

Stress, anxiety and other emotions in Japanese modern dance performance

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Abstract

Two reversal theory-based studies investigated dancers' psychological experience at final rehearsal, and at three performances in an annual competition. In Study 1, 23 Japanese modern dance specialists completed the Tension and Effort Stress Inventory immediately before and after performance. Pre-study expectations that dancers would experience higher levels of unpleasant emotions (including performance anxiety or stage fright) and stress pre-competition than pre-final rehearsal were not confirmed. Dancers experienced significantly higher levels of unpleasant emotions before final rehearsal than before competition. Also contrary to expectations, competing was found not to be more stressful and not to require greater efforts to cope, than rehearsing. Study 2 set out to investigate dancers' basic motives for dancing and to show whether the anxiety-to-excitement reversal phenomena could be discerned during dance performance. Using

the same experimental procedure as Study 1, a similar group of 15 dancers completed a dance performance experience questionnaire. The results indicated that, for the majority of dancers, the primary reason for dancing was either the paratelic, telic, arousal-seeking, or alloic-sympathy meta-motivational categories, and that many dancers experienced anxiety to excitement reversals.

A number of research reports concerning the emotions associated with public artistic performance can be found in the psychology literature. Of those studies carried out, most appear to have focussed on performance anxiety or stage fright in musical, vocal, or acting performance (e.g., Abel & Larkin, 1990; Craske & Craig, 1984; Fredrikson & Gunnarsson, 1992; Hamann, 1982; Konijn, 1991; Marchant-Haycox & Wilson, 1992; Steptoe & Fidler, 1987; Steptoe et al, 1995). As far as can be ascertained by the authors, no previous work has examined the emotional experience of modern dancers when performing.

Bakker's research results on the personality of dancers (Bakker, 1988, 1991), have shown that young Dutch ballet dancers were more introverted, attained higher scores on emotionality (related to feelings of fear, shame and guilt), and tended to be more anxious, than non-dancers. Findings from other research involving different artistic performers, such as orchestral musicians (Steptoe & Fidler, 1987) and student actors (Steptoe et al, 1995), may be relevant to the study of modern dancers. For example, Steptoe and Fidler (1987) have shown that performance anxiety was related to neuroticism and everyday fears in groups of experienced professional orchestral players, music students, and amateur orchestra players. Among these groups, performance anxiety was highest in students and lowest in professional orchestra musicians. Also,

Marchant-Haycox and Wilson (1992) measured the personality characteristics of different types of performing artists (actors, musicians, singers, dancers) and a general population control group. When compared with the control group, performing artists tended to be introverted and emotionally volatile. Important differences were identified among the various groups of performing artists, with dancers found to be the most emotionally unstable group. In addition, among actors, singers, and dancers, almost one third reported experiencing performance anxiety on occasion.

Stephoe et al (1995) found that stage fright could affect both physical factors of performance and elements related to emotional involvement and characterisation. They also found a positive relationship between stage fright and neuroticism (see also, Craske & Craig, 1984), and a negative association between stage fright and extraversion. Given the personality profile of dancers revealed by Bakker (1988, 1991) and Marchant-Haycox and Wilson (1992), it would appear that modern dancers may well, like their artistic peers, be susceptible to performance anxiety or stage fright.

Stephoe et al (1995) have underlined the importance of cognition in the experience of stage fright, and further suggested that stage fright arises through physiological responses, including heightened physiological activation (Abel & Larkin, 1990), linked to negative thoughts (Stephoe, 1989). However, if cognition plays a role in the emotional experience of performers, the experience of other, quite different, emotions are also a possible outcome. For example, increased physiological arousal may be linked to pleasant positive thoughts, in which case excitement, rather than anxiety, would be the emotion experienced by individual performers. In line with theoretical formulations (Apter, 1982, 1989;

Cox, 1978), there is evidence from studies conducted in sport that high level performers can experience increased arousal in a non-stressful, pleasant way (Kerr & Cox, 1991; Males & Kerr, 1996). The majority of previous studies which have focussed on stage fright in artistic performers did not explore this as a possibility.

Comments by expert ballet dancer Twyla Tharp suggest that there is a close relationship between anxiety and excitement.

I began to discriminate between fear and excitement. The two, though very close, are completely different. Fear is negative excitement, choking your imagination. Real excitement produces an energy that overcomes apprehension and makes you want to close in on your goal (Tharp, 1992, p. 79)

This statement concurs with the notion from reversal theory (Apter, 1982, 1992), of switches or reversals between anxiety and excitement, which can occur in some threatening situations.

While sitting in an aeroplane which is taking off, one may experience alternate feelings of fear and exhilaration as one considers first one then another aspect of what might be a dangerous situation. As one sets oneself up to make a critical putt in a game of golf, prepares to give an important lecture, or waits to be interviewed for a job, so the interpretation of the increasing arousal may fluctuate wildly between anxiety and excitement (Apter, 1982, p. 98)

In this regard, therefore, it would be advantageous in any research on dance to

use a measuring instrument that included positive emotion items, such as excitement, as well as items relating to anxiety and other unpleasant negative emotions. It would also be useful if measures of stress and efforts to cope with that stress could be included. In addition, it would be interesting to investigate whether the anxiety-to-excitement reversal phenomenon, posited by reversal theory, is pertinent for dancers. In an attempt to provide a broader picture of dancers' emotional experience, measures which allowed the concerns outlined above to be addressed were used in the two studies reported in this paper (see Measure sections).

It was noted that, in many of the previous studies examining artistic performance, the information obtained was collected a relatively long time, sometimes weeks before (e.g., Steptoe et al., 1995), a major performance. The authors felt that it would also be advantageous to collect data as close to performance as possible (see Procedure section).

The purpose of Study 1 was to monitor the emotional experience of modern dancers.

Research work by Konijn (1991) had shown that little psychological stress was experienced by actors before and during rehearsals, compared with during performances. Based on the findings of previous research described above (Bakker, 1988, 1991; Marchant-Haycox & Wilson, 1992; Steptoe & Fidler, 1987; Steptoe et al, 1995), it was expected that modern dancers would experience greater negative or unpleasant emotion, including performance anxiety, prior to competition than prior to final rehearsal. It was also thought that performing in a prestigious competition before an audience would be a more stressful experience, requiring greater efforts

to cope, than performing in a final rehearsal without an audience. The aim of Study 2 was to investigate dancers' basic motives in terms of the nature of the pleasure they obtained from dancing, and to determine if the anxiety-to-excitement reversals, already established for parachuting (Apter & Batler, 1996), could also be discerned in modern dance.

There are advantages and disadvantages to conducting research in the field. One major advantage is that the ecological validity of real-life field research is superior to that of research conducted under artificial or laboratory-type conditions. Field research often necessitates the type of quasi-experimentation advocated by Cook and Campbell (1979), and as such is subject to certain limitations. As Cook and Campbell (1979, p. 347) have acknowledged, gaining and maintaining access to research populations in field settings is difficult, and also the numbers in such populations are often fixed. In other types of research, it is relatively easy to organise large numbers of participants, adding extra participants if and when necessary. However, this becomes very difficult, if not impossible, in research of the field study type. This was the case in the current research, where the participants were members of one particular dance group. Nevertheless, numbers were adequate and the quality of the information obtained has high ecological validity.

Study 1 Method

Participants

Twenty-three Japanese university student modern dance specialists (20 females, 3 males; Mean age = 19.9 yrs, *SD* = 1.2), preparing for and performing as a group in the 8th All Japan National Dance Competition, acted as volunteer participants

in this study. The dance group was eventually awarded second place by the judges in a competition that involved 38 university dance groups.

Measure

The measure used in Study 1 was the state version of the Tension and Effort Stress Inventory (TESI; e.g., Svebak, Ursin, Endresen, Hjelmen, & Apter, 1991), which is based on concepts from reversal theory (Apter, 1982; 1989). The TESI has previously been used in, for example, medical (e.g., Bru, Mykletun, & Svebak, 1997; Svebak, Ursin, Endresen, Hjelmen, & Apter, 1991) and sporting contexts (e.g., Kerr & Svebak, 1994; Males & Kerr, 1996).

The state version has 20 individual response items set out in three sections. Respondents circle the appropriate figure on a scale of 1-7 ranging from 'not at all' to 'very much,' placed alongside each TESI item (see Svebak, 1993, for fuller details).

Section A (2 items) requires participants to estimate the degree of pressure, stress, challenge, or demand that you are exposed to in the current situation with respect to (1) 'external factors,' and (2) your own body. Section B (2 items) is concerned with the degree of effort that you put up in the current situation to cope with pressure etc, with respect to (1) 'external factors' and (2) your own body. The third section contains a list of 16 different emotions from reversal theory. Each individual emotion item can be considered separately, but groupings of emotions, based on the reversal theory concept of meta-motivational state combinations, can be computed. These include: (a) Pleasant (relaxation, excitement, placidity, provocativeness) and unpleasant (anxiety, boredom, anger, sullenness) somatic emotions (which are concerned with felt arousal, or how 'worked up' an

individual feels him or herself to be at any time); and (b) pleasant (pride, modesty, gratitude, virtue) and unpleasant (humiliation, shame, resentment, guilt) transactional emotions (which are concerned with an individual's interactions with others). Overall scores for total pleasant emotions (4 somatic, 4 transactional items), and total unpleasant emotions (4 somatic, 4 transactional items), can also be computed (see Appendix A).

A Japanese version of the TESI questionnaire was translated from the English version independently by two bilingual people, and translated back from Japanese to English independently by two others. Disagreements in translation were discussed, and the correct meaning of terms was agreed among the translators. This procedure ensured that the translation of the TESI into Japanese was as accurate as possible.

Procedure

Participants completed a Japanese version of the TESI 10 minutes before and 10 minutes after dance performance at final rehearsal, and at three performances during the national competition. Each performance lasted 7 minutes. The final rehearsal took place without an audience at the university, while performance in the competition took place in Tokyo, in front of an audience of several hundred people, including judges and other competitors.

Results

Table 1 shows the mean pre- and post-rehearsal and pre- and post competition scores for TESI items. As multivariate analysis is less likely to lead to experimentwise Type 1 error when multiple

Table 1
TESI Item Means and SD's pre/post rehearsal and competition

repeated measures and a large number of dependent variables are used, Profile Analysis MANOVA was chosen to statistically analyse groupings of related TESI variables (Tabachnick & Fidell, 1996). Univariate analysis and *t*-tests were used in post hoc analysis where appropriate, to provide details of which variable contributed to the significance. The significant results obtained from the statistical analysis are reported below.

Total pleasant/unpleasant emotions

Profile Analysis MANOVA was used to determine overall differences in total pleasant/unpleasant emotions. A 2 x 2 x 2 MANOVA (pleasant/unpleasant emotions x rehearsal/competition x pre/post) showed a significant pleasant/unpleasant emotions effect ($F(2,45) = 668.08, p < .001$). A significant effect for the rehearsal/competition factor ($F(2,45) = 4.85, p < .02$) was also obtained.

Two 2 x 2 ANOVAs (rehearsal/competition x pre/post) were calculated on the total pleasant and total unpleasant emotions scores. A significant rehearsal/competition x pre/post interaction effect ($F(1,46) = 5.45, p < .03$) was obtained for total pleasant emotions. *T*-tests were used to identify differences between specific means. The pre-rehearsal and pre-competition means were the same for total pleasant emotions, but post-competition means were significantly higher than post-rehearsal means ($p = .005$). For total unpleasant emotions, a significant rehearsal/competition effect ($F(1,46) = 6.62, p < .02$) was also obtained. Pre-rehearsal scores were significantly higher ($p = .005$) than those reported pre-competition, but post scores showed no significant differences.

Somatic emotions

Profile Analysis MANOVA was used to test for differences in the ratings of the 8 somatic emotions. An 8 x 2 x 2 MANOVA (somatic emotions x rehearsal/competition x pre/post) revealed a significant effect for total somatic emotions ($F(8,39) = 327.72, p < .001$). Significant effects for the rehearsal/competition factor ($F(8,39) = 3.21, p < .01$), and the pre/post factor ($F(8,39) = 6.19, p < .001$), were revealed. In addition, a rehearsal/competition x pre/post interaction effect was found to be significant ($F(8,39) = 4.21, p = .001$). Post hoc analysis using *t*-tests for total somatic emotions revealed that pre-rehearsal scores were significantly higher ($p < .02$) than those reported pre-competition, but post scores showed no significant differences.

Univariate 2 x 2 ANOVAs (rehearsal/competition x pre/post) were performed on the 8 somatic emotion measures. Significant rehearsal/competition effects for relaxation ($F(1,46) = 5.22, p < .03$), boredom ($F(1,46) = 13.87, p < .01$), and sullenness ($F(1,46) = 9.11, p < .005$), were revealed. For excitement, a rehearsal/competition effect approached significance ($F(1,46) = 3.59, p = .06$). Significant pre/post effects for relaxation ($F(1,46) = 14.22, p < .001$), and boredom ($F(1,46) = 9.68, p < .005$), and sullenness ($F(1,46) = 5.44, p < .03$), were also obtained. In addition, a single significant rehearsal/competition x pre/post interaction effect was found for relaxation ($F(1,46) = 15.15, p < .001$). Post hoc analysis, using *t*-tests, indicated that post-competition scores were significantly higher than post-rehearsal scores ($p = .0003$).

Transactional emotions

Profile Analysis MANOVA was used to test for differences in the ratings of the 8 transactional emotions. An 8 x 2 x 2

MANOVA (transactional emotions x rehearsal/competition x pre/post) revealed a significant effect for total transactional emotions ($F(8,39) = 104.67, p < .001$) and a significant effect for the pre/post factor ($F(8,39) = 2.37, p < .04$).

Univariate 2 x 2 ANOVAs (rehearsal/competition x pre/post) were performed on the 8 transactional emotion ratings. A significant pre/post effect for pride ($F(1,46) = 11.22, p < .005$) was obtained. For gratitude and resentment, rehearsal/competition effects approached significance ($F(1,46) = 3.78, p = .058, F(1,46) = 3.85, p = .056$), and a significant rehearsal/competition x pre/post interaction effect for gratitude ($F(1,46) = 9.73, p < .005$) was found. Further analysis using *t*-tests revealed that only at competition did the pre/post scores differ significantly ($p < .001$), with the post-competition mean greater than the pre-competition mean.

Stress and effort

Profile Analysis MANOVA was used to establish overall differences on the stress and effort ratings. A 4 x 2 x 2 MANOVA (stress and effort x rehearsal/competition x pre/post) revealed a significant effect for total stress and effort ($F(4,43) = 260.86, p < .001$), and a significant rehearsal/competition x pre/post interaction effect ($F(4,43) = 4.52, p < .005$). Post hoc *t*-tests revealed that both stress ($p < .02$) and effort ($p < .01$) scores were significantly higher post rehearsal than post competition.

Univariate 2 x 2 ANOVAs (rehearsal/competition x pre/post) were performed on the 4 stress and effort ratings. Significant pre/post effects were revealed for all four items: external stress ($F(1,46) = 6.65, p < .02$), somatic stress ($F(1,46) = 7.10, p < .02$), external effort ($F(1,46) = 6.26, p < .02$), and somatic effort ($F(1,46) = 7.66, p$

$< .01$). In addition, significant interaction effects were obtained for external stress ($F(1,46) = 7.29, p < .05$) and somatic effort ($F(1,46) = 14.75, p < .001$). Analysis using *t*-tests revealed that only at competition were the pre/post differences in external stress ($p = .006$) and somatic effort ($p = .002$) significant.

Discussion

Artistic performance in front of an audience can sometimes be an unpleasant experience, leading to performance anxiety or stage fright (Abel & Larkin, 1990; Craske & Craig, 1984; Fredrikson, & Gunnarsson, 1992; Steptoe et al, 1995). Contrary to prediction for this study, dancers experienced significantly greater levels of unpleasant emotions before final rehearsal than before competition. This pattern for unpleasant emotions might have reflected a feeling on the part of the dancers, that after long weeks of practice and rehearsal, they wanted to 'get on with it,' and perform their skills at the actual competition.

Examination of anxiety item scores in this study (see Table 1) indicated that scores were in the moderate range and similar to pre-rehearsal and pre-competition. In both cases, anxiety levels did decrease with performance, but non-significantly, and no significant differences were found between rehearsal and competition. In other words, performing in a competition with rival groups in front of judges and an audience did not provoke higher levels of anxiety than those reported at final rehearsal. The expectation that dancers would experience greater performance anxiety prior to competition than prior to final rehearsal was not confirmed.

This result for anxiety has to be considered in the broader picture that becomes apparent from the results for the other unpleasant and

pleasant emotions. Boredom and sullenness decreased significantly and decreases in resentment approached significance pre- to post-performance; dancers were also less bored and sullen at competition than at rehearsal.

The pattern for positive or pleasant emotions complements the findings obtained for unpleasant emotions. Dancers were more relaxed (significantly), more excited, more grateful, and less resentful (all three approaching significance), at competition than at rehearsal. Of interest from the reversal theory point of view are the mean scores for excitement at competition (see Table 1). Both pre- and post-competition means for excitement are higher than for anxiety and, whereas anxiety decreased pre- to post-competition, excitement increased pre- to post-competition. In addition, dancers were significantly more relaxed post-competition than post-rehearsal, and significantly more grateful post-competition than pre-competition.

It might be considered a natural response to relax after the competition was all over, and feel grateful perhaps to the dance group's choreographer, and/or to fellow members of the group. Feelings such as these would likely not have been so apparent at final rehearsal with the competition still to come. However, probably as a result of the group performing well, dancers' pride scores also increased significantly pre- to post-performance, at both the final rehearsal and competition.

It is interesting to consider the emotions of gratitude and pride in cultural context. Previous work has shown that independence, self-assertiveness, and individuality, tend to be characteristics of people in European and North American countries. However, people in Japan and other Asian countries tend to exhibit greater

interdependence or collectivism, and to have a different sense of community. These contrasting values appear to be instilled in children, especially girls, from a young age by parents (e.g., Edwards & Whiting 1980; Whiting & Edwards 1988). It is perhaps not surprising, therefore, that amongst Japanese dancers, emotions concerned with the outcome of interactions with others were shown to be important. In addition, cultural background may have benefited the dance group in terms of their group functioning. For example, it seems likely that the cohesiveness of the group, and individual dancers' willingness to cooperate and work together towards common goals, would be facilitated by the cultural values mentioned above.

There were no important differences found in stress and effort scores pre-competition and pre-rehearsal, suggesting that competing was not perceived as more stressful than rehearsing, contrary to prediction. Dancers' levels of external and bodily stress were matched by their efforts to cope with that stress. Reported levels changed very little at rehearsal, and dancers coped adequately with stress levels at rehearsal. Stress and effort scores were found to decrease significantly from pre- to post-competition, and scores post-competition were significantly lower than post-rehearsal. These decreases might well reflect a feeling of relief amongst dancers, that their performance was now over and they had performed well. This result ties in well with the earlier result for relaxation. No important mismatch between levels of stress and efforts to cope was observed at competition, suggesting that, as at rehearsal, dancers coped adequately with both forms of stress.

Taking these stress and emotion results together, the overall picture of Japanese modern dancers' experience at competition,

seems to be somewhat at odds with the view obtained from the studies of dancers and other artistic performers included in the review of literature. Rather than an experience characterised by high levels of performance anxiety and stress (Konijn, 1991; Marchant-Haycox & Wilson, 1992; Steptoe & Fidler, 1987; Steptoe et al, 1995), our modern dancers' experience was one dominated by positive affect in which levels of stress and negative emotions remained at moderate, manageable levels.

Finally, it could be argued that a within-subjects design, involving pre and post testing (Campbell & Stanley, 1963) at rehearsal and competition, may have acted to desensitise (or, equally, to sensitise) participants to performance anxiety. However, as can be seen in Appendix A, the TESI is an instrument that is most unlikely to have produced any desensitisation effect. The measure has been used in multiple repeated measurements, by many researchers, and findings do not support the idea that desensitisation is caused by, or is consistently related to, TESI administrations. This argument also holds true for the other 15 emotions included in the TESI.

Study 2 Method

Participants

Study 2 involved a similar group of 15 female student modern dance specialists (Mean age = 20.0 yrs, *SD* = 1.7), from the same university as participants in the previous study. They took part in the 10th All Japan National Dance Competition held in Kobe two years later, and also achieved second place. The dancers were volunteer participants.

Measure

The measure used in the Study 2 was a modified version of a questionnaire previously used by Apter and Batler (1996), in their study investigating reversal theory's 'anxiety to excitement' reversal phenomenon, in parachutists. The questionnaire, modified for use in the dance context, and labelled the Dance Performance Experience Questionnaire (DPEQ), is shown in Appendix B. Questions 1-3 are concerned with biographical information, and questions 4 and 5 investigate the basic motives of dancers and the nature of the pleasure they obtain from dancing. Here, dancers were asked to respond to a number of statements based on the metamotivational dyads from reversal theory (telic-paratelic, negativism-conformity, mastery-sympathy, autic-alloic; see e.g., Apter, 1989). Question 6 concerned dancers' perception of the moment of maximum threat. This corresponded to a question in Apter and Batler's (1996) original study, concerning the moment of maximum danger, but the word 'danger' was too strong and 'threat' a more appropriate term for the dance context. Questions 7 and 8 asked about dancers' experience of maximum anxiety and maximum excitement, prior to, during, and post-performance. The same procedure for producing a Japanese version of the TESI was used to develop a Japanese version of this questionnaire.

Procedure and data analysis

The procedure used in Study 2 was identical to that used in Study 1, except that dancers completed the DPEQ instead of the TESI.

Results

In Study 2, the DPEQ data were analysed using descriptive statistics. Where appropriate, Chi-square analysis and the Wilcoxon matched-pairs signed ranks test

were utilised. Answers to the four administrations of the Dance Performance Experience Questionnaire were collapsed and average scores calculated.

Reasons for participation

Dancers in Study 2 had been dancing for an average of 8.6 yrs. From the motive statements concerning the nature of pleasure derived from dancing, listed in question 4, dancers could mark as many of the statements as they thought appropriate. A total of 269 citations were obtained, and covered the full range of meta-motivational statements listed. Only 7 citations for reasons other than those listed were obtained.

Of the 269 citations, (d) excitement or thrill was marked most often with 43 citations, followed by (b) immediate fun 39 citations, (g) control and mastery 37 citations. (a) Serious achievement, and (i) helping others master the situation both had 31, and being a centre of concerned attention 30 citations, (c) relief afterwards had 19, being concerned for others had 13, (f) being part of a community or group had 12, and (e) defying convention had 7 citations. The maximum number of citations by an individual dancer was 9, and the minimum number 2.

Participants were also asked (question 5) to indicate which of these statements corresponded to their greatest pleasure in dancing. Dancers' responses are shown graphically in Figure 1, where the statements have been categorised according to reversal theory's basic motives. Here paratelic (immediate fun), telic (serious achievement), alloic mastery (helping others master the situation), and arousal seeking (excitement or thrill), were the meta-motivational categories with the highest percentages of respondents. For this question (unlike question 4), the respondents

were asked to provide only one reason. Therefore, it was possible to carry out a chi-square analysis of the distribution of responses. This analysis showed that the null hypothesis must be rejected ($\chi^2 = 53.93$, $p < .001$). It should be noted that the negativistic and alloic-sympathy based statements were not marked as a source of greatest pleasure by any of the dancers, and the autic-mastery based statement by only 2% of respondents.

The moment of maximum threat (question 6), was overwhelmingly perceived to be the moment just prior to the start of performance, known in the theatre as 'curtain up.' Some examples of dancers' statements were, 'just before coming on stage;' 'waiting in the wings before curtain up;' and 'before the very first movement; at curtain up.' Dancers' perception of the moment of maximum anxiety during the period spent waiting in the wings before curtain up, and the time spent in performance is shown in Figure (2a). Greatest anxiety for the majority of dancers occurred just prior to or at the moment of maximum threat, at curtain up. By way of contrast, Figure (2b) shows dancers' perception of the moment of maximum excitement, during the same time period. Greatest excitement for the majority of dancers occurred once performance had begun, with the modal moment occurring five minutes after curtain up, but two minutes before the end of the performance. Apter and Batler (1996) had used a Wilcoxon matched-pairs signed-ranks test to indicate whether, in general, parachutists' estimations of the moment of the maximum excitement would occur later in time than their estimations of the moment of maximum anxiety. The same statistical analysis was applied to the dancers' data and

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- as might be expected from reversal theory - a similar result was obtained ($z = 5.5$, $p = <.01$, two-tailed).

Discussion

The way in which maximum anxiety judgements peaked at "curtain up" and maximum excitement judgements peaked five minutes into the performance, suggests that many of the dancers in this study reversed from the telic to the paratelic meta-motivational state. Once performance had begun and was proceeding satisfactorily, a switch took place, and the unpleasant high arousal associated with anxiety was experienced as pleasant excitement. This finding tends to confirm the anecdotal reports by performers in music, drama, dance, and sport that, once performance actually begins, nervousness and anxiety disappear. For a few dancers, maximum excitement judgements occurred post-performance, suggesting that they only experienced reversals once the performance was over.

Concluding comments

In summary, the picture of emotional experiences of modern dancers which emerged from Study 1 was characterised by general increases in pleasant emotions, general decreases in unpleasant emotions, and acceptable levels of stress. Based on the results of Study 1, it must be concluded that, in general, these modern dancers did not experience the very high levels of performance anxiety characteristic of stage fright in some other performing artists prior to their major performances. On the contrary, they appear to have experienced high levels of pleasant hedonic tone, and enjoyed performing as a positive experience. This positive experience was most obvious as a post performance high which, as the findings of Study 2 suggest, is a

consequence of dancers reversing from telic to paratelic state, and experiencing excitement rather than anxiety.

By extending the monitoring of emotions beyond the single negative or unpleasant emotion of anxiety, these studies have obtained a much broader picture of the performers' emotional experience. In addition, by collecting data close to, and before and after performance, a more accurate mapping of emotional experience than that obtained in other artistic performance studies (e.g. Steptoe et al, 1995) has been possible.

Finally, although it must be conceded that the analysis of group data in the two studies may mask the experience of particular artistic performers whose experience was not that characterised by the group pattern, it has produced a set of preliminary findings which warrant further investigation.

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