Free Assignment 5: Studying Love Languages

The idea of "love languages" is an interesting concept based on the idea that we express love through different ways, called languages. There are five proposed languages:

- Gifts: gifts of material goods
- Touch: physical contact
- Acts of Service: doing things for a person
- Time: quality time spent together
- Words of affirmation: nice words that encourage a person

The project here investigated love languages looking at how a person shows love (or gives love) and how a person receives love. The main idea of love languages is that often these languages may not match up in a relationship, such that a person shows love in a way that is different than how their partner would prefer to receive love.

A problem with the love language idea is that it is not empirically validated. This was one clinician's speculation based on his experience in counseling. This lab will look at some data to test some ideas with love languages:

Step 1: Create a folder and an R notebook in the folder. Download the data "FA5_lovelanguage.csv" into that folder. Create a code chunk where you load the tidyverse library and the psych library

Step 2: Import "FA5_lovelanguage.csv" as the dataframe named "love". It should be a dataset with 100 observations of 18 variables. The variables are named as follows:

- Sex: participant sex
- Age: participant age
- Race: participant race
- LLGive, LLTouch, LLService, LLTime, and LLWords: a participant's score on a love language questionnaire based on how they prefer to receive love. A higher score on "LLGive" means they have a higher need for the love language of Gifts
- GiftsReceive, TouchReceive, ServiceReceive, TimeReceive, and WordsReceive: Participatns were given a definition of the love language and then asked a single 5 point scale question as to how much they liked to receive love in a certain way.
- GiftsGive, TouchGive, ServiceGive, TimeGive, and WordsGive: the answer to a question where a person was asked to rate on a 5 point scale how much they gave the following love languages, or how much they showed love to other people.

Step 3: For the rest of this assignment, you will produce a writeup which answers the questions below. You must include your code chunks and annotations to describe what you are doing, why you are doing it, and what you conclude. Write this so that someone who is unfamiliar with the hypotheses and data will be able to understand your writeup.

For this assignment, I want you to produce an R notebook that answers **two** of the following questions. You should use multiple regression to answer at least one of the questions below. Any other analysis may be appropriate.

When you evaluate your data, make sure you visualize the variables to make sure there are no outliers. You may want to then use the filter() command to ensure there are no outliers in your data.

- 1. Do men and women have different levels of love languages?
- 2. Is there a relationship between a person's self-reported love language (the Receive) variable and the questionnaire? That is, do people self-report their love language accurately? Does controlling for gender affect this relationship?
- 3. Is there a relationship between different kinds of love languages using the LL questionnaire variable? What about when you control for other possible variables, such as sex or other love languages?

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4. Is there a relationship between the love language a person likes to give and the one they like to receive?

How about when you control for other potential variables?