Attitudes towards mental illness: influence of data collection procedures

Ian G. McPherson and Frances J. Cocks
Department of Psychology, University of Birmingham, Birmingham, England, UK

Summary. The suggestion that the divergence in results of studies exploring public attitudes to mental illness may be partially attributable to variation in data collection procedures was subjected to empirical investigation. Specifically the effects of style of administration and response format were examined using a split-half sampling method, in which a questionnaire based on social distance items was administered under a self-response condition to one half of the sample and under an interview condition to the other half, using open-ended and closed-ended response formats under both response conditions. The effects of data collection procedures were not as straightforward as hypothesised, but the findings support the view that the type of procedures used can influence the attitudes elicited. Implications for the existing literature and future research in this area are discussed.

Introduction

Attitudes towards mental illness have received considerable attention over the past 30 years, but within the extremely large literature (Rabkin 1974; Segal 1978) there is a notable divergence of results. Some studies (e.g. Cumming and Cumming 1957; MacLean 1969; D'Arcy and Brockman 1976) have found negative, rejecting attitudes while other investigators (e.g. Lemkau and Crocetti 1962; Meyer 1964; Ring and Schein 1970) have found the populations surveyed much more accepting of the mentally ill. Brockman et al. (1979) have attempted to explain this divergence in methodological terms. In a review of 22 studies, all of which employed social distance scales, Brockman et al. identified a number of factors which they suggest may have significantly influenced outcomes; the data collection method, the population sampled and, related to these two, the discipline of the researchers. Open-ended interviews (with vignettes) and closed-ended self-response questionnaires typically produced negative results, while closed-ended interviews tended to produce positive results. There was a definite preference for a particular method of data collection on the part of each discipline, such that social scientists tended to find negative results and medical personnel typically found positive attitudes. More specifically, Brockman et al. suggest that the presence of an interviewer may be affecting responses, due to a greater tendency of subjects to conform to socially desirable answers in personal interviews than on self-administered questionnaires. They suggest that it would be valuable if researchers employed a split-half sampling method, which would involve giving a set of items to half of a sample using one form of administration and the same items to the other half using the alternative form. They also argue that forced-choice (i.e. closed-ended) questions may limit qualified answers, and they recommend that open-ended items should be used in conjunction with closed-ended items to obtain a more accurate assessment of attitudes.

In an attempt to experimentally evaluate these recommendations, the present study investigated the effects of administering a questionnaire based on social distance items under a self-response condition to one half of the sample and under an interview condition to the other half. In addition, the effects of open-ended and closed-ended questions were investigated by using both closed-ended and open-ended formats under both response conditions. The following hypotheses were tested:

1. Interviewed subjects will produce more positive attitudes than non-interviewed subjects.

2. Closed-ended questions will elicit more positive attitudes than open-ended questions.
3. Style of administration and response format will interact such that closed-ended interviews will produce more positive attitudes than open-ended self-response administration.

Method

Subjects

The subjects were 54 first year undergraduates, 20 males and 34 females. The subjects made up two groups (n = 27, 10 males and 17 females), a self-response group and an interview group.

Measures used

The attitudes of the subjects were measured using a three-section questionnaire. The first two sections were made up of ten questions adapted from the Social Rejection Scale devised by Trute and Loewen (1978). Five of the statements from the scale were randomly allocated to an open-ended section and phrased as open-ended questions (i.e. questions which may be answered as fully as the respondent wishes). Five other statements were phrased as closed-ended questions (i.e. forced-choice; five alternative answers ranging from “definitely no” to “definitely yes” were provided for each question). The answers in the open-ended section were scored in terms of their positivity or negativity toward ex-mental patients or people with mental health problems. Answers were classified into one of five categories: “definitely positive” (1 point); “overall positive but some reservations” (2 points); “neutral or don’t know” (3 points); “negative, but with some exceptions” (4 points); “definitely negative” (5 points). Since this classification inevitably involved a degree of subjectivity, the reliability of the procedure was examined using two independent raters who scored the open-ended sections of ten questionnaires randomly selected from each of the two groups, according to the categories given above. The closed-ended questions were scored by the alternatives being allocated five points for the most extreme negative answer down to one point for the most extreme positive answer.

The third section of the questionnaire consisted of the Opinions About Mental Illness (OMI) questionnaire (Cohen and Struening 1962). This is a standardised questionnaire consisting of 51 Likert-type items. A score on each five factors (authoritarianism; benevolence; mental hygiene ideology; social restrictiveness; interpersonal aetiology) is obtained for each respondent. The OMI was employed to provide a measure of attitudes obtained under similar conditions for all subjects. This was a control to check that any differences found were not attributable to actual differences in attitudes between the two groups.

Half of each group were presented with the order of the questionnaire as open-ended section, closed-ended section, OMI, whilst the other half received the ordering closed-ended section, open-ended section, OMI.

Procedure

Self-response condition

In the first condition subjects were tested as a group and were required to fill in the questionnaire themselves. The instructions on the front of the questionnaire emphasised that there were no right or wrong answers to the questions, that the experimenter was interested only in their own options and that the whole procedure was entirely anonymous.

Interview condition

The subjects were interviewed individually. In the interview, the subject was given, verbally, the same instructions as the self-response group, except that whereas in the first condition anonymity was stressed, the interviewed subjects were assured that no name would be attached to a particular set of answers and that their replies would be kept in the strictest confidence.

Results

Main hypotheses

For both the open-ended and closed-ended sections a single score with a maximum of 25 and a minimum of 5 was obtained for each subject. A high score indicates a more rejecting attitude (Table 1 and Fig. 1). Using these scores the hypotheses suggesting the effects of administration (non-interviewed subjects producing more negative attitudes than interviewed subjects) and of question format (open-ended questions eliciting more negative attitudes than closed-ended questions) were tested initially by an analysis of variance. The analysis revealed no significant question format or administration effects. Therefore neither hypothesis was supported. However, the question × administration interaction component was highly significant (F = 11.5, P < 0.01), indicating that in the self-response condition open-ended scores were higher than closed-ended scores, while in the inter-