

**Quantitative II
Final Project Draft**

Name: Matthew K. Robison
Educational Leadership

Problem Title: One-Day vs. Overnight Orientation Programs...
Is there a difference in the peer bonding experience?

Area of Problem: Higher Education—Student Affairs

Type of statistical analysis: Two-way ANOVA

Source of data: I am using a factious data set which I constructed for purposes of final assignment.

In my study I am interested in finding if there is a significant difference in the amount of peer bonding that takes place during different types of Orientation program. Specifically, I want to look at if there is any difference on the peer bonding experience of students that attend a One-day vs. Overnight Orientation program. I also would like to see if there is any difference in how these two Orientation programs effect differently the peer bonding experience of male and females students.

To explore my research question, I selected 40 students to be included in my research study. I selected 20 students (10 male and 10 female) that attended a One-day Orientation program. I also selected 20 students (10 male and 10 female) that attended an Overnight Orientation program. At the conclusion of their individual Orientation experience each student was given the Robison Test of Peer Bonding Measurement. This instrument measures the amount of peer bonding which takes place during a structured Orientation activity. The results of this test are outlined in the table below.

**One-Day Orientation
Robison Test of Peer Bonding Scores**

<u>Males</u>					<u>Females</u>				
74	83	86	71	77	74	83	78	82	91
70	69	82	77	70	89	61	89	81	87

**Overnight Orientation
Robison Test of Peer Bonding Scores**

<u>Males</u>					<u>Females</u>				
84	88	81	96	98	88	95	91	89	93
92	82	96	91	89	98	92	92	89	99

Effect of Orientation Program on Amount of Peer Bonding

Introduction

This project was undertaken to study the effect of different types of Orientation programs on the amount of Peer Bonding which takes place during a new college student's Orientation experience. Orientation programs are meant to introduce new students to multiple aspects of their new academic home. From enrollment and registration policies to financial aid and payment regulations, there are numerous things that students need to know to be successful at a new institution.

Along with these rules and regulations, Orientation programs serve additional goals...one goal being to introduce new students to their fellow classmates. Research shows that students that are connected with their fellow classmates before the start of their first semester of college will be more successful in their new college home. Therefore, peer bonding is an important component of any Orientation program. The primary goal of this research study is: To find if there is a difference on the amount of peer bonding that takes place in a One-day vs. an Overnight Orientation program. In addition, I am interested to see if there are statistical differences between males and females in regards to their amount of peer bonding as they go through different Orientation types.

Methods

Two groups of new college students were selected to go through two different Orientation programs. One group of twenty new college students (ten male and ten female) attended a One-day Orientation program. Another group of twenty new college students (ten male and ten female) attended an Overnight Orientation program. At the completion of their respective Orientation programs, each student took the Robison Test of Peer Bonding Measurement.

Results

An alpha level of .05 was used for all statistical tests and η^2 was calculated as the effect size. Scores on the Robison Test of Peer Bonding Measurement served as the dependent measure for the 2x2 ANOVA are presented in Table 1. Levene's test for Equality of Variance found the variance of the populations samplers are equal ($p = .234$)

Table 1

Cell Sizes, Means & Standard Deviations of Robison Peer Bonding Scores

Level	Treatment	Mean	Std. Deviation	N
One-Day	Male	77.70	6.80	10
	Female	81.50	8.97	10
Overnight	Male	89.70	6.02	10
	Female	92.60	3.75	10

As shown in Table 2, a significant main effect was found for Orientation program type, $F(1,36)= 30.1456$, $p<.001$, $\eta^2 =.456$ but not for Gender $F(1, 36)= .2536$, $p=.120$, $\eta^2 =.066$. The Orientation Type X Gender interaction was not found statistically significant $F(1,36)= .046$ $p=.832$, $\eta^2 =.001$.

Table 2
Factorial Analysis of Variance in Robison Peer Bonding Scores

Source	df	SS	Mean Square	F
Gender	1	112.223	112.223	2.536
Program	1	1334.025	1334.025	30.146
Gender*Program	1	2.025	2.025	.046
Error	36	1593.100	44.253	
Total	40	294597.000		

As Figure 1 shows, students attending an Overnight Orientation program showed significantly more peer bonding than those students who attended a One-day Orientation program.

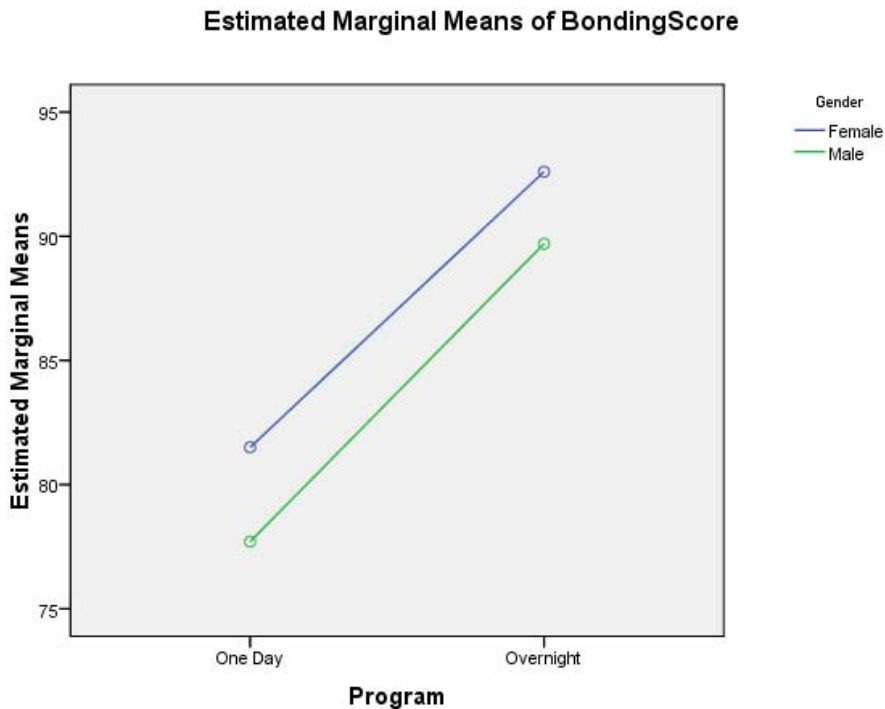


Figure 1. Estimated marginal means of peer bonding by Orientation program type and Gender.

Discussion

This was an interesting study with a small amount of students. What is interesting is the data did not show a statistical difference between gender and peer bonding. Girls and boys tend to bond somewhat similarly during either a One-day or Overnight Orientation program. Also, it is interesting to note that one type of Orientation program does not favor one gender over another. This study will be a good jumping off point as studies are done on different types of Orientation programs and how they affect new students as they transition into their new academic community.