



# Winter School 2023

<https://www.shu-rouen-schools.com/>

## Introduction and Project Overview

### Monday 9am

Dr. Joe Stone

joseph.stone@shu.ac.uk;  [DrJoeStone](#)

# Morning Session

- Welcome

- Winter School Overview

<https://www.shu-rouen-schools.com/>

- Data Sources



# Schedule

## Winter School 2023 Provisional schedule Collegiate Campus, Sheffield Hallam University

Monday 9th Jan		Session Title	Room	Session Leader/s
09:00-10:45	Winter School Introduction and Project Overview Identifying the Project Issue Lunch and Group Work Project development and Group Work Sport Social/Free Time	A201	Joe Stone	
11:00-12:30		A201/A004	Ben Strafford & Joe Stone	
12:30-14:00		HoC Café		
14:00-16:00		A201	Joe Stone & Ben Strafford	
17:00-Onwards		TBC	David Farrokh & Ben Strafford	
Tuesday 10th Jan		Session Title	Room	Session Leader
09:00-10:45	DoM Introduction and Practical Consideration Group Work Lunch and Group Work Constraints based Coaching Group/Project Work Update Optional drinks/dinner	A201	Sam Hydes	
11:00-12:30		A201/A004	Joe Stone & Ben Strafford	
12:30-14:00		HoC Café		
14:00-16:00		A201	Anna Fitzpatrick	
16:00-17:00		A201/A004	Joe Stone & Ben Strafford	
18:00-Onwards		Kommune		
Wednesday 11th Jan		Session Title	Room	Session Leader
09:00-10:45	Psychology in a Department of Methodology Group Work Lunch TBC Sport Social/Free Time	A201	Jen Hobson	
11:00-12:30		A201/A004	Joe Stone & Ben Strafford	
12:30-14:00		HoC Café		
14:00-17:00		A201	Marianne Davies	
17:00-onwards			David Farrokh & Ben Strafford	
Thursday 12th Jan		Session Title	Room	Session Leader
09:00-10:00	Movement Variability Group Work Lunch ASM & Donor Sports Group/Project Work Update	A201/A004	Jon Wheat	
10:15-12:30			Joe Stone & Ben Strafford	
12:30-14:00		HoC Café		
14:00-16:00		A201/A004	Ben Strafford	
16:00-17:00				
Friday 13th Jan		Session Title	Room	Session Leader
09:00-10:45	Group/Project Work Group/Project Work Lunch Group Presentations Optional: Social Drinks	A201/A004	Joe Stone & Ben Strafford	
11:00-12:30			Joe Stone & Ben Strafford	
12:30-14:00		HoC Café		
14:00-16:00		A201/A004	JS/BS/LS/JW	
16:00-Onwards		Nursery Tavern		

# A201 and A004

# School Overview

- Work in small teams to solve an applied sport science problems
- Focus on Women's' International Football Teams
- Each group will adopt the role of the coaching and sport science team for a Euro 2022 woman's team



# Scenario: Competition Stage



# Scenario: Quarter Finals

**VS**

**VS**

**VS**

# Scenario: Preparing the Team

The head coach has suggested three focus areas:

1. Tactical Approach
2. Set Pieces
3. Penalty Kicks

Your group can select how many areas to focus on

However more tasks completed will result in extra points during the final presentation (if done well)

Proposed methods should be informed by a guiding theoretical framework and research evidence base



# Area 1: Tactical Approach

- Identify tactical/performance weaknesses in the opposition
- Create a presentation designed for players to demonstrate these weaknesses
- Propose a game plan to exploit these weaknesses and suggested intervention/training designs to implement this plan

## **Area 2: Set Pieces**

- Select one set piece (e.g. free kick, throw-in, corner, goal kick)
- Design a set piece strategy for your team to exploit your oppositions weakness and your teams' strengths
- Propose an intervention/training session to implement these set piece strategies

## **Area 3: Penalty Kicks**

- Evaluate previous penalty data
- Plan a strategy to prepare the players for the penalty shoot-out
- Propose an intervention/training session to implement these preparation ideas

# Key Project Milestones

- 1. Team formation and task planning
- 2. Evaluate data sources to guide your tasks and decide on your guiding theoretical framework
- 3. Data processing and analysis to demonstrate the strategies/problems
- 4. Design the proposed intervention/training sessions
- 5. Create a presentation ready for Friday afternoon to explain your work and performance preparation plans

# Groups and Teams

# Get to know your groups

- Introduce your name and short background
- Sport or exercise you like to play/watch
- Your main discipline area (e.g., Psychology, S&C, Performance Analysis....)
- SHU Student: Best/iconic UK food the Rouen students should try
- Rouen students: Food you would like to try while in the UK
- Any “fun” facts about yourself you want to share with the group



# **The Project Focus Ideas**

# Tactical Approach: Starting point

- Dynamic systems of play in invasion sports

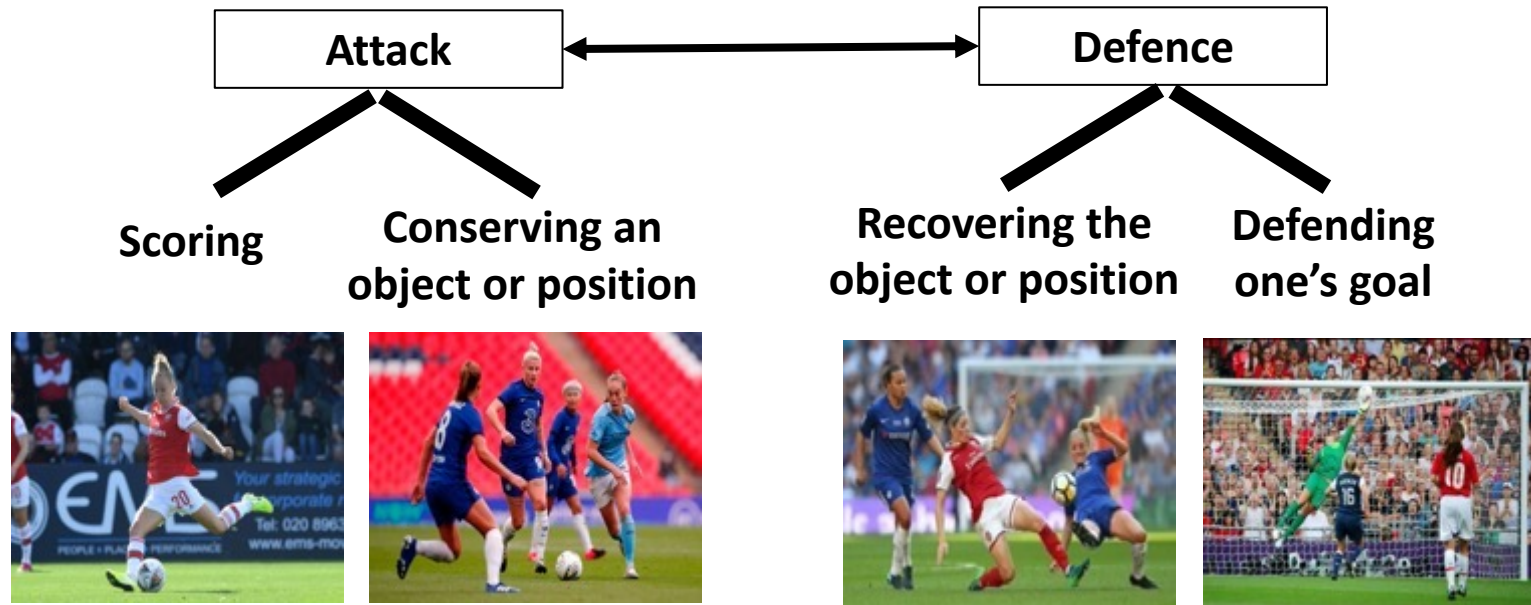
**Attack**

**Defence**





# Dynamic System of Play



# Tactical Problems: Invasion

- **Scoring:** What is the main problem for **poor conversion rate**?
- **Scoring:** What is the reason for poor **attack efficiency**?
- **Scoring:** Where is the **effective area** for creating chances?
- **Scoring:** What is the **temporal pattern** of shot attempts?
- **Conserving:** What is the best strategy for building up attacks in terms of **passing styles**?
- **Conserving:** What are the **reasons for losing the ball** possession?
- **Conserving:** What is the role of **speed in counter-attack** play after the ball is regained?
- **Recovering:** How the team **recovers the ball** to prevent goal conceding?
- **Defending:** Where is the most **vulnerable area** to concede a goal?

# Set Pieces: Pick One

- Attack or Defense?
- How does it fit with your tactical approach in area 1?
- How is the best way to training the selected strategy?

# Penalty shoot out

- Attack or Defense?
- How is the best way to training the selected strategy?
- How does that training strategy fit with your theoretical framework?

# Next Fixture: Quarter Finals

**VS**

**VS**

**VS**

# **Data Sources**

# Typical Data Sources



- Full Matches
- Pre-Clipped Footage
- Ask Joe for specific requests





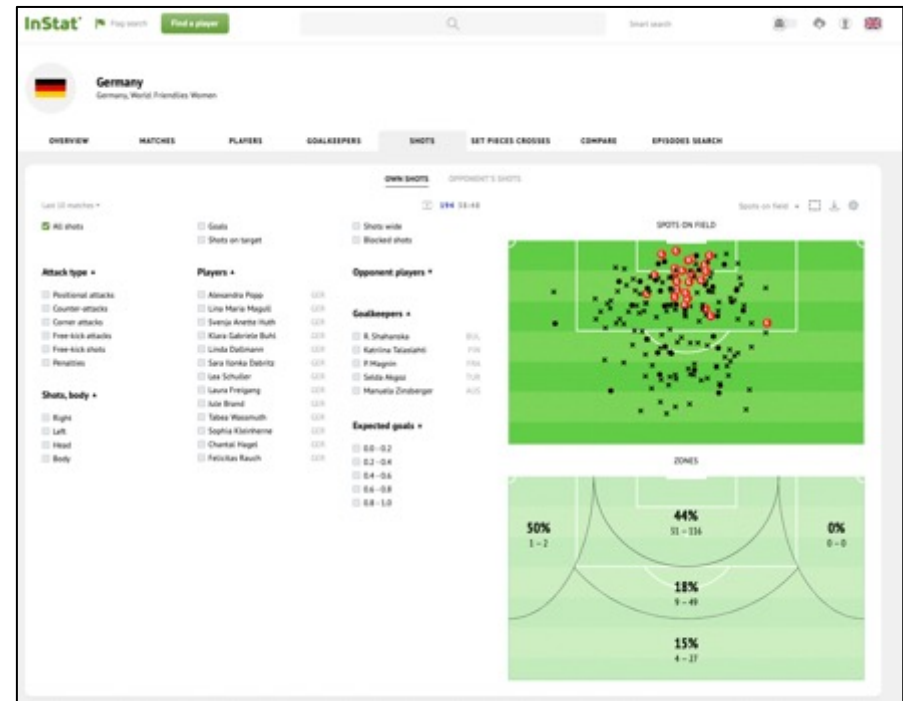
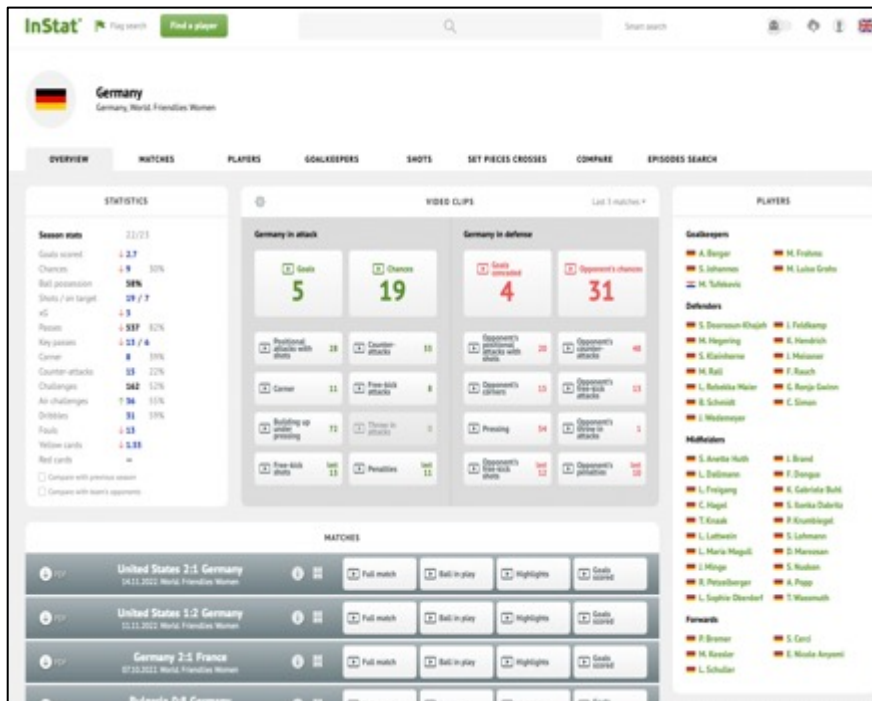
# Code/Tag Data

- Pen and Paper, Excel or Nacsport

The collage illustrates three methods of data collection and analysis:

- Pen and Paper:** Represented by an image of a pen resting on a spiral-bound notebook.
- Excel:** Represented by the Microsoft Excel logo, which consists of a green 'X' and a grid icon on a green background.
- Nacsport:** Represented by a screenshot of the Nacsport software interface. The interface shows a live rugby match video feed, a sidebar with various statistics (Possession, Penalties, Points, etc.), and a main area with detailed performance metrics and charts. The Nacsport logo and contact information are also visible.

# Pre-Tagged InStat Data



# Pre-coded data

```

{r}
#This chunk of code imports the specific competition of data we need. the euros 2022
Comp <- FreeCompetitions()
Women_Euros <- FreeCompetitions() %>%
  filter(competition_id==53 & season_id==106) #this loads the specific WSL 20-21 season.
StatsBombMatches <- FreeMatches(Women_Euros)
StatsBombEvents <- StatsBombFreeEvents(MatchesDF = StatsBombMatches, Parallel = T)

```

The screenshot shows the RStudio Environment pane with the following data objects:

Object	Observations	Variables
Comp	42 obs.	12 variables
StatsBombEvents	104988 obs.	141 variables
StatsBombMatches	31 obs.	42 variables
Women_Euros	1 obs.	12 variables

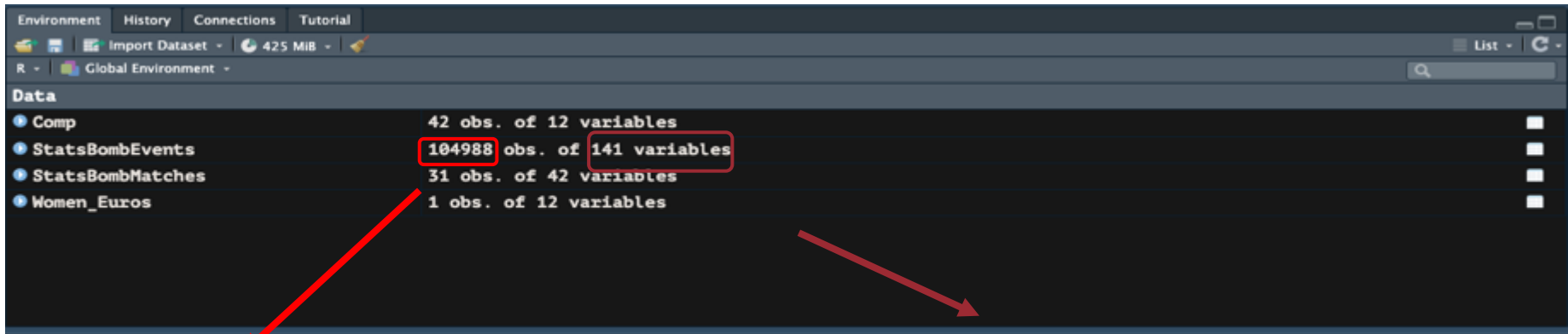
A red box highlights the 'StatsBombMatches' row, and a red arrow points from it to the text '31 matches of data' below the screenshot.

31 matches of data

# Pre-coded data

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```



104988 observations of data

141 variables of data

Total of 14,803,308 data observation



# Is having more data better?

<http://www1.skysports.com/watch/video/sports/rugby-union/9756589/sports-science-in-rugby-union>

# Is having more data better?

- **What's and Wherefore's**
- Data **interpretation** is **critical**
- Coaches running the data, not the data running the coaches

<http://www1.skysports.com/watch/video/sports/rugby-union/9756589/sports-science-in-rugby-union>

# Performance Analysis

- What data and interpretation does your group require to support issue and proposed intervention?

# Which data to use?

- Time is short, like in professional sport
- Use the skillset of your group
- Plan and distributed the work
- Use the staff for advice to help if you are unsure
- You need to be ready to present on **Friday** afternoon



# Friday Presentation

- 20 minutes maximum per group
- Presentation guide here:
- Each group member should speak at least once during the presentation
- Powerpoint slides can be used, but other methods of presentation style are also ok

# ADD TITLE OF PROJECT

ADD A PICTURE OF YOUR GROUP HERE

**INSERT STUDENT NAMES**  
**Winter School 2023**

# Morning Tasks

- 1. Start to examine the data sources
- 2. Map out which areas you want to start investigating
- 3. Define the area of interest you will investigate