

THE UNIVERSITY OF MICHIGAN

July 25, 1984

TO: Don Kinder, Santa Traugott
FROM: Maria Sanchez
RE: Branching versus 7-point scale measurements

A disturbing finding in the 1982 NES CATI Method Comparison Project should be documented because it is relevant to the choice of branching versus 7-point scale issue measurements in the 1984 NES study.

As you probably recall, ISR and Berkeley alternated branching and 7-point techniques for issue measurements in the 1982 CATI questionnaire. The design ensured that:

- (a) All issues were measured both in 7-point and branching modes, and
- (b) the two measurement techniques were used in contrasting fashion across survey organizations--that is, if ISR administered a 7-point scale for an issue, Berkeley then administered the branching sequence, and vice versa.

Criteria need to be defined to test the relative merits of each measurement option (7-point and branching). The relative discriminating power of the resulting scales is no doubt an important criterion, and I don't know whether anybody has systematically looked at the data with this in mind. Another criterion is the relative amount of missing data elicited by each of the measurement options, and here we have to distinguish between simple and cumulative effects. It appears that in the 1982 CATI study both the 7-point and the branching methods elicit the same amount of missing data over the first two rounds of administration (simple effect), but that branching produces a great deal more of missing data responses beyond the second administration (cumulative effect), whereas the 7-point technique does not. It's as if respondents learn to recognize and avoid the branching sequence of questioning after a first encounter and a single iteration.

The table on the next page displays results from the 1982 CATI study and documents, in my opinion, the disturbing pattern of cumulative effects. The proportion of missing data responses almost doubles on the third time when a branching administration is attempted with ISR and Berkeley respondents. For ISR respondents, this happens with the EQUAL ROLE scale, an item for which a low threshold of information has been traditional. While 4.7% of the 7-point scale (Berkeley) respondents say they "haven't thought much about this" matter, 8.6% of the branching (ISR) respondents claim the same. The same pattern is observed for the GOVERNMENT SERVICES/SPENDING issue. Some 14% of the 7-point scale (ISR) respondents say they haven't thought about the matter while 24% of the branching (Berkeley) respondents respond in similar terms. These Berkeley respondents were encountering the branching format for the third time at this

point. The 1982 CATI questionnaire had a limited set of placements for all issues, and some dealt only with self-placement. I imagine that the missing data count would increase, if anything, if the branching method is administered with many more placements from the beginning.

I really can't explain what causes the problem. Perhaps the branching format is too slow and tedious; perhaps some respondents feel unhappy about having to choose very specific response alternatives when all they have is a general idea or "gut level" feeling about the various issues and the position of candidates and parties.

If the problem hinges on tedium and pace, the branching format could be streamlined somewhat. The first question in the series (whether R has an opinion or not) could be deleted, and the second question could be reworded to determine whether R favors X, R favors Y, R is somewhere in the middle, or R has not thought much about the issue. The 1984 Pilot interviewers also drew our attention to the awkwardness of this first question which I think we should delete. Other than that, the response alternatives for subsequent placements could be also streamlined by rewording, offering the scaled choices to respondents earlier than is the case in our present format.

Tinkering with ameliorations of the sort described should have low priority, however. The virtues of the branching format in the predictive arena should be documented first before we address the issue of how to make the technique better. This investigation is a high priority matter for NES research in the immediate future since the scale resulting from branching may not be superior to the 7-point scale, and, if this is the case, the problem would resolve itself at that early stage.

NES 1982 CATI

<u>Question</u>	<u>I S R</u>			<u>B E R K E L E Y</u>		
	<u>Var #</u>	<u>% MD*</u>	<u>Format</u>	<u>Format</u>	<u>% MD*</u>	<u>Var #</u>
J1 (LIB/CON)	V396	28.7(DK)	7 pt	Branching	28.9(DK)	V471
J3 (DEFENSE)	V507	15.2(DK) 1.6(NO) <hr/> 16.8	Branching	7 pt	14.5(DK)	V410
J4 (MINORITY)	V418	14.6(DK)	7 pt	Branching	1.7(DK) 13.5(NO) <hr/> 15.2	V547
J5 (JOB & STND)	V553	12.4(DK) 2.2(NO) <hr/> 14.6	Branching	7 pt	14.9(DK)	V428
J6 (EQUAL ROLE)	V594	7.8(DK) .8(NO) <hr/> 8.6	Branching	7 pt	4.7(DK)	V438
J7 (GOVT SERVICES)	V446	14.2(DK)	7 pt	Branching	1.9(DK) 22.3(NO) <hr/> 24.2	V600

*MD includes the following categories--

7 pt: DON'T KNOW, HAVEN'T THOUGHT MUCH (DK)
Branching: DON'T KNOW, HAVEN'T THOUGHT MUCH (DK); NO OPINION (NO)

