Dyadic partnership in the context of joint physical activity in subjects participating in dance

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Background: The research of interpersonal behaviour associated with physical activity is limited on relationship of coaches and athletes. Thus, studies focused on dyadic partnership in association with joint physical activities seem to be desirable. Objective: The aim of the study was to assess differences between men’s and women’s own and their partner’s interpersonal style and satisfaction with joint physical activities and to assess the relationship between an individual interpersonal style, complementarity or similarity of interpersonal behaviour in a dyadic partnership. Methods: The research sample consists of adult couples pursuing sport dance for at least three years (22 men, age 47.50 ± 8.24 years; 22 women, age 45.27 ± 8.35 years). The measurement was performed by means of the Interpersonal check list and Physical activity satisfaction questionnaire. Differences between men and women were assessed by a t-test for two independent samples. The relationship between interpersonal assessment and satisfaction with joint physical activity was assessed by Pearson’s correlation coefficient. In addition, the data were subjected to a cluster analysis with the aim to obtain findings which are not represented by an individual but by a pair. Results: Women who are more satisfied with themselves in the context of joint physical activity are assessed by their partners as dominant (r = .602, p = .003) and also perceive their partners as little dominant (r = -.561, p = .007). Conclusion: Men and women assess their own personality in a similar way in terms of dominance and submission. The main difference between men and women is in the assessment of each other. Women in a dominant position in a relationship are less satisfied with their partner in the area of joint physical activity compared with women in a submissive position.

Keywords: interpersonal relationships, dyadic relationships, complementarity, dance, Interpersonal check list

Introduction

The issue of dyadic symmetrical relationships during physical activity and their associations with competitive success, performance and satisfaction with physical activity is ranked among marginal psychological topics. Pursuing physical activity that is subject to cooperation with another person brings various experiences, which are specifically unique and rewarding. The need to cooperate with another person on a repeated basis in situations of increased load represents a challenge. However, the success of an individual in such a situation depends not only on the individual’s qualities, abilities and skills, but also on the behaviour and qualities of the partner.

Dyadic relationships

Dyadic members’ feelings, thoughts, and behaviours are interdependent. It has been shown that the compatibility of mutual interpersonal behaviour reinforces the degree of satisfaction of a mutual dyadic interaction and thus contributes to a feeling of satisfaction in the context of a joint activity. The quality of interpersonal relationships is important for optimal human functioning and psychological well-being. There are important links between the quality of interpersonal relationships and such variables as self-concept, motivation to persist in an activity for example sport and positive emotions (Jowett, Lafrenière, & Vallerand, 2012). Heterosexual relationships have a strong and positive effect on levels of adjustment and well-being (Fitzpatrick, 2009). The quality of dyadic interpersonal relationships is an important characteristic of changes in health behaviour. It is essential to understand how partners and relationships affect their individual intentions and behaviours (Howland et al., 2016). The quality of the dyadic
relationship combined with participation in leisure activities, therefore, can be conceptualized as a form of social support having a mediating and main effect on mental and physical health conditions (Fitzpatrick, 2009). The theoretical background of this research study stems from studies generally dealing with dyadic relationships in sport (Jowett & Clark-Carter, 2006; Jowett & Poczwardowski, 2007; LaVoi, 2007).

**Complementarity in the relationship**

Scientific literature focused on the relationships between partners mentions two main perspectives of compatibility in dyadic partnerships. The first approach emphasizes similarity (Jowett & Clark-Carter, 2006). The basic features of similarity, in which partners mostly match, include age, level of intelligence, education, basic value orientation and membership in a particular social class or professional group. Aube and Koestner (1995) claimed that attraction in a partnership is increased by similarity of attitudes. From a psychological perspective it is very uncomfortable to like someone that you strongly disagree with, especially when such disagreement relates to areas crucial for the relationship. The agreement in mutual attitudes showed to be a significant predictor of partnership satisfaction (Shanhong et al., 2008). Also, the choice of a partner is affected by the level of satisfaction with oneself (Sinner & Iaboni, 2009). Higher self-assessment increases the tendency to choose a partner rather according to mutual similarities. Low self-assessment decreases this tendency.

The second approach emphasizes complementarity as a dominant aspect in a harmonious partnership, which is primarily delivered in the context of mutual interpersonal behaviour and fulfilment of partnership roles. Dryer and Horowitz (1997) stated that interpersonal behaviour of an individual might be described from two perspectives. The first dimension represents the degree of affiliation, which ranges from friendliness to hostility; the second dimension is the degree of control, which again varies, this time from domination to submissiveness. Dryer and Horowitz (1997) found out that complementarity in interpersonal style was more significant than similarity. Dominant individuals were most satisfied in an interaction with submissive individuals and vice versa (see also Yaughn & Nowicki, 1999). The complementarity of an interpersonal style reduces anxiety and strengthens self-assessment, while anticomplementarity has an opposite effect (Yaughn & Nowicki, 1999). In accordance with Yaughn and Nowicki (1999), Smith and Ruiz (2007) conclude that a greater degree of complementarity in a social interaction is applied in the control dimension while the affiliation dimension is rather governed by the similarity principle. A similar position in terms of functionality of an interpersonal relationship between a coach and an athlete was showed by Jowett and Poczwardowski (2007). who also claim that complementarity is ideal in the dominance – submission dimension, and similarity in the acceptance – rejection dimension. Smith and Ruiz (2007) also point to the problem of finding a simple association between the interpersonal style and satisfaction in a social interaction. Smith and Ruiz (2007) further state that women have a greater tendency to produce complementary interpersonal behaviour regardless of their individual interpersonal style.

Dryer and Horowitz (1997) further point out that it is necessary to clearly distinguish between complementarity and similarity of relatively permanent and defined characteristics such as intelligence, age and qualities, and complementarity of interpersonal behaviour. A partnership between a man and woman is symmetrical and complementary at the same time. Equality and symmetry are usually determined by similar age (peer relationships), whereas complementarity is primarily determined by the fact that a relationship involves a man and a woman, whose sexual and gender roles differ, complement each other and give the partnership dynamics. A harmonious partnership requires partners to be in an asymmetrical relationship in terms of partial activities, i.e. one of the partners dominates and takes the role of an expert, and the other partner is submissive (Dryer & Horowitz, 1997).

**Satisfaction in relationship**

Partner satisfaction is considered to be the result of emotional and cognitive balancing that expresses subjective experiencing. Satisfaction is derived from a relationship between how an individual perceives his/her own real situation and what his/her wishes and aspirations in the area are (Plaňava, Rajmicová, & Blažková, 2003). A dissatisfied person will assess his/her partner negatively, will easily attribute to him/her selfish and inconsiderate motives, and the subsequent negative reaction will contribute to further deepening of the problem and overall dissatisfaction (Fincham & Bradbury, 1992). In a partnership, women are generally much less satisfied than men. Overall satisfaction is subject to a steady slight decrease over time, with women still being less satisfied (Plaňava et al., 2003). Women's experiencing is different from men's experiencing. Women have a tendency to deeper intimacy in a relationship. Snodgrass, Hecht, and Ploutz-Snyder (1998) speculate that the so-called feminine empathy might be based on the traditional subordinate role of a woman in relation to a man because in the superior – subordinate relationship (regardless of gender) a higher degree of empathy is observed in individuals in a subordinate position. It is
generally assumed that in terms of empathy, women are better equipped than men.

Joint physical activities and partnerships
Physical activity is beneficial to humans through its biological effect as well as an emotional experiential opportunity that allows relaxation and extrication from unpleasant stress. In the context of intimate relationships, partners often share their time in common relational activities, such as leisure involvement, household care, intimacy, and so forth. Therefore, it is to be expected that jointly operated physical activities should be associated with relationship satisfaction. Satisfaction that occurs in a relationship correlates with the satisfaction that partners experience in working together (Ricard et al., 2012). The joint activities may promote the quality of the relationship and even protect against experiencing arguments, disagreements, and misunderstandings with dyadic partners (Jowett et al., 2012). When individuals and partners both believed they could control their own physical activity, individuals held particularly strong behavioural intentions, especially if they were in higher-quality relationships (Howland et al., 2016). Physical activity is associated with positive moods and effects, is related to the concept of well-being and thus reduces both acute and chronic anxiety. Particularly for women, regular physical activity may serve as a form of coping that helps deal with stress associated with the onset of ageing (Štěrbová, Hrubá, Harvanová, Elfmark, & Otipková, 2008). Satisfaction in a relational activity not only depends on the motivation for practicing that activity, but also on the relationship context in which it occurs (Ricard et al., 2012).

Dance has a unique ability to simultaneously develop cognitive, motor and affective component of a personality, and represents an opportunity to learn to use the body as a means of communication and expression of emotions (Purcell, 1994). Pair dance then enriches a person with experience of an intense interaction with another person. Ballroom dancing represents a novel and intriguing applied setting that imposes considerable demands on both partners. Dancing with a partner requires a fair amount of communication, as well as constant collaboration. Individuals in dyadic relationships think about their own as well as their partner’s physical activity predicts both their own as well as their partner’s behavioural intentions to engage in physical activity (Howland et al., 2016). As this type of activity, dance is often associated with peer evaluation, the setting is prone to the creation of tension between partners. Overall, ballroom dancing can lead to both positive and negative outcomes within the romantic relationship (Ricard et al., 2012). Partner’s relationship satisfaction is negatively related with their partner’s perceptions of interpersonal conflict within the joint activity (Jowett et al., 2012).

The objective of the study was to assess differences between men’s and women’s own and their partner’s interpersonal style and to assess the relationship between an individual interpersonal style, complementarity or similarity of interpersonal behaviour in a dyadic partnership and to assess satisfaction with joint physical activity of a dyadic structure in subjects practising dance.

Methods
Participants
The research sample consisted of 44 persons from all over the Czech Republic, of whom 22 were men (age 47.50 ± 8.24 years) and 22 were women (age 45.27 ± 8.35 years); these were pairs pursuing sport dance. Participants were amateur ballroom dancers of various skill levels and years of experience in ballroom dancing (years of dance performance: men 10.36 ± 9.56, women 9.55 ± 8.16). A common feature of the research sample is the fact that the man and woman in the dance pair also live in a permanent partnership. Participants were acquainted with the study’s purpose and the methods were explained in detail. Written informed consent was obtained prior to testing, and the study was pre-approved by the Ethical Committee of the Faculty of Arts, Palacký University Olomouc.

Procedures
To measure individual interpersonal style, we used the ICL Interpersonal check list (Leary, LaForge, & Suczek, 1976). The individual interpersonal style is expressed by the DOM index (dominance – submission) and the LOV index (affiliation – hostility). The ICL checklist was presented to each research participant three times. During the first measurement each research participant conducted an assessment of his/her own person (EGO_DOM_W, EGO_DOM_M, EGO_LOV_W, EGO_LOV_M), in the second measurement each participant assessed the interpersonal style of his/her partner (PARTNER_DOM_W, PARTNER_DOM_M, PARTNER_LOV_W, PARTNER_LOV_M) and in the third measurement each participant expressed his/her idea of an ideal partner (IDEAL_DOM_W, IDEAL_DOM_M, IDEAL_LOV_W, IDEAL_LOV_M).

The degree of satisfaction with joint physical activity was measured by a questionnaire of our own design called the Physical activity satisfaction questionnaire (Harvanová, 2011), which aimed to find out to what degree an individual is satisfied with various aspects of joint physical activity. The questionnaire contains
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twenty-five statements to which the respondents react on a five-point scale (1 – very dissatisfied, 2 – rather dissatisfied, 3 – neither satisfied nor dissatisfied, 4 – rather satisfied, 5 – very satisfied). These 25 statements are classified into 5 areas A to E. Overall satisfaction is identified as TS (Total Satisfaction, variables: TS_W, TS_M):

A. Satisfaction with dance as a type of physical activity (statements 1–5; e.g., With my physical condition due to dancing I am…), variables: A_W, A_M.
B. Satisfaction with own person in the context of physical activity (statements 6–10; e.g., With my skills and movement abilities in dancing I am…), variables: B_W, B_M.
C. Satisfaction with the partner in the context of physical activity (statements 11–15; e.g., With the skills and movement abilities of the dance partner I am…), variables: C_W, C_M.
D. Satisfaction with the content and course of training (statements 16–20; e.g., If we dance under the supervision of the lecturer, I am…), variables: D_W, D_M.
E. Satisfaction with “social support” in the context of physical activity (statements 21–25, e.g., If we dance together with other dance couples, I am…), variables: E_W, E_M.

Data analysis

Statistical processing was performed using Statistica software (Version 12; StatSoft, Tulsa, OK, USA). Level of statistical significance was set \( \alpha = .05 \). Kolmogorov-Smirnov test confirmed that data are normally distributed. Difference between men and women (intra and interpersonal assessment, satisfaction with joint physical activity) were assessed by \( t \)-test for two independent samples. The relationship between interpersonal assessment and satisfaction with joint physical activity was assessed by Pearson’s correlation coefficient.

In addition, the data were subjected to a cluster analysis, which correlated the measured data of an individual with his/her partner and developed a new unit, which is not represented by an individual but by a pair. The units of the cluster analysis were the DOM and LOV variables from the first and second measurements. Based on the similarity of the above-mentioned variables, the research participants were divided into three groups – clusters, which are characterized as follows:

1. Cluster 1: dominant and rather hostile woman, submissive and at the same time affiliative man. The relationship of these couples can be described as partly complementary.
2. Cluster 2: woman and man are similar in the degree of dominance and affiliation. The relationship of these couples shows a tendency to similarity rather than complementarity.
3. Cluster 3: submissive and affiliative woman, dominant and hostile man. The relationship of these couples can be described as partly complementary.

The couples were divided into the clusters twice. In the first case the cluster analysis is based on women’s perspective (cluster analysis units: EGO_DOM_W, EGO_LOV_W and PARTNER_DOM_W, PARTNER_LOV_W) and in the second case the cluster analysis is based on men’s perspective (cluster analysis units: EGO_DOM_M, EGO_LOV_M and PARTNER_DOM_M, PARTNER_LOV_M).

Results

Descriptive measures of interpersonal style are shown in Table 1. Between men and women there are no significant differences in self-assessment in terms of dominance or affiliation. The results of the independent \( t \)-test indicated that there was a significant difference between self-assessment of men in terms of dominance EGO_DOM_M and women’s assessment of their partners in terms of dominance PARTNER_DOM_W (\( t = 2.983, p = .007 \)) and also between self-assessment of men in terms of dominance EGO_DOM_M and

<table>
<thead>
<tr>
<th></th>
<th>EGO</th>
<th>PARTNER</th>
<th>IDEAL</th>
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<tbody>
<tr>
<td><strong>DOM</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>54.05 ± 10.61</td>
<td>57.31 ± 11.67</td>
<td>57.45 ± 6.95</td>
</tr>
<tr>
<td>Men</td>
<td>50.86 ± 10.36</td>
<td>54.00 ± 11.95</td>
<td>53.81 ± 5.93</td>
</tr>
<tr>
<td><strong>LOV</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>46.68 ± 12.59</td>
<td>42.09 ± 13.38</td>
<td>46.22 ± 9.29</td>
</tr>
<tr>
<td>Men</td>
<td>45.77 ± 10.14</td>
<td>49.27 ± 10.81</td>
<td>49.81 ± 7.74</td>
</tr>
</tbody>
</table>

Note. EGO = self-assessment; PARTNER = assessment by partner; IDEAL = expression of partner’s idea of an ideal partner; DOM = DOM index (dominance – submission); LOV = LOV index (affiliation – hostility).
women’s expressed idea of an ideal partner in terms of dominance IDEAL_DOM_W \( (t = 2.617, \ p = .016) \). Women perceive their partners and also their idea of an ideal partner as significantly more dominant compared with how men assess themselves.

Descriptive measures of satisfaction with joint physical activity are shown in Table 2. The independent \( t \)-test indicated that there was a significant difference between men and women in terms of satisfaction with dance as a type of physical activity A_W, A_M \( (t = -2.244, \ p = .036) \) and satisfaction with the partner in the context of physical activity C_W, C_M \( (t = -2.540, \ p = .019) \). Women are less satisfied with dance as a type of physical activity and with their partner than men.

Relationship between individual interpersonal style and satisfaction with joint physical activity
Regarding the association with the individual interpersonal style, we observed a statistically significant correlation between the variables “Satisfaction with own person in the context of physical activity” (B_W) and PARTNER_DOM_M (how men assess their partners in terms of dominance) \( (r = .602, \ p = .003) \). Women who are assessed by their partners as dominant are more satisfied with their own person in the context of joint physical activity. An opposite statistically significant association \( (r = -.561, \ p = .007) \) was found between the variables “Satisfaction with own person in the context of physical activity” (B_W) and PARTNER_DOM_W (how women assess their partners in terms of dominance), as well as between the variables “Satisfaction with the partner” (C_M) and PARTNER_DOM_W (how women assess their partners in terms of dominance) \( (r = -.477, \ p = .025) \). Women who are more satisfied with themselves in the context of joint physical activity perceive their partners as little dominant, and men who are more satisfied with their partner are assessed by their partners less dominant.

Table 2
Gender differences in satisfaction with joint physical activity

<table>
<thead>
<tr>
<th>Area of satisfaction with joint physical activity</th>
<th>Women</th>
<th>Men</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>19.68 ± 1.89</td>
<td>20.59 ± 1.50</td>
</tr>
<tr>
<td>B</td>
<td>16.09 ± 2.16</td>
<td>16.50 ± 2.99</td>
</tr>
<tr>
<td>C</td>
<td>16.86 ± 2.95</td>
<td>19.18 ± 3.06</td>
</tr>
<tr>
<td>D</td>
<td>17.86 ± 2.21</td>
<td>18.23 ± 3.04</td>
</tr>
<tr>
<td>E</td>
<td>19.72 ± 2.55</td>
<td>20.23 ± 1.77</td>
</tr>
</tbody>
</table>

Note. A = satisfaction with dance as a type of physical activity; B = satisfaction with own person in the context of physical activity; C = satisfaction with the partner in the context of physical activity; D = satisfaction with the content and course of training; E = satisfaction with “social support” in the context of physical activity. Minimum points 5, maximum points 25.

Relationship between complementarity or similarity of interpersonal behaviour in dyadic partnership and satisfaction with joint physical activity
Complementarity or similarity of interpersonal behaviour in a dyadic partnership is represented by clusters 1 to 3. This part of the research investigates whether the clusters that represent the groups of couples differ in relation to various areas of satisfaction with joint physical activity.

A statistically significant difference was found between cluster 1 and cluster 3 from the perspective of women in relation to the C_W variable \( (p = .039) \). Figure 1 presents the differences between clusters from the perspective of women in relation to the C_W variable. We can see that women who ranked their couple in the cluster 1 are less satisfied with their partner in the context of physical activity. Women who ranked their couples in the cluster 3 are significantly more satisfied with their partner in the context of physical activity.

Women, although they perceive mutual interpersonal behaviour in a dyadic partnership as complementary but at the same time assess themselves as more dominant than their partner, are less satisfied in the sub-areas of satisfaction with joint physical activity. They differ from women who perceive mutual
interpersonal behaviour in a dyadic partnership also as complementary but compared with their partner they assess themselves as submissive.

Discussion

The quality of dyadic interpersonal relationships is an important predictor of satisfaction with joint physical activity (Howland et al., 2016). The quality of the relationship can be characterized by the presence of compatibility in dyadic partnerships. The first perspectives of compatibility is a similarity (Jowett & Clark-Carter, 2006) and the other is complementarity characterized by the dimension of dominance and affiliation (Dryer & Horowitz, 1997; Smith & Ruiz, 2007; Yaughn & Nowicki, 1999). Between men and women there are no significant differences in the assessment of interpersonal style in terms of dominance or affiliation. Men in the research sample assess themselves as less dominant than women. In terms of the degree of affiliation, the assessment of both men and women is comparable. In terms of dominance, men’s assessment of their partners is almost identical to women’s assessment of themselves. According to the degree of affiliation, we can state that men see their partners as more affiliative compared with women’s perception of themselves. In contrast, women assess their partners as much more dominant and much less affiliative compared with how men assess themselves. It might be stated that the main difference between men and women is in the assessment of each other. Men assess their partners similarly to how female partners assess themselves. Women perceive their partners differently from how they assess themselves. It might be stated that the main difference between men and women is in the assessment of each other. Men assess their partners similarly to how female partners assess themselves. Women perceive their partners more affiliative compared with how they assess themselves. It might be stated that the main difference between men and women is in the assessment of each other. It might be stated that the main difference between men and women is in the assessment of each other.

As far as satisfaction with joint physical activity is concerned, in our research we observed a significant difference between men and women in the sub-areas of satisfaction with joint physical activity. Aube and Koestner (1995) and Shanhong et al. (2008) reported that attraction in a relationship is, inter alia, increased by an agreement in mutual attitudes; this fact is confirmed in our research by the decision of the couples to spend leisure time through joint physical activity. Relationship is significantly affected not only by the similarity of own attitudes, but primarily by the similarity of preferred leisure activities. It might be concluded that in the group of men there is no clear correlation between the individual interpersonal style and satisfaction with joint physical activity. In the group of women, we observed a correlation between the degree of dominance, satisfaction with their own person in the area of joint physical activity and satisfaction with their partner in the area of joint physical activity. Women who perceive themselves as more affiliative or who are assessed by their partner as dominant are more satisfied with themselves and at the
same time less satisfied with their partner and report a greater difference between the assessment of their real partner and the image of an ideal partner. Fincham and Bradbury (1992) suggest that the degree of satisfaction with partnerships is affected by cognitive interpretation of the partner’s behaviour. Negative attributions of women in these couples might be reflected in the feedback provided to the partner; a subsequent critical or negative reaction then exacerbates the problems and increases general dissatisfaction.

Conclusions

Our research showed the relationship between an individual interpersonal style, complementarity or similarity of interpersonal behaviour in a dyadic partnership and satisfaction with performance during joint physical activity of a dyadic structure. It can be concluded that women who perceive themselves as more dominant or who are assessed by their partner as dominant are more satisfied with themselves and at the same time less satisfied with their partner in the context of joint physical activity. In couples where women perceive mutual interpersonal behaviour as complementary and at the same time assess themselves as dominant, women are significantly less satisfied with their partner in the context of joint physical activity.

Conflict of interest

There were no conflicts of interest.

References


