

Feasibility of Parkour-style training in team sport practice: A Delphi study

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Citation:

STRAFFORD, Ben, DAVIDS, Keith, NORTH, Jamie and STONE, Joseph (2024). Feasibility of Parkour-style training in team sport practice: A Delphi study. In: Expertise and Skill Acquisition Network (ESAN 2023), Manchester, UK, 17-18 May 2023. [Conference or Workshop Item]

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Feasibility of Parkour-style training in team sport practice: A Delphi study.

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Introduction

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- Recently researchers have addressed *how* Parkour-style training might be integrated as a donor sport using coaches' experiential knowledge (Strafford et al., 2020; Strafford et al., 2021). However, these initial insights cannot serve to provide consensus on recommendations for practice design alone.
- The aim of this study was to acquire expert opinion on the feasibility of integrating Parkour-style training into team sport practice routines and to establish a framework and set of design principles for integrating Parkour-style training in team sport settings.

Panel Selection

- Talent development specialists and strength and conditioning coaches with expertise in team sports were specifically targeted for inclusion in the study. The sample demographics are outlined in Table 1.
- Participants had to possess accreditation from a relevant governing body and/or university degrees in related subject areas, and a minimum of three years' experience working in applied team sport settings at the time of recruitment.
- Institutional ethical approval was granted by the university ethics committee of the lead author, with all participants providing informed written consent prior to the commencement of the online-Delphi study.

Delphi Procedure

- Figure 1 outlines the online-Delphi procedure which consisted of three iterative rounds using ad-hoc Qualtrics questionnaires.
- In Round One, coaches answered 15 open-ended questions across four categories: (1) General Perceptions of Parkour-style training; (2) Potential Applications of Parkour-style training; (3) Designing and Implementing Parkour-style training Environments; and (4), Creating an Inclusive Learning Environment.
- Responses from Round One were analysed using reflexive thematic analysis with deductive and inductive coding resulting in 78 statements across three dimensions (Application of Parkour Style Training in Team Sports; Designing and Implementing Parkour-style training Environments; Overcoming Potential Barriers when Integrating Parkour-style training).
- In Rounds Two and Three, coaches rated these statements using a four-point Likert scale and measures of collective agreement or disagreement were calculated.

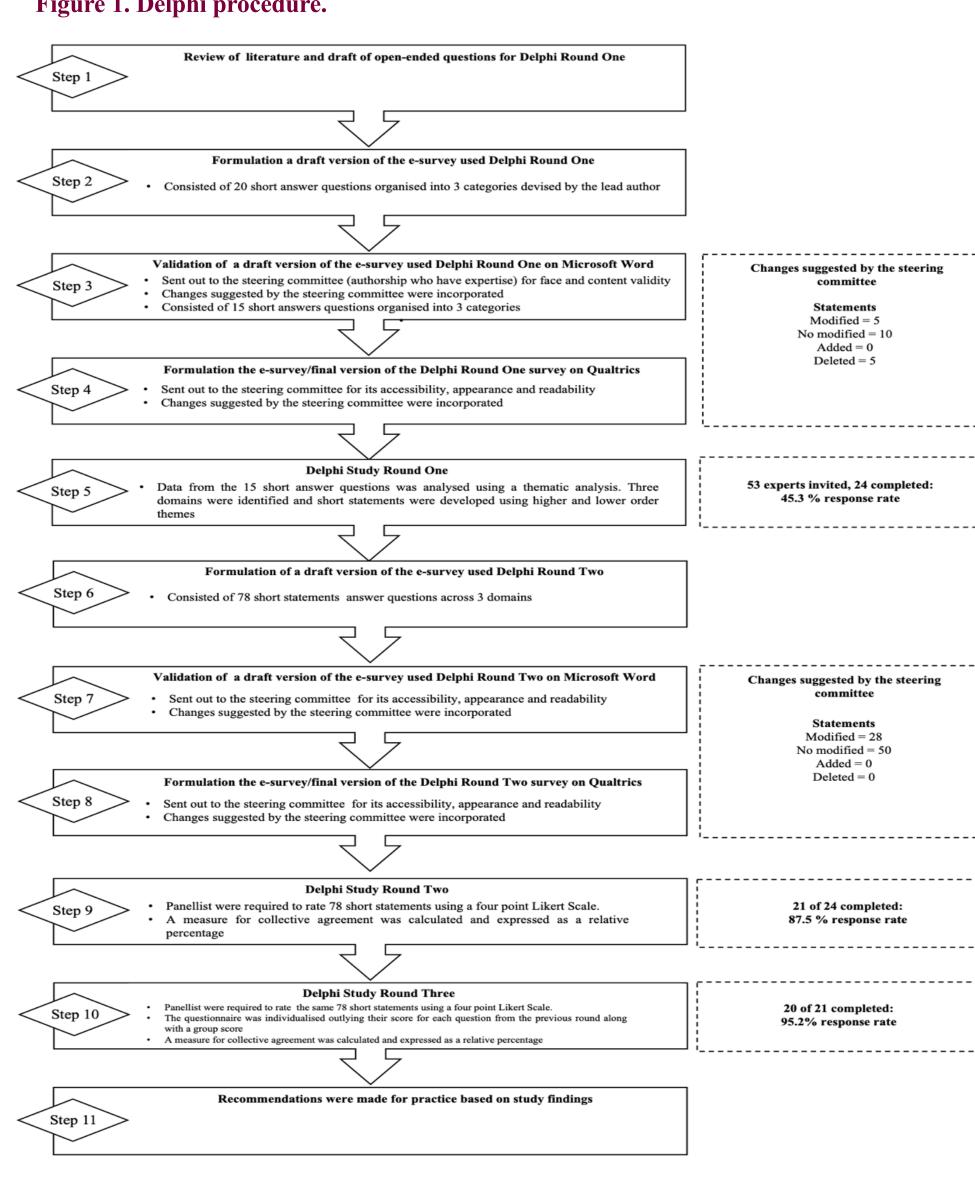
Criteria for Consensus

- Based on previous work, consensus was defined as $\geq 70\%$ of the panel agreeing/strongly agreeing or disagreeing/strongly disagreeing with a statement in Round Three (Vogel et al., 2019).
- All 'don't know' responses were excluded to ensure that the reported percentage agreement or disagreement for each statement represented the consensus among only those who believed they held a firm view.
- The stability of consensus was considered reached if the between round group responses (between Round 2 and Round 3 in this instance) varied by $\leq 10\%$ (Duffield, 1993).

Table 1. Sample Demographics.

	Round 1	Round 2	Round 3
Descriptives:	(n=24)	(n=21)	(n=20)
-	34.1±9.4	33.2±8.8	32.8±8.8
Age (Years) (Mean \pm SD)			
Experience (Years) (Mean ± SD)	13.4 ± 7.1	13.4±7.1	11.9 ± 6.4
Current Role:	41.70/ (10)	20.10/ (0)	20.10/ (0)
Talent Development Coach	41.7% (10)	38.1% (8)	38.1% (8)
Strength and Conditioning Coach	41.7% (10)	42.9% (9)	38.1% (8)
Both	16.7% (4)	19.0% (4)	19.0% (4)
Sports currently working with:			
American Football	4.2% (1)	4.8% (1)	5.0% (1)
Basketball	4.2% (1)	4.8% (1)	5.0% (1)
Gaelic Football	4.2% (1)	4.8% (1)	5.0% (1)
Ice Hockey	4.2% (1)	4.8% (1)	5.0% (1)
Multi-Sport	33.3% (8)	28.6% (6)	35.0% (7)
Rugby League	8.3% (2)	9.5% (2)	10.0% (2)
Rugby Union	4.2% (1)	4.8% (1)	5.0% (1)
Soccer	33.3% (8)	38.1% (8)	40.0% (8)
Team Athletic Sports	4.2% (1)	0.0% (0)	0.0% (0)
Academic Qualifications:	. ,	` ,	. ,
Undergraduate Degree	79.2% (19)	81.0% (17)	80.0% (16)
Master's degree	54.2% (13)	57.1% (12)	55.0% (11)
Doctorate Degree	12.5% (3)	9.5% (2)	10.0% (2)
Professional Qualification:			
Strength and	45.8% (11)	38.1% (8)	35.0% (7)
Conditioning Accreditation			
Sport Coaching Qualification	45.8% (11)	47.6% (10)	50.0% (10)
Country of Employment:			
Finland	4.2% (1)	4.8% (1)	5.0% (1)
Ireland	8.3% (2)	9.5% (2)	10.0% (2)
Morocco	4.2% (1)	4.8% (1)	5.0% (1)
Netherlands	4.2% (1)	4.8% (1)	5.0% (1)
Portugal	4.2% (1)	4.8% (1)	5.0% (1)
Singapore	4.2% (1)	0.0% (0)	0.0% (0)
United Kingdom	62.5% (15)	61.9% (13)	60.0%(12)
United States	8.3% (2)	9.5% (2)	10.0% (2)

Figure 1. Delphi procedure.



Results and Implications

- Informed by the findings from the study, a set of design principles for integrating Parkour-style training into team sport practice routines has been established.
- Figure 2 provides a coaching resource which outlines principles for integrating and delivering Parkour-style training in team sport settings, across four pillars: equipment, session structure, creating variability, and session delivery and feedback. Before integrating Parkour-style training in team sport settings it is recommended that coaches engage with this resource and relevant coach education material to aid the development and delivery of a Parkour-style learning environment as a platform for athlete development.
- Figure 3 and 4 provides principles for supporting the successful integration of Parkour-style training via education opportunities. Whilst these recommendations are provided, future work is required to develop parent and coach education materials and examine the feasibility of these developmental activities in team sport settings.

Figure 2. Principles framework for integrating and delivering Parkour-style training in team

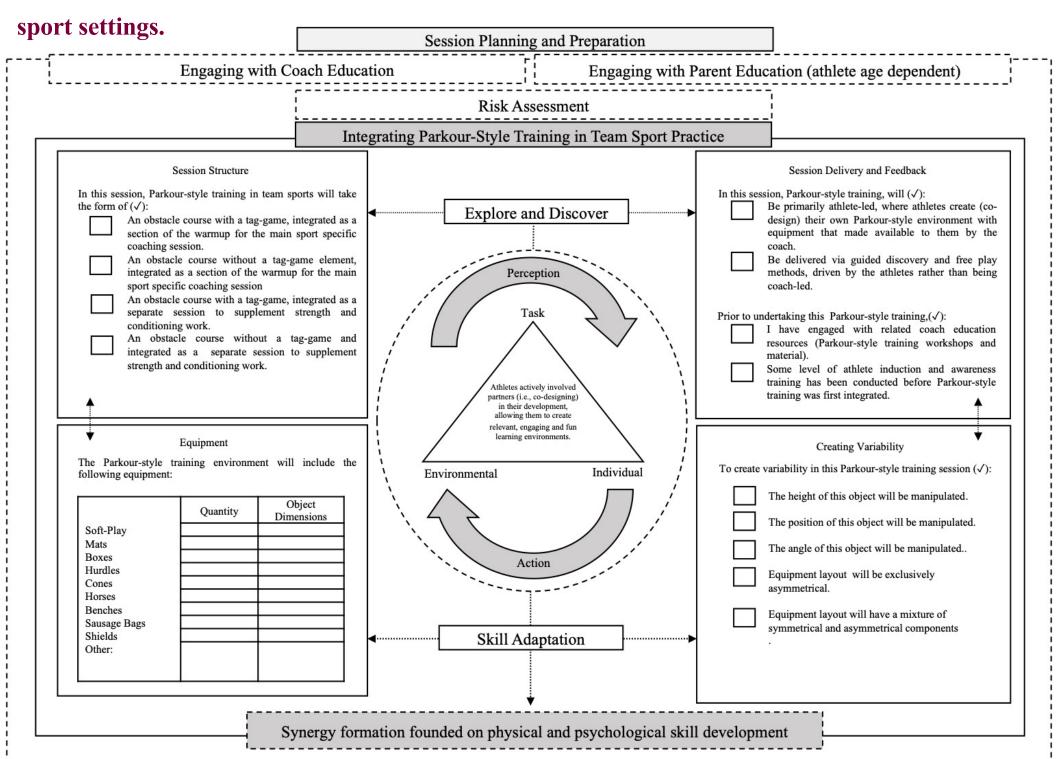


Figure 3. Principles for supporting the successful integration of Parkour-style training via coach education opportunities.

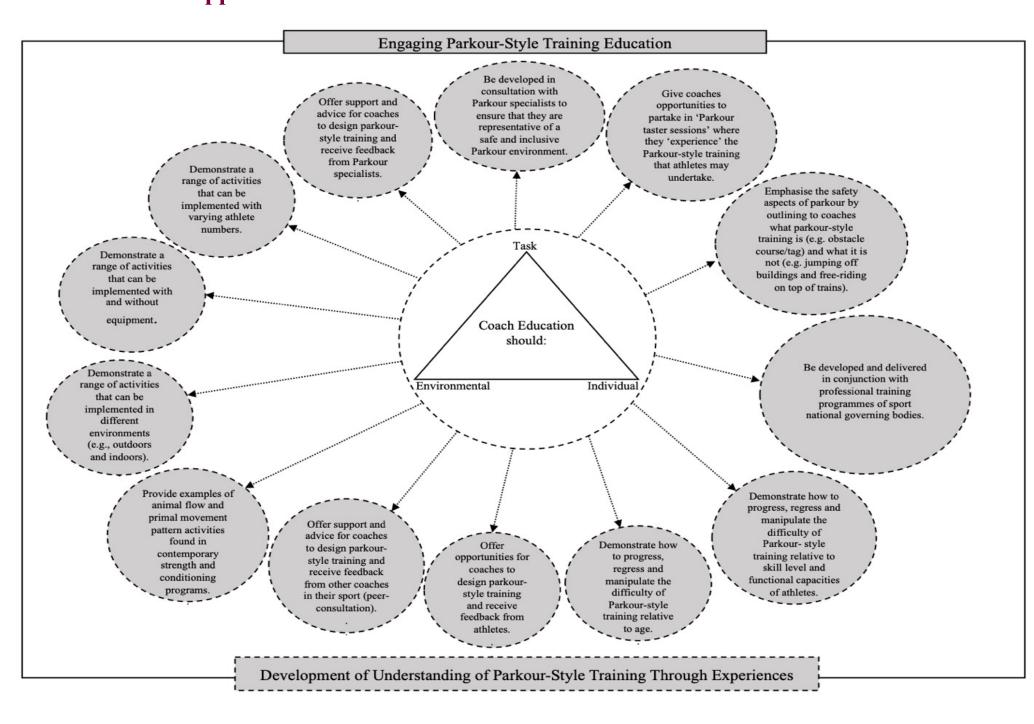
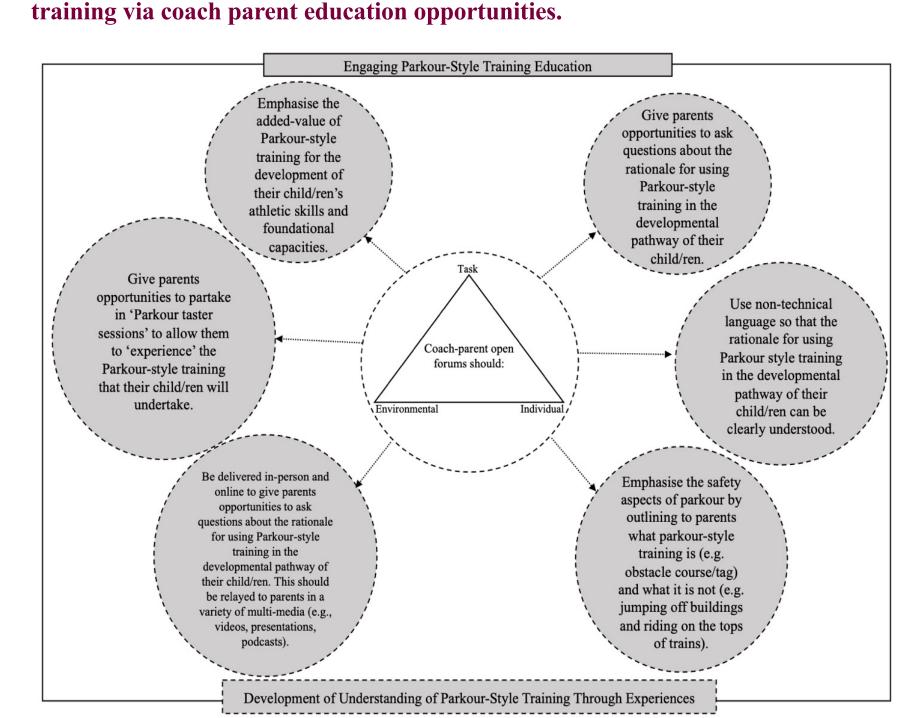


Figure 4. Principles for supporting the successful integration of Parkour-style





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