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AUTHOR Smith, H. W.
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ABSTRACT

Data are presented which show: (1) that differences between adult and child psyches have important implications for age-stratified interaction process; and (2) that adult-child interactional differences cannot be solely attributable to genetic or psychological differences but that they are in part due to social factors. The data are based on like-aged, like-sexed gros of 4, 5, 6, 8, 10, 13, 16, and 20 year olds which are comparable with regard to personal and social characteristics, group size and number of sessions met. Behavioral stratification at various age levels was analyzed on the basis of: (1) who-speaks-to-whom data; (2) power and status distribution; and (3) the direction of interaction. Results suggest that, contrary to what is usually thought, child-adult qualitative interaction differences are more directly attacked through quantitative comparisons. Certain of the data suggests that, while physical maturation may be slow enough to hinder the child's complete attainment of adult interpersonal styles, children may also lack adult interaction structure due to poor, or incomplete, socialization. (TL)

Interaction Process In Small Groups of Varied Ages

H.W. Smith

University of Missouri--St. Louis

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Interaction Process in Small Groups of Varied Ages

Sociologists have been content through the years to pay remarkably little attention to childhood. The meager amount of our literature focused on childhood has tended to be concerned with intra-individual, as opposed to interpersonal, characterizations of children versus adults. Most notably, Piaget (1954; 1957) has dealt with adult-child differences in such a manner. His argument has been that children are qualitatively as well as quatitatively different psychically from adults. In the short space allotted to me I wish to hint at an extention of Piaget's argument. Namely, I wish to show that differences in the adult-child psyche have important implications for age stratified interaction process; second, that these adult-child interactional differences cannot be solely attributable to genetic or psychological differences, but that they are in part due to social factors.

The groups upon which this data are based consisted of like-aged members. The age levels sampled were ages four, five, six, eight, ten, thirteen, sixteen, and twenty. Furthermore, in order to control for as many confounding variables as possible, the groups were made comparable with respect to personal and social characteristics (white Catholic, working class), degree of transciency (artificially constructed groups), group size (five), group sex composition (like-sexed), and number of sessions met (four one-half hour sessions). Rorschach projective inkblots were used as a means of obtaining a group story "explaining" the inkblots at each session. The task appeared to be

equally stimulating and difficult across all ages. Borgatta's revision of Bales' I.P.A. schema (1962) was used for coding interaction processes.

Two tables will be presented indicating the degree of behavioral stratification at various age levels. Table I uses standard Bales-type who-speaks-to-whom analysis to indicate some generalizations about power and status.

Table I about here

Who-speaks-to-whom data is important because to speak takes up time, and since time is limited (especially in experimental discussion groups), time can be regarded as a scarce resource. Thus, problems of allocation of time as a scarce resource can be created in interpersonal relationships. Presumably, then, to take up time is to exercise control (power) over other members of the relationship, at least during the time that one has taken (Bales, 1970).

Table I indicates a possible power development across ages as expressed by the total amount of interaction initiated. Perhaps of greatest interest is the gradual development of greater differences in total initiated interaction with age. That is, at the youngest ages there seem to be three basic differences in power, with the two highest status persons initiating approximately the same amounts of interaction, the third and fourth persons (in status) each initiating approximately one-fourth as much interaction as the two highest ranked persons, and the fifth ranked person initiating approximately a tenth the interaction of the two highest ranked individuals. Between the thirteenth and sixteenth years this ranking differentiates much more clearly into

five separate statuses.

Adult interaction initiation structures typically approximate a logrithmic curve as shown in Figure 1. Why don't these children's

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Figure 1 about here

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groups fit into this adult pattern? By focusing upon the individual session data (not shown) rather than the grouped session data shown in table 1 the children's data can be made to approximate this adult pattern. This suggests that status and power within children's groups may be somewhat more fluid than in adult groups. Adults who dominate interaction in one session are more likely than children to dominate interaction in later sessions; the adult's behavioral participation within the group tends to be more internally consistent and stable.

Returning to Table 1, consider the amount of interaction directed to the group as a whole (Sum to 0). It seems evident that the younger aged group members direct much less interaction to the group and much more to individuals than do older group members.

Finally, compare the interchange between specific individuals (for instance, person #1 to #2 as compared with #2 to #1). The tendency is for communication to be directed upwards in rank. This supports Bales (1970) contention of a tendency for each person to form a coalition with a person more powerful than himself, although it is evident that this tendency is less apparent once again at lower ages.

The data considered to this point has focused on how much interaction is used by differently aged groups. A further question

may concern the types of interaction that characterize age stratified groups. Table 2 shows striking interactional differences using very

Table 2 about here

gross categorizations. Between ages five and twenty positive reactions more than double in usage, questions increase six hundred fold, and negative reactions decrease to one-third the original five year level. Attempted answers seem to increase somewhat until about age thirteen and then decrease slightly in usage.

Evidently, there seems to be clear evolution towards adult interpersonal behavior styles throughout childhood. Less clear is the function(s) of these increasing (or decreasing) patterns of interaction with age. Perhaps several tentative conslusions may be offered with respect to similarities found in both tables.

First, both tables show quantitative similitude in the sense that all forms of interaction are present at each age: all persons engaged in interaction and all four basic types of interaction categories were used. On the surface this fact might not seem important. But the fact that we have been able to compare children with adults quantitatively is somewhat foreign to mainstream child social psychology. Piaget, for example, has been emphatic in arguing for a child social psychology based on qualitative, rather than quantitative, comparisons with adult behavior. Thus, his interaction coding schema was developed with the intention of imputing that children are much more egocentric and less socialized that adults. This paper would argue that one can more

directly attack adult-child qualitative differences through quantitative comparison. For example, in Table 1 we noted that the younger the children, the less likely they are to address the group as a whole; and table 2 shows a clear cut development in the use of questioning behavior. It can be argued that both of these patterns support Piaget's egocentric-socializing theses. That is, it seems reasonable to conclude that the trend towards adult patterns of interaction is a by-product of socialization. Further, lesser usage of questions at younger ages could belie the child's egocentrism. Questioning behavior implies a minimal amount of self-reflection and some attempt to go beyond one's own authistic world.

Second, the fact that each type of interaction category can be found from age four onwards means that differences across ages can not solely be attributed to genetic developmental differences as has been stressed by Kohlberg and his associates (1969) in their age comparisons of the development of dreams. Probably the truth lies somewhere in between. That is, physical maturation may be slow enough to hinder the child's complete attainment of adult interpersonal styles, but children may also lack adult interaction structure due to poor, or incomplete, socialization.

TABLE 1

INTER-AGE INTERACTION CATEGORY DEVELOPMENT*

AGE	Positive Reactions	Attempted Answers	Questions	Negative Reactions
05	13.99	46.86	**	39.24
06	16.65	51.09	0.69	31.56
08	20.58	51.59	1.60	26.23
10	19.08	52.35	1.91	26.66
13	21.31	64.56	3.55	10.58
16	27.91	54.89	5.23	11.97
20	29.68	51.13	6.00	13.19

*expressed in percentages of the total interaction.

**less than 0.01.

TABLE 2

WHO-TO-WHOM INTERACTION MATRICES IN PERCENTAGES BY AGE [a]

AGE 05

FROM: \ TO:	1	2	3	4	5	SUM TO I	SUM TO 0	TOTAL INIT.
1	-	20,1	6,3	4,0	1,8	32,2	1,8	34,0
2	24,4	-	2,9	2,4	1,4	31,1	1,9	33,0
3	10,1	3,3	-	,6	,5	14,5	,8	15,3
4	6,7	3,0	2,3	-	,8	12,8	,6	13,4
5	3,0	,7	,2	,2	-	4,1	,2	4,3
SUM REC.	44,2	27,1	11,7	7,2	4,5	94,7	5,3	100,0

AGE 06

FROM: \ TO:	1	2	3	4	5	SUM TO I	SUM TO 0	TOTAL INIT.
1	-	20,2	6,2	3,9	1,8	32,1	2,1	34,2
2	24,3	-	3,6	2,7	1,5	32,1	1,9	34,0
3	9,4	3,4	-	,7	,6	14,1	1,1	15,2
4	6,5	2,9	2,4	-	,1	11,9	,9	12,8
5	2,1	,7	,3	,1	-	3,2	,6	3,8
SUM REC.	42,3	27,2	12,5	7,4	4,0	93,4	6,6	100,00

AGE 08

FROM: \ TO:	1	2	3	4	5	SUM TO I	SUM TO 0	TOTAL INIT.
1	-	16,6	6,3	3,4	1,4	27,7	6,1	33,8
2	19,2	-	5,0	3,4	,6	28,2	4,8	33,0
3	9,3	3,4	-	,8	,6	14,1	2,6	16,7
4	6,3	2,9	1,2	-	,4	10,8	2,3	13,1
5	2,2	,6	,2	,2	-	3,2	,2	3,4
SUM REC.	37,0	23,5	12,7	7,8	3,0	84,0	16,0	100,0

AGE 10

FROM: \ TO:	1	2	3	4	5	SUM TO I	SUM TO 0	TOTAL INIT.
1	-	9,1	4,9	3,9	2,2	20,1	16,6	36,7
2	16,4	-	3,5	1,7	,6	22,2	8,6	30,8
3	8,8	2,7	-	,9	,5	12,9	3,4	16,3
4	5,1	1,1	,7	-	,2	7,1	2,8	9,9
5	2,9	,5	,3	,2	-	3,9	2,4	6,3
SUM REC.	33,2	13,4	9,4	6,7	3,5	66,2	33,8	100,0

[a] "Sum to I stands for sum to individuals, "Sum to 0" for sum to the group, and "Sum Rec" for sum received.

TABLE 2 - CONTD.

AGE 13

FROM:	TO: 1	2	3	4	5	SUM TO I	SUM TO 0	TOTAL INIT.
1	-	6.2	4.3	3.8	2.0	16.3	21.2	37.5
2	12.7	-	2.9	1.8	.6	18.0	8.3	26.3
3	8.9	2.2	-	1.0	.7	12.8	5.9	18.7
4	5.6	1.0	.3	-	.2	7.1	3.8	10.9
5	3.1	.6	.6	.4	-	4.7	1.9	6.6
SUM REC.	30.3	10.0	8.1	7.0	3.5	58.9	41.1	100.0

AGE 16

FROM:	TO: 1	2	3	4	5	SUM TO I	SUM TO 0	TOTAL INIT.
1	-	4.9	3.8	3.6	1.9	14.2	32.0	46.2
2	11.7	-	2.3	2.0	.6	16.6	6.2	22.8
3	8.4	1.9	-	.6	.5	11.4	4.1	15.5
4	5.6	1.4	.4	-	.1	7.5	2.4	9.9
5	2.9	.7	.5	.3	-	4.4	1.2	5.6
SUM REC.	28.6	8.9	7.0	6.5	3.1	54.1	45.9	100.0

AGE 20

FROM:	TO: 1	2	3	4	5	SUM TO I	SUM TO 0	TOTAL INIT.
1	-	4.9	4.1	3.8	1.9	14.7	32.1	46.8
2	11.8	-	2.3	2.0	.5	16.6	5.5	22.1
3	3.5	1.9	-	.6	.6	11.6	3.9	15.5
4	5.7	1.3	.4	-	.2	7.6	2.5	10.1
5	2.9	.7	.4	.3	-	4.3	1.2	5.5
SUM REC.	28.9	8.8	7.2	6.7	3.2	54.8	45.2	100.0

TABLE 2 - CONTD.

AGE 13

FROM: \ TO:	1	2	3	4	5	SUM TO I	SUM TO 0	TOTAL INIT.
1	-	6.2	4.3	3.8	2.0	16.3	21.2	37.5
2	12.7	-	2.9	1.8	.6	18.0	8.3	26.3
3	8.9	2.2	-	1.0	.7	12.8	5.9	18.7
4	5.6	1.0	.3	-	.2	7.1	3.8	10.9
5	3.1	.6	.6	.4	-	4.7	1.9	6.6
SUM REC.	30.3	10.0	8.1	7.0	3.5	58.9	41.1	100.0

AGE 16

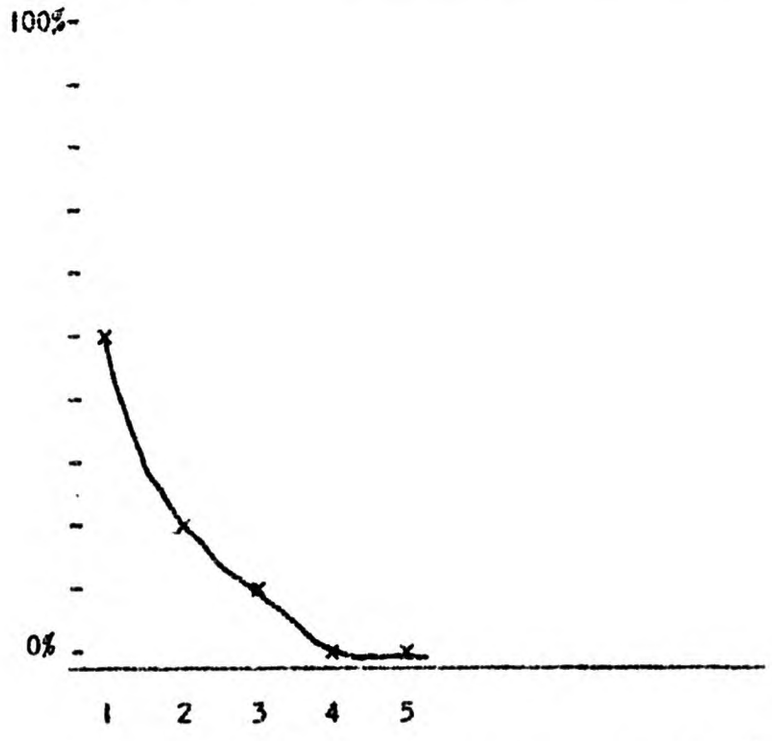
FROM: \ TO:	1	2	3	4	5	SUM TO I	SUM TO 0	TOTAL INIT.
1	-	4.9	3.8	3.6	1.9	14.2	32.0	46.2
2	11.7	-	2.3	2.0	.6	16.6	6.2	22.8
3	8.4	1.9	-	.6	.5	11.4	4.1	15.5
4	5.6	1.4	.4	-	.1	7.5	2.4	9.9
5	2.9	.7	.5	.3	-	4.4	1.2	5.6
SUM REC.	28.6	8.9	7.0	6.5	3.1	54.1	45.9	100.0

AGE 20

FROM: \ TO:	1	2	3	4	5	SUM TO I	SUM TO 0	TOTAL INIT.
1	-	4.9	4.1	3.8	1.9	14.7	32.1	46.8
2	11.8	-	2.3	2.0	.5	16.6	5.5	22.1
3	8.5	1.9	-	.6	.6	11.6	3.9	15.5
4	5.7	1.3	.4	-	.2	7.6	2.5	10.1
5	2.9	.7	.4	.3	-	4.3	1.2	5.5
SUM REC.	28.9	8.8	7.2	6.7	3.2	54.8	45.2	100.0

Figuge 1*

Relationship Between Size of Group and Percentage of Total Acts Initiated by Individuals



*adapted from Bales, Interaction Process Analysis

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