceive that other students were performing better than themselves (Dearborn et al.). Regardless of the phase, the mirror, when learning both simple and complex combinations, often distracted dancers, especially those with less than 10 years of experience. When students are beginning a ballet class, the mirror can negatively affect their skill achievement and can decrease body image (Radell et al., 2004). The performance level and the mirror interact to influence body image in beginning ballet dancers. When performance level is low, dancers have an increased preoccupation with being overweight when performing without a mirror and a decrease preoccupation with being overweight while performing with a mirror. However, when the performance level is high, dancers feel better about their bodies when not using a mirror. Both high and low performers show a slight increase in body image when using a mirror (Radell, Adame, Cole, & Blumenkehl, 2011).

Learning simple and complex dance movements with or without the mirror can lead to increases in the anxiety of ears, wrists, hands, and forehead (Dearborn et al., 2006). The increase anxiety in these body parts was lower than the anxiety levels of the thighs, buttocks, stomach, or muscles, which could be because of the societal preoccupation with the latter body parts.

Injury

Research relating to dance injury is one of the common topics in the field of dance research. It is commonly accepted that for professionals and professionals in training, dance is physically and psychologically demanding, and, in turn, dancers are at high risk for injury. Previous studies have

indicated that most dancers experienced injuries during their careers, and the prevalence of injury in dancers is from everywhere from 37.1% to 90.2% (Adam, Brassington, Steiner, & Matheson, 2004; Noh, Morris, & Andersen, 2005; Sanna M. Nordin-Bates et al., 2011; Patterson, Smith, Everett, & Ptacek, 1998; Thomas & Tarr, 2009). Although the incidence of dance injury has been considered high, it is expected that the actual dance injury rate would be higher than the reported rate due to a "culture of tolerance concerning injury and pain that encourages dancers to dance through, around, and in spite of injury" (Mainwaring & Krasnow, 2010, p. 107). Studies reported that dancers frequently ignore their injuries and/or do not report these issues to medical physicians, in turn deciding to continue dancing with pain (cited from Nordin-Bates et al., 2011).

During practice and performance, various physical, psychological, and environmental factors may promote the occurrence of dance injuries (Noh et al., 2005). Psychological factors influenced injuries in ballet dancers, and dancers, as well as athletes, experienced injuries resulting as much from psychological factors as physical causes (Patterson et al., 1998). Professional ballet dancers experienced tremendous stress and anxiety in their life, in that classic ballet required both athletic and artistic demands (Adam et al., 2004). Hamilton et al. (1989) reported that psychological stress, typically associated with certain personality types, may be specifically associated with an increased risk of injury, stating that most ballet dancers display the "over achiever" personality type, where they are extremely dedicated, goal orientated and persevering people, which may, in turn, contribute towards this increased injury risk. Life stress and perceived social support have also been considered injury risk predictors. Patterson et al. found a significant association between life stress and social support and their impact on injury. Specifically, the combinations of high life stress and low social support led to an increased risk for injury in dancers. Dancers also indicated that social support moderated the stress-injury relationship. Because psychological factors are maintaining an important role in the causes of dance injuries, researchers should investigate this association further (Noh, 2005).

Conclusion

This article has reviewed a range of psychology-related topics that are studied in dance. More specifically, anxiety, eating disorders, body image, and injury have been examined. Many findings showed overlaps with sports domains. For example, ballet dancers and other aesthetic athletes (gymnastics, skating, and swimming) may frequently present body image and ED issues (Brooks-Gunn, Burrow, & Warren, 1998; Davis & Cowles, 1989; Davison, Earnest, & Birch, 2002).

When dancers are negatively affected by their performance anxiety, psychological interventions can be very beneficial (Walker & Nordin-Bates, 2010). Research has shown that dance teachers used

goal setting with imagery to increase group cohesion, self-confidence, and anxiety management although most stated that they did not have any formal performance psychology training (Klockare et al., 2011). Additionally, an intervention that teaches education on nutrition, exercise, and disordered eating can lead to a decrease in depression, drive for thinness, body dissatisfaction, and maturity in college auxiliary dancers (Torres-McGehee et al., 2011).

Future research needs to examine the differences between dance styles. Most of the research has focused on ballet dancers at the adolescent elite level and the professional level. Additional research needs to focus on different genres of dance, such as modern, tap, and jazz. Moreover, research on the differences between classically trained dancers and dancers who dance in competitions and are on collegiate-level dance teams would present benefits. Finally, physiological aspects of performing dance have widely been studied, but further scientific research on psychological aspects of dance is required.

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