

SPSS & OOM t-tests Assignment

1. Download the Terror Management Data from the course website in SPSS format. These are genuine data from our attempts to replicate the death threat study here at OSU. Recall the main hypothesis was that students in some population who write about their deaths will, on average, rate themselves as more religious and with a greater belief in God than those writing about their favorite foods. Test these predictions for the Religious and Belief items separately using the appropriate t-tests in SPSS.

In the original published study, the hypotheses were supported. Did we replicate the findings here at OSU?

2. Many students (even Christian students who go to church every week) describe themselves as “spiritual but not religious” due to a perceived negative view of religion in society. Consequently, students in the population are expected to, on average, rate higher on the Belief item compared to the Religious item. Test this prediction using the appropriate t-test in SPSS.
3. Download the Terror Management Data from the course website in OOM format.
 - Use the *Build/Test Model* function in OOM to test the first two predictions above regarding group differences on the Religious and Belief items.
 - Use the *Ordinal Analysis / Concatenated Ordering* function in the OOM software to test the prediction above comparing ratings on the Religious and Belief items. The ordinal prediction is as follows: $\text{Belief} > \text{Religious}$. In other words, for each person, his/her belief rating will be higher than his/her religious rating.
4. On the backside of this sheet you will find two problems from a statistics textbook. Enter the data from both data sets into SPSS and OOM and run the appropriate t-tests and OOM analyses to address the researcher’s expectations.

Write a brief summary for the SPSS and OOM results from both problems. You do not have to use APA style.

17. Expanding technology and the growth of knowledge in medicine require that nurses continually upgrade their skills. One way to accomplish this upgrading is through continuing-education workshops. The present study investigated the impact of a 60-hour workshop on a measure of the participants' cognitive knowledge. Twenty-two staff nurses took a paper-and-pencil pretest to evaluate their basic knowledge of cancer and cancer nursing prior to the 10-day workshop. The following data were obtained. (Suggested by Donovan, Marilee, Wolpert, Patricia, and Yasko, Joyce. [1981]. Gaps and contracts. *Nursing Outlook*, 467-471.)

Participant	Knowledge Score	
	Pretest Score	Posttest Score
1	29	35
2	20	41
3	24	33
4	32	41
5	33	39
6	19	20
7	17	29
8	32	42
9	16	36
10	28	37
11	35	36
12	19	27
13	31	50
14	28	33
15	23	23
16	18	35
17	24	34
18	25	30
19	28	39
20	32	45
21	25	36
22	27	29

11. It has been reported that employment interviewers spend more time talking to applicants who are hired than to applicants who are rejected. To determine whether this is true for college students seeking summer employment through a university placement center, a researcher posing as an applicant accompanied a random sample of referees to their job interviews. A record of the duration and outcome of $n = 49$ interviews was kept.

	Duration of Interview (minutes)		
	Hired	Rejected	
30	23	19	17
21	24	18	18
24	26	22	19
25	27	13	22
29	24	15	15
24	22	18	19
23	25	17	17
24	26	20	20
28	23	18	18
25	24	19	17
24	27	23	
19	26	12	
25	25	18	