Mentally retarded adults (N=180) were asked 30 yes/no questions, to determine if their acquiescence is explained by indiscriminant yea-saying in response to the yes/no question format or due to subjects submitting to the influence of the interviewer. After selected questions, the interviewer either nodded his head "yes" or shook his head "no" or did neither, providing a cue to the subjects as to what response the interviewer desired. As a second experimental manipulation, subjects were interviewed by either a familiar person or someone they did not know. Results indicated that subjects were significantly influenced by the interviewers' head-nodding, thereby supporting the hypothesis that acquiescent responding among the mentally retarded is a form of maximizing reinforcement by submitting to others. Familiarity with the interviewer did not affect subjects' responses. Includes five references. (Author/JDD)
ACQUIESCENCE IN THE MENTALLY RETARDED: 
DO THEY JUST SAY YES?

Dominick R. Palma
Association for the
Help of Retarded Children

Mitchell L. Schare
Hofstra University

For additional correspondence:
Mitchell L. Schare, Ph.D.
Department of Psychology
Hofstra University
Hempstead, New York 11550
In a study on acquiescence, 180 mentally retarded adults (M IQ=53.8) were asked thirty yes/no questions, to determine if the phenomena is explained by indiscriminant yeasaying in response to the yes/no question format or due to subjects submitting to the influence of the interviewer. After selected questions the interviewer either nodded his head "yes" or "no" or did not nod at all (neutral), providing a cue to the subjects as to what response the interviewer desired. As a second experimental manipulation subjects were interviewed by either a familiar person or someone they did not know.

The results indicate that subjects were significantly influenced by the interviewers' headnodding, thereby supporting the hypothesis that acquiescent responding among the mentally retarded is a form of maximizing reinforcement by submitting to others. Familiarity with the interviewer did not effect subjects' responses. Implications of these results for additional research and clinical applications are discussed.
Inherent to mental retardation are impaired social skills and a decreased ability to communicate effectively. An area of communication which is particularly difficult for the mentally retarded is producing meaningful responses to questions. Research has indicated that mentally retarded individuals tend to acquiesce in response to "yes/no" questions, that is responding yes regardless of the correct answer (Sigelman, Budd, Spanhel, & Schoenrock, 1981; Research and Training Center in Mental Retardation 1983).

Acquiescence has been found to be significantly related to mentally retarded subjects IQ; with lower IQ subjects being more likely to self-contradict by acquiescing to oppositely worded question pairs than higher IQ subjects (Shaw & Budd, 1982). Further acquiescent behavior by mentally retarded persons is not limited to their responsiveness to yes/no questions, but has been observed in a variety of behavior tasks (Rosen, Floor, and Zisfein, 1974, 1975). These authors did not view acquiescence as simply response effect, but as "an enduring predisposition to comply or submit to persuasive or coercive attempts by others" (Rosen, Floor, & Zisfein, 1974, p. 60).

In this study it was hypothesized that the acquiescent behavior of mentally retarded individuals is not simply a form of response bias, but attempts by these individuals to please the interviewer. When asked questions, mentally retarded subjects try to read the discriminative stimuli in the environment (e.g. location, time of day, interviewer's nonverbal behavior, tone, or facial expressions, etc.) that would hint at the correct (or at least desired) answer and respond yes because they believe they are giving the answer the interviewer desires.
METHOD

Subjects

The sample was made up of 180 mentally retarded adult (97 males and 83 females) clients from a sheltered workshop program. Subjects' IQ ranged from a low of 20 to a high of 70. The mean IQ was 53.8 with a standard deviation of 11.36. The subjects ranged in age from 21 to 80 with a mean age of 36.06 years and a standard deviation of 11.93 years.

Materials

A questionnaire of thirty questions was designed for this study. Many items were drawn from previous research (Research and Training Center in Mental Retardation, 1983; Shaw & Budd, 1982). Twenty items were reversed forms of ten questions. For example:

Do you like dogs more than cats?/Do you like cats more than dogs?

The remaining ten items were questions for which the correct answer is no, for example:

Does it snow here in the summer?

Design

A 3 x 2 between subjects factorial design with subject's IQ as a covariate variable were utilized for this study. The first factor, familiarity had two levels: familiar interviewer and unfamiliar interviewer. The second factor had three levels: positive influence, negative influence, and neutral. This design was chosen to examine the main effects and interactions between the independent variables while controlling for subject's IQ.
Interviewer Familiarity: This variable had two conditions: "familiar" condition in which the subjects previously knew the interviewer and "unfamiliar" condition in which the interviewer was someone who the subjects did not previously know.

Headnodding: There were three conditions for this variable: "positive", "negative", and "neutral". In the positive condition the interviewer attempted to influence the subjects by clearly nodding yes three times after designated questions. In the negative condition the interviewer attempted to influence the subject by gently nodding no three times after each question. No attempt to influence the subject was made in the neutral condition.

Dependent Variables

Yeasaying score - item reversal question pairs: One point toward this score was given for each time the subject responded "yes" to both questions of a item reversal pair. A possible score of 0 to 10 could have been obtained for this variable.

Yeasaying score - "no" questions: One point was scored for each "yes" response to the ten questions for which the correct answer is "no". Subjects could have scored from 0 to 10 for this variable.

Covariate Variable

IQ: Subjects IQ based upon a recent administration of the Wechsler Adult Intelligence Scale Full Scale IQ score or the Stanford Binet Intelligence Scale (Form L-M) served as a covariant.
Subject's were selected from a roster of workshop clients. They were informed of the research nature of the study and informed consent was obtained through proper channels. Subjects were told that they would be asked a number of questions and that this interview would last approximately five to ten minutes. Volunteers were randomly assigned to experimental conditions and were asked thirty questions.

The first experimental manipulation concerned the familiarity of the subject with the interviewer. Half the subjects were interviewed by someone familiar to them. The others were interviewed by someone previously unknown to them. All interviewers were males of approximately the same age who were experienced in interviewing mentally retarded individuals.

The second manipulation involved an attempt by the interviewer to influence the subjects response through nonverbal cueing. Three conditions of headnodding were used. In the positive condition the interviewer gently nodded his head "yes" three times immediately after asking the target questions. In the negative condition the interviewer gently nodded his head "no" three times immediately after asking the target questions. In the neutral condition no attempt was made to influence the subjects response.
RESULTS

Two dependent variables were calculated, yeasaying on questions in the item reversal pairs and yeasaying on the ten questions for which the correct answer was no.

**Frequencies of biased responses**

Subjects' responses were compared to rates of chance responding, which represents a more stringent test of response bias than comparing actual responses to expected responses. The 34.5 percent level of yeasaying responses obtained in the neutral headnodding conditions on item reversal questions was significantly above the 25 percent level expected by chance ($\chi^2 = 32.0$, df=1, $p < .05$). Subject’s responded to yes to 17 percent of the "No" questions which is greater than expected based upon question content (0 percent expected), but not greater than the chance level of 50 percent. A significant negative correlation (−.29) was found between subject's IQ and their yeasaying score on item reversal questions was found ($p < .05$). Similarly a significant negative correlation (−.58) between subject’s IQ and their yeasaying score for “No” questions was found ($p < .001$).

**Yeasaying- Item Reversal Questions**

A 2 x 3 analysis of covariance was conducted with the independent variables Familiarity and Headnodding, the covariant IQ, and the dependent variable Yeasaying on Item Reversal Questions. The analysis did not indicate a significant main effect for Familiarity ($F= .27$, df=1, $p > .05$). A significant main effect was found for Headnodding ($F= 69.21$, df=2, $p < .001$). A significant interaction effect for Familiarity with Headnodding was also indicated ($F= 3.69$, df=2, $p < .05$).

Group differences related to the interaction effect were also explored. This was accomplished with the Scheffe procedure at a .05 significance level. Table 2 indicates the results.
Yeasaying- "No" Questions

A second 2 x 3 analysis of covariance was conducted with the independent variables Familiarity and Headnodding, the covariant IQ, and the dependent variable Yeasaying on "No" Questions. No significant main effect for Familiarity ($F= .36$, $df=1$, $p=.55$) was found. A significant main effect was demonstrated for Headnodding ($F= 58.55$ $df=2$, $p< .001$). There was no significant interaction effect with the combination of Familiarity and Headnodding ($F= .49$ $df=2$, $p=.61$).

The Scheffe procedure was used for post hoc testing of group differences on the independent variable Headnodding. The mean score of subjects in the positive Headnodding condition (mean=3.33) was significantly ($p= .05$) greater than the mean score for subjects in the neutral group (mean= 1.70). The mean score for subjects in the negative Headnodding condition (mean= .30) was found to be significantly less than the mean score for subjects in the neutral condition (mean= 1.70).
Discussion

The results of this study support previous research conclusions that mentally retarded subjects tend to respond yes to yes/no questions and that the greater their cognitive impairment the more likely they are to give a biased response.

Further examination indicates that acquiescent responding among the mentally retarded results from individuals attempting to provide the answer the questioner desires. Significant between group differences were found on both dependent measures when the interviewers' headnodding was varied, indicating subjects were influenced by the nonverbal behavior of a questioner. Subjects responded to the headnodding by providing answers which agreed with the interviewer's nodding. On both question formats, subjects tendency to yeasay increased when the interviewer nodded "yes" and decreased when he nodded "no". Contrary to expectations, yeasaying and naysaying rates were not influenced by the subjects' familiarity with the interviewer.

A post-hoc analysis of response patterns of subjects in the neutral headnodding condition (where no direct attempts were made to influence responses) to each question indicated two types of questions with unexpected response patterns. The first group were questions utilizing negative syntax: "Is it against the rules to _________?" Similar to what Shaw and Budd (1982) found, subjects appeared confused by these questions. Subjects appeared to respond to the social desirability of the questions content while ignoring its format. For example subjects tended to respond "no" to the question, "Is it against the rules to hit people?". Focusing on "hit people" not the negative nature of the question. The second type of questions which had unexpected response patterns were two factual questions ("Was John F. Kennedy the first president?" and "Is
sandpaper soft?" whose difficulty appeared to be beyond some subjects' ability to answer correctly.

In summary, the results of this study suggest that despite the simplicity of asking "yes/no" questions, the response of a mentally retarded person to these (or any question) must not be accepted at face value, but viewed as possibly having been influenced as much by mentally retarded persons tendency to comply with the desires of others as by fact. Further specific question formats (such as negative syntax) are particularly prone to this type of response error and should be avoided.
Table 1

Means and Standard Deviations of the Dependent Variables by Treatment Groups

**Yearaving to "No" Questions**

<table>
<thead>
<tr>
<th>Familiarity</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familiar</td>
<td>m 3.3</td>
<td>1.9</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>sd 2.43</td>
<td>1.86</td>
<td>0.61</td>
</tr>
<tr>
<td>Unfamiliar</td>
<td>m 3.4</td>
<td>1.5</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>sd 2.34</td>
<td>1.36</td>
<td>0.64</td>
</tr>
</tbody>
</table>

**Yearaving to Item Reversal Questions**

<table>
<thead>
<tr>
<th>Familiarity</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familiar</td>
<td>m 4.7</td>
<td>4.0</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>sd 2.45</td>
<td>2.10</td>
<td>0.92</td>
</tr>
<tr>
<td>Unfamiliar</td>
<td>m 4.7</td>
<td>2.9</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>sd 1.78</td>
<td>1.75</td>
<td>1.51</td>
</tr>
</tbody>
</table>
Table 2

**Group Differences for Yeasaying on Item Reversal Questions**

<table>
<thead>
<tr>
<th>Yeasaying</th>
<th>Group</th>
<th>Fam</th>
<th>Unfam</th>
<th>Fam</th>
<th>Unfam</th>
<th>Fam</th>
<th>Unfam</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fam -</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Unfam -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fam o</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unfam o</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fam +</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unfam +</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean 0.67 1.27 2.90 4.00 4.70 4.73

- = Negative Headnodding condition
0 = Neutral Headnodding condition
+ = Positive Headnodding condition

Fam = Familiar interviewer condition
Unfam = Unfamiliar interviewer condition

* indicates pairs of groups whose means were found to differ significantly (p < .05) by the Scheffe procedure.
References


