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A study of how different small-sided game formats affect agility in football players

Submission date 11/06/2025	**Recruitment status** No longer recruiting	[ ] Prospectively registered [ ] Protocol [ ] Statistical analysis plan [ ] Results [ ] Individual participant data [ ] Record updated in last year
Registration date 16/06/2025	**Overall study status** Completed	
Last Edited 16/06/2025	**Condition category** Other	

Plain English summary of protocol
Background and study aims
This study aimed to examine how different football training methods, particularly small-sided games (4 v 1 and 6 v 2 formats), affect players' agility.

Who can participate?
Male football players aged 17–19 years from Çanakkale Dardanelspor Club with at least 5 years of experience

What does the study involve?
Participants were divided into three groups. One group followed standard training, the second performed closed-skill agility drills, and the third practised small-sided games. All groups trained for 8 weeks.

What are the possible benefits and risks?
Participants might improve agility and decision-making. There were no significant risks. No medication, supplements, or food interventions were involved.

Where is the study run from?
Manisa Celal Bayar University (Türkiye)

When is the study starting and how long is it expected to run for?
January 2015 to October 2016

Who is funding the study?
Manisa Celal Bayar University Scientific Research Projects Unit (BAP) (Türkiye)

Who is the main contact?
Dr Barış Baydemir, barisbaydemir@comu.edu.tr

Contact information

Type(s)

Public, Scientific, Principal investigator

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Study information

Scientific Title
The effects of 4V1 and 6V2 small-sided games on agility performance

Study objectives
Hypothesis 1:
The Sport-Specific Reactive Agility Test System (SSRATS) is a valid and reliable measurement tool.

Hypothesis 2:
As a result of football-specific training, there is no significant difference between pre-test and post-test scores of the control group (CG) in terms of movement time, sprint time, decision-making time, and total agility time measured by SSRATS.

Hypothesis 3:
As a result of football-specific training combined with closed-skill agility training, there is a significant difference between the pre-test and post-test scores of the Closed-Skill Agility Training Group (CSATG) in terms of movement time, sprint time, and total agility time measured by SSRATS.

Hypothesis 4:
As a result of football-specific training combined with 4V1 and 6V2 small-sided games, there is a significant difference between the pre-test and post-test scores of the Small-Sided Games Group (SSGG) in terms of movement time, sprint time, decision-making time, and total agility time measured by SSRATS.

Hypothesis 5:
As a result of football-specific training combined with closed-skill agility training, there is no significant difference between the pre-test and post-test scores of the CSATG in terms of decision-making time measured by SSRATS.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 30/09/2015, Local Ethics Committee of the Faculty of Medicine, Celal Bayar University (Manisa Celal Bayar University Campus Road, No 14, Muradiye Neighborhood, Yunusemre, Manisa, 45140, Türkiye; +90 (0)236 233 51 77; etikkurul@cbu.edu.tr), ref: 20478486-358

Primary study design
Interventional

Study design
Randomized controlled experimental study with a parallel group design

Study type(s)
Other

Health condition(s) or problem(s) studied
Agility performance in amateur football players

Interventions
The study evaluates the effects of football-specific small-sided games and closed-skill agility training on agility performance measured by the Sport-Specific Reactive Agility Test System (SSRATS).

Participants were randomly assigned to one of the three groups using a simple randomisation method. The assignment was performed manually by drawing group codes from a container to ensure allocation concealment.

1. Control Group (CG): Participants continued their standard football training and were additionally assigned basic endurance runs that did not include any sprint-specific content.
2. Closed-Skill Agility Training Group (CSATG): In addition to their football training, participants performed closed-skill agility exercises where the start and end of movement tasks were pre-determined. These included cone drills and pre-set change-of-direction exercises.
3. Small-Sided Games Group (4V1 and 6V2 SSGG): This group received football training combined with small-sided game formats (4 versus 1 and 6 versus 2) designed to simulate real match scenarios, encouraging reactive agility and decision-making under pressure.

Each group followed the intervention protocol for 8 weeks with three sessions per week.

Intervention Type
Other

Primary outcome(s)
Total agility time measured using the Algıya Dayalı Tepkisel Çeviklik Test Sistemi (ADTÇTS – Perception-Based Reactive Agility Test System), which records movement initiation, sprint, and decision-making responses in milliseconds, measured at baseline (pre-test) and after 8 weeks of training (post-test)

Key secondary outcome(s)

1. Sprint time: sprint duration over a reactive course recorded using ADTÇTS pre-test and post-test
2. Decision-making time: time taken by the participant to make the correct directional choice in response to a visual stimulus, as recorded by ADTÇTS pre-test and post-test
3. Movement initiation time: time between stimulus presentation and the initiation of body movement, measured by the same system pre-test and post-test.
All measurements were conducted using the same test system under identical conditions, ensuring consistency and reliability.

Completion date
30/10/2016

Eligibility

Key inclusion criteria
1. Players must be members of the Çanakkale Dardanelspor U17 or U19 football team
2. Players must have at least 5 years of football experience
3. Players must have undergone a training period of at least 8 weeks prior to the study

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
17 Years

Upper age limit
20 Years

Sex
Male

Total final enrolment
45

Key exclusion criteria
1. Players with any chronic medical condition
2. Players who sustained an injury during training or competition

Date of first enrolment
30/10/2015

Date of final enrolment
30/10/2016

Locations

Countries of recruitment
Türkiye

Study participating centre
Çanakkale Dardanelspor Kulübü
Deniz Street No. 1
Barbaros Neighborhood
17020 Canakkale City Center
Çanakkale
Türkiye
17100

Sponsor information

Organisation
Manisa Celal Bayar University

ROR
https://ror.org/053f2w588

Funder(s)

Funder type
University/education

Funder Name
Manisa Celal Bayar Üniversitesi

Alternative Name(s)
Manisa Celal Bayar University, Celal Bayar University, Celal Bayar University at Manisa, Celal Bayar Üniversitesi, Celal Bayar Üniversitesi, Manisa, Manisa Celal Bayar Üni., MCBÜ, MCBU, CBU, CBÜ

Funding Body Type
Government organisation

Funding Body Subtype
Universities (academic only)

Location
Türkiye

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study will be available upon request from Dr Barış Baydemir (barisbaydemir@comu.edu.tr).
Type of data shared: Anonymized individual-level performance data, including reaction time, sprint time, decision-making time, and total agility time measured via the ADTÇTS test system.
Dates of availability: From November 2024 onwards, upon reasonable academic request.
Consent for data sharing: Informed consent for participation and future use of anonymized data was obtained from all participants prior to the start of the study.
Anonymization comments: All datasets have been fully anonymized by removing personal identifiers. Each participant is coded with a unique ID to ensure privacy and confidentiality.
Ethical or legal restrictions: There are no legal restrictions. Data sharing is limited to non-commercial, academic research purposes only, in accordance with institutional ethical approval.

IPD sharing plan summary
Available on request