

## The relationship between the dancers’ and the audience’s aesthetic experience

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The study investigates the aesthetic experience of a dance performance from the perspective of both the dancers and the audience. The audience observed three short custom-made choreographies that were presented live and then watched the recorded versions, and judged them on an instrument designed to measure the aesthetic experience of dance. The choreographies were performed by six dancers. The dancers judged their own performances as well as the recorded versions of the performances. The analyses revealed that the dancers’ aesthetic experience of a dance performance is similar when they perform choreography and watch it on video. On the other hand, the audience showed a higher sensitivity to live performance: they judged the live performance higher on all dimensions of aesthetic experience compared to their video presentation.

*Keywords:* aesthetic experience, choreographies, dancer, audience, proprioception

### Highlights:

- Aesthetic experience of dancers is similar when they perform or watch choreographies
- Audiences’ aesthetic experience are judged higher when dance choreographies are seen live
- Choreographies are judged differently between dancers and audience
- Specificity of choreography and of a dancers’ expression influence on audiences’ judgements

Dance, despite its elusive and impermanent character, can evoke resonating aesthetic experiences of emotional, kinesthetic and visual forms both in dancers and in their audience (Reason & Reynolds, 2010). The present study is focused on the differences in the structure of aesthetic experience based on the subjective reports of dancers and their audience.

Establishing the difference between the aesthetic experience and aesthetic preferences, this paper defines the aesthetic experience as a special state of mind, characterized by focusing on a particular object which strongly engages and fascinates the subject while all other events in its environment are suppressed in its consciousness (Beardsley, 1982; Csikszentmihalyi, 1990; Ognjenović, 2003; Marković, 2007, 2010, 2012; Vukadinović & Marković, 2012).

Dance is defined as an artistic form which implies “a specific type of complex and highly articulated human activity” (Layson, 1994, p. 5), which “generally involves body movements” (Christensen & Calvo-Merino, 2013, p. 76). These movements are usually rhythmic and performed to some music, i.e., performed as a system of organized and formalized movements used as a form of expression. They represent carriers of specific meaning consciously expressed and purposefully transferred for an audience by the artist (cf. Christensen & Calvo-Merino, 2013; Layson, 1994; McFee, 1992; Stevens, Glass, Scuhubert, Chen, & Winskel, 2007).

There are two distinctive features of dance. First, it is determined by space and time and defined by complex spatial and temporal synchronization (Brown, Martinez, & Parsons, 2006; Hutchinson Guest, 1973; Laban, 1960; Layson, 1994; Luck & Sloboda, 2009; McFee, 1992; Repp & Penel, 2004). The second characteristic is that dancers do not create within the same medium through which the audience perceives their artwork. The body of the dancer is used as an instrument in a dance performance, so the dancer is simultaneously an “artist” and a “work of art”. In other words, the dancer is the subject which perceives the aesthetic experience and the object of the same aesthetic experience (Arnheim, 1966).

### **Dancers' and audience's aesthetic experience of dance**

The dancer's aesthetic experience is related to the role of proprioception, or to the role of senses which inform us about ourselves – i.e., to kinesthesia and vestibular sensitivity (Glomer & Dupui, 2000; Hagendoorn, 2003; Hugel, Cadopi, Kohler, & Perrin, 1999; Jola, Davis, & Haggard, 2011; Leanderson, Eriksson, Nilsson, & Wykman, 1996; Montero, 2006; Moore, 2007; Proske, 2006). Dancers evaluate the aesthetic quality of their movements mostly by means of the sensation they have in their muscles, tendons and joints while dancing, as well as through their balance and orientation sensitivity (Glomer & Dupui, 2000; Hagendoorn, 2003; Montero, 2006). The audience's aesthetic experience of dance has been studied from three different perspectives. First, the perspective of neuroaesthetic studies suggest that the audience's aesthetic experience of a dance performance can be associated with the activity of the “mirror neuron” mechanism (Bläsing et al., 2012, Calvo-Merino, Glaser, Grezes, Passingham, & Haggard, 2005; Calvo-Merino, Jola, Glaser, & Haggard, 2008; Calvo-Merino, Urgesi, Orgs, Aglioti, & Haggard, 2010; Christensen & Calvo-Merino, 2013; Cross, Hamilton, & Grafton, 2006; Cross, Kirsch, Ticini, &

Schütz-Bosbach, 2011). These mechanisms bring together information related to “the observed action through an internal motor resonance” (Christensen & Calvo-Merino, 2013, p.77).

The second perspective suggests that the audience’s aesthetic experience of a dance performance can be associated with the numerous psychological factors, such as visual elements related to the scenography and spatial dynamics, physical characteristics of dancers, and their movement, dancers’ interpretation of choreography, as well as the audiences’ previous experience, intellectual and emotional stimulation and recognition (Glass, 2005; Grove, Stevens, & McKechnie, 2005; Stevens et al., 2007). Dance usually conveys information about emotional states and the dancer’s physical condition (Brown et al., 2005; Chicchella & Bianchini 2004; Dittrich, Troscianko, Lea, & Morgan, 1996; Sawada, Suda, & Ishii, 2003).

The third perspective focuses on the audience’s subjective experience of the internal qualities of movement (Hagendoorn, 2005). This perspective takes into account the whole dance piece (i.e. it rejects the reductionist approach) and investigates the experience of *live* dance performances (i.e. it avoids to use recorded performances as stimuli) (Jola, Ehrenberg, & Reynolds, 2011).

The instrument for measuring the aesthetic experience of a dance performance used in the present study was constructed in a previous factor analysis study (Vukadinović & Marković, 2012). In this study, we investigated the structure of both dancers’ and spectators’ aesthetic experience: participants judged the performances of various dance forms (classical ballet, contemporary dance, flamenco and folklore) using the semantic differential scales. Three dimensions common for both the dancers’ and audiences’ aesthetic experience of dance performances were extracted: *Dynamism* (scales: expressive, powerful, strong, exciting), *Exceptionality* (scales: eternal, ineffable, unique, exceptional), and *Affective Evaluation* (scales: subtle, elegant, seductive, sensitive). We used these three dimensions (i.e., 12 scales) as an instrument for measuring the aesthetic experience of a dance performance.

The second important element when studying the aesthetic experience of a dance performance is related to dance stimuli. Some previous studies in the field of neuroaesthetics investigated the experience of a dance performance standardly using relatively short fragments of longer movement sequences (Christensen & Calvo-Merino, 2013). However, short dance sequences are not good stimuli for the investigation of complex aesthetic experience, because the impression of the whole choreography could be seriously deformed. On the other hand, studying the aesthetic experience of the whole dance performance complicates the stimulus definition (Glass, 2005; Grove et al., 2005; Vukadinović & Marković, 2012). Namely, aesthetic experience could be determined by numerous stimulus factors, such as visual elements, the individual characteristics of each dancer’s movement, choreography, interpretation, emotional recognition, novelty, spatial/dynamic, intellectual and emotional stimulation, previous experience, as well as the medium of presentation.

Although the performance of a choreography is almost always closely connected to music (Carrol & Moore, 2012), it has been noted that music can be a confounding factor when studying the aesthetic experience of dance, specially in the sense of how the cognitive system combines music and dance into an unique aesthetic experience (Christensen & Calvo-Merino, 2013). Having in mind this problem, in the present study, dance and music were given in their original merged form. Namely, we intended to investigate the aesthetic experience of a dance performance as a complex and usually multimedial artistry which includes both vision and sound (i.e. music).

The main purpose of the present study is to specify the differences in the dancers' aesthetic experience concerning two conditions – performing (visual, kinesthetic and vestibular information are relevant) and watching (only visual information is relevant). In addition, this study investigates the differences in the audience's aesthetic experience when a dance performance was being watched live and on video. We expected that the aesthetic experience of the dancers and of the audience would be influenced by the medium through which choreographies are perceived. The dancers' aesthetic experience may be more intense and more memorable while performing their dance when compared to the experience of watching the video of it. As for the audience, we expected that their aesthetic experience would be more intense when watching a performance live compared to watching it on video.

## General method

### Participants

Dancers: six female dancers, aged 16, participated in the research (mean age = 16.03,  $SD = .186$ ). They were students of the same grade at the Department of Contemporary Dance at the Ballet School in Novi Sad. The dancers had at least two years of daily dance training, both in classical ballet with a minimum of 7.5 hours a week, and in contemporary dance with a minimum of 20 hours a week.

Audience: 30 students from the Faculty of Philosophy in Novi Sad participated in this research. There were students 8 male and 22 female students (mean age = 22.3 years;  $SD = .170$ ). The participants did not have any formal experience neither in dance training, nor in any other form of professional physical training. The students participated voluntarily and they did not receive any course credit or monetary compensation for their participation.

In this study sexual orientation of participants, as well as attractiveness of the dancers were not controlled. Written informed consent was not asked neither from the students nor from the dancers.

### Instrument

The instrument for measuring the aesthetic experience of a dance performance was constructed in our previous study (Vukadinović & Marković, 2012). The instrument consists of 12 seven-point rating scales. Each of the 3 dimensions was measured with 4 scales: *Dynamism* (expressive, powerful, strong, and exciting), *Exceptionality* (eternal, unspeakable,

unique, and exceptional) and *Evaluation* (delicately, elegant, seductive, emotionally). The instructions for completing the scales were: "Please mark the number according to your impression: the higher the impression, the higher the number (1 being the minimum, 7 being the maximum)". Scales and instructions were presented in the Serbian language.

## Stimuli

The stimuli consisted of three contemporary dance choreographies, performed by six dancers. For the purpose of this study, choreographies were made by Aleksandra Ketig, a choreographer and the headmistress of the Department of Contemporary Dance at the Ballet School in Novi Sad. Six dancers, aged 16, finished a primary ballet school and are currently attending the second year of studies at the Department of Contemporary Dance at the Ballet School in Novi Sad.

The first choreography was made to the music of "Morning Passages" by Philip Glass; the second choreography was made to the music of "Don't You Want Me" by Maxence Cyrin and, finally, the third was made by Mina Cvejić as her musical improvisation on the theme from "The Poet Acts" by Philip Glass. All choreographies were around two minutes long. They were all presented in the ceremonial Hall of the Ballet School in Novi Sad, with piano accompaniment by Mina Cvejić.

In the study, the same stimulus was presented in two different manners. First, the choreographies were presented "live", so that each of the six dancers performed all three choreographies. Their performances were filmed, and then these video records were presented to both the dancers and the audience.

## Experiment 1

This experiment investigated the dancers' aesthetic experience when performing different types of custom-made contemporary dance choreographies. Furthermore, the aim was to specify the differences in the aesthetic experience when dancers perform the choreography live and when they watch the recording of their own performance.

## Procedure

Having performed each of the 3 choreographies live, each of the 6 dancers judged the aesthetic experience of their own dance. The dancers were asked to judge their experience of their own performance on 12 seven-point scales (see General method). They were asked to focus on the aesthetic experience of their own dance movements while making the judgement. One must have in mind that these judgements could not be based on immediate perception, but rather on memory (the judgments were made after performance) and expertise (dancers could evaluate the professional quality of their performance). They were given approximately ten minutes to make their ratings. Two weeks later, the dancers watched an audio-visual recording of their performance and reassessed the experience of the performed dance choreographies in the same way as before.

The experiment was based on a two-factor design: 3 x 2 (Choreography [3 choreographies] x Medium [live, video]). The dependent variables included the ratings on the dimensions of the aesthetic experience: *Dynamism*, *Exceptionality* and *Affective Evaluation*.

## Results

Means and standard deviations of ratings are presented in Appendix A – Table A1.

The multivariate analysis of variance have shown no significant main effect of Medium, Choreography and their interaction on the dancers' ratings of aesthetic experience of dance choreographies. The results of univariate tests for dancers' ratings on single dimensions of aesthetic experience are presented in further text.

**Dynamism.** The analysis of variance revealed no main effect of Choreography and Medium. Interaction Choreography/Medium was not significant as well.

**Exceptionality.** The analysis of variance revealed no significant main effect of Choreography and Medium, but the interaction Medium/Choreography was significant,  $F(2,10) = 5.198, p < .05, \eta_p^2 = .510$ . Post-hoc tests (Bonferroni correction) show that the ratings in the first and second choreography are significantly higher ( $p < .05$ ), when both choreographies are performed live. However, in the ratings of the third choreography there are no statistically significant differences when the choreography is performed or watched filmed.

**Affective Evaluation.** The analysis of variance revealed no significant main effect of Medium and Choreography. Interaction Medium/Choreography was not significant as well.

## Discussion

The results of the first experiment have shown that the aesthetic experience of dancers is similar whether they perform or watch choreographies. The medium through which dancers perceive their experience of a dance performance does not produce significant difference in their aesthetic experience.

Some previous research of the role of visual and proprioceptive information indicated that dancers rely on their vision mostly for self-correction, by using a mirror, at the beginning of their practice and while learning a particular movement (Dearborn & Ross, 2006; Shabbott & Sainburg, 2010). At the same time, through dance training, dancers practice a particular movement until they gain proprioceptive integration of information and body representation of the movement (Jola et al., 2011). Using dancers language, gaining proprioceptive integration of information and body representation of the movement Hagendoorn (2003) is explained as gaining proprioception of a “good feeling” or “what *feels* right” (Montero, 2012) when performing the movement. Along with the other

authors (Hugel et al., 1999; Montero, 2006, 2012), Hagedoorn emphasizes that proprioception serves as the basis for the dancers' aesthetic experience of a performance in front of the audience and that apart from the exteroception (vision) of one's own movement proprioception plays the key role in the aesthetic evaluation.

The similarity between the aesthetic experience of dancers when they perform or watch choreographies may be explained on the basis of the above-mentioned studies. It is possible that because of the acquired proprioceptive integration of information and body representation of the movements of choreographies, the dancers' aesthetic experience does not differ when they perform and when they watch their performance. However, as acquiring proprioceptive integration of information and body representation of the movements is not empirically tested in this study, this explanation has to be considered in reserve.

Generally speaking, Barbara Montero (2006, p.235) points out the interdependence of proprioceptive and visual input arguing that proprioception is involved in the aesthetic judgements about movements in the way that it can allow a dancer to picture what the movement looks like, and the dancer may then judge that movement as beautiful, if seen. According to Montero (2006, p. 236) proprioception and vision work together in interdependence. In other words, while a dancers' proprioceptive sensibility is informed by its own visual aesthetic sensibility, dancers' visual aesthetic sensibility can also be informed by its own proprioceptive aesthetic sensibility.

When experienced through different media, different dance choreographies have different ratings on the *Exceptionality* dimension. For dancers, some of the choreographies are more unique and exceptional when performed than when they are watched, while some others don't differ in uniqueness and exceptionality when performed or watched on video. It is possible that specific features of a choreography related to its technical and formal characteristics have a significant role in the dancers' aesthetic experience of a dance performance. Having this in mind, this result could also be associated with the technical and formal characteristics of choreography as well as with the experience of a certain dancer in mastering a certain performed choreography.

Given the fact that the dancers in this experiment performed custom-made contemporary dance choreographies in front of the audience, the next experiment was conducted in order to examine the audience's aesthetic experience of a dance performance.

## Experiment 2

Experiment 2 had three aims. The first aim was to investigate the nature of the audiences' aesthetic experience of dance performances while they were watching different types of custom-made contemporary dance choreographies. The second aim was to specify whether the experience of the audience is influenced by the characteristics of the dancers who perform the choreographies. Finally, the

third aim was to investigate whether there are any differences in the experience of a dance performance when the audience watches the choreography live or filmed.

### Procedure

The experiment had two stages. In the first stage, 30 participants – the audience – rated their aesthetic experience of a dance performance. The same custom-made contemporary dance choreographies used in the previous experiment were also used in the present experiment.

The audience were asked to rate their experience of the choreography on 12 seven-point scales (the same set of scales was used in Experiment 1 as well). The participants were told to focus their judgments on dance movements, and to try to disregard idiosyncratic features of the dancers. They were given approximately ten minutes to do so.

The experiment was based on a three-factor design: 3 x 6 x 2 (Choreography [3 choreographies] Dancer [6 dancers] x Medium [live, video]). The dependent variables included the ratings on the dimensions of the aesthetic experience of a dance performance: *Dynamism*, *Exceptionality* and *Affective Evaluation*.

### Results

Means and standard deviations of ratings are presented in Appendix B – Table B1. The results of the multivariate analysis of variance have shown a significant main effect of Medium ( $F(3, 27) = 2.703a$ ;  $p < .05$ ,  $\eta_p^2 = .231$ ), Choreography ( $F(6, 114) = 14.025$ ;  $p < .001$ ,  $\eta_p^2 = .425$ ) and Dancer ( $F(15, 435) = 10.691$ ;  $p < .001$ ,  $\eta_p^2 = .269$ ) on the audiences' ratings of aesthetic experience of dance choreographies. Interaction Medium x Dancer was significant ( $F(15, 435) = 3.125$ ;  $p < .01$ ,  $\eta_p^2 = .097$ ). Interaction Choreography x Dancer was significant as well ( $F(30, 870) = 4.934$ ;  $p < .001$ ,  $\eta_p^2 = .145$ ).

The univariate analyses of variance of audience's ratings on single dimensions of aesthetic experience are shown in Table 1, Table 2 and Table 3. In the following sections, the results of these analyses are elaborated in more details.

**Dynamism.** The analysis of variance revealed significant main effects of Medium, Choreography and Dancers. The interaction Choreography/Dancer was significant as well (see Table 1).

Table 1  
*The results of the analysis of variance for the Dynamism dimension in the audience*

Audience: <i>Dynamism</i>	<i>df</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
Medium	1, 29	5.60	.05	.162
Choreography	2, 58	82.58	.01	.740
Dancer	5,145	51.24	.01	.639
Medium x Choreography	2, 58	2.60	<i>n.s.</i>	.082
Medium x Dancer	5,145	1.10	<i>n.s.</i>	.037
Choreography x Dancer	10,290	14.35	.01	.331
Medium x Choreography x Dancer	10,290	2.36	<i>n.s.</i>	.045



The results indicate that live performance increases the experience of *Dynamism*: when watched live, choreographies are judged as stronger, more powerful, more expressive and more exciting than when watched on video. The other two main effects and interaction reflect the difference between particular choreographies and particular dancers in *Dynamism*.

**Exceptionality.** The analysis of variance revealed that all of the main effects and interactions were significant, except the interaction Medium/Choreography/Dancer (see Table 2).

Table 2  
The results of the analysis of variance on the *Exceptionality* dimension in the audience

Audience: <i>Exceptionality</i>	<i>df</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
Medium	1, 29	5. 23	.05	.153
Choreography	2, 58	17. 64	.01	.378
Dancer	5, 145	26.91	.01	.481
Medium x Choreography	2, 58	3.43	.05	.106
Medium x Dancer	5, 145	2.27	.05	.073
Choreography x Dancer	10,290	9.76	.01	.252
Medium x Choreography x Dancer	10,290	0.66	<i>n.s.</i>	.022

The results indicate that the audience's ratings on the *Exceptionality* dimension are significantly higher when choreographies are seen live than on video. The other main effects and interactions reflect the differences between particular choreographies and dancers.

The interaction Choreography x Medium suggests that dance choreographies are not different in the same manner in terms of the *Exceptionality* dimension when they are seen live and filmed. Post-hoc tests (Bonferroni correction) shows that the *Exceptionality* dimension of the first choreography is rated with a significantly higher value when seen live ( $p < .05$ ). The other two choreographies are not significantly different in terms of the ratings of their *Exceptionality* dimension when seen live or filmed.

The interaction Medium x Dancer shows that the audience rate the dancers' performances differently within the *Exceptionality* dimension when they are seen live and filmed. The post-hoc tests (Bonferroni correction) show there are statistically significant differences (in the ratings on the *Exceptionality* dimension of all the dancers, except for the first, third, fifth and sixth, when their performance is seen live and filmed (all  $p < .05$ ). For the dancers with statistically significant differences, the audience's ratings on the *Exceptionality* dimension are higher when their performance is seen live than when seen filmed (all  $p < .05$ ).

**Affective Evaluation.** The analysis of variance revealed all main effects and interactions Medium/Dancer and Choreography/Dancer significant (see Table 3).

Table 3

*The results of the analysis of variance on the Affective Evaluation dimension in the audience*

Audience: <i>Affective Evaluation</i>	<i>df</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
Medium	1, 29	7.42	.05	.204
Choreography	2, 58	7.38	.05	.203
Dancer	5, 145	37.30	.01	.563
Medium x Choreography	2, 58	0.40	<i>n.s.</i>	.014
Medium x Dancer	5, 145	3.44	.05	.106
Choreography x Dancer	10,290	7.20	.01	.199
Medium x Choreography x Dancer	10,290	0.89	<i>n.s.</i>	.030

The results indicate that the audience's ratings on the *Affective Evaluation* dimension are significantly higher when choreographies are seen live than on video. The other main effects and interactions reflect the differences between particular choreographies and dancers.

The interaction Medium x Dancer shows that the audience's ratings on the *Affective Evaluation* dimension are different when a dance performance is seen live and filmed. The results of the post-hoc tests (Bonferroni correction) show that the ratings on the *Affective Evaluation* dimension of the second and fourth dancer are significantly higher when their choreographies are seen performed live than when watched filmed (all  $p < .05$ ). The first, third, fifth and sixth dancer do not show any statistically significant differences in the ratings on the *Affective Evaluation* dimension when seen in performance live or filmed (all  $p < .05$ ).

In the present study we were theoretically focusing on the effect of Medium (live/video), whereas we used Choreography and Dancer primarily as experimental factors that should increase the variability of stimuli (different choreographies, different dancers). Having this in mind, we will not discuss the results of post hoc test indicating, for instance, that the first dancer is rated higher or lower than the second dancer on a particular dimension.

## Discussion

The results show that all dimensions of the audience's aesthetic experience of a dance performance are judged significantly higher when dance choreographies are seen live. These findings emphasize the importance of direct experience in the audiences' ratings of a dance performance. Moreover, the results showed that the audience's aesthetic experience of a dance performance is influenced by the specificity of a particular choreography and the specificity of a dancers' particular expression. These findings are generally in line with many previous studies (Butterworth & Wildschut, 2009; Glass, 2005; Stevens, Malloch, & McKechnie, 2001; Stevens et al., 2009; Vukadinović, 2008). In addition, we re-evaluated our previous findings that medium (i.e., whether a dance performance is seen live or on video) affects the audience's aesthetic experience (Vukadinović, 2008).

The future studies should specify the relationship between the objective characteristics of a choreography and the audiences' aesthetic experience (e.g.

specific atmosphere, lightening, clothing, objects on stage and their arrangement, tempo, complexity, type of movements, and so on; cf. Butterworth & Wildschut, 2009; Christensen & Jola, 2015; Reason, 2006).

Concerning the specific characteristics of the dancers, there are few important elements which influence audiences' aesthetic experience that need to be discussed. It seems that some dancers have a natural ability to draw people into a specific atmosphere of dance. That special element, as suggested in a previous study, would be the staging of the performer (Jaeger, 2009). According to Jaeger (2009) observable, peak moments of the stage presence of a dancer can be explained as a moment when a professional dancer comes closest to a perfect articulation of their own style of bodily movement which makes full use of the dancer's skills. Close to this important element of the audiences' aesthetic experience of dancers would be the attractiveness of a dancer's face (Fayn & Silvia, 2015). Along with the staging of the performer, the attractiveness of the dancer's face, the influence on variables such as synchronicity in body parts and synchronicity of the movement (Christensen & Jola, 2015), as well as the mastery of movement and dancers' technical skills (Adshead, Briginshaw, Hodgens, & Huxley, 1988; Glass, 2005; Stevens et al., 2009) should be empirically tested in future research in order to address the questions of how objective characteristics of the dancers affect the aesthetic experience of the audience.

Following the idea suggested in a previous study (Christensen & Jola, 2015) further studies have to investigate the spectators' aesthetic experience in the context of the holistic impression of all elements of given performance.

### **General discussion**

The purpose of this study was to investigate the aesthetic experience of a dance performance from the perspective of dancers and the audience in parallel. The results showed that in general, the aesthetic experience of dance performances is similar for dancers and their audience but it can significantly vary depending on medium, particular choreography or the dancer.

The results indicated that dancers' aesthetic experience is similar when they perform or watch their own performance. This finding could possibly be explained by the dancers' expertise which is acquired through training sessions over the years. As previous research (Batson, 2008) showed, professional dance training strengthens the accuracy of proprioceptive input and shifts the tendency to depend on vision for motor control to a more internally-based system of reference. According to Montero (2012), dance training improves motor perception and enables dancers to identify certain aesthetic properties better. Similarly, other research has shown that dancers' training experience influences the aesthetic experience of their own performance (Glass, 2005; Golomer & Dupui, 2000; Hugel et al. 1999; Stevens et al., 2007; Thomas, 1980).

On the other hand, the audience has a more intense aesthetic experience when watching dancers' performance live, than on video. Previous studies specified many elements of live performance (e.g. lighting, scenography,

space, personal dancer-audience communication, and so on) which are lost when the dance is watched on film (McConachie, 2008; Reason, 2006; Reason & Reynolds, 2010). In other words, live dance performance induces stronger emotional experience, attracts more attention and induces higher motivation for watching the performance (Reason & Reynolds, 2010).

Regarding the choreography, results showed that specific features of the choreography influenced the aesthetic experience of the dance performances. However, while the effect of the choreography was identified in all three dimensions of the audience's experience, the effect of choreography was not found in dancers' ratings. In other words, dancers did not differ in ratings of aesthetic experience of dance choreographies. All dimensions of aesthetic experience, *Dynamism*, *Exceptionality* and *Affective Evaluation* were judged relatively similarly which means that all choreographies were similarly pleasant, exceptional and dynamic. On the other hand, aesthetic experience of the audience depends on particular choreographies: unlike the dancers, the audience does not judge all choreographies equally pleasant, exceptional and dynamic.

In conclusion, we can say that the medium and expertise could be the factors underlying specific differences between dancers' and audience's aesthetic experience. Regarding the medium, the dancers' aesthetic experience of a dance performance is similar when they perform choreography or watch it on video. On the other hand, the audience is more sensitive to live performance: they judge the live performance higher on all dimensions of aesthetic experience compared to their video presentation. In addition, dancers and audience differently evaluate choreographies: dancers found the choreographies not different, whereas the audience judged them differently on all dimensions of aesthetic experience. Also, these specific differences could be induced by differences in expertise. Dancer's expertise, acquired through professional dance training, improves motor perception and enables dancers to identify certain aesthetic properties better than the audience (Glass, 2005; Golomer & Dupui, 2000; Hugel et al., 1999; Montero, 2012; Stevens et al., 2007; Thomas, 1980).

Finally, further studies should specify the effect of many other psychological factors and objective constraints of aesthetic experience of dance. Some of these factors were generally investigated in the present study (e.g. medium and expertise), but additional studies should investigate their effect in a more precisely defined stimulus setting (i.e. choreography).

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Appendix A

Table A1  
*Results of Experiment 1 – Means (M) and Standard deviations (SD) of ratings on dimensions of the dancers' aesthetic experience*

Dimension of dancers' aesthetic experience				
<i>Dancers (N = 6)</i>				
	Live		Video	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Dynamism				
Choreography 1	4.95	1.42	4.91	1.28
2	5.29	1.01	4.25	0.65
3	4.58	1.36	4.95	1.04
Exceptionality				
Choreography 1	3.62	1.35	2.45	1.52
2	3.50	1.04	2.16	1.36
3	2.79	1.74	2.91	1.47
Affective Evaluation				
Choreography 1	5.50	0.88	5.54	0.76
2	4.70	0.71	4.25	1.21
3	4.62	1.09	4.75	1.39



## Appendix B

Table B1  
*Results of Experiment 2 – Means (M) and Standard deviations (SD) of ratings on dimensions of the audiences' aesthetic experience*

		live						video					
		Choreographies						Choreographies					
		1		2		3		1		2		3	
		M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
<i>Dimension of audience's aesthetic experience</i>													
<i>Spectators (N = 30).</i>													
<i>Dynamism</i>													
<i>Dancer</i>													
1		4.07	0.92	4.37	1.25	4.57	1.15	3.76	1.09	4.08	1.22	4.75	0.94
2		3.57	1.26	3.91	1.20	4.31	1.27	3.38	0.74	3.75	0.94	4.18	1.22
3		3.71	1.28	5.59	0.96	5.57	0.99	3.20	0.90	5.52	0.80	5.34	0.97
4		4.02	1.05	4.40	1.34	4.74	1.05	3.24	1.11	4.24	1.31	4.59	1.23
5		4.80	1.09	6.30	0.78	6.01	0.82	4.51	1.43	6.2	0.60	5.78	1.35
6		4.41	1.44	5.50	1.23	5.82	0.86	4.01	1.20	5.78	0.73	5.79	0.67
<i>Exceptionality</i>													
<i>Dancer</i>													
1		2.78	1.28	2.85	1.19	2.53	1.30	2.43	1.27	2.59	1.38	2.66	1.48
2		2.70	1.38	2.43	1.44	2.47	1.14	2.02	1.11	1.82	0.91	2.12	1.07
3		2.60	1.19	3.70	1.48	3.42	1.47	1.95	0.98	3.07	1.36	3.05	1.36
4		2.65	1.15	2.61	1.42	2.97	1.28	2.12	1.10	2.36	1.24	2.48	1.35
5		3.44	1.52	4.44	2.00	3.84	1.73	3.28	1.51	4.28	1.70	4.09	1.79
6		3.08	1.95	3.25	1.50	3.65	1.67	2.49	1.29	3.20	1.47	3.45	1.59
<i>Affective Evaluation</i>													
<i>Dancer</i>													
1		4.63	1.10	4.64	1.14	4.74	1.03	4.73	0.97	4.15	1.51	4.79	0.98
2		4.58	1.13	4.18	1.46	4.50	1.24	4.03	1.24	3.60	1.11	3.73	1.31
3		4.68	1.38	5.50	0.86	5.55	0.91	4.24	0.99	5.05	0.72	5.17	0.92
4		4.68	1.11	4.57	1.40	4.80	1.05	4.01	1.23	4.00	1.14	4.36	1.01
5		5.58	1.06	6.10	0.76	5.80	0.71	5.25	1.13	5.94	0.76	5.73	0.94
6		5.04	1.44	5.30	1.16	5.55	0.86	4.80	1.13	5.25	0.80	5.45	0.75