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Survey Response Rate and Request for Student Identification

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INTRODUCTION

As we undertake survey research concerning student experiences and educational outcomes, it is often critical to link data gathered from questionnaires to demographic and academic indicators. Much of this information can be collected using the questionnaire itself, but because space is generally at a premium, it is better devoted to questions directly related to the research topic. In addition, many of the things we learn from questionnaires are especially interesting in relationship to information that is not available at the time of the survey, such as academic records, future surveys or college outcomes. This limitation can be partially overcome by using group averages, but our ability to chart relationships is vastly improved if we can link questionnaire responses with other variables at the individual level.

In order to provide this linkage, we often ask students to record their student identification numbers as they respond to surveys, but this may have the unintended consequence of lowering response rate. Although we describe our research purpose and procedures in cover letters, and assure students that all responses are confidential and reported only in group form, occasional comments on returned questionnaires suggest that concerns about confidentiality remain. If such concerns affect students' willingness to complete and return questionnaires, the representativeness of response will be reduced and our ability to draw valid conclusions diminished. To determine the extent to which requests for student identification affect survey response rate, we undertook a small experiment in Autumn 1997 as part of a larger study.

PROCEDURES

Students who attended New Student Orientation during Summer 1997 were surveyed the following Autumn quarter regarding the value of their orientation and advising experiences. Of the approximately 6,000 undergraduates who attended Orientation, 1144 were randomly selected to be sent a mailed questionnaire. Questions addressed type of student housing, students' previous experiences with the UW and with computers, the type of orientation and registration process they underwent, and their concerns about attending the UW. To facilitate student response, a stamped, addressed envelop was sent along with the survey and cover letter, and a follow-up postcard or letter was mailed approximately two weeks later.

To determine the effect of requests for identification on student willingness to respond, half of the survey sample was sent a questionnaire that asked for demographic information such as age, gender, ethnicity and class level, but did not ask for student number. The other half of the sample received a questionnaire that asked for student number, but not demographics.

A secondary research question concerned the relative effectiveness of follow-up postcards and letters in encouraging student response. The sample was correspondingly divided with half of the students receiving a reminder postcard and half receiving a letter and extra copy of the questionnaire. Four equal sized groups were created as shown in Table 1.

Table 1. Number of undergraduates in each mailing group

	Postcard follow-up	**Letter follow-up**	**Total**
ID not requested	Group 1: n = 286	Group 2: n = 286	N = 572
ID requested	Group 3: n = 286	Group 4: n = 286	N = 572
Total	N = 572	N = 572	N = 1144

RESULTS

Of the 1144 questionnaires sent out, 533 (46.6%) completed surveys were returned. Only six questionnaires were returned as undeliverable; the students surveyed were just entering the University and the Registrar's address file was correspondingly up-to-date. Correcting the sample size for undeliverable questionnaires resulted in a very small increase in overall response rate (0.2%) so this adjustment was not made in further analyses.

Overall response rate

Students who were asked to supply their student number returned questionnaires at a slightly lower rate than did students who were not asked to supply their number. As shown in Figure 1, 259 (45.3%) "ID requested" questionnaires were returned compared to 274 (47.9%) "ID not requested" questionnaires.[1] This minor reduction in response would seem to be an acceptable tradeoff for the improved capability to link to other variables. However, 29 of the students who returned "ID requested" questionnaires did not provide their student number and consequently their data could not be matched to data from other sources. Eliminating these questionnaires resulted in an adjusted response rate of 40.2%, comparing much less favorably with that of the "ID not requested" questionnaires.[2] These results suggest the following conclusions:

- Requests for respondent identification should be included on questionnaires whenever it is desirable to collect data beyond that available from the questionnaire itself. Such requests should not appreciably reduce overall response rate.
- Essential demographic variables should be included on questionnaires, even though these data will also be available from other sources, because a certain proportion of the completed questionnaires will be returned without respondent identification.

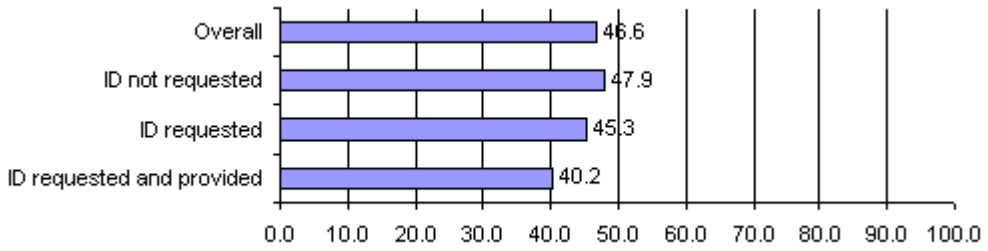

Figure 1. Percentage of questionnaires returned

Response rate by gender, transfer status and ethnicity

The same pattern of response was observed when returns were examined by gender and transfer status. The overall response rate for females (n=650, 48.5%) was higher than that of males (n=494, 38.1%),[3] but as Figure 2 shows, the return rate increased the same amount (approximately 7%) for each group when

identification was not requested. (Note that respondents who returned questionnaires without supplying requested identification could not be included in this analysis because their gender was unknown.)

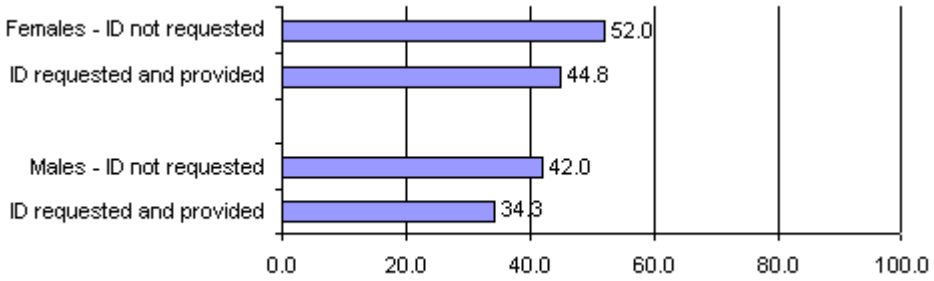

Figure 2. Percentage of questionnaires returned by gender

Transfer status was identified by entering class; "new" students were defined as those who entered as freshmen (n=804), and transfers were defined as those who entered as juniors (n=213). The response rates of these groups were nearly identical (approximately 40%)[4] when students were asked to identify themselves, but as can be seen in Figure 3, the percentage of returns increased dramatically for transfer students when identification was not requested (14.6%), compared to a more moderate increase for freshmen (4.5%).

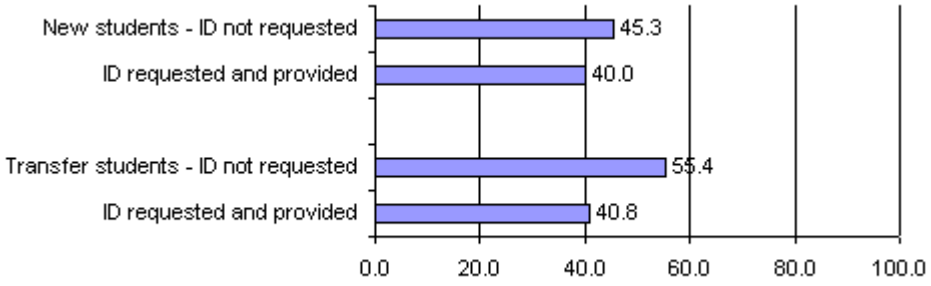

Figure 3. Percentage of questionnaires returned by transfer status

Slight variations in rate of response were found when returns were examined by ethnicity. Caucasian students returned questionnaires at a somewhat higher rate (n=655, 47.3%) than did Asian (n=248, 39.5%) or non-Asian minority students (n=241, 36.1%).[5] However, as shown in Figure 4, more dramatic differences were found in pattern of response. Caucasian students showed a much lower response rate when requested to identify themselves than when identification was not requested (-15.8%), but the pattern of response was reversed among minority students; those who were asked for their identification were more likely to return questionnaires than were those who not were asked. This tendency was more marked for non-Asian minority students (+11.5%) than for Asian students (+2.2%). This difference in pattern of response suggests that various ethnic groups may be differentially represented among respondents depending on whether identification is requested. This result is unexpected and intriguing and suggests a need for further investigation.

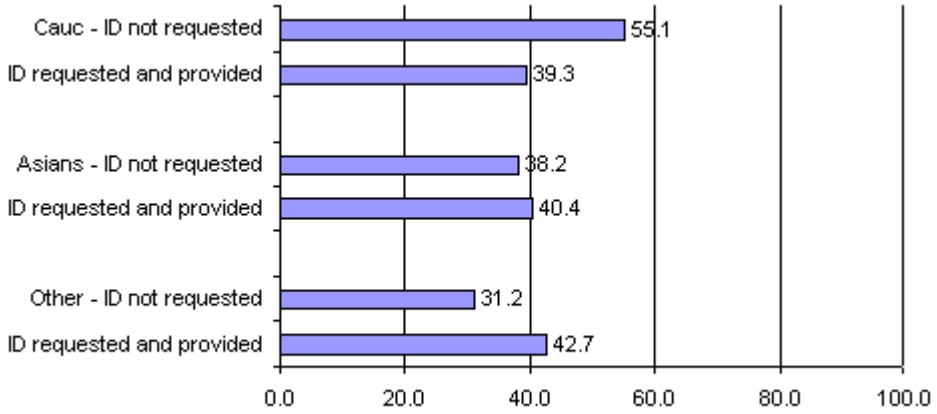

Figure 4. Percentage of questionnaires returned by ethnicity

Response rate by type of follow-up

Figure 5 shows the response rate for students who received a follow-up postcard or a letter and questionnaire. Only students who were requested to provide identification and who did so are included because type of follow-up could not be determined for other respondents. As shown in the figure, the response rate for students who were sent a letter and extra questionnaire (n=286) was more than 10.0% higher than that of students who were sent a postcard reminder (n=286).[6] The extra costs of a letter and questionnaire seem well justified by the increased quality of the resulting data, and additional investigation may reveal how much of the increase is due to the letter itself, and how much to the extra questionnaire.

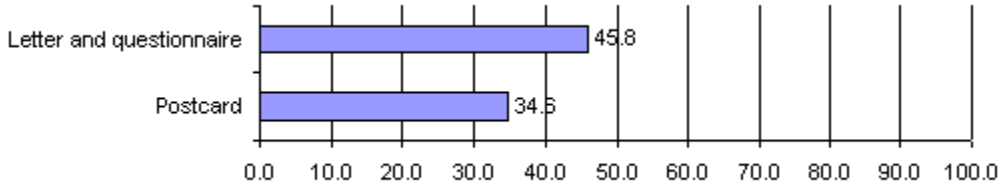

Figure 5. Percentage of questionnaires returned by type of follow-up

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[1] Chi-square = .79, df = 1, n.s.
[2] Chi-square = 6.80, df = 1, p < .01.
[3] Chi-square = 12.33, df = 1, p < 001.
[4] Chi-square = 2.22, df = 1, n.s.
[5] Chi-square = 5.82, df = 2, n.s.
[6] Chi-square = 7.45, df = 1, p < .01.