Improving shots conversion of Manchester City WFC 20/21 season

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Introduction

- The theoretical framework in our analysis will be based on ecological dynamics.

- The performance problem faced by the Manchester City squad is shots conversion to goals ratio.

- To win the match against Manchester United!!!

VS

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Role of the Sport Psychologist in a Department of Methodology

Statistics or people?

MANCHESTER CITY WOMEN

```r
StatsBombMatches <- FreeMatches(Women_WSL20_21)
StatsBombEvents <- StatsBombFreeEvents(MatchesDF = Matches, Parallel = T)
```

```r
mancitymatches <- StatsBombMatches %>% filter(home_team.home_team_id == 746|away_team.away_team_id == 746)
```

```r
man_city_lost_draw_events <- StatsBombEvents %>% filter (match_id %in% c(3775576, 3775624, 3775659, 3775611, 3764241))
```

```r
mancityLDmatches <- mancitymatches %>% filter(match_id %in% c(3775576, 3775624, 3775659, 3775611, 3764241))
```

```r
Shot_1 <- StatsBombR::allclean(Mancity_events)
```

```r
Shot_1 <-subset(Shot_1, type.name=="Shot")%>%
  filter(team.id=="746")
```

```r
Shot_offT <- StatsBombR::allclean(Mancity_events)
```

```r
Shot_off_target <-subset(Shots, type.name=="Shot")%>%
  filter(shot.outcome.name %in% c("Off T", "Blocked"))
```

What should the psychologist be aware of before, during, and after the intervention?

Before:

- How does the team respond to situations that may not occur frequently?
- How do the players respond to change? (Individually and collectively)
- Team culture? (Form of life – macro & micro level)

During:

- Appraisal states of individual players
- How is feedback given?

After:

- How fatiguing was the cognitive load on players? (More cognitively demanding than a deterministic model)
- How did the athletes respond to the manipulation of task constraints?

Lazarus (2006)
Martin (2020)
Rietveld & Kiverstein (2014)

Interdependency of decision-making

What factors can affect decision-making in this context?

- Match status (winning or losing)
- Coach instructions and tactics (task constraints)
- Weather and surface conditions (environmental constraints)
- Patterns of play (past learning experiences and task intention)
- Opponent action tendencies (stable/dynamic contextual information) - interdependency of decision-making
- Opponent positioning (more space on one particular side / dynamic contextual information) - interdependency of decision-making

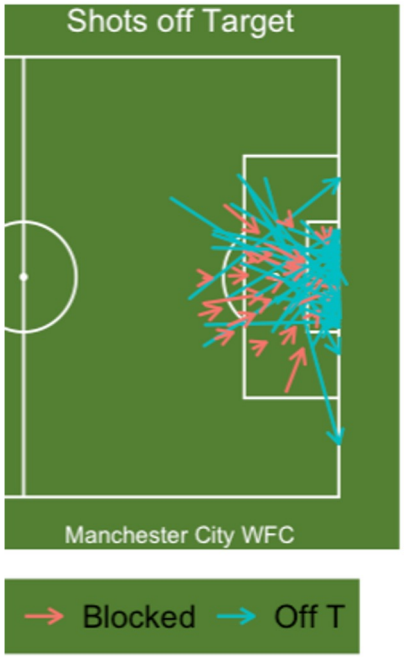
Methods

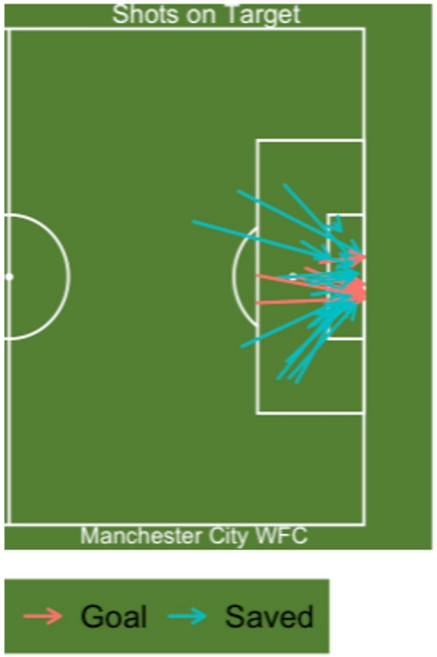
- ***Data implemented***: Wyscout and StatsBomb data alongside Dartfish video clips.
- **Wyscout** data allowed us to identify the initial problem of poor shot conversion.
- **Statsbomb** data was obtained and made into visuals in of RStudio.
- **Dartfish** was used for creating video clips of critical incidents in games which we lost or drew.

Results

Shots maps and statistics from games that ended in loss & draw for Manchester City

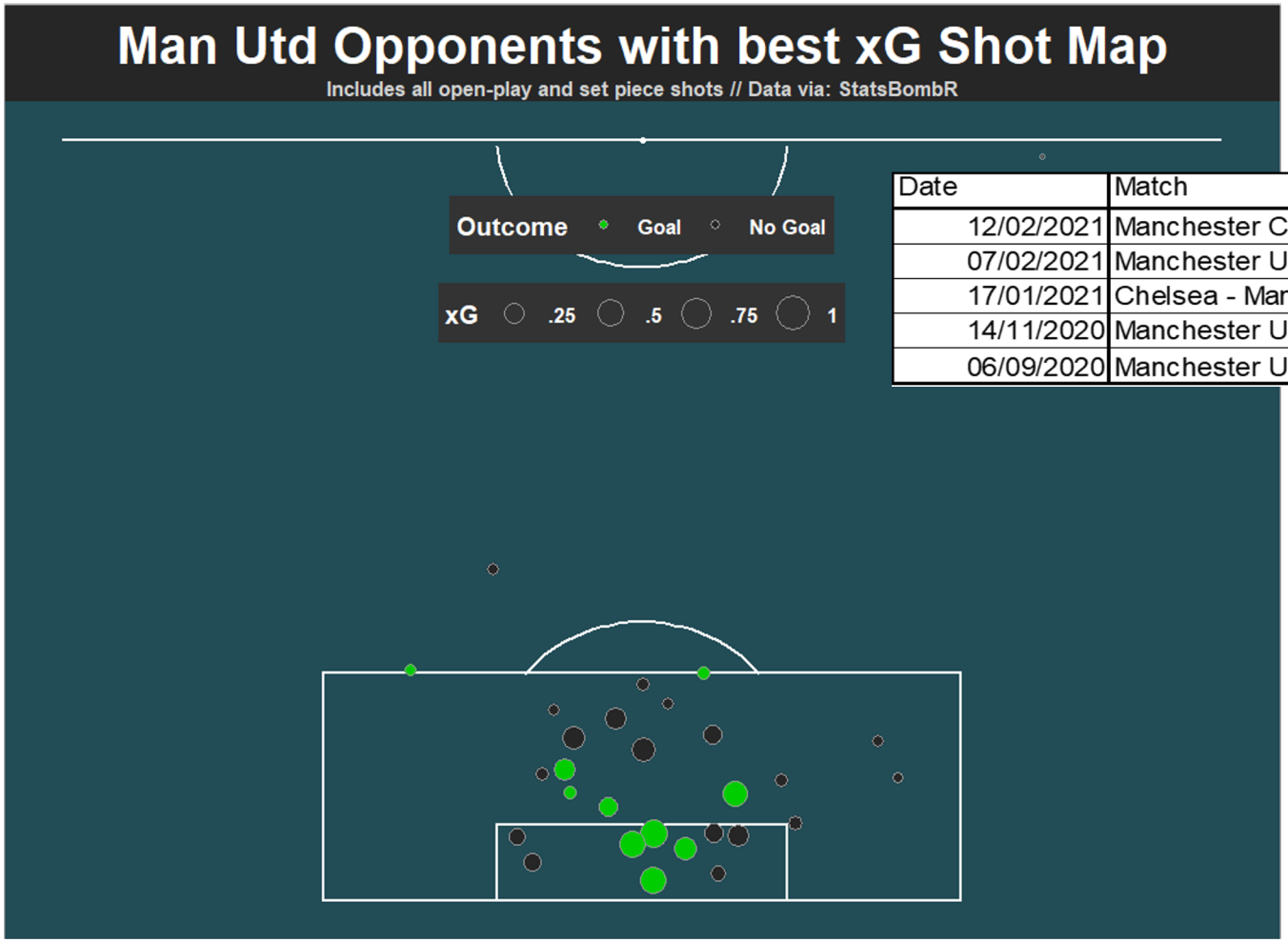
Team	Goals	xG	Shots	(% on Target)	Passes	(%)	Possession (%)	Losses	Recoveries	Duels	(%)
Manchester City	1.2	2.07	15.2	32.9	506	82.2	60.09	122.8	85.2	227	50.8
Opponents	1.6	1.67	11.2	34	309	73.1	39.91	118.8	72.4	227	45.9





Results

Shots maps from 5 games of Manchester United where it was draw or losses.



Date	Match
12/02/2021	Manchester City - Manchester United 3:0
07/02/2021	Manchester United - Reading 0:2
17/01/2021	Chelsea - Manchester United 2:1
14/11/2020	Manchester United - Manchester City 2:2
06/09/2020	Manchester United - Chelsea 1:1

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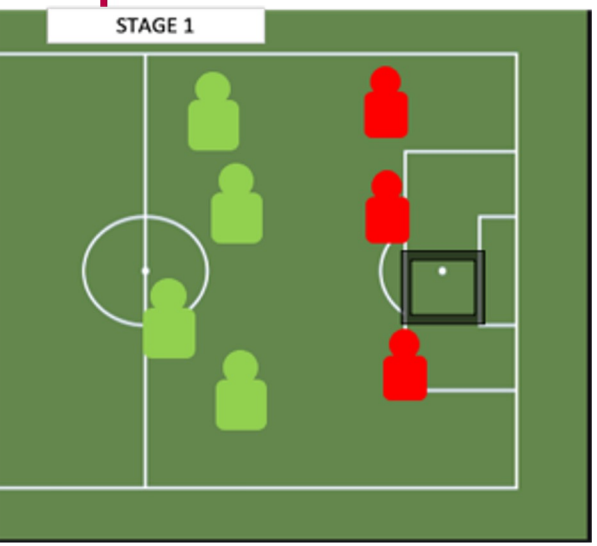
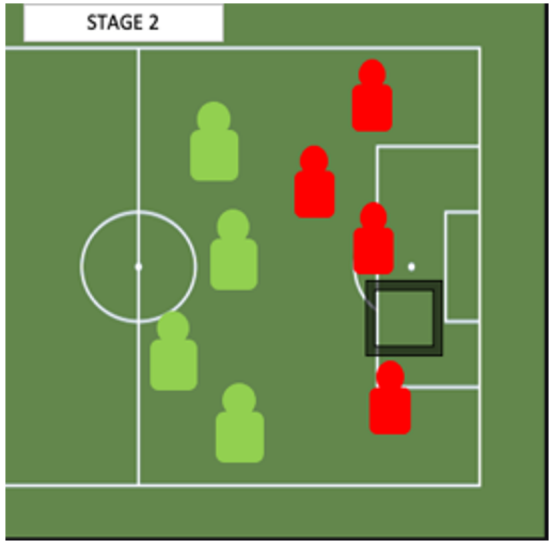
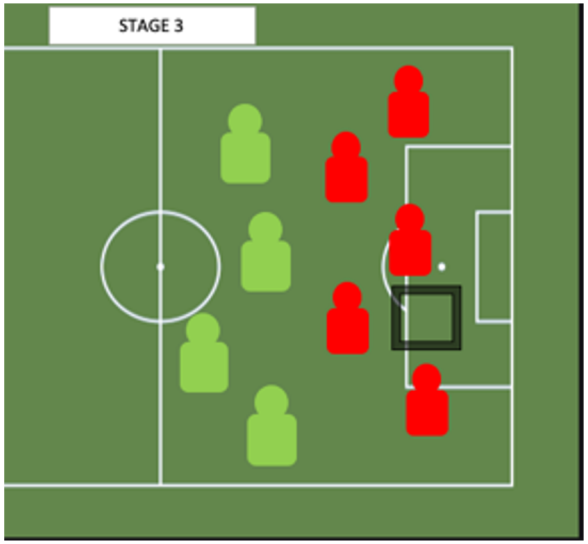
Video Analysis

Intervention

- 3 stage intervention focusing on exploiting the weakness of opposition.
- Creating overload on one side of the pitch.
- Points based system to reward desired action.
  - Attackers need to exploit space to create shots on goal.
  - Defenders need to press opposition to win back possession.
- Emphasise areas of exploitation in the opposition rather than our weaknesses.
- Monitoring cognitive and physiological training load during the session.







Monitoring and Evaluation of the Intervention

Performers as co-designers of the practice task:

- They have first-hand knowledge vs coaches third-person interpretation
- Via observations (coaches) and reflections (players and coaches)
- Make changes based on feedback
- Modify the degree and frequency of the constraint(s) to suit the individual learner
- Using movement variability (change build-up play, no. of defenders/attackers) to evaluate the learner's skill retention and transfer.

North et al. (2016)
Williams et al. (2006)
Woods et al. (2020)

Conclusion

- Firstly we identified the shot conversion problem which contributed to Manchester City WFC losing and draw games.
- We then identified areas of weakness of Manchester United to help inform our training intervention.
- Department of Methodology and Ecological Dynamics theoretical frameworks also informed our training intervention.

Reflection on the School

- Strengths and weaknesses of the project
  - Too short of a project due to holidays this week
  - Good interventions but sometimes we lack the link between intervention and field application
- The skills developed during the week
  - Communication
  - Quick adapatation and analysis
  - Organisation
- Reflections on working together
  - Interesting to see other point of view and way of working
  - Language barrier can be difficult to overcome
- Any other thoughts on the experience
  - More activities together like football of yesterday to inreact more.