



Running Case Study 6

Sampling

In developing a sample set, Rebecca has created a couple of lists of student email addresses. For her own school, she has copied the names from the participant lists of courses she and some friends of hers have taken. She has used these name lists to create email addresses by simply adding the domain name to the student's name, which finally resulted in 407 unique email addresses of Master's students in her school. According to the website of the school about 650 Master's students are currently enrolled in different programmes, thus her email lists cover more than 60 per cent of the total population. Her friend Brenda (see Running Case Study 4) has sent her request to all (821) psychology students at her school. Moreover, Rebecca has used her Facebook account to track other people she knows at other universities. She has

approached them and asked them to fill in the questionnaire and to forward it to other friends at their university. As she did not know how well the last group of her friends had spread her questionnaire, she could not calculate exactly how many students were invited to participate in her questionnaire. Nevertheless, she knew for sure that at least 1,252 people were approached (821 in Amsterdam, 407 at her school and at least 24 Facebook friends she has approached directly). Rebecca thought that 1,252 was quite an impressive number and she was rather confident at receiving at least 100 responses.

Although Rebecca used an identical questionnaire for each of the three groups, she used three different links, which allowed her to trace back whether a respondent received the mail through Brenda, through the list she compiled for her school or through her Facebook friends. After two weeks she sent a reminder to the students of her own school and to her direct Facebook contacts. She could not send a reminder to the psychology students in Amsterdam, as Brenda received a warning from the system administrator regarding her inappropriate use of the email services. Brenda apologized saying that she was not aware of the conditions for using the university email system, as she thought that for research purposes it would have been acceptable, but she promised to fully comply with the rules in the future. After six weeks, Rebecca had the responses depicted in the table for each group.

Group	Emails sent	Valid questionnaires filled in	Response rate
Through Brenda	821	43	5%
Rebecca's school	407	76	19%
Facebook friends	24	38	158%

Although Rebecca was delighted to have so many responses, exactly 161, she was also a little disappointed that most of the people she approached did not respond and she was especially worried about the large differences in the response rate. Although, the second and third group received a reminder, it could still not account for the large difference: Rebecca had received 63 questionnaires from her school before she sent out the first reminder; after the first reminder this number rose to 75; the second reminder yielded just one extra respondent.

In a meeting with her supervisor, they discussed how Rebecca could take into account differences between the universities. Of her respondents, 76 studied in Maastricht, 43 in Amsterdam, but the 38 respondents approached through her Facebook friends were scattered across 11 universities, with 5 respondents even studying outside the Netherlands. In the end she had the strong feeling that she could not use the 38 respondents acquired through her Facebook contacts, as she did not have sufficient respondents for each university they studied at. Would the distribution of the respondents across different universities allow her to investigate differences between universities? Rebecca wanted to ask her supervisor about how to handle this problem.

Mehmet had progress as well. He had talked to self-employed friends and also asked them whether they could direct him to other self-employed people they knew. Moreover, he has become active in local business networks and even visited two small conferences: a regional business plan competition for business founders planning to start businesses with high growth expectations, mainly smaller high-tech companies; and a conference on migrant entrepreneurs organized by a national think tank that brings together entrepreneurs, policy makers and scientists from various fields. In a short time, Mehmet collected a huge stack of business cards, too many to enable each to be approached for an extensive interview. But how should he proceed? Which contacts should he approach with the request for a longer interview? Should he first approach those he knew best, i.e. friends? Or should he approach those who seem most important to him, as they owned sizable businesses or held senior positions in the municipality, banks and other organizations?

- 1 Try to identify the sampling types Rebecca is thinking about.
- 2 What is the main sampling problem of the population Mehmet is interested in?
- 3 Discuss how many respondents Rebecca needs to have a sufficiently large sample.