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Dancing Toward Positive Body Image? Examining Body-Related Constructs with Ballet and Contemporary Dancers at Different Levels

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Abstract The present study examines the suggestion that associations between dance participation and body image are influenced by dance type and level. A total of 82 female dancers varying in dance type (ballet vs. contemporary dancers) and level (beginner vs. advanced) completed measures of body appreciation, actual-ideal body weight discrepancy, body awareness, body responsiveness, dancer identity, length of time as a regular dancer, and provided their demographic details including age and body mass index. Analyses of variance showed that beginner ballet dancers had significantly higher body appreciation compared with advanced ballet dancers, whereas advanced contemporary dancers had significantly higher body appreciation compared with their beginner counterparts. Additionally, advanced ballet and contemporary dancers both had significantly higher body weight discrepancy compared with their beginner counterparts. Multiple regressions showed that body awareness, body responsiveness, dancer identity, and time as a dancer did not significantly predict body image once dance type and level had been accounted for. These results are discussed in relation to the promotion of positive body image using dance/movement therapy.

Keywords Dance · Body image · Ballet · Contemporary dance · Body appreciation · Body weight discrepancy

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Introduction

Over the past several decades, it has become increasingly clear that anxiety about appearance and negative body image are "normative" experiences among women globally (Cash, 2004; Rodin, Silberstein, & Striegel-Moore, 1984; Smolak, 2006; Swami et al., 2010). This is of concern because of the established relationships between negative body image and symptoms of disordered eating (Neumark-Sztainer, Paxton, Hannan, Haines, & Story, 2006; Stice & Shaw, 2002), diminished confidence in interpersonal relationships (Cash, Maikkula, & Yamamiya, 2004), and poorer psychological well-being (Keery, van den Berg, & Thompson, 2004). It is not surprising, therefore, that a good deal of scholarly research has focused on identifying both putative risk and protective factors that could potentially be targeted in intervention programs aimed at promoting healthier body image.

Recent work has highlighted the possible protective influence of such factors as ethnic group affiliation (Swami, Airs, Chouhan, Padilla Leon, & Towell, 2009), feminist identity (Rubin, Nemeroff, & Russo, 2004; Swami, Salem, Furnham, & Tovée, 2008a), and individual psychological differences (Swami, Hadji-Michael, & Furnham, 2008). Another factor that has received some attention is participation in various forms of dance (for a review, see Smolak, Murnen, & Ruble, 2000), particularly as physical appearance and bodily strength are two key components of dance performance. However, studies examining whether dance participation promotes positive or negative body image have returned equivocal results (Abraham, 1996a, 1996b; Ackard, Henderson, & Wonderlich, 2004; Olson, Williford, Richards, Brown, & Pugh, 1996; Swami & Tovée, 2009). The most likely explanation for these mixed results is that the effects of dance participation on body image are related to both the level of participation and type of dance (Smolak et al., 2000).

It has been suggested that, at beginner levels, dance participation may promote positive body image because it allows individuals to develop a sense of body empowerment (Burgess, Grogan, & Burwitz, 2006). In addition, the social nature of most dance forms at novice levels may provide opportunities to develop and maintain positive self-schemas, such as an enhancement of self-esteem (Swami & Tovée, 2009). Thus, dance participation has been shown to enhance positive body image among adolescent non-dancers (Burgess et al., 2006).

At advanced levels, however, dance participation appears to result in more negative body image and disordered eating (Smolak et al., 2000). Research suggests that elite dancers experience heightened pressure to maintain a lean bodily physique that is optimum for physical performance (Bettle & Bettle, 2003), not dissimilar to some types of athletes (Swami, Steadman, & Tovée, 2009). Unlike athletes, however, dancers may also experience the dual pressures of excessive focus on the body inherent in dancing, (Radell, Adame, & Cole, 2002; Price & Pettijohn, 2006) as well as pressure to maintain extremely thin (often underweight) ideals, which can result in them becoming "weight preoccupied" (Pierce & Daleng, 1998). In addition, media representations of elite dancers typically depict dancers who are toned and athletically fit and, to the extent that such images are internalized, it may result in more negative body images among advanced dancers (Abraham, 1996a).

In addition, dance type may also shape the relationship between dance participation and body image. In particular, it has been suggested that dance types, such as ballet, that require individuals to attain excessively slender physiques for either task (e.g., performance advantages or weight requirements) or social reasons (e.g., adherence to images of idealized dancers or competitive judgement) result in more negative body image (Ravaldi et al., 2006; Ringham et al., 2006; Thomas, 2005). Thus, studies have shown that, compared to non-dancers, ballet dancers have a greater drive for thinness, higher body dissatisfaction (Anshel, 2004), and higher self-objectification (Tiggemann & Slater, 2001).

On the other hand, some dance types may promote more positive body image. For example, belly dancers have been shown to hold more inclusive body image norms, express a lack of pressure to conform to the thin ideal, and consequently have low levels of body dissatisfaction (Downey, Reel, SooHoo, & Zerbib, 2010). Similarly, Swami and Tovée (2009) reported that, although non-dancers and street dancers (involved in a form of dancing that evolved outside formal settings, such as break-dancing) had similar levels of body dissatisfaction, street dancers had significantly higher scores on body appreciation (a measure of positive body image) than non-dancers. The authors suggested that street dancing might afford participants a "unique opportunity to view the body as functional in a kinesthetic manner" (Swami & Tovée, 2009, p. 306), although they may still experience pressure to attain a thin ideal.

In a similar vein, a growing body of research has examined issues related to body image among contemporary dancers (Langdon & Petracca, 2010). Unlike dance styles such as ballet, contemporary dancing is less focused on specific dance techniques and rather emphasises a dance philosophy focused on the mind–body connection (Goldstein, 2003). More specifically, contemporary dancers are taught to explore their emotions through non-traditional dance movements (e.g., floor-work, fall and recovery, and improvisation). Contemporary dance also borrows some elements from dance/movement therapy, including an integration of mind–body dynamics through movement experiences, body awareness, attending to the body while in interaction, and creative expression (Dibbell-Hope, 2000; Goodill, 2005; Lippin & Micozzi, 2006). Recent work has suggested that, compared to non-dancers, contemporary dancers have higher body appreciation and lower drive for thinness and self-objectification (Langdon & Petracca, 2010).

While the available evidence suggests that both dance level and type may be associated with body image, previous studies have not typically examined both factors concurrently, particularly in relation to non-balletic dance forms. As a contribution to the extant literature, therefore, the present study sought to examine body image among beginner and advanced (professional) ballet and contemporary dancers. Because previous work has suggested that dance participation may have different relationships with negative and positive body images, we operationalized body image in the present work as both actual-ideal body weight discrepancy (a measure of body dissatisfaction) and body appreciation (a measure of positive body image).

In addition, we also examined between-group differences in two variables that may be associated with more positive body image, namely body awareness

(attentiveness to normal, internal bodily processes and sensations) and responsiveness (responsivity to bodily sensations). To the extent that dance participation cultivates a direct experience of the body (and in the case of contemporary dance, in particular, a greater understanding of the unity of the mind and body), it should result in higher levels of body awareness and responsiveness. In turn, these variables may promote more positive body image as dancers increasingly value autonomic processes and devalue the importance of physical appearance to one's overall sense of self. Although we are not aware of previous studies that have examined these variables in relation to dance participation, Daubenmier (2005) reported that both body awareness and responsiveness helped explain body satisfaction among practitioners of yoga, which shares a similar underlying philosophy with contemporary dance.

Finally, we also included a measure of dancer identity (that is, the extent to which individuals identify themselves as dancers). Langdon and Petracca (2010) have suggested that, to the extent that stronger dancer identity involves an adoption of the normative attitudes and behaviors involved with that group, it should be associated with more negative body image and an increased tendency to focus on appearance. Indeed, in their study of contemporary dancers, they found that identity as a dancer was negatively associated with body appreciation. To our knowledge, however, previous work has not simultaneously examined the impact of dancer identity on body image among dancers of different dance types and levels, which the present study sought to overcome.

In short, the present study sought to examine body image, body awareness and responsiveness, and dancer identity among a sample of beginner and advanced ballet and contemporary dancers. Based on previous work, we hypothesised that elite ballet dancers would have more negative body image than beginner ballet dancers. On the other hand, we expected that advanced contemporary dancers would evidence more positive body image than beginner contemporary dancers, perhaps as a function of their greater body awareness and responsiveness. Finally, we also predicted that, controlling for dance level and type, body image among dancers would be associated with body awareness, body responsiveness, and dancer identity.

Method

Participants

The participants of this study were 82 female dancers attending classes at a dance studio in London, England. The studio caters to dancers at a range of levels (beginner, elementary, intermediate, and advanced) and a selection of dance types (ballet, contemporary, street, and ballroom). We focused on classes with the largest attendance, namely classical ballet and contemporary dance, and compared those enrolled in beginner classes with those in advanced or professional classes. All classes are held regularly (at least weekly) and led by professional teachers. Dancers in beginner classes were taught the basic movements of their dance type, whereas those in advanced classes were typically competitive or professional dancers

supervised by professional choreographers. Of the total sample, 37 were attending primarily ballet classes (18 in beginner classes and 19 in advanced classes) whereas 45 participants were primarily enrolled in contemporary dance classes (23 in beginner classes and 22 in advanced classes). Of the total sample, the majority were of British White descent (89.0%). Other participant demographics (age and body mass index) for each group are reported in Table 1.

Measures

Body Appreciation Scale (Avalos, Tylka, & Wood-Barcalow, 2005). This is a 13-item scale that measures related aspects of positive body image, including favorable opinions about one's own body and respect for the body. Items are rated on a 5-point Likert-type scale (1 = *Never*, 5 = *Always*), with higher scores reflecting greater body appreciation. The scale has a one-dimensional structure when completed by women in Western settings (Avalos et al., 2005; Swami, Stieger, Haubner, & Voracek, 2008), as well as good test–retest reliability over a three-week period, and good construct and discriminant validities with student and community samples (Avalos et al., 2005; Swami et al., 2008). In the present study, Cronbach's alpha ranged from .87 to .90 for the four groups.

Photographic Figure Rating Scale (PFRS) (Swami, Salem, Furnham, & Tovée, 2008b). To measure actual-ideal body weight discrepancy, we used the PFRS, which consists of 10 photographic and standardized images of real women in front-view. The women depicted in the PFRS represent the full range of established BMI categories, from emaciated to obese. Female participants are asked to select the figure that most closely matched their own body and the figure that they would most like to possess. Responses were made on a 10-point scale, with 1 representing the figure with the lowest BMI and 10 the figure with the highest BMI. A measure of actual-ideal weight discrepancy was computed as the difference between unsigned (absolute) current and ideal ratings. Previous work has shown that scores derived from the PFRS have good psychometric properties and test–retest reliability after a three-week interval (Swami et al., 2008b; Swami et al., in press).

Body Awareness Questionnaire (BAQ) (Shields, Mallory, & Simon, 1989). The BAQ is an 18-item scale that measures awareness of responses or changes in the body process, bodily reaction, the sleep-wake cycle, and onset of illness. Items are rated on a 7-point Likert-type scale (1 = *Not at all true about me*, 7 = *Very true about me*). An overall score is computed by taking the mean of all 18 items, with higher scores indicating greater body awareness. The scale has been shown to have good convergent and discriminant validity (Shields et al., 1989). In the present study, Cronbach's alphas ranged from .84 to .88 for the four groups.

Body Responsiveness Scale (BRS) (Daubenmier, 2005). To measure responsiveness to bodily sensations, we used the novel, 7-item scale developed by Daubenmier. Items are rated on a 7-point Likert-type scale (1 = *Not at all true about me*, 7 = *Very true about me*) and an overall score is computed by taking the mean of all 7 items (higher scores reflect greater body responsiveness). In her study, Daubenmier reported that the scale had adequate internal reliability (alpha = .83)

Table 1 Means and descriptive statistics for all variables included in the study as well as results of the analyses of variance (ANOVAs)

	Group								Dance type			Dance level			Interaction		
	BB		AB		BC		AC		*F*	*p*	Π_p^2	*F*	*p*	Π_p^2	*F*	*p*	Π_p^2
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*									
BAS	3.38	0.80	2.67	0.77	3.50	0.74	4.23	0.51	28.26	<.001	.27	0.01	.921	<.01	21.06	<.001	.21
AIBWD	1.11	0.83	2.63	0.76	1.13	0.55	1.72	0.83	7.18	.009	.08	41.09	<.001	.35	7.82	.007	.09
BAQ	3.27	1.43	4.32	0.87	3.60	1.51	5.10	0.73	4.41	.039	.05	23.57	<.001	.23	0.70	.406	<.01
BRS	3.29	1.56	4.42	0.99	3.71	1.38	4.90	0.86	2.83	.096	.04	18.30	<.001	.19	0.01	.905	<.01
DI	2.58	1.11	4.61	1.22	2.56	1.26	4.85	0.95	0.03	.857	<.01	82.72	<.001	.52	1.23	.272	.02
Months	2.89	1.28	77.42	46.53	2.70	1.43	76.27	50.10	0.01	.930	<.01	94.60	<.001	.55	<.01	.95	<.01
BMI	21.96	3.45	17.78	1.76	21.63	4.09	20.99	3.69	3.65	.060	.05	10.18	.002	.12	5.50	.022	.07
Age	25.22	6.17	25.26	5.96	25.17	6.47	27.00	6.42	0.37	.546	<.01	0.45	.505	<.01	0.41	.524	<.01

BB beginner ballet, *AB* advanced ballet, *BC* beginner contemporary, *AC* advanced contemporary, *BAS* BODY Appreciation Scale, *AIBWD* actual-ideal body weight discrepancy, *BAQ* body awareness questionnaire, *BRS* Body Responsiveness Scale, *DI* dancer identity, *Months* estimated number of months regularly dancing, *BMI* body mass index. Degrees of freedom for ANOVAs = 1.78

and convergent validity. In the present work, alpha coefficients for this scale ranged from .80 to .88 for the four groups.

Dancer Identity. To measure dancer identity, we used the 10-item Athletic Identity Measurement Scale (Brewer, VanRaalte, & Linder, 1993), which was adapted by Langdon and Petracca (2010) to have a 7-point (rather than 5-point) Likert-type response and to refer to "dancer" or "dancers" rather than "athletics" or "athlete." An overall score is computed by taking the mean of all 10 items, higher scores indicate that dance is a more salient part of an individual's identity. Langdon and Petracca (2010) reported that their adapted scale had good internal consistency (alpha = .91), which the present study replicated with alpha coefficients across the four groups ranging from .88 to .92.

Body Mass Index (BMI). Body mass (kg) and height (cm) were directly measured to the nearest 0.5 kg and 0.5 cm, without shoes and in dancing attire (typically a leotard), using a standard tape measure and weighing scale. BMI was then calculated as kg/m^2.

Demographics. Participants provided their demographic details, consisting of age and ethnicity. Participants also estimated how many months they had regularly practiced in dancing on an open-ended scale.

Procedure

Ethical approval was obtained from the relevant university ethics committee. Two female research assistants trained in psychological methods directly recruited participants from the dance studio, inviting potential participants to complete a survey on dancing and well-being. We limited participation to women (due to the small number of male dancers and because previous work has typically focused on female dancers) and to those of adult age. A total of 88 individuals out of 118 who were invited agreed to take part in the study, representing a response rate of 74.6%. The main reasons for declining participation were lack of time. Six individuals later withdrew consent for the data to be used, citing privacy concerns, leaving a final sample of 82 participants. Participants who agreed to take part in the study completed a four-page paper-and-pencil questionnaire in which the above scales were counter-balanced. Once they had completed the questionnaire at a quiet location in the dance studio, it was returned to the research assistants in a sealed envelope. The research assistants then directly measured participants' height and weight in a private area in the dance studio. All participants provided informed consent, took part on a voluntary basis, were not remunerated for participation, and were fully debriefed by the two research assistants.

Analytic Strategy

For the purposes of the present study, we used a 2 (dance type: ballet vs. contemporary) × 2 (dance level: beginner vs. advanced) between-subjects design. We initially sought to establish whether there were any significant between-group differences in participant age, so as to control for this variable should there be significant differences. We then conducted a series of 2 × 2 analyses of variance

(ANOVAs) with all variables included in the design as dependent variables (BMI, number of months regularly dancing, body appreciation, actual-ideal body weight discrepancy, body awareness, body responsiveness, dancer identity). Where there were significant interactions between dance type and level, these were given priority over main effects and were further analysed using tests of simple effects.

We also sought to examine the relationships between body image and the other included variables in our study. However, the small inter-group sample sizes prevented us from computing separate analyses for each of the four groups computed. We, therefore, combined the data from all four groups and computed multiple hierarchical regressions (enter method) with body appreciation and actual-ideal body weight discrepancy, respectively, as the dependent variables. For these analyses, dance level and type were entered in a first block and all remaining variables (body awareness, body responsiveness, dancer identity, months as a regular dancer, and participant BMI) were entered in a second block.

Results

Between-Group Differences

Descriptive statistics (means and standard deviations) for all variables included in the study as well as the results of all ANOVAs are reported in Table 1. Initial analysis showed that there were no significant between-group differences in participant age, so this variable was left unconstrained for all further analyzed. In addition, and as might be expected, results of the ANOVA with number of months regularly dancing showed that advanced dancers had been training for a significantly longer period of time than beginners, but that there was no effect of dance type and no significant interaction.

The results of the ANOVA with participant BMI as the dependent variable showed that there was a significant main effect of dance level (with beginners having a higher BMI than advanced dancers) as well as a significant dance type $\times$ level interaction. Tests of simple effects showed that, among ballet dancers, beginners had a significantly higher BMI than advanced dancers, $t(35) = 4.70$, $p < .001$, $d = 1.59$. On the other hand, there was no significant difference in BMI between beginner and advanced contemporary dancers, $t(43) = 0.55$, $p = .583$, $d = 0.17$.

When body appreciation was entered into the ANOVA as a dependent variable, the results showed that there was a significant main effect of dance type (with contemporary dancers having higher body appreciation than ballet dancers) as well as a significant interaction. Tests of simple effects showed that beginner ballet dancers had significantly higher body appreciation than advanced ballet dancers, $t(35) = 2.73$, $p = .010$, $d = 0.92$, whereas beginner contemporary dancers had significantly lower body appreciation than their advanced counterparts, $t(43) = 3.88$, $p < .001$, $d = 1.18$.

For actual-ideal body weight discrepancy, the ANOVA results showed that there were significant main effects of dance type (with ballet dancers having higher body

weight discrepancy than contemporary dancers) and dance level (advanced dancers had higher body weight discrepancy than beginners). However, there was also a significant dance type × level interaction. Among both ballet, $t(35) = 5.80$, $p < .001$, $d = 1.96$, and contemporary dancers, $t(43) = 2.87$, $p = .006$, $d = 0.88$, advanced dancers had significantly greater body weight discrepancy than beginners, although the difference was larger among ballet dancers.

In terms of body awareness, results showed that there was no significant dance type × level interaction, although contemporary dancers reported significantly higher awareness than ballet dancers, as did advanced dancers compared with beginners. For body responsiveness, there was only a significant main effect of dance level, with advanced dancers reporting significantly higher responsiveness than beginners. Results of the ANOVA with dancer identity as the dependent variable showed the same pattern of results, with advanced dancers reporting stronger dancer identity than beginner dancers.

Multiple Regressions

The results of the multiple hierarchical regression for body appreciation showed that the final regression model was significant, $F(2, 81) = 11.33$, $p < .001$, Adj. $R^2 = .21$. Of the variables entered into the model, however, the only significant predictors were dance type ($\beta = .43$, $t = 3.97$, $p < .001$) and BMI ($\beta = -.20$, $t = -2.22$, $p = .040$). That is, involvement with contemporary dancing (as opposed to ballet dancing) and a lower BMI were significantly associated with higher body appreciation. The same analysis with actual-ideal body weight discrepancy also showed that the final regression model was significant, $F(2, 81) = 21.23$, $p < .001$, Adj. $R^2 = .31$, with the only significant predictors being dance level ($\beta = .55$, $t = 2.76$, $p = .007$) and dance type ($\beta = -.21$, $t = -2.12$, $p = .037$). That is, advanced dancers (as opposed to beginners) and ballet dancers (as opposed to contemporary dancers) had higher actual-ideal body weight discrepancy.

Discussion

Previous studies examining the association between dance participation and body image have returned mixed results, with some studies supporting a negative association (Abraham, 1996a, 1996b; Ackard et al., 2004) and others supporting a positive association (Langdon & Petracca, 2010; Swami & Tovée 2009). It has been suggested that these mixed results may be a function of the differential effects of dance type and level on body image (Langdon & Petracca, 2010; Swami & Tovée 2009). Although the results of the present study are broadly consistent with such suggestions, our work also suggests that the picture may be complicated by the manner in which body image in operationalized.

Thus, we found that dance type and level both had an impact on body image when the latter was measured in terms of body appreciation. Specifically, our results showed that advanced ballet dancers had significantly lower body appreciation than beginner ballet dancers, whereas advanced contemporary dancers had significantly

higher body appreciation than their beginner counterparts. On the other hand, advanced ballet dancers and contemporary dancers both had higher levels of actual-ideal body weight discrepancy than their beginner counterparts (although the difference was smaller between advanced and beginner contemporary dancers than it was between advanced and beginner ballet dancers).

The first set of findings, namely in relation to body appreciation, are explicable in terms of the available literature. It has been suggested that the pressure experienced by ballet dancers to attain excessively slender physiques results in greater drive for thinness, higher self-objectification, and consequently more negative body image (Anshel, 2004; Ravaldi et al., 2006; Ringham et al., 2006). On the other hand, contemporary dance affords individuals greater opportunities to explore their emotions (particularly the mind–body connection) and bodily experiences (Goldstein, 2003). In addition, and as has been suggested in relation to street dancers (Swami & Tovée, 2009), contemporary dance may also allow individuals to more fully appreciate their bodies as functional in a kinesthetic manner, which is consistent with our finding that contemporary dancers reported significantly higher body awareness than ballet dancers. In turn, this may result in contemporary dancers developing more favorable opinions of their bodies, accepting their bodies in spite of imperfections, and being more respectful and protective of their bodies.

On the other hand, compared with beginners, advanced dancers (regardless of whether they are involved in ballet or contemporary dance) may in fact experience pressure to conform to an excessively thin ideal, which manifests as higher scores on the limited weight discrepancy measure that we used. That is to say, advanced dancers appear to want to attain an excessively thin ideal even if (as in the case of contemporary dancers) they are more respectful of their bodies. Two further points need to be made here: First, the fact that advanced ballet dancers wanted to be thinner is notable because this group also evidenced the lowest actual BMIs; that is, despite already being underweight (as a group), advanced ballet dancers appeared to want to be even thinner. Second, our work contributes to a growing body of evidence suggesting that positive and negative body image may not simply be polar opposites of each other (Avalos et al., 2005; Langdon & Petracca, 2010; Swami et al., 2008), emphasising the need to operationalize body image in different ways when examining the impact of dance participation.

A number of other findings from our study are also worth highlighting. First, we found that advanced dancers reported significantly higher body awareness, body responsiveness, and dancer identity compared with beginners. The latter result is perhaps unsurprising and is consistent with work showing that greater participation in sport is associated with strength of athletic identity (Daniels, Sincharoen, & Leaper, 2005). In a similar vein, the finding that advanced dancers had significantly higher body awareness and responsiveness is consistent with the notion that dance participation focuses the attention of individuals on their responses of changes in their bodily processes. It is also consistent with work showing that yoga participation is associated with increased body awareness and responsiveness (Daubenmier, 2005).

On the other hand, our multiple regression results showed that these variables were not significantly associated with body image in our total sample once the

effects of dance level and type had been accounted for. This stands in contrast to the results of Langdon and Petracca (2010), who found that body appreciation was significantly and negatively correlated with both dancer identity and a measure of dancer body efficacy and acceptance ($rs = -.28$). Our results are not directly comparable given differences in sampling and measures, but it does suggest that more work needs to be done on the associations between these factors and body image. At the very least, variables such as body awareness, body responsiveness, and dancer identity may only be weakly associated with body image among dancers.

The main limitation of the present work concerns the relatively small sample size, which limited our ability to conduct intra-group analyses (although the difficulties of recruiting elite samples should be borne in mind). By comparing ballet and contemporary dancers, however, we were able to avoid the limitations of comparing dancers with non-dancers, who may not provide an appropriate comparison group (Swami & Tovée, 2009). Other sampling limitations include the fact that our participants were recruited from a single dance studio in London, limiting our ability to generalize our findings to other dancers in Britain, let alone to the wider population or dancers in other countries.

In a similar vein, we cannot be certain that participants took part in multiple dance classes of different styles: although all participants were primarily engaged in only one dance style, there may have been some fluidity in cross-style participation, particularly at beginner levels. Finally, the present study included only a limited range of variables and future work would do well to extend our findings by including other putative factors that may be associated with body image among dancers, such as body esteem, internalization of the thin ideal, and number of hours spent dancing per week. Further work could also include a wider range of dance types and levels, as well as a broader focus on the dance environment (e.g., perceived teacher pressure), which may help to illuminate some of the findings of the present work.

The afore-mentioned limitations notwithstanding, our results may have important implications for health care practitioners, particularly body image practitioners and dance/movement therapists, for whom a central goal is the promotion of positive changes in body image (Pylvänäinen, 2003). In the first instance, body image practitioners will need to be aware of both the positive and negative impact of dance participation among the general population. That is, although dance participation shows promise in promoting positive body image among select populations (Burgess et al., 2006; Erfer & Ziv, 2006; Sandel et al., 2005), practitioners should be aware of the differential impact of both dance type and level.

For dance/movement therapists, on the other hand, the present results suggest that careful attention should be paid to different aspects of body image. For example, Pylvänäinen (2003) proposed a tripartite model of body image specific to dance/movement therapy, which encompasses image-properties (an individual's perception of the physical appearance of the body, heavily influenced by cultural and societal ideals), the body-self (the core self that interacts and experiences), and the body-memory (a reference for evaluating current sensations). Based on the present results, it might be argued that holistic approaches that allow participants to combat negative societal pressures and nurture healthy image-properties, while exploring

their emotional, social, and cognitive selves, will show the most promise for promoting positive body image. More broadly, there is a need for further studies that systematically and comprehensively examine the impact of dance participation on body image.

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