**Study 1: Do “high fives” improve team performance?**

In the 2011 NBA (National Basketball Association) finals, the Dallas Mavericks defeated the Miami heat. One headline on NBC sports stated “Miami’s real problem this series: Not enough high fives,” citing a study that found that teams exhibiting more “touching,” such as high fives, early in the season won more games.

[*http://probasketballtalk.nbcsports.com/2011/06/09/miami%E2%80%99s-real-problem-this-series-not-enough-high-fives/*](http://probasketballtalk.nbcsports.com/2011/06/09/miami%E2%80%99s-real-problem-this-series-not-enough-high-fives/%20)  *Kraus, M., Huang, C., and Keltner, D., “Tactile communication, cooperation, and performance: An ethological study of the NBA,”* ***Emotion****, 2010; 10(5): 745-749.*

**Study 2: Do metal tags on penguins harm them?**

Scientists trying to tell penguins apart have several ways to tag the birds. One method involves wrapping metal strips with ID numbers around the penguin’s flipper (cheap method – known as “flipper banding”), while another method involves electronic tags (more expensive method). Flipper banding is a controversial – some studies claim it harms penguins while others have concluded that there are no short term effects. Scientists wanted to determine whether the metal tags have any significant long term effect on penguins. Data were collected over a 10-year time span from a sample of 100 penguins that were randomly given either metal or electronic tags. This included information on number of chicks, if the penguins survived more than the decade, and length of time on foraging trips.

*Saraux, C., et al., “Reliability of flipper-banded penguins as indicators of climate change,”* ***Nature****, January 2011; 468: 203 – 206.*

1. Identify the cases and variables of interest in Study 2. Label each variable as explanatory or response variable and as categorical or numerical.
2. In an experiment, the researchers performing the study manipulate one (or more) of the variables to see how the other variable is impacted. In which of the two studies did the researchers manipulate one of the variables? Explain.
3. Does Study 1 provide evidence that additional high fiving improves team performance? Explain.

**Study 3: “Men tend to be judged more harshly for humor mistakes than women”**

In a 2021 study, 400 participants learned about a female or a male person who, while on a date, erred in making jokes that were not received well by the date. Participants then reported on the subjective magnitude of the mistake, how generally competent they believed the mistake-maker to be, and how much they liked the mistake-maker. The participants were randomly assigned to one of two gender of mistake maker conditions: female or male. In the female condition, participants read “Brenda went on a first date with a man she met online. Brenda tried to crack jokes all night but her date did not seem to enjoy them and he left after the first drink.” In the male condition, participants read “Brad went on a first date with a woman he met online. Brad tried to crack jokes all night but his date did not seem to enjoy them and she left after the first drink.” Participants in both conditions answered the following questions in randomized order: How big of a mistake did [Brad/Brenda] make? 1 =not at all, 7 =very big; How competent is [Brad/Brenda]? 1 =not at all, 7 =extremely; How much do you like [Brad/Brenda]? 1 =not at all, 7 =extremely.

*Reich, T., Maglio, S.J., and Fulmer, A.G. (2021) “No laughing matter: Why humor mistakes are more damaging for men than women,”* ***Journal of Experimental Social Psychology****,* 96 (104169).

1. Identify the cases and variables in this study. Label each as the explanatory or response variable and as numerical or categorical.
2. Why is this an experiment rather than an observational study?
3. Does this study have the key features of a well-designed controlled experiment? Explain.