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Introduction

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Problems with the traditional method of faculty evaluation

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Experimental design

The treatments and the randomized incomplete block design

Gathering faculty teaching evaluations

Gathering faculty teaching evaluations

Other design considerations

Faculty members are busy people. They have many other things to do besides teaching. They have to prepare lectures, grade papers, and meet with students. They also have to attend to their own research and administrative duties. Therefore, it is important to design a teaching evaluation system that is easy to use and does not take too much of their time.

One way to do this is to use a short, self-administered questionnaire. This type of questionnaire is easy to distribute and collect, and it does not require the presence of an interviewer. It also allows for anonymity, which may encourage more honest responses.

Research questions

There are several research questions that can be addressed by a teaching evaluation system. For example, we can ask whether the system is used by a sufficient number of students to provide a representative sample of the class. We can also ask whether the system is used by a sufficient number of faculty members to provide a representative sample of the faculty.

() We can also ask whether the system is used by a sufficient number of students to provide a representative sample of the class.

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The response rates

One of the most important factors in the design of a teaching evaluation system is the response rate. The response rate is the percentage of students who complete and return the questionnaire. A high response rate is important because it ensures that the data collected are representative of the entire class.

TABLE 2. *Means and standard deviations for the dependent variables in the present study*

Variable	Experiment 1		Experiment 2		Experiment 3		F(1, 108)	p
	M	SD	M	SD	M	SD		
Accuracy	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Reaction time	1.12	0.08	1.12	0.08	1.12	0.08	0.00	<.001
Confidence	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Calibration	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Overconfidence	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Underconfidence	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Calibration error	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Overconfidence error	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Underconfidence error	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Calibration error (SD)	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Overconfidence error (SD)	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Underconfidence error (SD)	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Calibration error (M)	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
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Calibration error (SD)	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Overconfidence error (SD)	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001
Underconfidence error (SD)	0.82	0.05	0.82	0.05	0.82	0.05	0.00	<.001

Note. M = mean; SD = standard deviation.

TABLE 3. *Means and standard deviations for the dependent variables in the present study (continued)*

The method effect

Gathering faculty teaching evaluations

Faculty	1	2	3	4	5
Dr. Smith	4	5	4	5	4
Dr. Jones	3	4	3	4	3
Dr. Brown	5	4	5	4	5
Dr. White	4	5	4	5	4

The following table shows the results of the online treatment effect analysis. The table is organized into two main sections: the top section shows the overall mean and standard deviation for each faculty member, and the bottom section shows the results of the ANOVA test. The ANOVA test results are presented in a table format, with columns for the faculty member, the mean, the standard deviation, and the p-value. The p-value is calculated using the formula $F_{(k-1, N-k)} = \frac{MS_B}{MS_W}$, where k is the number of groups, N is the total number of observations, MS_B is the mean square between groups, and MS_W is the mean square within groups. The p-value is then compared to the significance level α to determine if the treatment effect is statistically significant.

The online treatment effect

The following table shows the results of the online treatment effect analysis. The table is organized into two main sections: the top section shows the overall mean and standard deviation for each faculty member, and the bottom section shows the results of the ANOVA test. The ANOVA test results are presented in a table format, with columns for the faculty member, the mean, the standard deviation, and the p-value. The p-value is calculated using the formula $F_{(k-1, N-k)} = \frac{MS_B}{MS_W}$, where k is the number of groups, N is the total number of observations, MS_B is the mean square between groups, and MS_W is the mean square within groups. The p-value is then compared to the significance level α to determine if the treatment effect is statistically significant.

Faculty	1	2	3	4	5
Dr. Smith	4	5	4	5	4
Dr. Jones	3	4	3	4	3
Dr. Brown	5	4	5	4	5
Dr. White	4	5	4	5	4

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Mean item scores

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Discussion and conclusions

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References

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- Barnett, T. (1999) *Reflective faculty evaluation: enhancing teaching and determining faculty effectiveness* (1999) (1999) **B**
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