1 Married at First Sight

This is a document generated automatically from the figures and tables produced by the script that was used to read in and analyze data. First, in Section 2, it describes the data. Next, in Section 3, it describes the results of the estimated regression model.

2 Data

Summary statistics for numerical variables are shown in Table 1.

	Couple	AgeDifference	MarriedvsDivorced	DrPepperSchwartz	DrLoganLevkoff	DrJose
X	Min. : 1.00	Min. :0.000	Min. :0.0000	Min. :1	Min. :0	Min. :0
X.1	1st Qu.: 5.25	1st Qu.:0.250	1st Qu.:0.0000	1st Qu.:1	1st Qu.:0	1st Qu
X.2	Median : 9.50	Median :2.000	Median :0.0000	Median :1	Median :0	Median
X.3	Mean : 9.50	Mean :2.611	Mean :0.3333	Mean :1	Mean :0	Mean :
X.4	3rd Qu.:13.75	3rd Qu.:3.750	3rd Qu.:1.0000	3rd Qu.:1	3rd Qu.:0	3rd Qu
X.5	Max. :18.00	Max. :7.000	Max. :1.0000	Max. :1	Max. :0	Max. :0

Tab. 1: Summary of Numeric Variables

Table 2 shows the success or failure of a marriage depending on the age difference between multiple couples.

	Divorced	Married
1 year age gap	3	2
2 year age gap	2	0
3 year age gap	1	2
4 year age gap	2	1
5 year age gap	1	0
6 year age gap	1	1
7 year age gap	2	0

Tab. 2: MarriedvsDivorced

The correlation matrix of potential variables in the model is shown in Table 3. The success of a couple's marriage is positively correlated with the approval of Dr Pepper Schwartz and Dr Logan Levkoff. It is also can be positively correlated depending on the differences in age. In the next setion, these variables will be included in a regression model.

	AgeDifference	DrLoganLevkoff	DrPepperSchwartz	MarriedvsDivorced
AgeDifference	1.000			-0.131
DrLoganLevkoff		1.000		
DrPepperSchwartz			1.000	
MarriedvsDivorced	-0.131			1.000

Tab. 3: Correlation Matrix

	Model 1
(Intercept)	2.833**
	(0.731)
MarriedvsDivorced	−0.667
	(1.266)
R^2	0.017
Adj. R^2	−0.044
Num. obs.	18

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Tab. 4: Regression Model 1

3 Empirical Results

The estimates from the regression model are shown in Table 4.

The regression model predicts age difference as follows For every approval by DrLoganLevkoff, age difference is expected to rise by NA. If the couple is approved by DrPepperSchwartz, age difference are expected to be NA higher. If there was a successful couple approved by Dr Pepper Schwartz, age difference is expected to be -0.667 lower. Overall, this model provides a fairly good description with an R^2 of -0.044.

The regression lines are shown in Figure 1, with the estimated intercept term for marriages evaluated and approved by Dr Logan Levkoff (red), marriages evaluated and approved by both Dr Logan Levkoff and Dr Pepper Schwartz (green), and marriages evaluated and approved by Dr Logan Levkoff and rejected by Dr Pepper Schwartz.

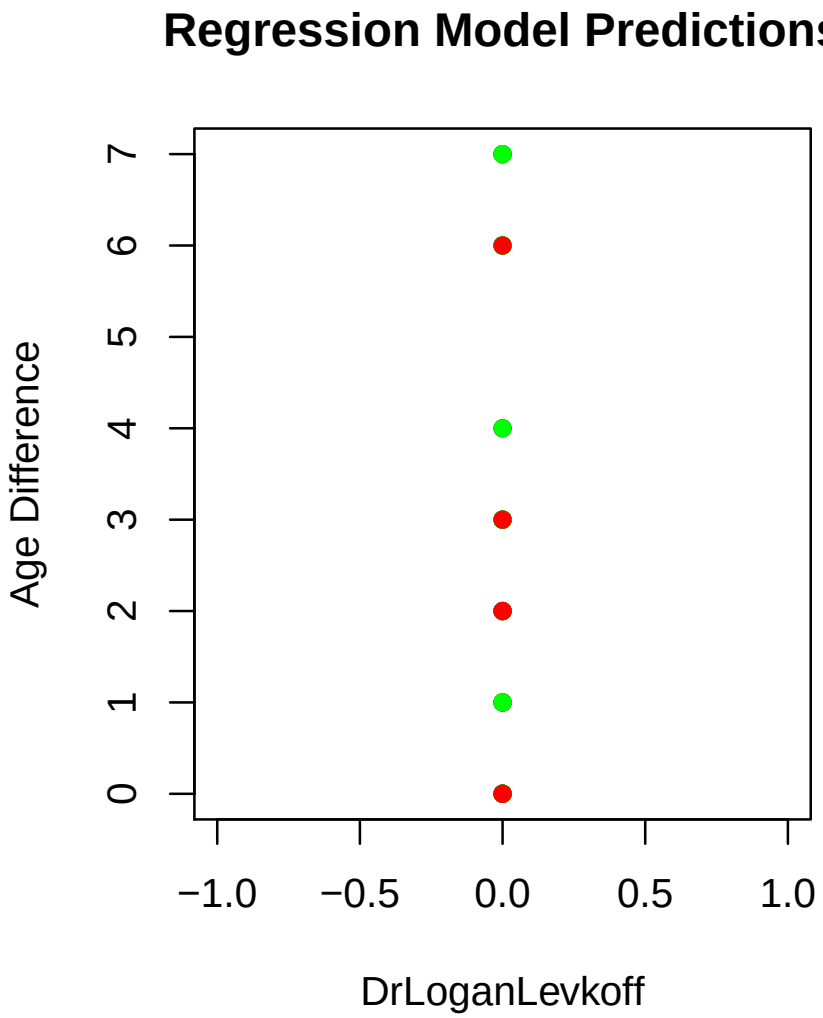

Fig. 1: Regression Model Predictions

The predictions are shown in Figure 2 compared to age difference. It is clear that there is a reasonably close relationship between the predictions and the observed age differences.

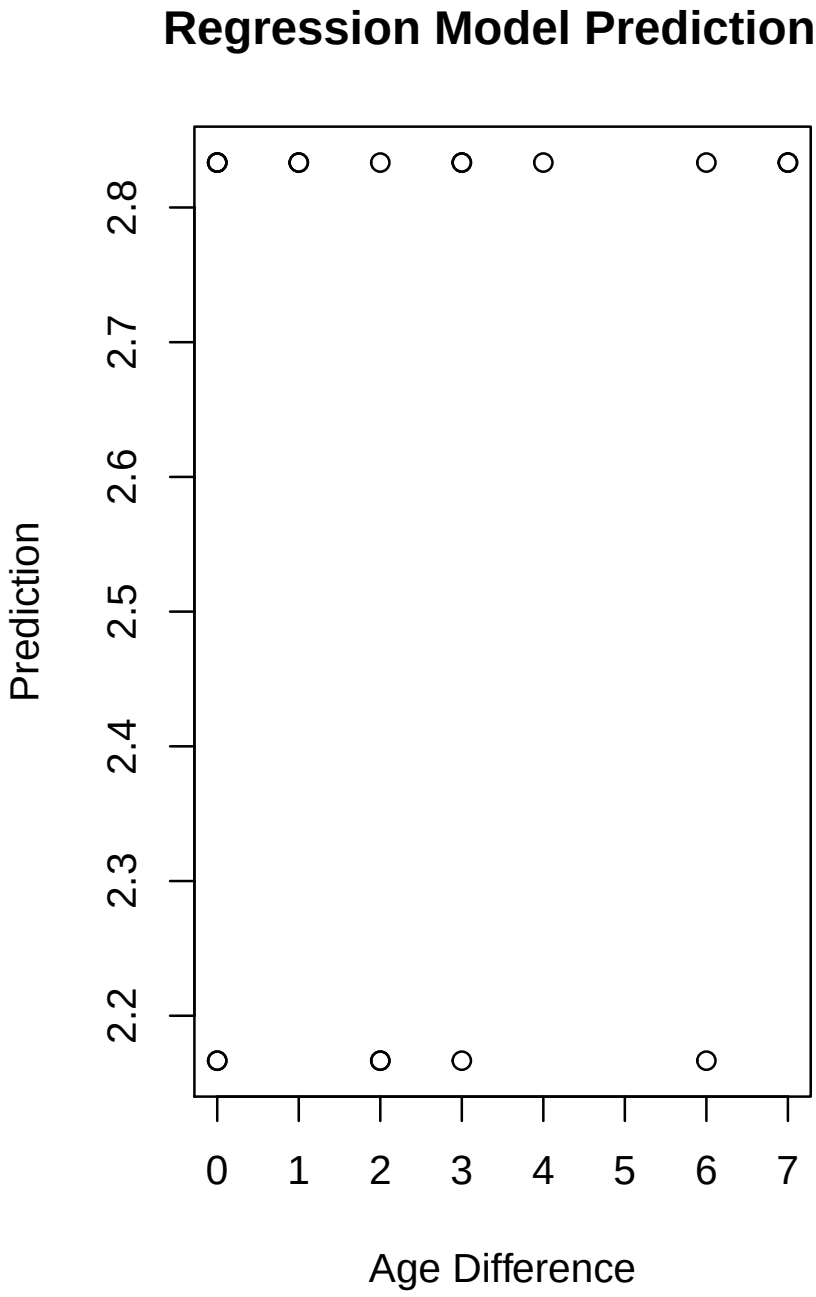

Fig. 2: Age Differences vs. Predicted Age Differences