# Classical dance competition: a negative anxiogenic factor?

CDD. 20.ed. 152.46
793.3
796.011

http://dx.doi.org/10.1590/1807-55092016000300805

Geovana Silva Fogaça LEITE*
Marco Túlio De MELLO**
Hanna Karen Moreira ANTUNES*

*Departamento de Biociências, Universidade Federal de São Paulo, Santos, São Paulo, SP, Brasil.
**Escola de Educação Física, Fisioterapia e Terapia Ocupacional, Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brasil.

## Abstract

Classical dance is a practice/modality related with art, and requires a large degree of physical, psychological and aesthetic of the dancers. In the competitive periods, similarly to practitioners of other sports, dancers face stressful situation that can raise the anxiety level, which in turn can have a negative impact on performance. Thus, the aim of this study was to investigate the effects of competitive-anxiety on dancers performances. Twenty-two dancers participated in this study, aged from 18 to 30 years old, practitioners of classical dance for at least two years. Data collection was accomplished by psychometric assessments in different times (pre - competition, competition and post - competition). Moments before competition, dancers shows an increase in anxiety, but their performance is not affected; they have increased tension/anxiety, altered anxious perception, but they remain focused on the activity that they will perform.

Key Words: Anxiety; Competition; Dance; Performance.

## Introduction

Some consider classical dance a favorable field for exchange and comprehension between practioners. Establishing relations with the universe through the dancers body, the classical dance uses sense refinements (visual, auditory and tactile), as well as subjective senses, and the emotional awareness, establishing an intimate relation with the art[1-2].

Technically, there are two important principles: postural (upright / stretch out position - postural alignment) and body positioning that must be present in all movements, leading the dancer potentialities to their maximum balance, agility and harmony. Classical dance teaching essences are corporal beauty, vision, precision, coordination, flexibility, tenacity, imagination and expressiviness[3-6].

Considering the rhythm dance nature and the expressive elements that compose it, it is not difficult to notice that aspects related to self-control, attention and concentration are central for a dancer good performance.

When we think about the behavior aspects related to the good performance, it is possible to notice that biological aspects like mood (anxiety, anger, aggressiveness, hostility, vigor, fatigue, depression) and stress are important factors that must be considered so the dancer can execute their performance as better as possible. These emphasize the awareness expressed on dance, where these emotions can be expressed in magnitude when someone speaks about the artistic context.

It is not rare that dancers on their presentation routine, festivals and competition, face situations that can be interpreted like harmful or threatening. Negative consequences can come through this, like fear, uncertanty, lack of security, leading to excessive nervousness, uncomum mistakes, increased agressivity, irritation, dificulties on concentrate, and so many other signals/sinthoms related to excessive axiety[7-8].

It seens plausible that in a competitive context dancers can develop exessive levels of anxiety[9-10], because they are exposed to facts that they can't control, like a complex movement sequence goal to execute (coreographic level / high error probability), that exige considerable memory and techinical skill habilities.

Anxiety can be considered an individual personality way of expression, a set of emotions or unic feelings[11] that involves psicologic conflicts and unpleasant feelings, expressed through worryness increased, tension, apreension, anguish, sofrering and increase in the autonomous nervous system activity[12].

It is commom to notice these conditions in competitive situations, and its effects can be negative to sportive performance. However, both competition stress and anxiety varies according interpreted resources available that allow dancers to deal with the circunstance / situation; excessive anxiety is the principal cause of competition problems[13-15].

In competition periods, when the athletic skills are publicly tested and evaluated, the pression that they support can became a negative influence on performance[16]. On the competitive context, evolved people are constantly submited to a trully observation bombing, opinions and judments that can create unsuitable expectations, aims and pressions for an athlete development. In some cases, practioners see competition like a threat, what would be negative to their performance[17-18].

Psychological competition reactions vary considerably from one individual to another, and it is mediated for personal and situational factors[19].

Personal factors include personality traces linked to anxiety, perfectionism, gender, skill, perception of prepare, aims and the esportive modality practiced. The situational factors include: competitive stress, environmental condition and team relation[11].

For well prepared, experienced, skilled and confident athletes, competition can be seem like a challenge that can raise up their performance. But, for those who judge themselves does not having minimum requirements necessary to execute their performance, the event will represent a threat to their physical, psychological and social well-being, which could inhibit their performance generating high levels of anxiety, becaming a negative factor, capable to impair performance[11, 17].

It is of great value to study such aspects related to the classical dance performance, trying to minimize the negative impact on the performance, once the modality is largelly practiced for female individuals, and such population suffers high behavior influence with the upcoming event, showing smaller levels of self confidence, high levels of anxiety and perceived threat, mostly when they have to perform individually[11, 19-21].

According to literature, stress allyed to anxious answers negativelly influence the sportive performance on the competitive context. Therefore, it is important to know the extension of this influence to create strategies that could minimize the deleterious effects to the sportive performance.

So, the aim of this study was to investigate the competitive anxiety effects on the dancers performance. The hypothesis to be tested is that if the pre-competitive anxiety can negativelly influence the dancers performance in a competition.

# Method

## Sample

Participated on this study 22 volunteers, female, with age from 18 to 30 years old, Classical Dance practitioners for at least two years, who participated in a competition divided by dancing modalities, runned only to the same modalitie and category participants.

## Experimental proceedings

Data collection used psychometric evaluations. To characterize sample (Basal), volunteers answered to questionnaries that evaluate aspects related to their life quality, level of habitual physical activity, aspects of mood and anxiety, fundamentals for the psychobiological analysis.

During the competitive period, intruments related to mood and axiety aspects (questionnaires) were reaplicated in different moments (pre-competition, competition and post-competition moments), and it were:

- Basal: 10 days before competition questionnaire.
- Pre-competition: one day before competition questionnaire.
- Competition: 30 minutes before competition questionnaire.
- Pos-competition: immediatelly after competition questionnaire.

Data were collected in the most renomade Brazillian Dance competition (Passo de Arte - Competição Internacional de Dança). Sample dancers competed on the advanced category, in the modalities: Variation, Contemporary Ballet, Repertory Ballet and Jazz.

Competition had two selection phases and the final, but the data collection were realized only on the final phase, because the aim of this study is related with the psychobiological modification, through competitive situations.

It is important to emphasize that winner groups runned for trophies and a money award. The three first places awarded were automatically invited to the

next belong modality competition. Futhermore, two candidates were choosen according to jury criterions to participate in the Youth America Grand Prix semifinal in New York (USA), to compete for a money award for the first place of each modality and category.

## Ethical proceedings

Before initiate any proceedings, the study was submited and approved by the Ethical Comitee in Research from the Federal University of Sao Paulo / Sao Paulo Hospital - UNIFESP (n.1712/08). Volunteers receved all the information about their participation in the study, as well as the evaluations, and they signed an informed consent agreeing to participate voluntarily on the study.

## Instruments

Data colection were realized using diferent psychometric instruments that evaluate mood, its diferents emotions, the body image and the quality of life, considering that mood is a set of feelings that usually evolve more than one emotion, and that suitable mood levels can give to individuals the oportunity to explore cognitive alternatives as an answer to stressful situations.

### IDATE

It is a self-evaluation questionnaire, divided in two parts: one evaluate the axiety-trace (personality aspects) and the second evaluate the anxiety-state (context sistemic aspects). Each one of this part is composed by 20 statements. When answering the questionnaire, the individual must consider a four itens scale that vary from one to four; the STATE means like the subject feels like in the "moment"and the TRACE how they "usually feels like". The score of each part vary from 20 to 80 points, scores can indicate a low anxiety degree (0-30), a median anxiety degree (31-49) and an elevated anxiety degree (higher or iqual a 50) - lower the scores, lower the anxiety degree[22-24]. The inventory showed reasonable indexes of intern consistence with Cronbach's alpha 0.88.

### Brunel Mood Scale (BRUMS)

Developed to quikly measure the mood state[25], adapted from "Profile of Mood States" (POMS)[26]. Consists in a list with 24 adjectives related to the mood state, where the evaluated individual should note how it feels in relation to it adjective. This tool measures six mood factors or affection states: tension, depression, anger, vigor, fatigue and confusion. It is expected in this text that the measured values for the vigor dimension are higher than the values found in other dimentions, what would denote an "Iceberg" shapped mood profile. For this study, the validated version for brazilian population was used[27]. The scale presents an internal consistence coeficient with Cronbach's alpha 0.84.

### SF-36- Health Research

Generic questionnaire of life quality evaluation "Medical Outcomes Study SF-36", translated and validated for brazillian population[28]. It is a multidimensional tool composed by 36 itens evaluating in eight dimentions: functional capacity; physical aspects; pain; general health state; vitality; social aspects; emotional aspects; mental health. To evaluate the results, a score is determined for each one of the questions that, afterwards, are scaled from 0 to 100, in which 0 correponds to a worse health state and a 100 to a better one. Each dimension is evaluated separetely. Cronbach's alpha value for this questionnaire was 0.92.

### Habitual physical activity level

Questionnaire that evaluates the habitual physical activity level in three dimensions: work activity, sport and leisure[29]. Cronbach's alpha value for this questionnaire was 0.77.

### Beck depression inventory[30]

IInstrument used to evaluate depression state. The classification indicates the folowing depression socres: minimal (0-9), mild (10-15), mild to moderate (16-19), moderate to severe (20-29), severe (30-63)[31]. Cronbach's alpha value for this questionnaire was 0.92.

### Body Shape Questionnaire (BSQ)

Questionnaire that evaluates the body shape, translated and validated for Brazilian population[32]. Score vary from 34 to 204 points. The score classification indicates different degrees of body shape distorsion: distorsion absence (≤ 80), mild distorsion (81-110), moderate distorsion (111-140), and severe distorsion (≥ 141). Internal consistance reveled a Cronbach's alpha value 0.96.

Visual Analogues of Mood Scales (VAMS)

16 analogical scales of 100 mm by which the individual evaluates mood variation with a vertical trace[33-34]. Internal consistance reveled a Cronbach's alpha value 0.81.

### Statistical analysis

Data normality were determined by Shapiro -Wilk's test, after the Basal x Pre-competitive condition being compared using t Test for dependent samples (BRUMS Questionnaire). For the analysis of the VAMS and Idate State questionnaire in different moments, it was used a Variance Analysis (ANOVA-one way) for repeated measures with Tukey port-hoc test. Data were presented in mean ± standard deviation or in porcentage, when necessary. For all the analysis, the significance level adopted was $p \leq 0.05$, and STATISTICA 12.0 software was used (StatSoft, Inc., Tulsa, OK, USA).

## Results

Sample descriptive data are shown in TABLE 1, like age, height, total body mass and BMI. Volunteers were in a eutrophic classification.

Mood data, life quality and habitual physical activity are showed in TABLE 2. Volunteers does not show any patologic anxiety related to personality trace, neither depression indicating scores, showing a good quality of life, once in all dimentions values found they got closer 100.

Results from BSQ questionnaire are presented in TABLE 3. It is possible to note that the majority individuals of the sample presented absent or mild body image distortion, and severe distorsion cases were not observed.

TABLE 1 - Sample descriptive data.

Data presented in mean ± standar deviation. BMI: body mass index.

| Variables | Mean ± Standard deviation |
|---|---|
| Age (years) | 19.68 ± 6.61 |
| Height (m) | 1.63 ± 0.06 |
| Body mass (kg) | 55.58± 6.91 |
| BMI (kg/m$^2$) | 20.80 ± 1.79 |

TABLE 2 - Mood, life quality, habitual physical activity data.

Data presented in mean ± standar deviation CF: funtional capacity, LAF: physical aspects, DOR: pain, EGS: general health state, VI: vitality, AS: social aspects, LAE: emotional aspects, SM: mental health.

| Variable | | Mean ± Standard deviation |
|---|---|---|
| Idate Trait | | 38.95 ± 8.80 |
| Beck depression inventory | | 3.5 ± 1.11 |
| SF-36 | CF | 95.00 ± 5.77 |
| | LAF | 81.81 ± 22.06 |
| | DOR | 63.81 ± 17.71 |
| | EGS | 81.77 ± 14.03 |
| | VI | 62.95 ± 15.71 |
| | AS | 79.54 ± 17.48 |
| | LAE | 69.69 ± 36.96 |
| | SM | 72.18 ± 15.58 |
| | Average dimensions | 75.51 ± 9.60 |
| Habitual Physical Education Level | Ocupational | 1.97 ± 1.39 |
| | Sportive | 2.79 ± 0.66 |
| | Leisure | 2.78 ± 0.80 |
| | Absolute | 7.59 ± 1.87 |
| | Average dimensions | 2.53 ± 0.62 |

TABLE 3 - Body Shape Questionnaire (BSQ).

| | | | |
|---|---|---|---|
| Body Shape Questionnaire (BSQ) | Scale average | | 78.63 ± 26.44 |
| | Classification | Absence | 54.55% |
| | | Mild | 31.80% |
| | | Moderate | 13.65% |
| | | Severe | 0 % |

Data presented in percentage, mean ± standar deviation.

BRUMS results are presented in TABLE 4. The sample presented an increase in the tension-anxiety and mental confusion in the pre-competitive moment when compared with the basal one. For other dimensions evaluated by the questionnaire, significant differences were not found.

VAMS results are presented in TABLE 5. For anxiety dimension, sample showed a significative decline in the competitive moment when compared to basal ($p < 0.01$), pre-competitive ($p = 0.01$) and post-competitive moments ($p < 0.01$), when considered the factor Time [$F(3,63) = 9.17$; $p = 0.00004$] power (0.81), having interaction between factors [$F(3,63) = 132.07$; $p < 0.001$] power (1.00).

No differences were found for other dimentions evaluated by the questionnaire.

TABLE 4 - Mood variation according to BRUNEL's.

| Variable | | Mean ± standard deviation | | SE | t/p |
|---|---|---|---|---|---|
| | | Basal | Pré-Competitive | | |
| BRUMS | Tension-anxiety | 2.72 ± 2.49 | 4.43 ± 3.02* | -0.46 | t = -2.74 /p = 0.02 |
| | Depression | 1.59 ± 2.21 | 2.20 ± 2.96 | -0.17 | t = -1.03/p = 0.32 |
| | Angry-hostility | 1.86 ± 2.49 | 1.83 ± 3,.2 | > 0.01 | t = 0.05/p = 0.95 |
| | Vigor | 8.13 ± 3.50 | 8.73 ± 3.32 | -0.13 | t = -0.97/p = 0.34 |
| | Fatigue | 4.90 ± 2.97 | 5.75 ± 3.84 | -0.18 | t = -1.25/p = 0.22 |
| | Mental confusion | 1.50 ± 2.06 | 2.11 ± 2.10* | -0.21 | t = -2.40/p = 0.02 |
| | DTH | 4.13 ± 10.97 | 6.37 ± 14.06 | -0.13 | t = -0.90/p = 0.37 |

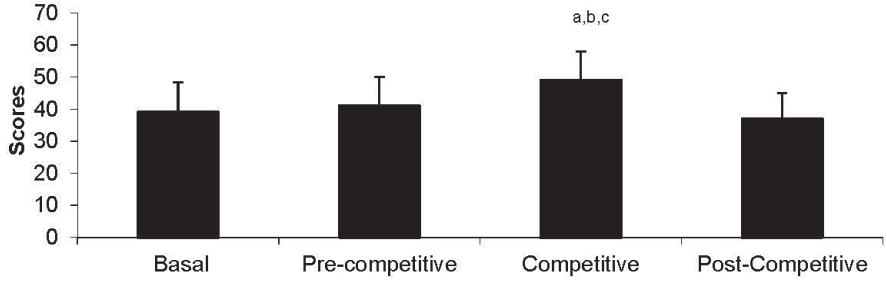
T Test for dependent samples, $p < 0.05$;
Data presented in mean ± standar deviation;
DTH: Mood total disturb;
SE: Standard Effect;
*Different from Basal.

TABLE 5 - Mood variation according to VAMS.

| Variable | | Basal | Pré-Competitive | Competitive | Pós-Competitive |
|---|---|---|---|---|---|
| VAMS | Anxiety | 50.42 ± 23.67 | 44.69 ± 17.32 | 35.46 ± 22.41 [abc] | 48.09 ± 16.64 |
| | Physical sedation | 48.98 ± 21.73 | 44.99 ± 17.32 | 48.00 ± 10.03 | 46.07 ± 11.42 |
| | Mental sedation | 43.95 ± 24.74 | 38.90 ± 14.82 | 48.27 ± 8.29 | 45.36 ± 13.69 |
| | Other feelings | 49.49 ± 20.41 | 44.24 ± 11.29 | 44.31 ± 10.32 | 45.71 ± 9.96 |

ANOVA for repeated measures, with Tukey post-hoc test;
[a] Different from Basal;
[b] Different from Pre--competitive;
[c] Different from Post-Competitive.

Idate State questionnaire results are presented in FIGURE 1. Sample showed an anxiety increase in the competitive moment when compared to basal ($p < 0.01$), pre-competitive ($p < 0.01$) and post-competitive moments ($p < 0.01$), when considered factor Time [$F(3,63) = 14.32$; $p<0.01$] power (0.99), having interaction between factors [$F(3,63) = 863.72$; $p < 0.01$] power (0.99).




ANOVA for repeated measures, with Tukey post-hoc test;
Data presented in mean ± standar deviation, $p < 0.05$;
[a] Different from Basal;
[b] Different from Pre--Competitive;
c Different from Post--competitive.

FIGURE 1 - Anxiety Variation according to Idate State questionnaire.

## Discussion

From the considerations regarding classical dance fundamentals and the competitive context, the aim of this study was to evaluate the relation between competitive anxiety in the psychobiological parameters, regarding the evaluation of a group of dancers who participated on a dance competition.

It is important to mention that the dance competitive context involves feelings, signals and symptoms commonly seen in sportive modalities, in general[35].

With the sample caracterization, it is possible to notice that dancers does not present high levels of axiety related to personality, depressive symptons, or body shape distortions signals, showing a good life quality.

From this way, in the competitive context, we realize that some affective changes happen in the above competition period. According to Idade state and BRUMS, as closer the competition gets, higher the tension, anxiety and mental confusion, and after the event, such parameters seens to turn back to normal values.

This increase can be translated in a dancer anxious behave (physiologic answer somatization), and impacts on their daily living activities, also increasing the emotional lability and the sleep pattern impairment. Some factors like cortisol increase, allied with increaseds rest heart rate and perspiration rate, can represent important physiological indexes for these increasing detection[36-39].

Results suggest that on the pre-competition period dancers experience an increased anxiety state, that can influence performance negativelly; that is, it can be related with the somatic discomforts related with the lower performance.

This is in accordance with Cerin et al.[11] affirmation that the subjective evaluation about the event, with consequent influence on the emotional state, depends on the competitive event closeness.

Dancers show considerable alteration in their anxiety state as soon the event approaches, corroborating with the results from others studies[40-41].

Gal-or et al.[42] study reports an increase in the competitive anxiety from one week to one day period before competition, with greater magnitude increases found in the hour that preceeds the event.

Results from this study shows that dancers mood changes in pre-competitive period in the tension-anxiety component can be linked with the Idate State data, showing a competitive anxiety increase. Such findings possibly reflect alterations related with the excitation and autonomics activity increases, denominated as somatic anxiety, in some theories[13].

This excitation increses can be caused for primary emotion alterations like fear, anxiety, angry, as well as the combination by two or more of this emotions[11].

Increased levels of somatic anxiety would be negative for complex skills that exige fine motricity (e.g. dance). But it seens that this kind of anxiety is present in the competition beggining, influencing initial performance but with a minimal impact posteriorly. During the competition this activation is replaced by a relative relax period and after the activity ending, an oscillation period can be observed because of the results repercussion expectation[13].

Considering the cognitive and somatic observable reactions, Weinberg and Gold[43] assert that an anxious athlete may have greater energy expenditure (due to muscular tension increase), coordination difficulties, apprehension increase, alert state, concentration changings, and narrowing attention field.

Besides that, some characteristics related to personality can influence this perceived anxiety levels. For Vasconcelos-Raposo et al.[18], self-control is closely related with sportive success, and, as higher the anxiety levels (somatic and cognitve),

lower the athlete self-confidence levels, what can directly influence the competitive performance.

Cruz[44] points that cognitive anxiety increase and the self-confidence decrease reflects alterations on the perceived individual threat, what could negativelly influence performance.

Winberg and Gold[43] support the idea that exists an ideal activation level for a good performance, a little of anxiety can favor athlete's efficiency.

Cox[45] points that this theory could only be applicated in somatic anxiety components (physical symptoms), because if somatic components were summed to cognitive components (mental), the athlete problably should present an impaired performance. The same author suggests that a moderatelly increased activation can contribute with the performance once this situation must allow an alert and attention state (central for the sportive conditions faced). The optimal manifestation intensity varies according to the practiced modality.

It is possible that some athletes report intense anxiety physiological symptoms, but do not report cognitive symptoms related to it, does not having in fact anxiety increase, but angry, excitation, concentration and attention increases, positive for their performance[11].

Thus, athletes focus attention would be directed only for a specific task, without distraction with irrelevant situations or diminished visual camp and damaged performance.

It is worth noting that, on the present study data, dancers showed an anxiety increase state in the competitive moment, keeping, according to the questionnaire classification, a medium anxiety level, not in the high levels, what seens does not present deleterious effects for the athletes performance, what can be explained based on the theories from Winberg and Gold[43] and Cox[45].

Hall and Kerr[14] points that even skilled and competitive atlhetes, that value themselves and judge themselves competent to face competition, shows increased anxiety state when the event get closer, with variations in magnitude changes related to the degree of self-confidence.

For the authors, such thing is a consequence of psychologic happennings that reflect physiological modifications necessary to action success. However, cognitive changes do not behave the same, once this should be related with the athlete's confidence on its capacity and domain aggainst the situation.

According to Martens et al.[13], cognitive anxiety must be stable for athlete's success. The anxiety behave presented on the VAMS, on which dancers presents a decrease in this variable in the competitive moment on the anxiety dimention, it is possible to think that such dimention could reflect what is denominated by the cognitive anxiety.

Possibly, this anxious mood behavior helps the dancers to do not present an increase in the excessive negative sensations (fear, aprehension, or apparent error without purpose), what corroborate for the athletes presence in the competition moment.

Such arguments are based on Martens et al.'s[13] theory, who says that the cognitive anxiety seens to be more stable during competition, reflecting on the subjective competence perception, influencing the adversary caracterization[19]; when increased, can negativelly influence thoughts, performance concerns, attention and cause concentration problems.

In this study, taking in consideration that the data exposed by VAMS questionnaire reflects what is known in literature as cognitive anxiety, it is possible to say that the dancers does not present an increase in this kind of anxiety in the competitive moment.

Contrary, in the preceding competition moments, the anxiety mood go down and it could be possible that this fact contributes for the performance go down movement on the competition moment.

Dunn and Nielsen[46] points that fear is the central emotion, related to negative events, seen as anxiety increasing[47]; however, for this study dancers presented anxiety levels changes, besides does not show fear in dealing with the event, once they executed the task successfully.

In general, from this result, it seems that when advanced dancers are investigated they can visualize the competition as a challenge, a threat situation, but also as an entertaining and interesting situation. From this way, changes related to the exciting level and threat perception occur, what could be explained for the perceived skill level (a performance booster).

Results confirm the idea that organismic answers related to autonomic arousal perception can not reflect cognitive anxiety levels, but in fact to be a way of someone to be prepared for dealing with the event.

Results anxiety level differences seem in the tools used in this study may reflect the effort of the dancers body to keep their function balance state, besides the changes related to the anxiety behavior. This increasing effort varies for each individual, according to each personal limit and perceived skill. In the goup investigated by this study, it seems to exist an answer control with the event coming, and their subsequent goal achievement.

It is important to highlight that the dancers that constitute the sample practices the modality for at least two years, so they already have been exposed to competitive situations in another moments (experience), showing a possible control over the disturbing situation. This can be related to their positive judgment to their performance capacity (skill perception), so dancers can keep the anxious mood in similar or below observable values in normal conditions, or, when they present physiologic changes related to anxiety, they can deal with the situation without negative effects.

Dancers executed successfully the proposed task (performance presentation) with any fall on performance, as the abcense of negative happenings derived from excessive anxiety levels (improper falls, decreased attention field, choreographic memory loss, and others), associated with a positive evaluation related to the presentation, done by the participants and the group responsable choreographer.

Relative to the post-competitive moment, a considerable decline on the anxiety levels (somatical) can be noticed, as well as a re-stablishment of an anxious mood. It confirms the results from other studies, on which immediatelly after competition occurs an anxiety fall[41, 48].

It is possoble to assume that the diminishing anxious mood counteracts the tension increase and the anxiety increase state, contributing for a good performance. Once dancers can not see a possible apparent error, they present alterations on the perceived anxiety, but keep focused on the task they will execute.

It important to highlight that, in a determined situation, the anxiety psychobiological elements are different from one individual to another in different situations. It varies according to the kind of reaction, degree and moment of occurance, and are related with the dancer prepare and experience on the situation, the kind of interpretation (perception) and the answer reaction.

Thus, in agreement with the results of this study, on the competitive classical dance context exists an increase on the anxiety moments before the competition, what does not affect the dancers performance once they executed the competition performance as expected on their and their responsable choreographer visions.

It is possible to assign such results to the balance between the increased anxiety state and the diminished anxious mood, that increases dancers tension/anxiety increase, perceived anxiety changes, but remain focused on the task that they must execute without changings on their cognitive perception.

Such changes are competition dependents, once after the event the anxiety levels regress to previous values.

## Resumo

Competição na dança clássica: um fator ansiogênico negativo?

A dança clássica é uma modalidade que apresenta relação com a arte, exigindo grande grau de preparo físico, psicológico e estético. Pode-se perceber que próximo a períodos competitivos, semelhante a praticantes de outras modalidades esportivas, bailarinas passam por situações estressantes que podem ter impacto negativo sob o desempenho. Deste modo, o objetivo do presente estudo foi investigar os efeitos da ansiedade competitiva no desempenho de bailarinas. Participaram do estudo 22 bailarinas com idade entre 18 a 30 anos, praticantes de dança clássica por pelo menos dois anos. A coleta de dados foi realizada por meio de avaliações psicométricas realizadas em momentos distintos (pré-competitivo, competitivo e pós-competitivo). Podemos perceber que ocorre um aumento da ansiedade momentos antes da competição, porém o desempenho das bailarinas não foi afetado, as bailarinas têm um aumento de sua tensão/ansiedade, alterações na percepção ansiosa, porém permaneceram centradas a tarefa que irão realizar.

Palavras-chave: Ansiedade; Competição; Dança; Desempenho.

## References


1. Arruda S. Arte do movimento: as descobertas de Rudolf Laban na dança e na ação humana. São Paulo: PW; 1988.
2. Robinson J. Le Langage chorégraphique. Paris: Vigot; 1978.
3. Malanga EB. Comunicação e balê. São Paulo: Edima; 1985.
4. Dantas M. Dança, o enigma do movimento. Porto Alegre: UFRGS; 1999.
5. Sampaio F. Ballet essencial. Rio de Janeiro: Sprint; 1996.
6. Achcar D. Ballet: uma arte. Rio de Janeiro: Ouro; 1998.
7. Buriti M. Psicologia do esporte. Campinas: Alínea, 1997.
8. Samulski D. Psicologia do esporte: manual para a educação física, psicologia e fisioterapia. São Paulo: Manole; 2002.
9. Rojas E. A ansiedade: como superar o estresse, as fobias e as obsessões. São Paulo: Mandarim; 1997.
10. Machado AA. Psicologia do esporte da educação física escolar ao esporte de alto nível. São Paulo: Guanabara Koogan; 2008.
11. Cerin E, Szabo A, Hunt N, Williams C, Temporal patterning of competitive emotions: a critical review. J Sports Sci. 2000;18:605-26.
12. Spielberger CD. The nature and measurement of anxiety. In: Spielberger CD, Diaz Guerrero, R, editors. Cross-cultural anxiety. New York: Hemisphere; 1976.
13. Martens R, Vealey RS, Burton D. Competitive anxiety in sport. Champaign: Human Kinetics;1990.
14. Hall KH, Kerr AW. Motivational antecedents of precompetitive anxiety in young sport. Sport Psychol. 1997;11:24-42.
15. Ferraz P. Identificação dos comportamentos pré-competitivos em jovens nadadores [dissertação]. Porto (PORT): Universidade do Porto, Departamento de Ciências do Desporto e de Educação Física; 1997.
16. Bertuol L, Valentini NC. Ansiedade competitiva de adolescentes: gênero, maturação, nível de experiência e modalidades esportivas. Rev Educ Fís. 2006;17:65-74.
17. De Rose Junior D. A competição como fonte de estresse no esporte. Cienc Mov. 2002;10:19-26.
18. Vasconcelos-Raposo J, Lázaro J, Mota M, Fernades H. Caracterização dos níveis de ansiedade em praticantes de atletismo. Motricidade. 2007;3:298-314.
19. Jones G, Swain A, Cale A. Antecedents of multidimensional competitive state anxiety and self- confidence in elite intercollegiate middle-distance runners. Sport Psychol. 1990;4:107-18.
20. Krane V, Williams JM. Cognitive anxiety, somatic anxiety, and confidence in track and field athletes: the impact of gender, competitive level and task characteristics. Int J Sport Psychol. 1994;25:203-17.
21. Gonçalves MP, Belo RP. Ansiedade-traço competitiva: diferenças quanto ao gênero, faixa etária, experiência em competições e modalidade esportiva em jovens atletas. Psico-USF. 2007;12:301-7.
22. Spielberger CD, Gorshusch RL, Lushene E. Manual for the State-Trait Anxiety Inventory ("Self-Evaluation Questionnaire"). Palo Alto: Consulting Psychologist; 1970.
23. Biaggio AMB, Natalício L. Manual para o Inventário de Ansiedade Traço Estado (IDATE). Rio de Janeiro: CEPA; 1979.
24. Andreatini R, Seabra ML. A estabilidade do IDATE - traço: avaliação após cinco anos. Rev ABP-APAL. 1993;15:21-5.
25. Terry PC, Lane AM, Fogarty GJ. Construct validity of the POMS-A for use with adults. Psychol Sport Exerc. 2003;4:125-39.
26. McNair DM, Lorr M, Droppleman LF. Profile mood states: manual. San Diego: Education and Industrial Testing Service; 1971.
27. Rohlfs ICPM, Rotta, TM, Luft CB, Andrade A, Krebs RJ, Carvalho TA. Escala de humor de Brunel (Brums): instrumento para detecção precoce da Síndrome do excesso de treinamento. Rev Bras Med Esporte. 2008;14:176-81.
28. Ciconelli RM. Tradução para o português e validação do questionário genérico de avaliação de qualidade de vida "Medical outcome study 36-item short-form health survey (SF-36)" [tese]. São Paulo (SP): Universidade Federal de São Paulo; 1997.
29. Baecke JA, Burema J, Frijters JE. A short questionnaire for the measurement of habitual physical activity in epidemiological studies. Am J Clin Nutr. 1982;36:936-42.
30. Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J. An inventory for measuring depression. Arch Gen Psychiatry. 1961;4:561-71.
31. Gorenstein C, Andrade L. Validation of a Portuguese version of the Beck depression inventory and state-trait anxiety inventory in Brazilian subjects. Braz J Med Biol Res. 1996;29:453-7.
32. Cooper PJ, Taylor MJ, Cooper Z, Fairburn CG. The development and validation of the body shape questionnaire. Int J Eat Disord. 1987;6:485-94.

33. Bond A, Lader M. The use of analogue scales in rating subjective feelings. Br J Med Psychol. 1974;47:211-8.
34. Guimaraes FS. Escalas analógicas visuais na avaliação de estados de estados subjetivos. Rev Psiquiatr Clin. 1995;25:217-22.
35. Wyon M. Preparing to perform: periodization and dance. J Dance Med Sci. 2010;14:67-72.
36. Fernandez-Fernandez J, Boullosa DA, Sanz-Rivas D, Abreu L, Filaire E, Mendez-Villanueva A. Psychophysiological stress responses during training and competition in young female competitive tennis players. Int J Sports Med. 2015;36:22-8.
37. De Pero R, Cibelli G, Cortis C, Sbriccoli P, Capranica L, Piacentini MF. Stress related changes during TeamGym competition. J Sports Med Phys Fitness. 2016;56:639-47.
38. Aguilar R, Jiménez M, Alvero-Cruz JR. Testosterone, cortisol and anxiety in elite field hockey players. Physiol Behav. 2013;2;119:38-42.
39. Hasegawa M, Toda M, Morimoto K. Changes in salivary physiological stress markers associated with winning and losing. Biomed Res. 2008;29:43-6.
40. Durtschi SK, Weiss MR. Psychological characteristics of elite and non elite marathon runners. In: Landers DM, editor. Sport and elite performers. Champaign: Human Kinetics; 1984. p.73-80.
41. Huband ED, McKelvie JS. Pre and post game state anxiety in team athletes high and low in competitive trait anxiety. Int J Sport Psychol. 1986;17:191-8.
42. Gal-Or Y, Tenenbaum G, Shimrony S. Cognitive behavioural strategies and anxiety in elite orienteers. JSports Sci. 1986;4:39-48.
43. Weinberg RS, Gould D. Fundamentos da psicologia do esporte e do exercício. Porto Alegre: Artmed; 2001.
44. Cruz JF. Psicologia do desporto e da actividade física. In: Cruz JF. Manual de psicologia do desporto. Braga: Sistemas Humanos e Organizacionais; 1996.
45. Cox RH. Sport psychology: concepts and applications. Boston: McGraw-Hill; 1998.
46. Dunn JGH, Nielsen AB. A classificatory aystem of anxiety-inducing situations in four team sports. J Sport Behav. 1996;19:111-31.
47. Hamilton LH, Hamilton WG, Warren MP, Keller K, Molnar M. Factors contributing to the attrition rate in elite ballet students. J Dance Med Sci. 1997;1:131-8.
48. Sanderson FH, Reilly T. Trait and state anxiety in male and female cross-country runners. Br J Sports Med. 1983;17:24-6.

## Acknowledgements

Authors acknowledge the scientific support of Everald Vancouler, and the technical and finnancial support from FAPESP (n. 2008/06718-2).

ADDRESS
Hanna Karen Moreira Antunes
Departamento de Biociências
Universidade Federal de São Paulo
Campus Baixada Santista
R. Silva Jardim, 136
11015-020 - Santos - SP - BRASIL
e-mail: hanna.karen@unifesp.br

Submitted: 11/16/2012
1a. Review: 05/26/2015
2a. Review: 05/27/2015
Accepted: 06/19/2015