## Materials for [27] What If Games Were Shorter?

## Overview

MTurk participants considered a football game between two NFL teams - Team A and Team B. They were told that Team A is better than Team B and that expert oddsmakers expect Team A to win a full-length game by 7 points.

I randomly assigned about 500 participants to one of four conditions:
Probability-by-quarter condition: Participants were asked to indicate the probability that Team A would win, lose, and tie after 4 quarters, then the first 3 quarters, then the first 2 quarters, then the first quarter.

Shortened-game condition: Participants were asked how shortening the game from 4 quarters to 2 quarters would affect the favorite's chances of winning.

Best-chance condition: Participants were asked whether the favorite would have the best chance of winning if the game were $1,2,3$, or 4 quarters in length.

Points-by-quarter condition: Participants were asked, on average, how many points the favorite would be winning by after the first, second, third, and fourth quarter. Because of space constraint, I do not report this condition in the post. However, data from this condition is in the data file.

I randomly assigned $\sim 200$ participants to the probability-by-quarter condition, and $\sim 100$ to each of the other three conditions.

The exact materials are displayed on the following pages.

## Page 1

We are researchers at the University of Pennsylvania and we are studying decision making. In this survey, you will answer some questions about NFL football and about yourself. Please be assured that your responses will be kept completely confidential.

The survey will take you approximately 2-5 minutes to complete. For completing this survey, you will be compensated 50 cents by MTurk.

Your participation in this research is voluntary. You have the right to withdraw from the study at any point and for any reason without penalty.

By continuing with this survey, you acknowledge that you have read the information above and are consenting to participate.

Enter your MTurk ID:

## Page 2 - Probability-by-Quarter Condition

Imagine that two NFL football teams - Team A and Team B - are about to play each other. Team A is better than Team B. Expert oddsmakers in Las Vegas expect Team A to win a full-length game by about 7 points.

In your opinion, what is the likelihood that Team A wins, loses, or ties against Team B?
In each box, please type in a number between $0 \%$ and $100 \%$, where $0 \%$ indicates that there is no chance of the outcome and $100 \%$ indicates that the outcome is guaranteed. Your three answers must sum to 100\%.

| The chances that Team A wins the game are... | 0 | $\%$ |
| :--- | :--- | :--- |
| The chances that Team A loses the game are... $\%$ <br> The chances that the game ends in a tie are... 0 <br> Total 0 | $\%$ | $\%$ |

Now think about how the game might unfold during the first three quarters.
In your opinion, what is the likelihood that Team A is winning, losing, or tied against Team B after the first three quarters?

| The chances that Team A is winning after the first three quarters are... | 0 |  |
| :--- | :--- | :--- |
| The chances that Team A is losing after the first three quarters are... $\%$ <br> The chances that the game is tied after the first three quarters are... 0 <br> Total 0 | $\%$ | $\%$ |

Now think about how the game might unfold during the first two quarters.
In your opinion, what is the likelihood that Team A is winning, losing, or tied against Team B after the first two quarters?

| The chances that Team A is winning after the first two quarters are... | 0 | \% |
| :---: | :---: | :---: |
| The chances that Team A is losing after the first two quarters are... | 0 | \% |
| The chances that the game is tied after the first two quarters are... | 0 | \% |
| Total | 0 | \% |

Now think about how the game might unfold during the first quarter.
In your opinion, what is the likelihood that Team A is winning, losing, or tied against Team B after the first quarter?

| The chances that Team $A$ is winning after the first quarter are... | 0 | $\%$ |
| :--- | :--- | :--- | :--- | :--- |
| The chances that Team $A$ is losing after the first quarter are... | 0 | $\%$ |
| The chances that the game is tied after the first quarter are... | 0 | $\%$ |
| Total | 0 | $\%$ |

## Page 2 - Shortened-Game Condition

Imagine that two NFL football teams - Team A and Team B - are about to play each other. Team A is better than Team B. Expert oddsmakers in Las Vegas expect Team A to win a full-length game by about 7 points.

Imagine that, because of an unforeseen event, the game is shortened by half. The teams play only 2 quarters of the game instead of 4 quarters.

In your opinion, would shortening the game in this way affect Team A's chances of winning the game?
Yes, it would decrease Team A's chances of winningYes, it would increase Team A's chances of winning

## Page 2 - Best-Chances Condition

Imagine that two NFL football teams - Team A and Team B - are about to play each other. Team A is better than Team B. Expert oddsmakers in Las Vegas expect Team A to win a full-length game by about 7 points.

Imagine that, due to a scheduling conflict, the NFL is considering shortening the game to either be 1 quarter in length, 2 quarters in length, or 3 quarters in length.

In your opinion, which of the following game lengths would give Team A the best chance of winning the game, or would it not matter?Team A would have the best chance of winning if the game were 1 quarter in lengthTeam A would have the best chance of winning if the game were 2 quarters in lengthTeam A would have the best chance of winning if the game were 3 quarters in lengthTeam A would have the best chance of winning if the game were 4 quarters in length
Team A would have the same chance of winning regardless of the game's length

## Page 2 - Points-By-Quarter Condition

Imagine that two NFL football teams - Team A and Team B - are about to play each other. Team A is better than Team B. Expert oddsmakers in Las Vegas expect Team $A$ to win a full-length game by about 7 points.

On average, how many points do you think Team A will be winning by after each quarter of the game? Feel free to use decimals if you desire.


## Page 3

Please answer the following question as best you can from memory. Please do not try to look up the answer. Your answer will not affect your compensation.

Which of the following players do NOT play the quarterback position in the NFL?Aaron RodgersEli ManningJoe FlaccoCalvin JohnsonDrew Brees

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Please indicate your gender.

Male
Female

How old are you?
$\qquad$

Thanks for participating!

