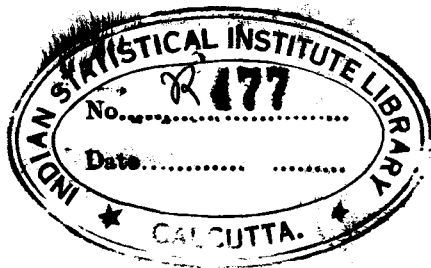


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STUDIES  
of  
FINGER vs VOICE DIALING  
by  
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SVC conference, 2 P.M., Dec. 21, 1948  
Room 2C-343

## General Objective

Primary purpose of two studies to be described is to establish methods for conducting preference tests. We are interested in learning more about selection of types of users, and situations, objective measurements, polling procedures, design of experiment, and analysis of results. It is hoped that such studies will yield information of general use.

A detailed statement of objective was given at conference on June 17th (See pp. 6 and 7 of notes for that conference).

As pointed out in the June 17th notes, the general plan calls for

1. Laboratory research
2. Special studies suggested by problems in Dept. 1300.

The two studies to be described fall under (2).

Five CHOICES to be made in comparing preferences for finger dialing A and voice dialing B

1. Choice of A and B to be compared.

1.1 Study 1 Take present dialing for A. For B, take present desk set with dial covered and a mock-up of circuit and operations to be described in some detail by R. R. Riesz

1.1.1 To provide ten users at Murray Hill with experience on both voice and finger dialing under controlled conditions.

1.1.2 To find out which dialing system they prefer and the reasons for their preferences.

1.1.3 To predict which system they would prefer with continued dialing experience and to measure the intensity of their preference.

1.1.4 To select users and locations which would be most representative of telephone users and situations generally.

1.1.5 To find out what changes to make in voice dialing to increase its desirability both for the user and the telephone company.

1.1.6 To study methods of determining direction of preference and measuring intensity of preference.

1.2 Study #2 - Study different mock-ups for handset with cord but no cradle.

2. Choice of conditions, such as office, home, laboratory, under which A and B are to be compared. In study #1 we shall choose office.

3. Choice of sample of users.

3.1 Physical criteria for selection.

- 3.1.1 Frequent outgoing calls.
- 3.1.2 Frequent use of unfamiliar numbers.
- 3.1.3 Represent as many types of people and situations in the general telephone public as possible.
- 3.1.4 Key people in the Laboratories should be offered opportunity to participate in experiment, but should be encouraged to wait for a later experiment.
- 3.1.5 Variations in light and noise environment.
- 3.1.6 Users with jobs requiring use of both hands during calling.

3.2 Psychological criteria for selection.

- 3.2.1 Independent thinkers capable of forming most meaningful judgments.
- 3.2.2 Opinion leaders.
- 3.2.3 Vocal and digital handicaps.
- 3.2.4 Preference between mechanical and human operation.
- 3.2.5 "People in a hurry" vs leisurely type.
- 3.2.6 Energetic type vs lazy type interested in all ways of saving expenditure of energy.

#### 4. Choice of method of measurement.

##### 4.1 Verbal probing.

4.1.1 Nondirective probe interview -  
An interview during which the interviewer endeavors to discover what features of the dialing system the user noticed and what value he attaches to these features. Speech by the interviewer is strictly limited to nonbiasing questions and comments designed simply to induce the user to describe his reactions in detail.

4.1.2 Directive probe interview -  
Following a nondirective interview, the interviewer may then question the user more closely so as to obtain his reaction to features he has forgotten about or did not notice or did not know about. The interviewer is literally probing the user to obtain reaction to all features of concern.

##### 4.2 Objective data.

- 4.2.1 Time from R.O.H. to ready signal.
- 4.2.2 Time from ready signal to beginning of dialing.
- 4.2.3 Time from beginning of dialing to end of dialing.
- 4.2.4 Call identification.
  - 4.2.4.1 Caller
  - 4.2.4.2 Number called
  - 4.2.4.3 Time at which call is made.
  - 4.2.4.4 Time delay in obtaining ready signal.

5. Choice of Design of Experiment.

Schedule has been prepared for giving sequence of experiences alternating between FD and VD. At certain points in the sequence the users will be interviewed. Test to cover period from March 21st to May 20th.

