

# Physical self-concept and interpersonal relationships in sports dance of college students in China

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**Abstract:** The primary focus of this study revolves around examining the complex correlation between physical self-concept and interpersonal relationships within the context of sports dancing. Through the analysis of this correlation, the research aims to provide insight into the reciprocal influence of dancers' self-perceptions of their physical talents and their interactions with dance partners or teammates. This study will be delimited to 310 sports dancers in selected schools in Hunan, China. These schools are Hunan International Economics University, Hunan University of Humanities, Science and Technology, Hunan First Normal University and Hunan University of Science and Engineering. The study will be conducting in the first semester of school year 2023-2024.

**Keywords:** Self-concept; Interpersonal relationships; Sports dance.

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## 1. Introduction

In Sports dance, dancers interpret transnational physical and cultural aesthetics through their choreographic performances based on the diversified origins of the ten dance styles. Dance is widely recognized as a holistic workout, providing an exercise regime that satisfies the heart as well as the soul. Going much beyond the physical concept of toning muscles as well as improving agility and cardiovascular fitness, dance offers one of the most multi-faceted sporting experiences. Dance practiced regularly, can combat obesity and enhance self-image in adolescents. The benefits of dancing for older adults are even more promising. Research evidence has shown that social dancing or ballroom dancing can enhance the elderly's physical functioning, cognitive ability, mental wellness as well as a social relationship. DanceSport is clearly on the ascent everywhere. The inclusion of Breaking in the 2024 Olympic Games moves DanceSport to another height.

Dance sport requires the partners to follow the rhythm of the music and compete with multiple pairs of contestants to show the beauty of sports, so the overwhelmingly dominant aesthetic of partner dancing (and especially ballroom) is the pairing cooperation of male and female. For the dancers, besides the great amount of practice (diligence and endurance) and a high level of technical expertise (for which a good trainer is important), the partner is vital. Good cooperation with that partner is of decisive importance for effective competition, which is supported by scholars from many countries. Chinese scholars even argue that partnership is an essential characteristic of sports dance that distinguishes it from other sports. Therefore, the amount of hours of ballroom coaching go into trying to depict the performing "male/female relationship" between partners, which is supported by the dyadic partnership between them. However, at present, few studies have explored the conceptions of partnership based on the characteristics of dance sport and cultural characteristics, which is happening in the context that athlete-athlete partnerships in dyadic sports, has been overlooked.

The partnership between a dance sport couple is hard to

define, for the reason that it is a very close relationship, both on the physical level, as mentioned earlier, and on a personal level, having the harmonious characteristics typical of a work environment. The areas of professional interaction and personal life between dance partners are highly integrated—dance partners define each other as best friends, many of them are even life partners. Even so, some scholars try hard to explore the concept of partnership between dancesport couples.

Although the study of athlete-athlete partnership frameworks is a very important research field, athlete-athlete partnership research is still in its infancy, especially between Chinese dance sport couples. The most important work of researchers remains in the creation of a comprehensive and ambitious theoretical system, where attention is often focused on the conceptual construction of the partnership; therefore, it is urgent to explore its dimensions and components. In addition, belittling or ignoring the partnership between sport couples might also have a negative impact on performance (e.g., persistence, motivation, success) and mental health (e.g., happiness, satisfaction, anxiety). So, the purpose of our study is to conduct in-depth interviews with 20 outstanding Chinese sports dancers through consensus qualitative research (CQR) to explore the connotation and conception of the partnership between Chinese dance sport couples.

## 2. Research Design

This study will utilize a descriptive correlational research design to determine the relationship between the physical self-concept and interpersonal relationship of sports dancers in Hunan International Economics University, Hunan University of Humanities, Science and Technology, Hunan First Normal University and Hunan University of Science and Engineering.

The Descriptive Correlational Research design, commonly referred to as correlational research, is a research methodology utilized to investigate the association between two or more variables, without necessarily establishing a causal relationship between them. The objective of this study is to provide a comprehensive depiction of the magnitude and

characteristics of the association between variables, typically by assessing them in their unaltered state inside authentic environments.

### 2.1. Respondent and Sampling

This study will use purposive sampling method from selected schools in Hunan, China. Purposive sampling is frequently utilized in research when there is a need to select a particular set of participants that possess specialist expertise, experience, or traits that are essential for addressing the study inquiries. The researcher will target a total of 310 students who are majoring in sports dancing in Hunan, China. The table below presents the number of target student respondents in Hunan International Economics University, Hunan University of Humanities, Science and Technology, Hunan First Normal University and Hunan University of Science and Engineering.

The criteria for the respondents are as follows:

1. Must be a sports dance major student.
2. Must have at least one semester/term participation in sports dance training.
3. Must be willing to participate in the study.

Table 1 Schools No. of Students

	Schools	No. of Students
1	Hunan International Economics University	82
2	Hunan University of Humanities, Science and Technology	75
3	Hunan First Normal University	73
4	Hunan University of Science and Engineering	80
	Total	310

### 2.2. Research Instrument

The instrument that will be used in this study is a researcher-made questionnaire that was based from extensive study on the theoretical and related literature on the physical self-concept and interpersonal relationship in sports dance. The design of the questionnaire will be structured and standardized to ensure the reliability and validity of the data collected.

To ensure the validity of the questionnaire, it will be pre-tested with a small sample of students not included in the main study. Feedback from the pre-test will be utilized to refine the questionnaire, making sure it accurately measures what it is intended to measure.

As for the reliability of the instrument, it will be tested using Cronbach's alpha coefficient. An alpha value of 0.75 or higher will be considered acceptable, indicating that the questionnaire is consistent in measuring the constructs of interest.

The questionnaire is divided into 3 parts. Each of the aforementioned sections in the questionnaire will employ a four-point Likert scale to evaluate the physical self-concept and interpersonal relationship of sports dancers. Specifically, the scale will range from Strongly Disagree (SD = 1) to Disagree (D = 2), Agree (A = 3), and finally Strongly Agree (SA = 4). Subsequent to data collection.

Table 2 The results will be interpreted as follows:

Weight	Scale/Range	Description/Interpretation
4	3.51-4.00	Strongly Agree/ Very High Level
3	2.51-3.50	Agree/ High Level
2	1.51-2.50	Disagree/ Low Level
1	1.00-1.50	Strongly Disagree/ Very Low Level

### 2.3. Data Gathering Procedure

Before commencing the data gathering process, the researcher will secure permission from the president of Hunan International Economics University, Hunan University of Humanities, Science and Technology, Hunan First Normal University and Hunan University of Science and Engineering. By sending a letter of request to conduct the study in the specified location. Once approval was obtained, the prepared questionnaire will be distributed to the students. After the data gathering process is completed, the researcher will organize, analyze, and interpret the data to extract relevant discussions from the findings such as summary, conclusion and recommendations. After which, the researcher will propose an improvement program as output for the study based on the results of the study.

## 3. RESULTS AND ANALYSIS

### 3.1. Assessment of Physical Self-Concept – Physical Ability

Table 3 Assessment of Physical Self-Concept – Physical Ability

Indicators	Mean	SD	Rank	Verbal Description/ Interpretation
I feel confident in executing complex dance movements	2.80	0.75	3	Agree/Evident
I can easily learn new dance routines	2.76	0.72	4	Agree/Evident
My body is well-suited for dance	2.69	0.75	5	Agree/Evident
I feel physically competent when I dance	3.13	0.65	1	Agree/Evident
I have the stamina required for long dance practices	2.87	0.73	2	Agree/Evident
Physical Ability	2.85	0.62	-	Agree/Evident

Scale: 1-1.50: Strongly Disagree/Not Evident 1.51-2.50: Disagree/Slightly Evident; 2.51-3.50: Agree/Evident; 3.51-4.00: Strongly Agree/Very Evident

The overall assessment of physical ability in dance across all indicators has a mean of 2.85 and an SD of 0.62, falling into the "Agree/Evident" category. This suggests a general agreement among respondents that they possess the physical abilities necessary for dance, reflecting a positive physical self-concept in this area.

Schwender, T. M., Spengler, S., Oedl, C., & Mess, F. (2018) in their systematic review discuss how dance interventions have positive effects on body-related perceptions and self-confidence, aligning with the findings of high self-confidence in dance. This research underlines that dance can significantly boost aspects of the self, such as body awareness and self-expression, which resonates with the high mean score the respondents reported in physical abilities when dancing.

### 3.2. Assessment of Physical Self-Concept – Body Satisfaction

Table 4 Assessment of Physical Self-Concept – Body Satisfaction

Indicators	Mean	SD	Rank	Verbal Description/ Interpretation
I am satisfied with my body appearance when I dance	2.75	0.76	4	Agree/Evident
I am proud of how my body looks when I dance	2.85	0.72	3	Agree/Evident
I feel comfortable wearing dance costumes	2.87	0.71	1	Agree/Evident
I feel confident about my body weight in relation to dance	2.74	0.77	5	Agree/Evident
I appreciate my body shape and size in dance	2.86	0.73	2	Agree/Evident
Body Satisfaction	2.81	0.63	-	Agree/Evident

Scale: 1-1.50: Strongly Disagree/Not Evident 1.51-2.50: Disagree/Slightly Evident; 2.51-3.50: Agree/Evident; 3.51-4.00: Strongly Agree/Very Evident

Table 4 evaluates respondents' body satisfaction in the context of dance, utilizing a series of indicators rated by mean scores and accompanied by standard deviations (SDs). These indicators are ranked, and each is provided a verbal description to convey the respondents' general consensus.

The overall mean for body satisfaction is 2.81, with an SD of 0.63, which places the general sentiment in the category of

"Agree/Evident." This reflects an overall positive body satisfaction among the respondents in the context of dancing.

### 3.3. Level of Physical Self-Concept

Table 5 Level of Physical Self-Concept

Domains	Mean	SD	Rank	Interpretation
Physical Ability	2.85	0.62	2	Agree/Evident
Body Satisfaction	2.81	0.63	3	Agree/Evident
Strength and Endurance	2.78	0.59	4	Agree/Evident
Coordination and Balance	2.69	0.64	5	Agree/Evident
Perceived Improvement	3.00	0.51	1	Agree/Evident
Physical Self-Concept	2.83	0.52	-	Agree/Evident

Scale: 1-1.50: Strongly Disagree/Not Evident 1.51-2.50: Disagree/Slightly Evident; 2.51-3.50: Agree/Evident; 3.51-4.00: Strongly Agree/Very Evident

Table 5 presents an overall assessment of the respondents' physical self-concept across various domains, each evaluated with a mean score, standard deviation (SD), and rank, including an interpretation for each.

The overall level of Physical Self-Concept is calculated to have a mean of 2.83 and an SD of 0.52. This composite score, which falls within the "Agree/Evident" interpretation, suggests that respondents generally have a positive view of their physical self-concept in relation to dance. This encompasses their abilities, body satisfaction, strength, endurance, coordination, and their perceived improvement in dance.

### 3.4. Assessment of Interpersonal Relationship – Communication with Partner/Teammates

Table 6 Assessment of Interpersonal Relationship – Communication with Partner/Teammates

Indicators	Mean	SD	Rank	Verbal Description/ Interpretation
I communicate effectively with my dance partner or teammates	3.18	0.53	3	Agree/Recognizable
My dance partner/teammates and I understand each other well during performances.	3.03	0.63	5	Agree/Recognizable
I feel comfortable giving feedback to my dance partner or teammates	3.20	0.53	2	Agree/Recognizable
I am open and receptive when receiving feedback from my dance partner or teammates	3.21	0.51	1	Agree/Recognizable
Our team has clear and effective communication during practices and performances	3.18	0.56	3	Agree/Recognizable
Communication with Partners/Teammates	3.16	0.49	-	Agree/Recognizable

Scale: 1-1.50: Strongly Disagree/Not Recognizable; 1.51-2.50: Disagree/Slightly Recognizable; 2.51-3.50:

Agree/Recognizable; 3.51-4.00: Strongly Agree/Very Recognizable

Table 6 evaluates the communication aspect of interpersonal relationships within a dance context, focusing on interactions with dance partners or teammates. The assessment is based on mean scores, standard deviations (SDs), and ranks for each indicator, with a verbal description to interpret the degree of agreement among the respondents.

The overall mean score for communication with dance partners/teammates is 3.16 with an SD of 0.49. Falling into the "Agree/Recognizable" category, this indicates a general consensus among respondents that effective and positive communication is a notable and recognized part of their dance experience.

### 3.5. Assessment of Interpersonal Relationship – Interpersonal Support

Table 7 Assessment of Interpersonal Relationship – Interpersonal Support

Indicators	Mean	SD	Rank	Verbal Description/ Interpretation
I feel supported and encouraged by my dance partner or teammates	3.25	0.54	2	Agree/Recognizable
My dance partner/team mates are there for me when I am struggling	3.23	0.56	4	Agree/Recognizable
We celebrate successes and achievements in our dance team	3.24	0.53	3	Agree/Recognizable
My dance partner/team mates are considerate of my feelings	3.26	0.52	1	Agree/Recognizable
I feel strong sense of camaraderie with my dance partner/team mates	3.17	0.58	5	Agree/Recognizable
Interpersonal Support	3.23	0.49	-	Agree/Recognizable

Scale: 1-1.50: Strongly Disagree/Not Recognizable; 1.51-2.50: Disagree/Slightly Recognizable; 2.51-3.50: Agree/Recognizable; 3.51-4.00: Strongly Agree/Very Recognizable

Table 7 provides an assessment of the level of interpersonal support among dance partners or teammates. It details respondents' perceptions using various indicators, each with a mean score and standard deviation (SD), along with a rank and verbal description to interpret the degree of agreement.

The overall mean score for interpersonal support is 3.23 with an SD of 0.49. This falls into the "Agree/Recognizable"

category, demonstrating that, on average, respondents agree that they experience significant support and camaraderie within their dance groups, contributing to a positive interpersonal relationship environment.

### 3.6. Level of Interpersonal Relationship

Table 8 Level of Interpersonal Relationship

Domains	Mean	SD	Rank	Interpretation
Communication with Partners/Teammates	3.16	0.49	4	Agree/Recognizable
Interpersonal Support	3.23	0.49	2	Agree/Recognizable
Conflict Resolution	3.25	0.46	1	Agree/Recognizable
Relationship Satisfaction	3.23	0.52	2	Agree/Recognizable
Trust in Partners/Teammates	3.00	0.51	5	Agree/Recognizable
Interpersonal Relationships	3.18	0.43	-	Agree/Recognizable

Scale: 1-1.50: Strongly Disagree/Not Recognizable; 1.51-2.50: Disagree/Slightly Recognizable; 2.51-3.50: Agree/Recognizable; 3.51-4.00: Strongly Agree/Very Recognizable

Table 8 aggregates the level of interpersonal relationships among dance partners or teammates across various domains, as perceived by the respondents. Each domain is quantified by mean scores and standard deviations (SDs), ranked by the level of agreement, with an overall interpretation provided.

The overall level of Interpersonal Relationships is 3.18 with an SD of 0.43. As this falls into the "Agree/Recognizable" category, it reflects a strong positive consensus on the quality of interpersonal relationships within the dance teams. This comprehensive score suggests that respondents believe they have effective communication, strong support systems, satisfying relationships, and solid trust among their dance partners and teammates.

### 3.7. Assessment of Interpersonal Relationship – Interpersonal Support

Table 9 Assessment of Interpersonal Relationship – Interpersonal Support

Indicators	Mean	SD	Rank	Verbal Description/ Interpretation
I feel supported and encouraged by my dance partner or teammates	3.25	0.54	2	Agree/Recognizable
My dance partner/team mates are there for me when I am struggling	3.23	0.56	4	Agree/Recognizable
We celebrate successes and achievements in our dance team	3.24	0.53	3	Agree/Recognizable
My dance partner/team mates are considerate of my feelings	3.26	0.52	1	Agree/Recognizable
I feel strong sense of camaraderie with my dance partner/team mates	3.17	0.58	5	Agree/Recognizable
Interpersonal Support	3.23	0.49	-	Agree/Recognizable

Scale: 1-1.50: Strongly Disagree/Not Recognizable; 1.51-2.50: Disagree/Slightly Recognizable; 2.51-3.50: Agree/Recognizable; 3.51-4.00: Strongly Agree/Very

## Recognizable

Table 9 provides an assessment of the level of interpersonal support among dance partners or teammates. It details respondents' perceptions using various indicators, each with a mean score and standard deviation (SD), along with a rank and verbal description to interpret the degree of agreement.

The overall mean score for interpersonal support is 3.23 with an SD of 0.49. This falls into the "Agree/Recognizable" category, demonstrating that, on average, respondents agree that they experience significant support and camaraderie within their dance groups, contributing to a positive interpersonal relationship environment.

### 3.8. Assessment of Interpersonal Relationship – Conflict Resolution

Table 10 Assessment of Interpersonal Relationship – Conflict Resolution

Indicators	Mean	SD	Rank	Verbal Description/ Interpretation
Conflicts with my dance partner/teammates are resolved in a healthy manner	3.26	0.50	3	Agree/Recognizable
We address issues openly and honestly	3.23	0.53	4	Agree/Recognizable
We avoid personal attacks when disagreements arise	3.31	0.50	1	Agree/Recognizable
After a conflict with my dance partner/teammates. We find a solution and move forward.	3.27	0.48	2	Agree/Recognizable
Our team handles conflicts maturely and professionally	3.18	0.55	5	Agree/Recognizable
Conflict Resolution	3.25	0.46	-	Agree/Recognizable

Scale: 1-1.50: Strongly Disagree/Not Recognizable; 1.51-2.50: Disagree/Slightly Recognizable; 2.51-3.50: Agree/Recognizable; 3.51-4.00: Strongly Agree/Very Recognizable

Table 10 examines how interpersonal conflicts are managed among dance partners or teammates. Each indicator is given a mean score and standard deviation (SD), which signifies the level of consensus on conflict resolution methods within the group. The indicators are also ranked, with verbal descriptions providing an interpretative summary.

The overall mean score for Conflict Resolution is 3.25 with the smallest SD of 0.46, indicating a strong, positive consensus among respondents that conflict resolution within their dance groups is effective and constructive. This suggests a healthy interpersonal dynamic where conflicts are seen as opportunities for growth and improvement.

### 3.9. Level of Interpersonal Relationship

Table 11 Level of Interpersonal Relationship

Domains	Mean	SD	Rank	Interpretation
Communication with Partners/Teammates	3.16	0.49	4	Agree/Recognizable
Interpersonal Support	3.23	0.49	2	Agree/Recognizable
Conflict Resolution	3.25	0.46	1	Agree/Recognizable
Relationship Satisfaction	3.23	0.52	2	Agree/Recognizable
Trust in Partners/Teammates	3.00	0.51	5	Agree/Recognizable
Interpersonal Relationships	3.18	0.43	-	Agree/Recognizable

Scale: 1-1.50: Strongly Disagree/Not Recognizable; 1.51-

2.50: Disagree/Slightly Recognizable; 2.51-3.50: Agree/Recognizable; 3.51-4.00: Strongly Agree/Very Recognizable

Table 11 aggregates the level of interpersonal relationships among dance partners or teammates across various domains, as perceived by the respondents. Each domain is quantified by mean scores and standard deviations (SDs), ranked by the level of agreement, with an overall interpretation provided.

The overall level of Interpersonal Relationships is 3.18 with an SD of 0.43. As this falls into the "Agree/Recognizable" category, it reflects a strong positive consensus on the quality of interpersonal relationships within the dance teams. This comprehensive score suggests that respondents believe they have effective communication, strong support systems, satisfying relationships, and solid trust among their dance partners and teammates.

## 4. Conclusion

1.It suggests a general agreement among respondents that they possess the physical abilities necessary for dance, reflecting a positive physical self-concept in this area.

2.It reflects an overall positive body satisfaction among the respondents in the context of dancing.

3.It reflects an overall positive body satisfaction among the respondents in the context of dancing.

4. It indicates a general consensus among respondents that effective and positive communication is a notable and recognized part of their dance experience.

5. on average, respondents agree that they experience significant support and camaraderie within their dance groups, contributing to a positive interpersonal relationship environment.

6. it reflects a strong positive consensus on the quality of interpersonal relationships within the dance teams. respondents believe they have effective communication, strong support systems, satisfying relationships, and solid trust among their dance partners and teammates.

## 5. Recommendations

1.Considering the significant differences in physical self-concept between males and females, it's advisable to implement gender-sensitive strategies in sports dance programs. Tailoring training and support to address the specific needs and concerns of each gender can help enhance self-confidence and body image, particularly among female students who may face more challenges in these areas.

2.With differences observed across year/grade levels, dance programs should be diversified to cater to the varying needs of students at different stages of their education. Freshmen might benefit from introductory programs that focus on building fundamental skills and confidence, while advanced classes for seniors could emphasize technique refinement and performance.

3.Focus on Communication Skills in Dance Education. Given the importance of effective communication in fostering positive interpersonal relationships within dance teams, incorporating communication skills training into dance education could be beneficial. This could include workshops on giving and receiving feedback, conflict resolution, and collaborative techniques.

4.Promote Team-Building Activities. To strengthen interpersonal support and trust within dance teams, integrating team-building activities into the dance curriculum

can be effective. These activities can help build camaraderie, improve relationship satisfaction, and enhance the overall team dynamics.

5. In light of the significant relationship between physical self-concept and interpersonal relationships, workshops that address both these aspects could be highly beneficial. These workshops could focus on body positivity, self-esteem building, and fostering supportive peer interactions.

6. Monitor and Address Interpersonal Conflicts. Regular monitoring and addressing any issues related to interpersonal conflicts in dance teams is essential. Providing conflict resolution mechanisms and ensuring a supportive environment where every team member feels heard and valued can improve the team's overall effectiveness.

## References

- [1] Aaron Hall Law. (2023). Building a Culture of Open Communication & Conflict Resolution in Self-Managed Teams. <https://aaronhall.com/insights/building-a-culture-of-open-communication-conflict-resolution-in-self-managed-teams/>.
- [2] Artur Poczwadowski, Brooke Lamphere, Kirsten Allen, Rendy Marican & Peter Haberl (2019): The 5C's Model of Successful Partnerships in Elite Beach Volleyball Dyads, *Journal of Applied Sport Psychology*.
- [3] Basso, J.C., Satyal M.K., and Rugh, R. (2021) Dance on the Brain: Enhancing Intra- and Inter-Brain Synchrony. *Front. Hum. Neurosci.* 14:584312. doi: 10.3389/fnhum.2020.584312.
- [4] Caputo, A., Kargina, M., & Pellegrini, M. (2022). Conflict in virtual teams: a bibliometric analysis, systematic review, and research agenda. *International Journal of Conflict Management*, 34. <https://doi.org/10.1108/IJCM-07-2021-0117>.
- [5] Himberg, T., Laroche, J., Bigé, R., Buchkowski, M., & Bachrach, A. (2018). Coordinated Interpersonal Behaviour in Collective Dance Improvisation: The Aesthetics of Kinaesthetic Togetherness. *Behavioral Sciences*, 8(2), 23. <https://pubmed.ncbi.nlm.nih.gov/29425178/>.
- [6] Hirsch, W. (2016). Trust: Does it impact team performance... or not?. <https://scienceforwork.com/blog/trust-impact-team-performance/>.
- [7] Flores-Piñero, M. del C., Valdivia-Moral, P., Ramos-Mondejar, L., & González-Hernández, J. (2024). Motivational Climate, Physical Self-Concept, and Social Relationships in Adolescents in Physical Education Classes: A Systematic Review. *Education Sciences*, 14(2), 199. <https://doi.org/10.3390/educsci14020199>.
- [8] Liu, C., & Sun, Z. (2023). The relationship between physical activity and interpersonal distress in college students: the chain mediating role of self-control and mobile phone addiction. *Psicologia: Reflexão e Crítica*, 36(1), 18. <https://doi.org/10.1186/s41155-023-00261-3>.
- [9] Davis, L., & Jowett, S. (2019). Communication Strategies: The Fuel for Quality Coach-Athlete Relationships and Athlete Satisfaction. *Frontiers in Psychology*, 10, 2156. <https://doi.org/10.3389/fpsyg.2019.02156>.
- [10] Korducki, K. M. (2023). Research Confirms the Importance of Healthy Workplace Relationships. *Work Life by Atlassian*. Retrieved from Atlassian.