

Minimizing Messi's Influence in a Given Match

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January 2024

Question

How does one stop Messi? Saudi Arabia defeated Argentina 2-1 in their opening group stage match. Not only did Saudi Arabia beat Argentina, they also held Lionel Messi, one of the world's best playmaking attackers, to 0.3 and 0.2 expected goals (xG) and expected assists (xA), respectively, in open play¹. Using StatsBomb's 360 data, I found a tactical insight as to how they managed to frustrate and control Messi and his influence. Finding a strategy to do the same will be the main concern when MLS teams face Inter Miami this season. Messi contributed 16 goals and 5 assists in 14 matches across the MLS, US Open Cup, and Leagues Cup in 2023.

Limiting a player's time and space to turn, carry, shoot, or pass is the most effective way to shut him down. It will diminish any *possible* impact he could have.

Method

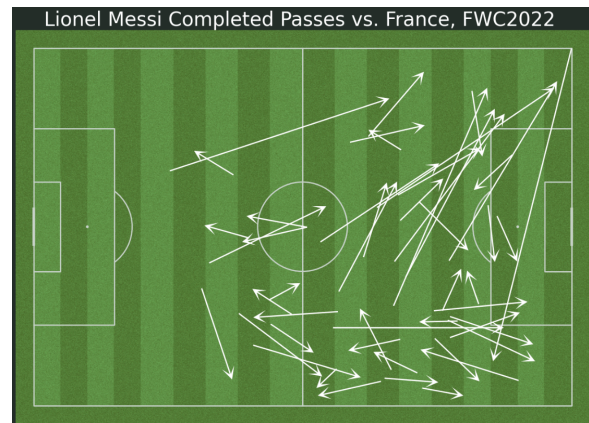
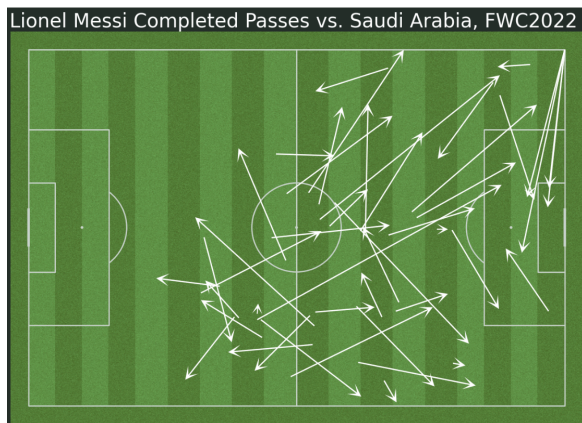
I compared Argentina's match against Saudi Arabia, where Messi had little effect in open play, with their

¹ Messi did score a penalty, so that is why the metrics are in open play.

match against France in the final, where Messi had a combined 1.5 xG+xA from open play. I wanted to see if there was a difference in how Saudi Arabia and France approached Messi.

1. Pass Maps

The first thing I did was analyze Messi's completed passes in both matches. I used the event data from each match and filtered each set until it contained only completed passes from Lionel Messi. I then used the `mplsoccer`² Python library to help map them, as seen below.



There are *fewer short distance passes* in the final third in the Saudi Arabia match. Only 5/19 (26%) of Messi's final third passes are <15 yards. In the France match, however, Messi had 14/30 (47%) of his third passes be <15 yards.

Saudi Arabia *limited Messi's ability to combine in small spaces*, arguably his best play-making quality. This

² <https://mplsoccer.readthedocs.io/en/latest/index.html>

forced him to play longer balls with a comparably lower success rate.

2. StatsBomb 360 Data

This is where I turned to the 360 data for each match. I wanted to see *how* the Saudi Arabians were able to limit Messi's small space combinations, compared to the France match.

To do so, I merged the event data and 360 data into one Pandas data frame and filtered the data until the data frame was only Messi's ball receipts. Using `mplsoccer` once again, I mapped each ball receipt and the surrounding players at each of the 116 specific moments between both matches.

The following snippet of code returned all freeze frames from the Saudi Arabia match in which Messi received the ball. The same technique was used for the France match:

```
Python
matchid=3857300
match_events_df=sb.events(match_id=matchid)
match_360_df=pd.read_json(f"/Users/michaelpace/Downloads/{matchid}.json")
df=pd.merge(left=match_events_df, right=match_360_df, left_on='id', right_on='event_uuid',
            how='left')

messi_receive1=messi_df1[messi_df1['type']=='Ball Receipt*'].reset_index(drop=True)

messi_receive1[['X','Y']]=pd.DataFrame(messi_receive1.location.tolist(),index=messi_receive1.index)

for i in range(50): #NumberOfBallReceipts
    p=Pitch(pitch_type='statsbomb')
    fig,ax=p.draw(figsize=(12,8))
    mr1=messi_receive[i:i+1]
```

```

for x in mr1.iloc[0]['freeze_frame']:
    if x['teammate']:
        color='blue'
    else:
        color='green'
    p.scatter(x=x['location'][0],y=x['location'][1],ax=ax, c=color, s=100)

p.scatter(x=mr1['X'],y=mr1['Y'],ax=ax,color='red',s=125)

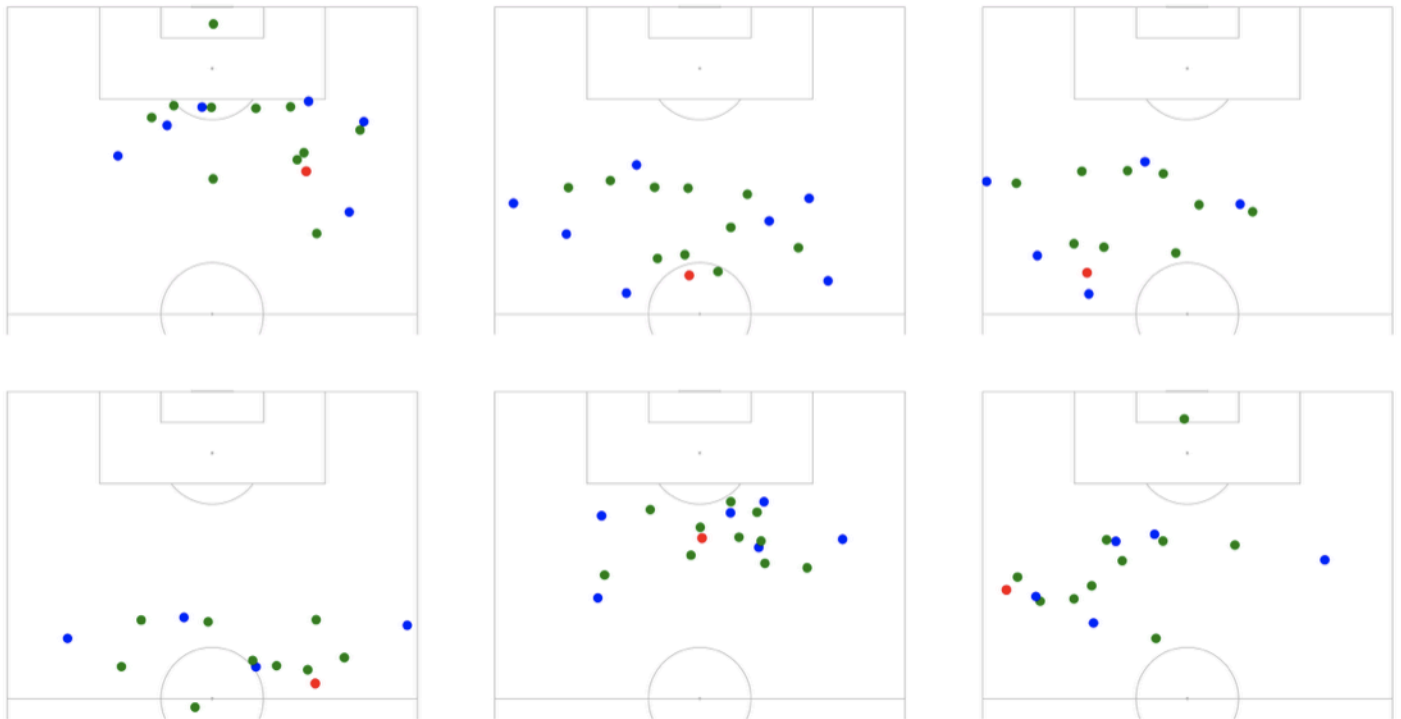
```

After analyzing each freeze frame, I chose 6 *freeze frames from each match* that exemplified the difference between how Saudi Arabia and France tactically defended Messi.

3. StatsBomb 360 Freeze Frames

The resulting freeze frames are as follows.

Argentina vs. Saudi Arabia, 2022 FIFA World Cup
Selected snapshots of pitch as Lionel Messi receives the ball.
(Argentina is attacking the shown goal in all snapshots)



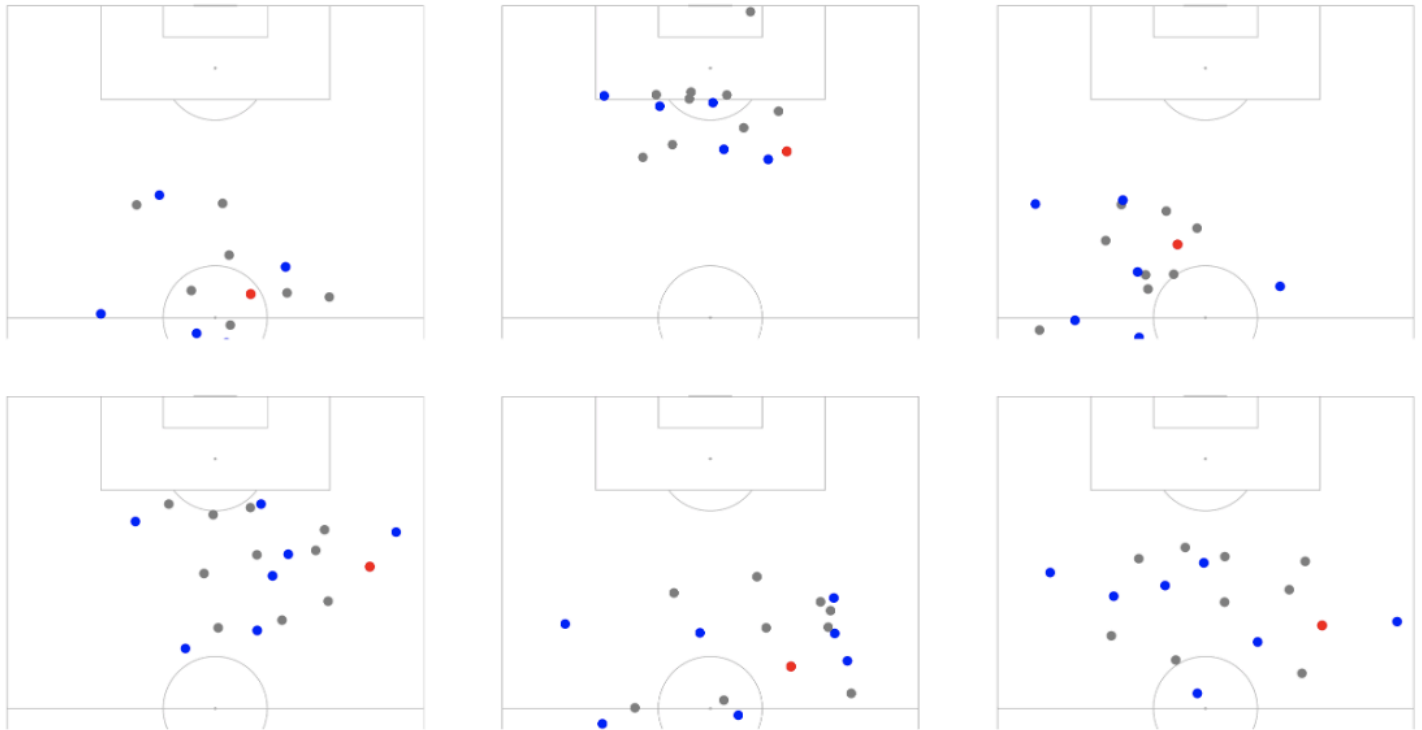
Data comes from StatsBomb 360 open data on Github.

In each of these freeze frames, there are a minimum of 2 Saudi Arabia players, goal-side, within several feet of Messi. This was consistent in 34/53 (64%) of ball receipts analyzed. The Saudis jammed the middle of the park, forcing Messi wide. Even as he was forced wide, he still was marked tightly.

This limited Messi's time and ability to look up and find a line-breaking or meaningful pass from the middle of the pitch. Further, the Saudis were well disciplined in man-marking the other Argentinians. Marking them as Messi receives the ball is crucial because it limits the options Messi has to release the ball.

Now let's look at the France match in which Messi had both a high xG and xA.

Argentina vs. France, 2022 FIFA World Cup
Selected snapshots of pitch as **Lionel Messi** receives the ball.
(Argentina is attacking the shown goal in all snapshots)



Data comes from StatsBomb 360 open data on Github.

There is a stark contrast between these frames and those of the Saudi Arabia match. Messi was able to find large pockets of space where he was able to receive the ball uncontested. Predominantly in the middle or right side, Messi received the ball with teammates surrounding him rather than the opposition, as seen with the Saudi Arabia match. This allowed Messi time, space, and passing options, something teams cannot do if they want to limit his influence. This is consistent in 43/63 (68%) frames I analyzed. France's inability to close and contain

Messi proved costly, as he led Argentina to a World Cup Final victory.

Results

Tactically implementing a system of play where Messi is always accounted for with close man-marking and help defense will have the best chance of limiting Messi's high-influence style of play. Allowing him to receive, turn in space, and then either carry or pass the ball will result in high xG chances.

I believe a system of play that crowds the middle of the pitch would be the best way to limit Messi. This would limit his space and force him wide, as seen in the Saudi Arabia match. It is then up to the wing backs and outside mids/wingers to close him down should he opt to sneak wide to receive the ball, like he did in the France match. He will want to be on the ball; however, it would be harder for him to impact the match to the fullest extent from the flanks of the pitch.