

Goal Orientation Profiles and Body Shape Perceptions of Female Ballet Dancers

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ABSTRACT

Quantitative research was carried out to determine the interaction between goal orientation profiles and body shape perceptions, and goal orientation profiles and sport anxiety, of 57 female ballet dancers. These measures were obtained using the Achievement Goal Questionnaire for Sport (AGQ-S), the Body Shape Questionnaire (BSQ), and the Sport Anxiety Scale-2 (SAS-2). From the goal orientations, cluster analysis was conducted to form four goal profiles. Results indicated that most dancers fell into the HiHiMdHi goal profile, all dancers were high on the mastery approach goal orientation, and overall the mastery orientation was higher than the performance orientation. Furthermore dancers who were high on mastery and medium on performance had moderate levels of body shape concern, and dancers who were high on mastery approach, medium or low on mastery avoidance, low on performance approach and medium or low on performance avoidance had no body shape concerns. Overall, the higher the mastery orientation, added to high or medium performance, the higher the body shape concerns. Furthermore, dancers with the highest body shape concerns also had the highest scores on the SAS-2, in particular on the worry subscale. Therefore, dancers that are highly motivated to achieve develop more anxiety and body shape concerns than dancers who are not.

Keywords: ballet; goal orientations; goal profiles; body shape; anxiety; motivational climate

Many girls aspire to become prima ballerinas. This aspiration intensifies when watching the ballet dancer with her perfectly sculpted body perform jete's with utmost ease and grace. However, ballet dancing is not always what it seems. The ballet dance setting brings with it a culture of complexities, where emotional and psychological effects are brought into play. A few of these complex factors are the way dancers approach success (goal orientation), their feelings about their body (body shape), and their levels of anxiety (trait anxiety). Most of the literature indicates that ballet dancers are highly goal-orientated and achievement focused, and have a dominant mastery goal orientation. Since the ballet environment places particular emphasis on high performance and low body weight, dancers are also assumed to have high levels of anxiety and poor body shape perceptions. To understand these constructs more clearly, achievement goal theory will be explored, particularly the 2X2 achievement goal framework.

PREVIOUS RESEARCH

Goal Orientations

In life, people are constantly trying to achieve something. Whether it is a promotion in a company, or simply the hope of passing a class test, people are always setting goals for themselves. However, people do not pursue their goals aimlessly. Particular motivations and antecedents precede the adoption of particular goals, which ultimately leads to particular consequences and outcomes. Furthermore, defining the purpose of reaching this goal is different from person to person. In achievement settings the purpose is to try demonstrate high ability and to avoid demonstrating low ability (Elliot, 1999). Therefore there are those goals that aim to approach success, and other goals that aim to avoid failure. Understanding achievement behaviour and goals can be useful when looking particularly at achievement settings, such as the sports or performing arts domains. According to social cognitive theory, achievement behaviour is not necessarily the result of particular amounts of motivation, but the manifestations of the different goals that people choose (Cumming & Hall, 2004).

Nicholls (1984) devised the first influential theory on achievement goals and their manifestations. According to him, tasks are based on self-referenced beliefs of ability. Success and ability are defined as either high or low, and can be seen as either

learning through effort or as capacity relative to others. So, if someone masters a task she shows high ability, as this task is self-referenced. However if someone masters a task but does not do as well as someone else, she sees herself as having low ability because her ability depends on the ability of others in relation to herself. These two different approaches to ability can be understood in terms of goals. There are two types of goals: mastery/task-orientated goals and performance/ego-oriented goals. Task-oriented goals focus on developing one's skills and abilities and are self-referenced, whereas ego-oriented goals are referenced in terms of others and performing better than someone else is the main goal (Nicholls, 1984). For example, defining success as passing one's test today compared to failing it yesterday is a task-orientated goal, whereas defining success as doing better than one's friend on a test is an ego-oriented goal.

Task-orientated and ego-orientated goals can be understood in terms of the performance-mastery dichotomy (dichotomous model), which is the dominant theoretical approach in the achievement motivation literature. Different theorists have labeled this dichotomy differently over the years, but the underlying principles are the same (Elliot, 1999). For example, Nicholls (1984), Duda and Nicholls (1992) and Smith, Balaguer, and Duda (2006) looked at ego and task orientated goals, whereas Dweck (1980) talked about performance versus learning goals (as cited in Smith et al., 2006). Furthermore, Elliot (1999), Elliot and McGregor (2001) and Van Yperen (2006) talked about performance versus mastery goals. This research project uses the terms mastery and performance.

The dichotomy between mastery and performance goals has been expanded to incorporate avoidance and approach motivation, in order gain a richer understanding of achievement motivation. Therefore goals vary not only in how competence is defined (as either mastery and performance), but also in terms of how it is valenced. Valence can be understood as either driving people toward success (approach) or leading them to avoid failure (avoidance). The incorporation of valence into the mastery performance dichotomy led to the development of the trichotomous framework, which includes mastery approach, performance approach, and performance avoidance goals (Elliot, 1999).

The goals within the trichotomous framework are specifically related to certain antecedents and consequences. For example, mastery goals are shown to have lots of positive outcomes such as persistence in the face of failure, deep information

processing, task absorption and intrinsic motivation. On the other hand, research on performance goals is not as clear, as evidence for negative, neutral and positive outcomes have emerged. It seems that this confusion is due to the fact that performance goal results depend on how a person perceives competence. According to Elliot (1999), perceptions of competence and achievement motives are antecedents of achievement goals. For example, performance goals with approach lead to more positive outcomes and high competence perceptions, whereas performance goals with avoidance lead to more negative outcomes and low competence perceptions (Elliot, 1999).

The trichotomous model is used most often within the achievement literature. However, Elliot and McGregor (2001) developed the 2X2 Achievement Goal Orientation Framework (most recent model), which expands on the trichotomous model by incorporating the mastery avoidance goal orientation. Therefore, the 2X2 model consists of four goal orientations: mastery approach, mastery avoidance, performance approach, and performance avoidance (see Figure 1). These goals differ in terms of how competence is defined and how it is valenced. Competence (or success) is defined as whether one has gained skill, improved on past performance, and/or performed better than others. Valence is defined as being either positive (in which one approaches success), or negative (in which one tries to avoid failure).

The mastery avoidance goals within the 2X2 model are the goals people adopt when they try to prevent themselves from losing their skills and abilities. These goals emerge out of a fear of failing, and these people have low perceptions of competence. Furthermore, these goals are seen as contradictory since mastery goals are weighted as being extremely positive in the achievement literature. Nevertheless, mastery avoidance goals are more optimal than performance avoidance but less optimal than mastery approach goals (Elliot & McGregor, 2001). Since mastery avoidance goals have both negative and positive consequences, more research is needed on this construct to understand its purpose and relevance within the achievement setting (Elliot & McGregor, 2001).

Elliot and McGregor (2001) compared the trichotomous model with their 2X2 achievement goal orientation model. This was done to establish whether the 2X2 model was better than the trichotomous model by incorporating the mastery avoidance orientation. Elliot and McGregor (2001) came to this decision by analysing each of the four goal orientations and looking at their antecedents and consequences

		Competence	
		<i>Mastery</i>	<i>Performance</i>
Valence	<i>Approach</i>	Mastery Approach	Performance Approach
	<i>Avoidance</i>	Mastery Avoidance	Performance Avoidance

Figure 1 Diagrammatic Representation of the 2X2 Achievement Goal Model

in relation to students in the academic setting. The students' responses to several items were averaged to form the four goal orientations. Confirmatory factor analysis indicated that the four achievement measures were internally consistent, separate variables with good reliability (Elliot & McGregor, 2001). These findings were confirmed by Van Yperen (2006).

Van Yperen (2006) focused on the 2X2 model in assessing the goal orientations and dominant achievement goals of a group of college students. Each goal in the 2X2 model was paired with each of the other three goals, and students were then asked to select one of the goals out of each of the pairs. If the students' consistently chose a specific goal more than three times, that would be their dominant goal. The study showed that the most dominant achievement goal was the mastery approach goal, as 41% of people exhibited this orientation. Interestingly, 31% of people had mastery avoidance as their dominant goal. Furthermore, the mastery avoidance goals had more negative antecedents and consequences than mastery approach goals, but were more positive than performance avoidance goals. This is important, as the mastery avoidance goal was left out of most of the research on goal orientation. Therefore the mastery avoidance goal orientation and the 2X2 achievement goal framework is a better model with which to work. It does not detract from the trichotomous model's simplicity, but rather makes a valuable contribution to the goal orientation framework (Elliot & McGregor, 2001).

Goal Profiles

In most of the literature goal orientations are looked at separately, such that people are seen as adopting only one of the goal orientations within the 2X2 achievement model. However some researchers believe that a person does not only have one goal orientation, and that combinations of both orientations may be present, meaning that the mastery and performance goals are orthogonal. These combinations are referred to as goal profiles (Cumming & Hall, 2004). Individuals with high performance and high mastery goal profiles are usually highly motivated. Furthermore, Smith et al. (2006) found that high levels of performance orientation do not reduce motivation, and are not maladaptive when coupled with high to moderate levels of mastery orientation. Carr (2006) also found that mastery goals maximize the opportunity for people to experience positive effects, such as pride and happiness, and avoid negative effects, such as shame, regardless of whether they have performance goals of any kind. This goes against the idea that performance goals are maladaptive when added to mastery goals. This also supports Duda's (1997) theory about mastery goals being able to sustain the effects of performance goals (as cited in Carr, 2006). Because achievement motivation is understood differently when focusing on goal profiling, goal profiling should be employed in achievement motivation and research (Cumming & Hall, 2004).

Goal Orientations within the Dance Setting

The majority of studies on achievement motivation have focused on either the academic or the sports setting. For example, numerous studies have indicated that people within the sport setting are more mastery than performance-orientated (Cumming & Hall, 2004; Duda & Nicholls, 1992; Hodge & Petlichkoff, 2000; Smith et al., 2006), and sportspeople with a high mastery orientation are believed to have adaptive cognitive, emotional and behavioural outcomes, and less anxiety (Carr, 2006; Smith et al., 2006). On the other hand, sportspeople with a high performance orientation are believed to have more adaptive or maladaptive outcomes depending on their perceptions of ability, and have more anxiety (Smith et al., 2006). These findings are useful but they are not exhaustive, as many other contexts need to be explored with regards to achievement behaviours. In particular, the performing arts need attention as this sector has been neglected within the achievement goal literature.

There are many fields within the performing arts, and the dance setting is one of them. Dancers, like sportspeople, are required to develop certain skills and achieve certain standards. Therefore dancers, like sportspeople, adopt particular orientations when achieving their goals. In saying this, research on the achievement behaviours of those within the dance setting requires further attention. To date, hardly any research on the performing arts or dance setting has been carried out. Nevertheless, the small amount that has been conducted offers a good starting point for those who would like to explore the goal orientations of performers in future.

Niemenen, Varstala, and Maninen (2001) focused exclusively on the achievement motivation of dancers. This study looked at dance students' goal orientations and their perceptions of the purpose of dance. Results showed that dancers had more mastery than performance-oriented goals. This corresponds to the sport literature where athletes have found to be more mastery-orientated than performance-orientated. The main purposes found for dance were being physically active, and reaching high standards, and the lowest purpose for dance was found to be competitiveness. Furthermore, dancers with a dominant mastery orientation believed that dance should promote feelings of well being, and teach people to be physically active. Whereas dancers with a dominant performance orientation believed that social status, competitiveness and not giving up were the main purposes of dance. Overall, the mastery orientations had more positive outcomes than the performance orientations.

A similar study looked at the goal orientations and motivations of performers (which included actors, dancers and musicians), and the relationship between these performers' goal orientations and other related factors such as anxiety and intentions to quit (Lacaille, Koestner & Gaudreau, 2007). Results showed that mastery goals led to better performances among the artists, less anxiety and greater satisfaction. On the other hand, performance goals were associated with more negative outcomes, such that those with performance-approach goals had greater anxiety during a performance and those with performance-avoidance goals had lower satisfaction and greater intentions to quit (Lacaille et al., 2007). These results are different to the sports results, where performance approach goals do have positive outcomes. Furthermore, dancers have a high drive to achieve, resulting in more approach as opposed to avoidance behaviours (Weeda-Mannak & Drop, 1985). However, because little research has been done on the performing arts, one cannot take these results as

conclusive. Furthermore mastery and performance orientations in dance, as in sport, are seen as orthogonal as one can adopt both goals (Niemenen et al., 2001).

Even though people in sport and dance have similar orientations, the aesthetic factor in the performing arts is quite different to that of sport, and serves different purposes between the two. Within sport the focus is often on competition and extrinsic goals, whereas within dance the focus is on aesthetics and intrinsic goals (Lacaille et al., 2007; Niemenen et al., 2001). It must, however, be noted that competition does exist in dance but is often covert and not talked about. Dancers are often aware that they want to do better than others, but this competitiveness is often not explicitly shown (Niemenen et al., 2001).

Motivational Climate and Body Perceptions within the Ballet Setting

Achievement goals and underlying motivations for behaviour are influenced by many factors, for example, beliefs about ability, self-esteem, and the motivational climate (Elliot, 1999). Particularly interesting is the motivational climate, which is the structure of the environment within which the achievement goals occur (Cumming & Hall, 2004). This climate is often created by the coach, or other people within the particular achievement setting (Smith et al., 2006). Within the dance setting, different motivational climates are present (Niemenen et al., 2001). For example, a dance setting with a mastery climate leads to positive learning and effort where effort and ability are believed to cause success, and success is believed to stem from intrinsic motivations. People in this climate are more satisfied. On the other hand, dancers in a performance climate see ability as being the cause of success, and that success is achieved from extrinsic motivations. Therefore a sense of self worth is achieved by doing better than others, and these people are believed to be less satisfied (Valentini & Rudisill, 2006).

In ballet there is another powerful motivational climate that dancers cannot escape. This is the climate where the ballet dancer's body image and appearance are regarded as highly important factors. Body image relates to people's feelings, thoughts, and perceptions about their physical appearance (Burgess, Grogan & Burwitz, 2006), and can be understood when focussing on self-objectification theory.

Self-objectification theory is useful when understanding the ballet dancer, and is based on the notion that within society sexual objectification of women and girls is

present. This is where others constantly objectify and monitor females' physical appearance. This objectification and preoccupation with females' outward appearance has led women and girls to internalize the observer's perspectives of their physical selves. Women therefore start seeing themselves as an object and constantly monitor their outward appearances so as to conform to the ideal placed upon them. Because it is often impossible to meet the ideal standards of beauty set by society, women often experience body shame, anxiety, and low self-esteem (Blowers, Loxton, Grady-Flessler, Occhipinti, & Dawe, 2003; Tiggemann & Slater, 2001).

Ballet dancers are expected to be high in self-objectification as they are situated in an environment that is heavily focused on the body, and where people (such as the audience, other ballet dancers, and the dance teacher) are constantly monitoring their appearance. Furthermore, dancers are constantly observing their bodies in front of a mirror when they practice, demonstrating that they are also objectifying their physical selves (Tiggemann & Slater, 2001). Body concerns come into play when the ideal body that dancers aspire to have do not match up to the body they currently have. They are therefore in a constant struggle to achieve the ideal, which is often impossible, which leads to poor body shape perceptions.

In today's society the media has also played a huge part in increasing the risks for the development of body shape concerns (Blowers et al., 2003). Movie stars, singers, models and even cartoon characters are constantly represented in the media as stereotypical ideals of beauty (Oliveira, Bosi, Vigario & Viera, 2003). Therefore, female ballet dancers not only receive pressure to be thin within the ballet dance environment, but also in everyday society (Furnham, Badmin & Sneade, 2002). As one can see, ballet dancers are at higher risk for developing body concerns and eating disordered behaviour (Byrne & McLean, 2002). This was validated by numerous studies, agreeing that dissatisfaction with one's body and increases in eating disorders are more prevalent in sports where there is an emphasis to be thin or have low body weight (Davis & Cowles, 1989; Furnham et al., 2002; Oliveira et al., 2003). This has been reflected through high scores that dancers obtained on many body related questionnaires, such as the BSQ (Oliveira et al., 2003). Overall, ballet dancers seem to have lower body-esteem compared to non-dancers or other types of dancers (Furnham et al., 2002; Ravaldi et al., 2006).

One could argue that amateur and professional ballet dancers have different goal orientations, different levels of pressure, and therefore different levels of body

concern. For example, professional ballet dancers are believed to have more performance goals and more pressure, and therefore have much higher body concerns than amateur ballet dancers (Lacaille et al., 2007). However, a study by Ravaldi et al. (2006) showed that body concerns were present in both professional and non-professional athletes. So even though professional dancers have more pressure to be thin and perform, body dissatisfaction and weight control occur in both groups (Ackard, Henderson & Wonderlich, 2004; Byrne & Mclean, 2002; Doumenc, Sudres & Sztulman, 2005).

Ballet Dancers and Trait Anxiety

Besides being susceptible to poor body perceptions, dancers also seem to be highly vulnerable to emotional stress. This was demonstrated by Barrell and Terry (2003), who examined trait anxiety in ballet dancers using the Sport Anxiety Scale. Results indicated that dancers were highest on somatic anxiety, second highest on worry, and low on concentration disruption on the sport anxiety subscales. Barrell and Terry (2003) believe that these high levels of trait anxiety are caused by the climate in which dancers participate. In the ballet dance setting, dancers often receive criticism about their appearance or performance, which leads them to experience low levels of self-esteem and increased anxiety. This proves true for both professional and non-professional dancers. We can therefore assume that ballet dancers with high levels of anxiety will also have poor body shape perceptions. All these issues draw attention to the fact that dance teachers need to be aware of the climate they create in the ballet room, as well as be trained to deal with the psychological issues that may arise within the dance setting (Barrell & Terry, 2003).

Relationship between Goal Orientation, Body Shape and Anxiety

As noted, ballet dancers are believed to be more mastery than performance orientated (Niemenen et al., 2001). Mastery goals in the ballet setting are believed to be associated with positive outcomes, and performance goals with negative outcomes (Lacaille et al., 2007). Ballet dancers are also known to have a high need to achieve and perform, and therefore approach success as opposed to avoiding failure (Weeda-Mannack & Drop, 1985). Furthermore, ballet dancers are believed to experience high

levels of body disturbances, emotional instability and anxiety due to the pressure placed on them within the ballet environment (Ackard et al., 2004; Barrell & Terry, 2003). In saying this, it seems that the literature on ballet dancers is contradictory. Dancers are said to be more mastery orientated; yet they experience high levels of body shape concern and anxiety, which are negative outcomes. This draws light to the fact that ballet dancers achievement goals need to be explored within the 2X2 achievement goal orientation framework, particularly to determine whether dancers are in fact more mastery than performance orientated. It also makes us aware that ballet dancers may adopt more than one achievement goal orientation, and therefore goal profiles need to be carried out. Furthermore, the association between these goal profiles and ballet dancers body shape perceptions and levels of anxiety need to be examined. This will determine which goal profiles are related to body concern and high levels of anxiety, as well as determine whether body shape concerns and levels of anxiety co -occur. Overall, more research on achievement goal orientations in the performing arts and dance domains needs to be carried out, in order to gain a richer understanding of achievement motivation (Niemenen et al., 2001).

METHOD

Participants

Female ballet students between the ages of 8 and 24 years (mean age = 14.28 years) participated in this study. The wide age range was based on findings within numerous studies indicating that body distortions and concerns about one's appearance are present in girls as young as 8 years old (Blowers et al., 2003; Grogan & Wainwright, 1996). Dancers were non-professional, semi-professional, and professional. The one group was not excluded over the other as the literature indicates that all ballet dancers have fairly similar body image concerns and orientations (Niemenen et al., 2001; Ravaldi et al., 2006). Female ballet dancers were exclusively focused on as the literature shows that females are more likely to have body image concerns than males. In total 57 ballet students participated in the study.

Measures

The battery of questions administered to the dancers consisted of four sections: demographic questions, the Achievement Goal Questionnaire for Sport, the Body Shape Questionnaire, and the Sport Anxiety Scale.

Demographic questions aimed to receive information about the dancer and her dancing history. Questions included the dancer's age, level of performance, other dance styles she participates in, and her feelings of how well she has done in terms of her dancing. The intended purpose of the demographic questions was to be used as supporting evidence for the data analysis.

The Achievement Goal Questionnaire for Sport (AGQ-S) is a fairly recent questionnaire, which was used to measure the achievement goal orientations of the dancers. It was developed by Conroy, Elliot and Hofer (2003) and consists of four subscales, which measure mastery approach, mastery avoidance, performance approach and performance avoidance. Each subscale consists of three questions that are assessed on a 7-point Likert-type scale ranging from 1 = "not at all like me" to 7 = "completely like me." Reliability and validity of the questionnaire has been established, and internal consistency was reported at 0.7 for all four subscales. Test-retest reliability was reported as follows: mastery-approach $r = 0.59$; mastery-avoidant $r = 0.66$; performance-approach $r = 0.74$; and performance-avoidant $r = 0.79$ on a 19 day retest basis (Conroy, Elliot & Hofer, 2003). This falls within the recommended range (0.68-0.8) for achievement goal instruments reported by Duda and Whitehead (1998) (cited in Conroy et al., 2003).

The Body Shape Questionnaire (BSQ: version 8C) was used to assess body dissatisfaction (fear of putting on weight, feelings of low self-esteem because of one's appearance, the desire to lose weight and body concern) in the ballet dancers. The questionnaire was created by Cooper, Taylor, Cooper and Fairburn (1987) and is based on a 6-point Likert-type scale ranging from 1 = "never" to 6 = "always". The original BSQ has 34 items, however shorter versions have been developed. In particular it was found that version 8C was most representative of the original BSQ, with a 0.95 goodness of fit score to the original 34-item (Evans & Dolan, 1993; Pook,

Tuschen-Caffier & Brahler, 2006). Furthermore, reliability and validity was established, with the 8-item scales having alpha values of 0.91, and nearly equivalent scores (Dowson & Henderson, 2001; Espina, Ortego, Aida, Aleman & Juaniz, 2002). Scores on the BSQ are summed to get to the dancers total body shape score. For version 8C, a minimum score of 8 and a maximum score of 48 could be obtained. Based on the 34-item rating scale by Cooper et al. (1987), scores on the 8-item scale can be interpreted as follows: < 20 = not worried about body shape, 21 – 26 = slightly worried about body shape, 27-33 = moderately worried about body shape, 34- 48 = extremely worried about body shape.

The Sport Anxiety Scale-2 (SAS-2) measures multi-dimensional trait-anxiety in sport, and was used to assess the dancers levels of anxiety. It was specifically chosen as it has been used before to measure anxiety within the ballet setting (Barrell & Terry, 2003). The scale was developed by Smith, Smoll, Cumming and Grossbeard (2006) and consists of three subscales: somatic anxiety, worry and concentration disruption. The questionnaire is based on a 4-point Likert-type scale ranging from 1= “not at all” to 4= “very much”. Acceptable levels of validity and reliability have been established, and internal consistency is reported as being above 0.7 for all three subscales. Test-retest reliability was also established and is reported as follows: somatic $r = 0.76$; worry $r = 0.9$; concentration disruption $r = 0.87$; whole scale $r = 0.87$, on a 1-week retest basis (Smith et al., 2006).

Procedure

Via the Internet and by word of mouth, ballet dance studios around Cape Town were found. These studios were chosen as they are highly regarded and recognized by the ballet industry. The dance teachers of each studio were contacted, either telephonically or through email, informing them about the details of the study. Out of the 5 schools contacted, four were willing to let their dancers participate, and the fifth gave a referral to another dance studio, as she was very busy. In all, the teachers were very accommodating by taking time out of their teaching schedule for the questionnaires to be administered.

Prior to filling in the questionnaires, each participant and her parent/s (if under the age of 18) were informed about the study and its requirements via the informed

consent forms. They were also made aware of the benefits and potential risks of the study (however no one reported any problems, and the study ran smoothly), as well as notified that anonymity would be strictly maintained. These forms were personally given to the dance teachers, and were then passed on to the students and parents who signed them.

On completion of the forms, the questionnaires were personally administered to the group of dancers at a scheduled time within the dancer's studio. On entering, information about the questionnaire and how to go about answering it was explained to the dancers. Within the group, each dancer then sat on their own and completed the questionnaires from beginning to end: demographic questions, the goal orientation questionnaire, the body shape questionnaire, and lastly the sport anxiety questionnaire. The demographic questions had a few open answers, however the rest of the questionnaires required the dancer to merely tick the appropriate block. Being present for the full duration of each questionnaire allowed me to answer any queries that were raised during the session. This proved fruitful as a few dancers were confused about certain questions, and therefore their concerns were addressed. This ensured that every question was answered with full understanding.

RESULTS

Data Analysis

Statistical analysis for the data in this research was carried out in STATISTICA (StatSoft, 2007). In order for this to occur, raw data was entered into Microsoft Access, where queries were created. The data was then extracted into Microsoft Excel for analysis in STATISTICA (StatSoft, 2007).

Descriptive statistics were first calculated for all the data groups, including the goal orientations, body shape questionnaire, and the sport anxiety scale. Correlations between the different goal orientations were then conducted to check for multicollinearity. Goal profiles were then created using cluster analysis on standardized data. The relationship between the dancer's goal profiles and body shape scores were then analysed using One-Way ANOVA, and the relationship between the goal profiles and sport anxiety scores were analyzed using a MANOVA. These were the most appropriate tests for the data presented.

Achievement Goal Orientations

Descriptive statistics were first calculated on the goal orientations to determine the mean, standard deviation and minimum and maximum scores (see Table 1). These

Table 1
Descriptive statistics of goal orientations

	N	Mean	Std. dev.	Minimum	Maximum
Map	57	6.26	0.78	3.67	7.00
Mav	57	4.94	1.32	1.33	7.00
Pap	57	3.58	1.35	1.00	6.67
Pav	57	3.91	1.53	1.00	7.00

Note: Map = mastery approach, Mav = mastery avoidance, Pap = performance approach, Pav = performance avoidance.

statistics revealed that Map was the highest goal orientation (Mean = 6.26, Std. dev. = 0.78), and Mav was the second highest goal orientation, followed by Pav then Pap. Furthermore, the standard deviation for Map was lower than all the other standard deviations (Map: Std. dev.= 0.78). This suggested that deviations from the mean in the mastery approach orientation were very low compared to the other orientations, and therefore most people did exhibit particularly high scores on Map. Overall it seemed that dancers had a higher mastery than performance orientation.

Zero order correlations were then conducted to test for multicollinearity between the different goal orientations. Results indicated that only Mav and Pap ($r = 0.48, p = 0.00001$), and Pav and Pap ($r = 0.58, p = 0.00001$), were significantly correlated (see Table 2). Therefore performance approach seemed to correlate with both mastery and performance avoidance. This seemed reasonable as Pav and Pap share the construct of performance. However, Mav and Pap were also correlated even, though they did not have common variables (i.e. in terms of competence and valence). Reasons as to why this was the case was not established. Nevertheless, these correlations were not that high, and it was concluded that the different orientations were separate variables.

Table 2
Zero order correlations of goal orientations

	Map	Mav	Pap	Pav
Map	1.00	0.05	0.03	-0.17
Mav	0.05 (p=0.724)	1.00	0.48	0.16
Pap	0.03 (p=0.829)	0.48 (p=0.000)	1.00	0.58
Pav	-0.17 (p=0.214)	0.16 (p=0.227)	0.58 (p=0.000)	1.00

Note: $P < .05$

Cluster Analysis

Cluster analysis was successfully created on the non-standardized data to determine the different combinations of goal profiles that dancers adopt. Cluster analysis created groups that minimized within-group variance and maximized between-group variance, which allowed naturally occurring clusters to emerge instead of using arbitrary criteria (Ainley, 1993; Hair et al., 1995) (as cited in Hodge & Petlichkoff, 2000). The Joining (tree clustering) was used to determine how many clusters were chosen. This decision was based on looking at the Joining hierarchical tree. The further up the tree you went, the larger the clusters were and the less similar they became. According to the Euclidian distances there were a possible 2 to 10 clusters (see Figure 2). This was seen when looking at the cut off points. For example, at a cut off point of 6.2, there were two clusters emerging, at a cut off point of 5 there were four clusters emerging, and at a cut off point of 4.2 there were 6 clusters emerging, etc. Inspection of the descriptive statistics of the different clusters indicated that there were strong similarities between a four and a six-cluster solution. A four-cluster solution was then chosen to be the optimum fit for the data. The four-cluster solution can be seen in Figure 2. The arrows point to the four clusters within the four-cluster solution, and the line represents the cut off point at which these four clusters were chosen.

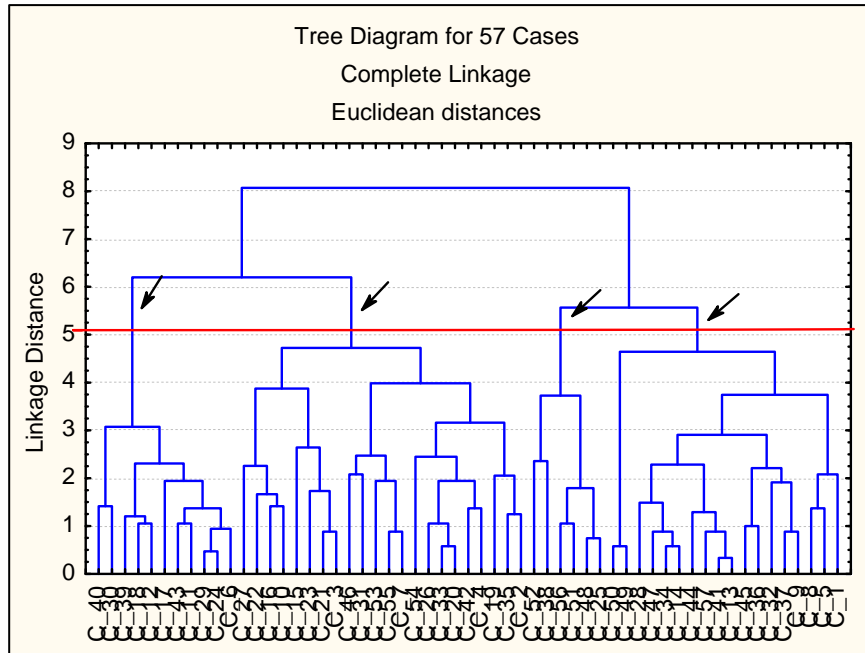


Figure 2 Euclidian distances, tree diagram for 57 cases: complete linkage

K-means clustering was then used to run the data for a four-cluster solution (see Figure 3). K-means is used when the amount of clusters one would like in a solution is known (i.e. k number of clusters to be run). K means clustering then produces the amount of clusters chosen, with the greatest possible distinction between them (i.e. $k=$ four).

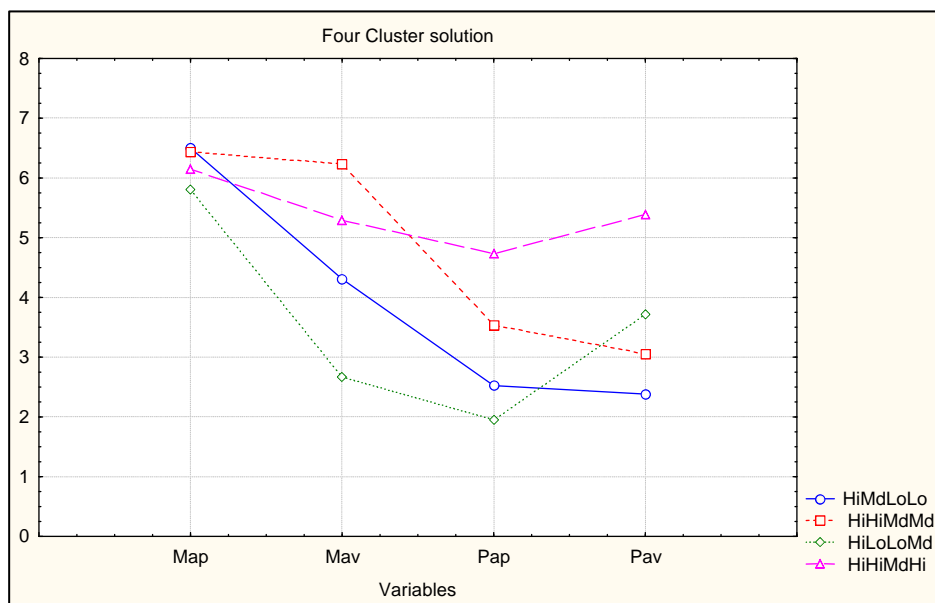


Figure 3 Four-cluster solution

Four clusters (or goal profiles) emerged, HiMdLoLo, HiHiMdMd, HiLoLoMd, and HiHiMdHi. The way these clusters were named was based on a rating scale, where 1-2.99 was determined as low, 3- 4.99 was determined as medium, and 5-7 was determined as high. For example, in cluster one (HiMdLoLo) the mean for Map was 6.5, which falls between 5 and 7, and therefore a Hi was allocated for Map. Furthermore, Mav is 4.31, which falls within the 3- 4.99 range, and therefore Mav was allocated a Md. Overall, each goal orientation in the cluster was allocated a Hi, Md or Lo, which in the end produced the goal profile name.

Descriptive statistics were then carried out on the four-cluster solution to determine the mean, standard deviation and number of dancers within each cluster (i.e. goal profile) (see Table 3). Within the four-cluster solution, HiMdLoLo showed that a high Map, a medium Mav and a low Pap and Pav were present. HiHiMdMd showed that a high Map and Mav, and a medium Pap and Pav were present. HiLoLoMd showed a high Map, but a low Mav and Pap, and a medium Pav. HiHiMdHi showed a high Map, Mav, and Pav. It also showed that Pap was medium, however, this was 4.74 which is just below the 5-point mark allocated as high for the clusters. Therefore it was assumed that within HiHiMdHi, dancers are high on all four dimensions of the goal profiles. Overall, in every goal profile mastery approach was the highest orientation (Mean = 6.26, Std. dev. = 0.78), and the mastery orientation was high overall (Mean = 6.5, 6.44, 5.81, 6.14). Furthermore, the performance orientation, in general, was either medium or low. Therefore, dancers were more mastery than performance orientated.

Table 3
Four-cluster solution: descriptive statistics

	Cluster 1 HiMdLoLo N=14		Cluster 2 HiHiMdMd N=13		Cluster 3 HiLoLoMd N=7		Cluster 4 HiHiMdHi N=23	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Map	6.50	0.45	6.44	0.67	5.81	1.29	6.14	0.77
Mav	4.31	0.61	6.23	0.71	2.67	1.00	5.29	0.81
Pap	2.52	0.78	3.54	0.59	1.95	0.59	4.74	1.03
Pav	2.38	0.77	3.05	0.83	3.71	0.71	5.39	0.93

With regards to valence, dancers did not seem to have higher avoidance or approach orientations. Nevertheless, there were more people that were Map than Mav, and more people that were Pav than Pap. Furthermore, most of the dancers fell into the HiHiMdHi goal profile (N = 23). Therefore most of the dancers within this sample were high on both mastery and performance.

Goal Profiles and Body Shape

Descriptive statistics indicated that most dancers had low levels of body shape concern. This was determined by comparing the dancers scores on the BSQ to the scoring scale (< 19 = not worried about body shape, 20 – 26 = slightly worried about body shape, 27-33 = moderately worried about body shape, 34- 48 = extremely worried about body shape). The mean score for body shape was 20.1, with a standard deviation of 9.85. This indicated that overall dancers were slightly worried about their body shape. Furthermore, the minimum score one could achieve on the scale was 8 and the maximum score was 48, and dancers within this sample had scores ranging from 8 to 45. Therefore some dancers had no body shape concerns at all, and others dancers had extreme concerns.

Descriptive statistics were then calculated to determine the mean and standard deviation of the different goal profiles in relation to body shape (see Table 4). Results indicated that body shape concerns were highest in the HiHiMdMd goal profile (Mean = 27.54, Std. dev.= 11.21). Based on the scoring scale, these dancers (N= 13) were moderately worried about their body shape. The second highest scores on the body

Table 4
Descriptive statistics of the four-cluster solution on body shape

	N	Mean	Std. dev.	Std. Error
HiMdLoLo	14	20.12	9.85	1.31
HiHiMdMd	13	18.71	7.42	1.98
HiLoLoMd	7	27.54	11.21	3.11
HiHiMdHi	23	12.57	3.99	1.51
Total	57	19.09	9.42	1.96

shape questionnaire corresponded to the HiHiMdHi goal profile (Mean = 19.09, Std. dev.= 9.42). According to the scale, these dancers (N= 23) were slightly worried about their body shape. The dancers within the remaining two goal profiles (HiMdLoLo and HiLoLoMd) did not have body shape concerns (N=21). Furthermore, dancers that exhibited the lowest scores on the body shape questionnaire were in the HiLoLoMd goal profile (Mean = 12.57, Std. dev.= 3.99). These dancers were high on Map, but low on Mav and Pap (this was the lowest score within Mav and Pap). Overall, dancers in HiHiMdMd had the highest body shape concerns, and dancers in HiLoLoMd had the lowest body shape concerns (see Figure 5 for a graphic representation).

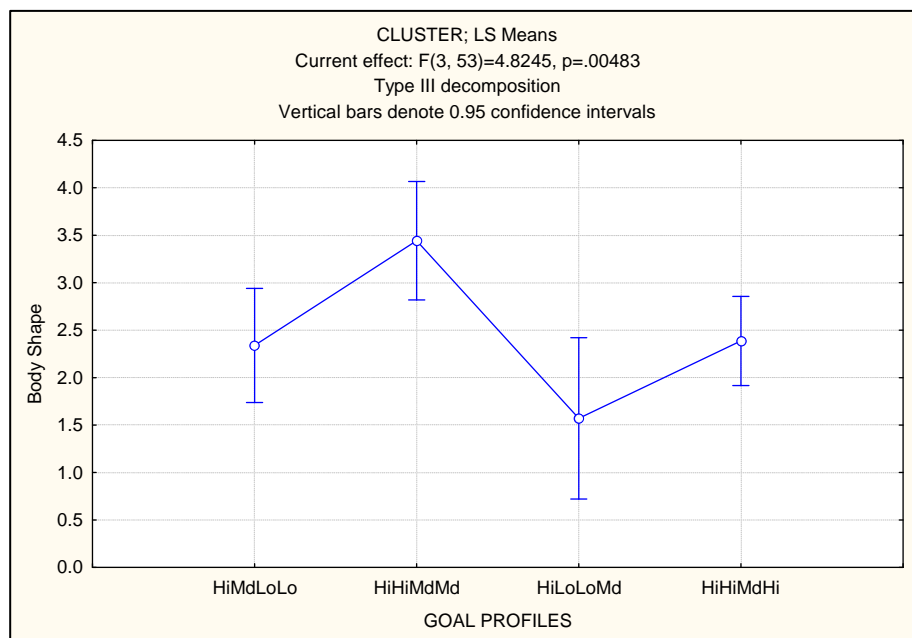


Figure 5 Body shape in relation to goal profiles

A One-Way ANOVA was then conducted to determine the relationship between the different goal profiles and body shape. Before this was done, the assumptions for ANOVA were tested. To test for normality the histogram of body shape was examined, which indicated that the data was normally distributed. Levene's test then revealed non-significant ($F(3, 53) = 2.3, p = 0.088264$), indicating that homogeneity of variance did occur. Furthermore, independence of observations was upheld, as the data within each group was independent. We therefore proceeded with the ANOVA.

Results of the One-Way ANOVA ($\alpha = 0.5$) indicated that the different goal profiles had a significant effect on the perception of body shape ($F(3, 53) = 4.82, p = 0.004827$). It was therefore concluded that the different goal profiles explain a significant amount of variance within body shape. To determine how much variance this was, multiple R squared was calculated, which indicated that the goal profiles accounted for 21% of the variance within body shape.

Goal Profiles and Sport Anxiety

Descriptive statistics were calculated to determine the mean and standard deviation of the different goal profiles in relation to the subscales within the sport anxiety scale (see Table 5). Results indicated that overall, dancers had low concentration disruption (Mean = 1.46, Std. dev. = 0.49), medium somatic anxiety (Mean = 1.85, Std. dev. = 0.59), and high worry (Mean = 2.38, Std. dev. = 0.75). Furthermore, dancers in HiHiMdMd had the highest scores on worry (Mean = 2.74, Std. dev. = 0.69) and the highest scores in somatic anxiety (Mean = 2.02, Std. dev. = 0.88). However, dancers in HiHiMdHi had the highest scores on concentration disruption. On the other hand, dancers in HiLoLoMd had the lowest scores on worry (Mean = 1.66, Std. dev. = 0.59), and those in HiMdLoLo had the lowest scores in disruption and somatic anxiety.

Table 5
Descriptive statistics of the four-cluster solution on sport anxiety

	N	Disruption		Somatic		Worry	
		Mean	Std dev	Mean	Std dev	Mean	Std dev
HiMdLoLo	14	1.24	0.22	1.67	0.33	2.21	0.80
HiHiMdMd	13	1.51	0.64	2.02	0.88	2.74	0.69
HiLoLoMd	7	1.40	0.31	1.77	0.55	1.66	0.59
HiHiMdHi	23	1.58	0.55	1.89	0.53	2.51	0.67
Total	57	1.46	0.50	1.85	0.59	2.39	0.75

Overall, dancers in HiHiMdMd and HiHiMdHi had the highest scores on all three subscales, and dancers in HiMdLoLo and HiLoLoMd had the lowest scores on all three subscales within trait anxiety (see Figure 6 for a graphic representation).

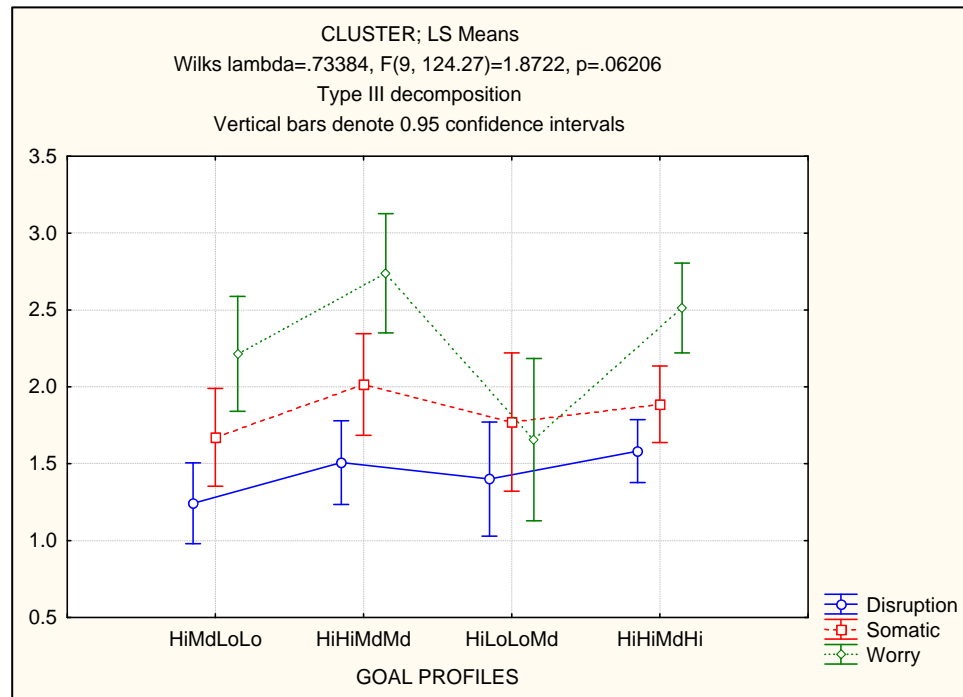


Figure 6 Sport anxiety in relation to goal profiles

A MANOVA was then conducted to determine the relationship between the different goal profiles and the subscales on sport anxiety. Before this was done, the assumptions for MANOVA were tested. To test for normality the histograms for each of the subscales (concentration disruption, somatic anxiety and worry) were examined, and it was concluded that the data was normally distributed. The Box M statistic revealed non-significant (Box M ($df = 18$) = 32.24, $p = 0.060215$), which indicated homogeneity of covariance. Furthermore, the data within each group was independent. Therefore, all the assumptions were upheld, indicating that the MANOVA may be carried out.

The overall MANOVA results indicated that sport anxiety did differ in relation to the different goal profiles ($F(9) = 1.87$, $p = 0.062062$). To examine the effect on each subgroup, a MANOVA was examined for each subscale ($\alpha = 0.5$). This was done because there were three levels within the sport anxiety scale that were compared to the clusters. Results for the MANOVA indicated that concentration disruption ($F(3, 53) = 1.48$, $p = 0.231634$), somatic anxiety ($F(3, 53) = 0.829$, $p =$

0.483), and worry ($F(3, 53) = 4.20, p = 0.00967$) were significant. It was therefore concluded that a significant amount of the variance in the sport anxiety subscales could be attributed to the different goal profiles. Whole Model R was calculated to determine exactly how much of the variance could be explained by the goal profiles. Results indicated that the goal profiles could explain 7.7% of the variance in concentration disruption, 4.4% of the variance in somatic anxiety and 19% of the variance in worry.

DISCUSSION

The first aim of this research was to try and understand what motivates ballet dancers to achieve their goals within the ballet environment. Merely having a brief idea of the amount of skill and training it takes to become a ballet dancer makes this understanding all the more intriguing. Therefore, dancers achievement goal profiles were examined, indicating that dancers within our sample could be classified into one of four goal profiles: HiMdLoLo, HiHiMdMd, HiLoLoMd, or HiHiMdHi. Most of the dancers (23) fell in the HiHiMdHi profile, which was high on both the performance and mastery orientations. These dancers may therefore feel that doing better than others is nearly or just as important as improving on their own skill, and may avoid success more than they approach it. Furthermore, because these dancers have very high orientations we can assume that they are more motivated to achieve their goals than the other dancers are. 13 dancers fell into the HiHiMdMd goal profile. These dancers seem to believe that improving on their own skill defines success more so than doing better than others. Furthermore, these dancers do not seem to prefer approach as opposed to avoidance behaviours, and we can assume that both behaviours are exhibited within this profile. 14 dancers fell into the HiMdLoLo goal profile. These dancers define success is in terms of improving on their own skills and performance, and we can conclude that these dancers rely on intrinsic motivation and approach success more than avoiding failure. The remaining 7 dancers in the HiLoLoMd goal profile had a particularly interesting way of approaching success and achieving their goals. These are the only dancers found to be low on one of the mastery orientations- mastery avoidance. Furthermore, these dancers are also low on performance approach and medium on performance avoidance. This seems to indicate that dancers within this profile approach their goals more so than dancers within the

other profiles, and define success more in terms of improving on their own skill as opposed to doing better than others. However, since the performance avoidance orientation is medium, one can assume that the way these dancers approach success is not clear and needs further exploration.

Overall, all 57 dancers were high on mastery approach, and overall the dancers were found to be higher on the mastery than performance orientations. This is particularly interesting and supports both the dance and sport literature in saying that dancers are more intrinsically motivated to achieve their goals, and are more concerned about developing and improving their own skills within the ballet room as opposed to doing better than their fellow dance participants. We can therefore conclude that competition within the ballet room is not as high as it may be in other competitive sports. This may be due to the fact that dancing is more of a performance based sport than a competitive one, and that winning or doing better than others is not as important as doing the best one can when on stage performing for an audience. Furthermore, since dancers have combinations of all four of the goal orientations, it seems that the 2X2 goal orientation framework is the best model to use within the achievement motivation literature.

The second aim of this research was to determine which of the four goal profiles were more strongly related to body shape concerns in the dancers, and which were not. It was found that dancers in the HiHiMdMd goal profile had the highest body shape concerns, and according to the BSQ scoring scale, were classified as being moderately concerned about their body shape. Furthermore, dancers in HiHiMdHi were classified as being slightly worried about their body shape. This indicates that dancers who are highly motivated to achieve their goals, and believe that improving on their own skills determines success more so than doing better than others, have the highest body shape concerns. Furthermore, dancers who believe that doing better than others is nearly or just as important as improving on their own skill, and dancers who avoid failure as opposed to approaching success, have the second highest body shape concerns. These results are contradictory, as high mastery orientations are known to have positive outcomes within the dance setting, regardless of the amount of performance orientations, such that dancers with a high mastery orientation should have lower body shape concerns. It therefore seems that dancers who even moderately define success in terms of doing better than others may be predisposed to more negative outcomes.

Besides the type of goal profiles exhibited, there may be many other reasons why the dancers within the HiHiMdMd and HiHiMdHi goal profiles had body shape concerns. For example, these dancers may be situated in a ballet environment where a performance climate and great amounts of pressure to be thin are emphasized. These dancers may also be exposed to more pressure regarding appearance in society and may take part in self-objectification more than other dancers or non-dancers. Overall, many factors play a role in increasing dancers' risks for developing body shape concerns.

Besides looking at the factors that increase the risk for body shape concerns, attention can be focused on the factors that mitigate against it. Dancers in the HiLoLoMd and HiMdLoLo goal profiles were classified as not being worried about their body shape. These dancers were not highly motivated to achieve their goals, and had low to medium levels of mastery avoidance and performance approach. Furthermore, dancers in HiLoLoMd had the lowest scores on the BSQ overall, and were the only dancers low on mastery avoidance. Therefore, dancers that are mainly concerned with improving their own skills as opposed to beating others, dancers that approach their goals within the mastery orientation, and dancers that have lower levels of mastery avoidance and mastery approach experience no body shape concerns. In saying this it seems that high levels of performance approach, and in particular mastery avoidance, may predispose dancers to higher body shape concerns. Therefore, the mastery avoidance and performance approach orientations may be associated with more negative than positive outcomes.

Despite some dancers having body shape concerns, and others having none, it was found that overall dancers within this sample only had slight body shape concerns. According to the scoring scale, dancers just made it into the "slightly worried about shape" category, with a mean of 20.1. Therefore, whether or not dancers in fact have body shape concerns is highly debatable. Furthermore, it seems that many factors play a part in the development of body shape concerns, such as self-objectification, pressures to be thin in the ballet environment and society, the way dancers perceive ballet, how dancers aim to achieve their goals in the ballet setting, as well as dancers' temperament and levels of self-esteem. Therefore, a more holistic approach needs to be taken when looking at body dissatisfaction within the ballet environment, and a big part of this approach should focus on dancers' achievement goal orientations and profiles.

The last aim of this research was to determine the relationship between the dancers goal profiles and their levels of trait anxiety. It was found that dancers in the HiHiMdMd and HiHiMdHi profiles had the highest scores on the three subscales of anxiety (somatic anxiety and concentration disruption), and dancers in HiMdLoLo and HiLoLoMd had the lowest scores on all three subscales. This again indicates that dancers who are more motivated to achieve their goals and who believe that success comes from improving on their own skills, as well as doing better than others, are more anxious within the ballet setting. On the other hand, dancers that more strongly define success as improving on their own skill, and dancers who approach success as opposed to avoiding failure, have the lowest levels of anxiety. This seems reasonable as dancers who have moderate to high levels of performance orientations and high levels of avoidant behaviours will more likely experience greater anxiety due to the constant comparison that they make between themselves and other dancers, and due to the deep fear of failing that they experience.

Overall, dancers were found to be highest on worry, second highest on somatic anxiety and lowest on concentration disruption. This indicates that dancers do not find it hard to concentrate in the ballet setting, which seems reasonable as being a ballet dancer requires extreme amounts of concentration and practice in order to advance one's technique and skills. Moderate levels of somatic anxiety also seem normal as dancers may experience physical tension (nerves) when they are about to perform on stage in front of so many people. Furthermore, high levels of worry seem to indicate that the anxiety dancers experience is mostly associated with their concern of not doing the best they can when performing, or the fear that they will let others down, such as their fellow dancers, dance teacher or the audience. This further supports the notion that dancers are exposed to immense amounts of pressure in the ballet setting.

When looking at all the findings together, strong, convincing patterns of behaviour seem to emerge. Firstly, dancers who are in the HiHiMdMd profile, and who experience moderate levels of body shape concern also experience the highest levels of worry. On the other hand dancers who are in the HiLoLoMd profile have no body shape concerns and also have the lowest levels of worry. Secondly, and even more convincing, dancers within the HiHiMdMd and HiHiMdHi profiles who have slight to moderate levels of body shape concern also have the highest levels of anxiety on all three subscales of trait anxiety. And dancers in the HiLoLoMd and HiMdLoLo profiles who have no body shape concerns also have the lowest levels of anxiety on

all three subscales. This seems to prove, with confidence, that dancers who are more motivated to achieve their goals, who define success in terms of improving on their own skills as well as doing better than other dancers, and dancers who sometimes have the aim of avoiding failure in the ballet room, have more concerns about their appearance and poor body shape perceptions, as well as increased fear and anxiety. On the other hand, dancers who are less motivated to achieve their goals, who are more concerned about doing the best they can instead of worrying about doing better than others, as well as dancers who have higher approach behaviours, are not worried about their appearance or body shape and have very low levels of anxiety.

Since these results represent a small sample of ballet dancers within the population, and because this is the first study that looks at dancers goal profiles within the 2X2 achievement model, the findings of this research cannot be taken as conclusive. Nevertheless clues about dancers' goal orientations, body shape concerns, and levels of anxiety have been established, which can be used as a basis for further research within the dance setting. This research should focus on ballet dancers attitudes towards success based on the 2X2 achievement goal orientation model, their feelings about their body, their emotional state, as well as the influence that the motivational climate within the dance setting has on the ballerina.

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APPENDIX A ETHICS FORMS

Informed Consent Forms for Parent/s or Guardian

Dear parent

Your child is being asked to take part in research studying the area of sports psychology with a special interest in ballet dancers. Your child's participation is entirely voluntary. The following information provides an outline of the research purpose and procedure, and will give you a better understanding of the research and whether you give your child consent to participate in the study.

Title of Research Study

Goal orientation profiles and body shape perceptions of female ballet dance students.

Principal Investigator

Jenavieve Ferreira

Department of Psychology

University of Cape Town

Tel 021-559-0469/ 072 282 1164.

Purpose of the research

The purpose of this research study is to understand how dancers define success. Furthermore it looks at the relationship between success and the dancers perception of their body.

Procedure

Your child/adolescent will be asked to fill in a series of questions. This will take place at the dance studio and will take approximately 30 minutes for your child to complete. Your child's dance teacher and myself will be present during the data collection so that any queries may be addressed. A copy of the overall research findings will be submitted on request once the study has been completed.

Risks

Participating in this research study has low minimal risk. The results will not affect the dancer in any way, as there will be strict anonymity when filling out the questionnaire. There may however be some questions within the questionnaire that are sensitive, but this is not a major risk.

Benefits

Taking part in this research will not be directly beneficial to the dance student, but it will help us understand the goal orientations of dancers a bit better, as well as assist in helping us understand how dancers feel about their bodies. The results will assist me in obtaining my honours degree in psychology, and may also form part of a master's student's thesis, which looks at the goal orientation of horse riders.

Confidentiality

As mentioned, the results of the research will be used for my honours project, and maybe as supporting research for a Masters student's thesis at the University of Cape Town. Furthermore, the results therefore might be used within a publication. In all cases the anonymity of your child will be kept.

Queries

If you are concerned with any of the information above you may ask me, or contact your child's dance teacher. If you have any questions regarding your child's rights as a research participant, and your rights as the individual granting consent for research participation, you may phone the Psychology Department offices at 021-650-3430.

You have been informed about this study's purpose, procedures, possible benefits, and risks; and how your child's performance and other data will be collected, used and shared with others. You have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time.

You voluntarily consent to allow your child to participate in this study. You hereby authorize the collection, use and sharing of your child's performance and other data. By signing this form, you are not waiving any of your legal rights. Furthermore, if at any time you wish for your child to drop out of the research study, you may do so, with no harm, loss or risk involved.

Parent or legal guardian:

Name:

Signature:

Researcher: Jenavieve Ferreira

As a representative of this study, I have explained to the parent/guardian of the participant the purpose, the procedures, the possible benefits, and the risks of this research study; and how the participant's performance and other data will be collected, used, and shared with others.

Assent Form for Dancer

Dear Dancer

You are being asked to take part in a project in psychology that is interested in looking at ballet dancers. You do not have to take part in the study; it is entirely up to you. The following information gives you a better understanding of why I am doing this research project and what I would like you to do.

Title of Research Study

Goal orientation profiles and body shape perceptions of female ballet dance students.

Principal Investigator (This is me)

Jenavieve Ferreira

Department of Psychology

University of Cape Town

Tel 021-559-0469/ 072 282 1164.

Why am I doing this research?

I am doing this research study to understand how dancers go about achieving their goals in dancing. I am also looking at what dancers think and feel about their bodies.

What you need to do?

You will be asked to fill in some questions. You will answer these questions at your dance studio and it will take you about 30 minutes to answer. Your dance teacher and myself will be there with you when you are answering the questions so that if there is anything you don't understand we can help you with it.

Is there any harm in this study?

Taking part in this study **will not** cause you any harm. Whatever you answer in the questions will not affect you in anyway because you do not have to put your name on the question paper. So you do not have to worry about anyone seeing your answers. However there might be some questions that you may be shy to answer, but there is

no need to worry. If there is any question that you do not want to answer or that makes you feel uncomfortable you may simply leave it out.

What will you get from taking part in this study?

You won't directly get something out of it, but you will help people to understand how ballet dancers feel about their bodies and about how they go about achieving their goals in dancing. It will also be very interesting to understand dancers a bit better. You will also help me to get my honours degree in psychology at the end of the year. Your answers will really help me a lot.

Confidentiality

No one will know what you answered to the questions because you do not have to put your name on the answer paper, so you do not have to worry about anyone seeing what you wrote. The results will be used in my study and maybe in another student's study that is also looking at how horse riders go about achieving their goals.

Queries

If you have any questions or you don't understand something, you may phone me or speak to your dance teacher. If you have any questions regarding your rights as a research participant, you may phone the Psychology Department offices at 021-650-3430.

Your parents have allowed you to take part in this study, and you are allowing me to use your answers and share it with others. By signing this form, you are not waiving any of your legal rights. Furthermore, if at any time decide you do not want to take part in this study at any time, you may drop out of it, and you will not get into trouble for doing so.

Child participant:

Name:

Signature:

Parent or legal guardian:

Name:

Signature:

Researcher: Jenavieve Ferreira

As a representative of this study, I have explained to the parent/guardian of the participant and the participant, the purpose, the procedures, the possible benefits, and the risks of this research study; and how the participant's performance and other data will be collected, used, and shared with others.

APPENDIX B
BATTERY OF QUESTIONNAIRES

Demographic Questions

How old are you?

How old were you when you started dancing?

How many years have you been dancing for?

Do you take part in any other forms of dance besides ballet? If yes, tick the appropriate blocks?

Modern	Hip hop	Belly dancing	Ballroom/Latin	Tap	Other
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How many hours a week do you practice for, on average?

What level/grade of ballet dancing are you currently at?

Have you competed in any competitions, tick one block?

Yes	No
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Where have you performed or competed?

.....

Where do you see yourself in the future in terms of your dancing?

.....

Would you say you are a professional dancer, tick one block?

Yes	No
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Do you think that you have done well over the last year in your dancing, tick one block?

No not really	Quite well	Yes, very well.
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Do you expect to do well next year, tick one block?

No not really	Quite well	Yes, very well.
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Would you be like to take part in other research projects in the future, tick one block?

Yes	No
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In the following questions, place circle the number that you feel most describes how you feel about the statement. For example, *When I dance it is important for me to dance as well as I possibly can.* If this is very very true then you circle the last box number 7 called “completely”, If you don’t feel this way at all, then you cross the box “not at all”.

1 = not at all like me, 2 = not really like me, 3 = a little like me, 4 = sometimes like me, 5 = Like me, 6 = Quite a lot like me, and 7 = completely like me. Choose the answer that best describes how you feel. Please answer as honestly as possible.

Achievement Goal Orientation Questionnaire

Goal Orientation: Self

When I dance I feel that...	Not at all like me	Not really like me	A little like me	Some times like me	Like me	Quite a lot like me	Comple tely like me
It is important for me to dance as well as I possibly can	1	2	3	4	5	6	7
I worry that I may not perform as well as I possibly can	1	2	3	4	5	6	7
It is important for me to do well compared to others	1	2	3	4	5	6	7
I just want to avoid dancing worse than others	1	2	3	4	5	6	7
I want to dance as well as it is possible for me to dance	1	2	3	4	5	6	7
Sometimes I'm afraid that I may not dance as well as I'd like	1	2	3	4	5	6	7
It is important for me to dance better than others	1	2	3	4	5	6	7
My goal is to avoid dancing worse than everyone else	1	2	3	4	5	6	7
It is important for me to master all aspects of my dancing	1	2	3	4	5	6	7
I am often concerned that I may not dance as well as I can.	1	2	3	4	5	6	7
My goal is to do better than other dancers	1	2	3	4	5	6	7
It is important for me to avoid coming last in the class	1	2	3	4	5	6	7

Body Shape Questionnaire (BSQ)- Version 8C

Please read each question and circle the number about how you have been feeling about your body or the way you look over the **past four weeks**.

1= never, 2= rarely, 3= sometimes, 4=often, 5= very often, 6= always.

Over the past four weeks:

1. Have you been afraid that you might become fat (or fatter)?

Never	Rarely	Sometimes	Often	Very often	Always
1	2	3	4	5	6

2. Has feeling full (e.g. after eating a large meal) made you feel fat?

Never	Rarely	Sometimes	Often	Very often	Always
1	2	3	4	5	6

3. Has thinking about your shape interfered with your ability to concentrate (e.g. while watching television, reading, listening to conversations)?

Never	Rarely	Sometimes	Often	Very often	Always
1	2	3	4	5	6

4. Have you imagined cutting off fleshy areas of your body?

Never	Rarely	Sometimes	Often	Very often	Always
1	2	3	4	5	6

5. Have you felt excessively large and rounded?

Never	Rarely	Sometimes	Often	Very often	Always
1	2	3	4	5	6

6. Have you thought that you are in the shape you are because you lack self-control?

Never	Rarely	Sometimes	Often	Very often	Always
1	2	3	4	5	6

7. Has seeing your reflection (e.g. in a mirror or shop window) made you feel bad about your shape?

Never	Rarely	Sometimes	Often	Very often	Always
1	2	3	4	5	6

8. Have you been particularly self-conscious about your shape when in the company of other people?

Never	Rarely	Sometimes	Often	Very often	Always
1	2	3	4	5	6

Sport Anxiety Scale (SAS-2)

Please read each question. Then circle the number that says how you **usually** feel before or while you compete in dancing. There are no right or wrong answers.

1= not at all, 2= a little bit, 3= pretty much, and 4=very much.

There are no right or wrong answers. Please be as truthful as you can.

	Not at all	A little bit	Pretty Much	Very Much
Before or while I compete or perform:				
It is hard to concentrate on my dancing	1	2	3	4
My body feels tense	1	2	3	4
I worry that I will not dance well	1	2	3	4
It is hard for me to focus on what I am supposed to do	1	2	3	4
I worry that I will let others down	1	2	3	4
I feel tense in my stomach	1	2	3	4
I lose focus on the competition	1	2	3	4
I worry that I will not dance my best	1	2	3	4
I worry that I will dance badly	1	2	3	4
My muscles feel shaky	1	2	3	4
I worry that I will mess up during the competition	1	2	3	4
My stomach feels upset	1	2	3	4
I cannot think clearly during the class	1	2	3	4
My muscles feel tight because I am nervous	1	2	3	4
I have a hard time focusing on what my dance teacher tells me to do	1	2	3	4

PLAGIARISM DECLARATION

1. I know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.
2. I have used the SAJP convention for citation and referencing. Each significant contribution to, and quotation in, this assignment from the work(s) of other people has been attributed, and has been cited and referenced.
3. This assignment is my own work.
4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.
5. I acknowledge that copying someone else's assignment or essay, or part of it, is wrong, and I declare this is my own work

Signature:.....

