

Personality variables and interruptions in small discussions

Y. RIM*

Technion-Israel Institute of Technology

'When two or more people are conversing, they take it in turns to speak, and usually manage to achieve a fairly smooth synchronized sequence of utterances without too many interruptions or silences' (Argyle, 1975). It is surprising how little is known about the amount of interruptions to be expected; what is the normal amount of interruptions? True, it is likely that people who do not know each other will need some time to adjust their spontaneous styles of speaking until they fit together, but how long? Experiments have led to the discovery of the signals which are used for synchronizing. Thus, if a listener wants to take the floor he can either interrupt, and speak louder and/or faster, he can make triple head-nods or nonverbal signals often accompanied by verbal signals like 'yes', 'but', or 'well'.

Meltzer, Morris and Hays (1971) report a multiple correlation of .79 between the percentage of successful interruptions, (a) the change in interruptee's vocal amplitude from before to during the interruption, and (b) the difference between the interruptee's and interrupter's amplitude during simultaneous speech.

Another feature characteristic for certain stages in conversations is simultaneous talking. Again, very little is known about the amount still acceptable to people without becoming too disturbing.

The turn-taking in conversations was studied by Duncan (1972), who found that the change of simultaneous turns was sharply decreased when the auditor attempted to take his turn after the display of a yielding signal by the speaker. As more yielding cues were conjointly displayed, the probability of a turn-taking attempt by the auditor increased in a strictly linear fashion. To what extent are interruptions and double-talking culturally determined? To what extent are they related to personality variables?

It is reasonable to assume that more intelligent partners would engage in fewer

* The author is holder of the Abraham Tulin Chair in Social Sciences.

interruptions and/or engage less in simultaneous talk than less intelligent partners. Similarly, it may be expected that neurotics and extraverts would behave differently in conversation: neurotics and extraverts should interrupt more often.

Another variable which seemed worthwhile investigating was Machiavellianism, the tendency to manipulate interpersonal relationships. Would Machiavellians (Machs) interrupt more or less in order to successfully manipulate in this specific situation? It is possible that high Machs would choose to listen more and interrupt less in order to better manipulate their partners. On the other hand, it is quite reasonable to assume that high Machs would start immediately with interrupting and simultaneous talk as one means to manipulate their partner. Another possibility is of course that they may try different strategies at different stages of the discussion, in other words engage in some trial and error in an attempt to adjust to the situation.

The present study had two aims: (a) to assess the amount of interruptions and simultaneous talk in conversations between subjects who did not know each other previously, at different stages of their conversations, and (b) to investigate whether certain personality variables are connected with the two phenomena studied.

Method

Subjects

Ninety-six male candidates for admission to the Technion served as subjects. The average age was 25, with a range of 21-27. Thirty-two groups of three discussed for fifteen minutes a topic dealing with current affairs.

Measures

- (a) Number of interruptions (for each five-minute period, and total).
- (b) Number of simultaneously spoken utterances (for each five-minute period, and total).
- (c) Mach-V Scale (Christie and Geis, 1970), a measure designed to tap the tendency to successfully manipulate interpersonal relationships.
- (d) Dominoes-test (Vernon, 1951), a nonverbal intelligence test (g -loading of .8).
- (e) Eysenck's Personality Inventory (Eysenck and Eysenck, 1965), measuring extraversion and neuroticism.

Procedure

Subjects first filled out the questionnaires in a morning session of testing as candidates for admission to the Technion.

In the second part of the day they were randomly assigned to three-person-groups, and asked to discuss a topic of current interest they could agree upon. When the discussion started, two trained observers scored each interruption and each utterance spoken simultaneously with at least one other participant. The discussion was terminated after 15 minutes. Reliability of observations was found to be very high. Pearson product-correlations were above .90.

Four scores are available for interruptions and simultaneous talk: the amount for each five-minute period, and total score.

Results and discussion

Tables 1 and 2 show that on the whole in three-person-discussions of a topic on current affairs partners interrupt each other on the average 34.7 times and talk simultaneously on the average 24.6 times. In both phenomena there is a slight U-shaped relationship when we compare the three time-intervals. There is a peak between the sixth and tenth minute with less interrupting behaviour both at the beginning and toward the end of the discussion. It seems that after an initial short period of relative inhibited behaviour, many interruptions and much double-talk are taking place in a struggle to be listened to by the partners. After the reaching of a certain 'balance of power' between the participants, there is a gradual diminishing of interruptions.

Analysis of the data according to personality variables was done on the basis of group data. Average scores on each variable were calculated for each group. The 32 groups were then subdivided into 16 groups above and 16 groups below the median on each variable.¹

As shown in Tables 1 and 2, the largest difference in amount of interruptions was found between groups of intelligent and less intelligent subjects. The latter interrupted each other twice as much as the more intelligent groups. It seems that less intelligent subjects have difficulties in interpreting the signals sent by partners, meaning that they have not yet yielded the floor.

Marked differences in amount of interruption can be seen when comparing the more neurotic with the less neurotic groups. In the former, many more interruptions are taking place than in the less neurotic groups.

Similarly, extraverts both interrupt and speak simultaneously more than introvert groups. With regard to Machiavellianism it is clear that in high and low

1. Significance of differences between means of groups was tested by Wilcoxon's

Rank Sum Test (Wilcoxon and Wilcox, 1964).

groups subjects interrupt each other to the same extent in the first five minutes, but in the second and third stages in the low-Mach groups much more interrupting is going on than in the high-Mach groups.

With regard to simultaneous talking, an entirely different picture emerges. In high-Mach groups, right from the beginning much more simultaneous talking is taking place, diminishing in the second stage, and coming back to the same level in the third stage.

In low-Mach groups the opposite is happening: in the first stage very little simultaneous talking, rising drastically in the second stage, and levelling off in the third stage.

It is obvious that low- and high-Mach subjects employ different strategies in small group discussions. High-Mach subjects interrupt less and less as the discussion is developing, whereas low-Mach subjects try first to interrupt more, and change later their strategy.

High Machs start on a high level of simultaneous talk and decide to try behaving differently, i.e., talking less.

Low Machs start on a low level, and decide to try behaving like high Machs, i.e., to talk more; at the end they behave similarly.

It may be concluded, on the basis of the data, that personality variables play an important role in explaining the amount and pattern of interruptions and simultaneous speech in small discussion groups.

Table 1. *Average number of interruptions according to personality variables*

	Time in minutes			Total
	1-5	6-10	11-15	
Overall interruptions	11.4	13.2	10.1	34.7
High extrav.	10.9	15.2	12.2	38.3
Low extrav.	12.0 ^b	11.2 ^b	7.7 ^b	30.9 ^a
High neurot.	14.8	15.2	12.1	42.1
Low neurot.	8.0 ^b	11.2 ^b	7.9 ^b	27.1 ^a
High intell.	9.2	8.6	5.6	23.4
Low intell.	13.6 ^b	17.9 ^b	14.4 ^b	45.9 ^a
High Mach.	12.8	9.8	8.2	30.8
Low Mach.	12.6	16.1 ^b	12.1 ^b	40.8 ^a

a. Differences between high and low groups are significant at less than .01 level.

b. Differences between high and low groups are significant at less than .05 level.

Table 2. Average number of simultaneous utterances according to personality

	Time in minutes			Total
	1-5	6-10	11-15	
Overall simult. talk	5.2	10.2	9.2	24.6
High extrav.	7.9	11.2	12.6	31.7
Low extrav.	2.6 ^b	9.2 ^b	5.5 ^b	17.3 ^a
High neurot.	6.9	11.5	7.6	26.0
Low neurot.	3.6 ^b	9.0 ^b	10.5 ^b	23.1 ^a
High intell.	2.7	6.2	7.1	16.0
Low intell.	7.7 ^b	14.2 ^b	11.0 ^b	32.9 ^a
High mach.	10.7	6.7	10.0	27.4
Low mach.	2.6 ^b	13.7 ^b	10.1	26.4

a. Differences between high and low groups are significant at less than .01 level.

b. Differences between high and low groups are significant at less than .05 level.

REFERENCES

- Argyle, M. (1975). *Bodily communication*. London: Methuen.
- Christie, R., and Geis, F. L. (1970). *Studies in Machiavellianism*. New York: Academic Press.
- Duncan, S. (1972). Some signals and rules for taking speaking turns in conversations. *J. Pers. soc. Psychol.*, 23: 283-92.
- Eysenck, H. J., and Eysenck, S. B. C. (1965). *The Eysenck Personality Inventory*. London: University of London Press.
- Meltzer, L., Morris, W. N., and Hays, D. P. (1971). Interruption outcomes and vocal amplitude explorations in social psychophysics. *J. Pers. soc. Psychol.*, 18: 392-402.
- Vernon, P. (1951). *The structure of human abilities*. London: Methuen.
- Wilcoxon, F., and Wilcox, R. A. (1964). *Some rapid approximate statistical procedures*. Pearl River, N.Y.: Lederle Laboratories.