

Characteristics of Interview Refusers: Women Who Decline to Participate in Interviews Relating to Eating

Tracey Wade
Marika Tiggemann
Nicholas G. Martin
Andrew C. Heath

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Abstract: Objectives: *The aim of this study was to compare the eating habits and weight ranges of 27 women who refused to participate in a semistructured interview on eating with 25 women who agreed to participate, to determine if there were any systematic differences between the two groups.* **Method:** *The women had previously completed a general psychiatric interview that also included a lifetime DSM-III-R diagnosis of eating disorders. About 2 years after this interview, the women were asked to participate in an interview that would specifically examine eating behaviors.* **Results:** *In contrast to the results of previous studies, this study found that there was no difference between women who refused or agreed to participate in an interview about eating, in terms of their eating problems or weight ranges.* **Conclusions:** *It seems that eating or weight problems need not be overrepresented in groups who refuse to participate in surveys about eating, thereby undermining the accuracy of prevalence rates in the general population. Suggestions for achieving this representation are discussed.* © 1997 by John Wiley & Sons, Inc. *Int J Eat Disord* 22: 95–99, 1997.

One of the problems which has been repeatedly identified as hampering the accuracy of prevalence rates of eating disorders in community samples is the incomplete and variable response rate to questionnaires and interviews about eating behavior. These response rates are typically about 75%, ranging from 34% to 100% (Fairburn & Beglin, 1990). Low response rates raise the question of whether those people who refuse to respond to

Tracey Wade is a doctoral candidate in the School of Psychology, Flinders University of South Australia; Marika Tiggemann, Ph.D., is Senior Lecturer in Psychology at the Flinders University of South Australia; Nicolas G. Martin, Ph.D., is Professor of Epidemiology, Queensland Institute of Medical Research; Andrew Heath, D.Phil., is Professor at the Department of Psychiatry, Washington University Medical School, St. Louis. Address all correspondence to Tracey Wade, School of Psychology, Flinders University of South Australia, GPO Box 2100, Adelaide, 5001, Australia.

questions about eating behavior are the very people who have experienced more problems with their eating. Thus, eating problems would be overrepresented in nonresponders, resulting in an overall underestimate of eating problems in the entire sample.

Studies of people who respond to general psychiatric epidemiological surveys find that refusers do not differ from participants with regard to hospitalized medical or psychiatric illness or rates of attendance at psychiatric outpatient clinics (Romans-Clarkson, Walton, Herbison, & Mullen, 1988). However, with respect to eating disorders in particular, three studies have found that there is a substantially higher rate of eating problems in women who refuse to participate in surveys on eating than in women who agree to participate (Johnson-Sabine, Wood, Patton, Mann & Wakeling, 1988; King, 1989; Beglin & Fairburn, 1992). Johnson-Sabine and colleagues (1988) found that 40% of those schoolgirls who refused to answer the Eating Attitudes Test (EAT; Garner, Olmsted, Bohr, & Garfinkel, 1982) were thought by their teachers to have significant problems with eating, compared to 2.8% of the girls who completed the EAT. King (1989) and Beglin and Fairburn (1992) both approached attenders from general medical practices to participate in interviews about their eating. The medical case notes of the nonresponders were subsequently examined for evidence of eating problems. In one study, 75% of the nonresponders were considered to have significant eating problems compared to only 4% of the responders (King, 1989). In the other study (Beglin & Fairburn, 1992), 10.3% of the nonresponders were considered to have a lifetime prevalence of an eating disorder as compared to only 2.5% of the responders. In summary, these studies found that there was a prevalence of 4 to 70 times as many significant eating problems for those people who chose not to respond to surveys on eating than those who did respond.

The present study aims to compare the eating habits and weight of those women who refused to participate in an interview on eating to those who did participate, using a sample that had previously expressed willingness to participate in research interviews and had completed an interview about general psychiatric status. The latter included assessment of the presence of eating disorders, and so we are able to examine the women's own previous admission of eating problems rather than relying on external sources. This form of study avoids some of the concerns about the ethical issues involved in researching nonparticipants (Beglin & Fairburn, 1992).

METHOD

The women in this study had all previously registered with the Australian National Health and Medical Research Council (NHMRC) Twin Registry, on the understanding that this would mean approaches from a variety of research groups to participate in different studies. It was made clear in all subsequent approaches to the women that they were free to refuse or discontinue their participation at any time, or to decline to answer particular questions. In 1992–1993 the women were approached to participate in a structured psychiatric diagnostic interview, the Semi-Structured Assessment for the Genetics of Alcoholism (SSAGA; Bucholz et al., 1994). This was a 2 to 3-h telephone interview which covered a range of areas, including anxiety, depression, and alcohol use. The questions on eating, which took from 1 to 15 min to answer, were embedded in the interview, and gave a diagnosis of bulimia nervosa or anorexia nervosa. (American Psychiatric Association, 1987).

A subsample of these women ($N = 298$), between the ages of 30 and 45 years at the time of the SSAGA interview, were approached between October 1994 and July 1995, about

18–24 months after the completion of this interview. Apart from the criterion for the follow-up that at least one of the twin pair had to have completed the SSAGA, the women were chosen randomly, except for about one third of the group who were specifically included because they indicated a likely lifetime diagnosis of an eating disorder in the SSAGA interview. This time the women were asked to participate in a semistructured telephone interview specifically on disordered eating, namely the Eating Disorder Examination (EDE; Fairburn & Cooper, 1993). The approach letter asked women to participate in a study that would examine the question, “Why do some women develop problems with their eating and others do not?”

At the time of the EDE interview, the interviewer was blind to the SSAGA diagnosis. In order to minimize the influence of one twin’s results on another, all twin 1 interviews were conducted first and carried out in a randomly selected order. Twin 2 interviews were then completed, also in random order.

RESULTS

Of the 298 women approached, 34 declined to participate and 264 agreed to be interviewed. Additionally, there were eight women who could not be contacted. This is an overall refusal rate of 11.4%, within the range found in earlier studies. Reasons were not always given for refusal, but for the 20 women who did give reasons, 8 said that they were too busy, 6 said that they wanted a temporary break from twin registry studies, 3 said it would be too stressful, 2 women were pregnant and felt that their eating patterns had changed significantly, and 1 woman had recently had a stroke. The mean age of the responders was 36.7 years (SD 4.5) on January 1, 1993, ranging from 29 to 46 years. For the nonresponders their mean age was 35.8 years (SD 4.9), ranging from 29 to 44. The ages were not significantly different, $t(298) = 1.02$, $p > 0.5$. Women who had not previously been interviewed with the SSAGA were removed from further analyses, leaving 27 women in the refusers group and 256 women in the group that agreed to participation.

Of the women who refused to participate in an interview, 4 (11.8%) had been previously assessed on the SSAGA as having a significant eating problem. Two women had a lifetime prevalence of both bulimia nervosa and anorexia nervosa, one had a lifetime prevalence of bulimia nervosa only, and the other was a probable case of anorexia nervosa, having deliberately lost weight to 1 lb above 85% of the normal body weight. This overall number of eating-disordered individuals is very similar to the 10.3% found in Beglin and Fairburn’s study (1992).

Of the 256 women who had agreed to participate, 37 (14.5%) had been previously assessed as having had a significant eating problem. Twenty-six women had bulimia nervosa, 5 of whom also had anorexia nervosa. Another 6 women were assessed as having had probable bulimia nervosa, 4 as having probable anorexia nervosa, and 1 as having probable anorexia nervosa and probable bulimia nervosa. Probable bulimia nervosa and probable anorexia nervosa refer to those women who admitted to all but one of the diagnostic criteria.

Given that there was no difference in the rate of diagnosed or probable eating disorders between the two groups, less severe eating and weight problems were also examined. There was no significant difference between responders and nonresponders in the percentage of women who had, in the SSAGA interview, admitted to having had a preoccupation with either food or weight at some stage of their life and having experienced bingeing, though not necessarily feeling out of control with this behavior. Similarly, there

was no difference in those women who had admitted to only having had a preoccupation with either food or weight at some stage of their life. The summary of these comparisons can be found in Table 1. The overall distributions did not differ between the groups, $\chi^2 = 0.85, p > .05$ ($df = 3$).

Further, different BMI groups were examined as there is some evidence that the degree of obesity is greater in a nonparticipant group (Beglin & Fairburn, 1992). As BMI was calculated from self-report questionnaires completed in 1988–1989, there were more missing data than for the eating problem groups. Four groups were examined: those women who would be classified as underweight (BMI < 20), those women of normal weight (BMI between 20 and 30), those women who are classified as being overweight (BMI between 31 and 40), and the women in the morbidly obese category (BMI > 40). These findings are also summarized in Table 1. Due to violation of the requirement for minimum expected frequency of at least 5 in three of the cells (Hays, 1988), chi square could not be calculated. Instead, the individual scores were examined using the Mann-Whitney statistic (all $ps > .05$). In summary, no significant differences were found between responders and nonresponders for any of these eating problem or weight groups.

DISCUSSION

This study found no differences between those women who participated and those who refused to participate in an interview on eating, in terms of definite or probable eating disorders, less severe problems with eating, or different weight categories. Therefore, this study does not support the previous findings of Johnson-Sabine et al. (1988), King (1989), and Beglin and Fairburn (1992) that there is a significant overrepresentation of eating or weight problems for those people who choose not to respond to surveys on eating problems. This finding must be treated with some caution, however, given the problem of low power due to the small number of nonresponders.

There are a number of possible explanations for this finding. First, in using the Twin Registry, this study may have used a generally more motivated population, as demonstrated by the moderately high response rate, that is, a population willing to participate in any survey, and thereby removing the problem of uneven patterns of response. Second,

Table 1. Comparisons between the responder and nonresponder groups

Categories of Eating Problems	Responders (<i>N</i> = 256)		Nonresponders (<i>N</i> = 27)	
	<i>N</i>	%	<i>N</i>	%
Probable and definite eating disorders	37	14.5	4	14.8
Definite eating disorder	26	10.2	3	11.1
Problems with binge eating	40	15.6	6	22.2
Problems with preoccupation with food/weight	77	30.1	8	29.6
No problems	107	41.2	10	37.0
BMI ranges	<i>N</i> = 245		<i>N</i> = 27	
BMI <20	46	18.8	5	18.5
BMI between 20 and 30	179	73.1	20	74.1
BMI between 31 and 40	18	7.3	2	7.4
BMI >40	2	0.8	0	0.0

Note: BMI = body mass index.

it may be that the use of a telephone interview as opposed to a face-to-face interview, as in the cases of King (1989) and Beglin and Fairburn (1992), appeared to be less threatening to the respondents. More likely, however, are two other possibilities. Once having committed themselves to a general survey, people may be more likely to respond to further surveys, no matter what their content. It may also be that once people have been approached about a topic that is sensitive to them, such as eating, within a general survey, and have discussed this subject with an interviewer, they are more receptive and relaxed about further approaches which specifically examine eating patterns.

If these latter two possibilities are correct, this would suggest several avenues for collecting more accurate data about eating behavior. Investigators could consider following up populations that have already participated in a general survey or turning to groups that have previously been asked about their eating. Alternatively, if a new sample is thought to be preferable in order to avoid previous selection bias, future investigators might be advised to consider embedding their eating questions within a more general survey. This might be best carried out in the context of a multicenter study, which would maximize the efficacy of the interviewing time for both the interviewer and the interviewee.

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