

CHILD REARING ANTECEDENTS OF AUDIENCE SENSITIVITY

by

Allan U. Paivio

A thesis submitted to the Faculty of Graduate
Studies and Research in partial fulfilment of the
requirements for the degree of Doctor of Philosophy.

Department of Psychology,
McGill University,
Montreal.

April 1959

ACKNOWLEDGEMENTS

This thesis was completed while the author was Research Psychologist at the Department of Child Development and Family Relationships of Cornell University. The research was largely supported by a grant from the United States National Institute of Mental Health (M-901), given to the above department for a study entitled "Pride and Shame in Children". The author is indebted to Professor Alfred L. Baldwin, Head of that Department, for making the financial assistance possible, as well as for his valuable advice. He wishes also to thank Dr. Harry Levin, Dr. Mary Gallwey and Mrs. Irene Stein, of the same department, for many helpful suggestions. Particular thanks is due Mr. C. J. Fraser, Principal of Sir Arthur Currie School in Montreal, and Mr. F. L. Billard, Elementary School Principal of Dryden Central School in Dryden, N. Y., for contributing school time, facilities and pupils (as subjects) to the research, and for their advice concerning data-gathering procedures. He is grateful also to the teachers of the many classrooms involved for their part in obtaining data.

TABLE OF CONTENTS

Introduction	1
The Montreal Study	14
Subjects	14
Materials and Procedure	14
Results and Discussion	17
Summary and Conclusions	36
The Dryden Study	39
Subjects	39
Materials and Procedure	39
Results	43
General Discussion	68
Summary	81
Appendices	
A. The Children's Questionnaire--Montreal Study	84
B. The Parent Questionnaire--Montreal Study	86
C. The Children's Questionnaire--Dryden Study	91
D. The Parent Questionnaire--Dryden Study	96
References	108

Child Rearing Antecedents of Audience Sensitivity

This study is part of a program of research on the nature of "stage fright". The analysis to date has suggested that stage fright is an instance of a more general phenomenon of "social influence" where people in interaction are conceptualized as "actors" presenting themselves before "audiences". The outline of this theory has been discussed elsewhere in an introductory manner (Paivio, 1957; Paivio and Lambert, 1959), and elaborated in an unpublished manuscript (Paivio, 1959). It is sufficient, therefore, to present here the central concepts involved, especially those directly related to the present investigation.

Stage fright is interpreted as an extreme instance of audience anxiety, which tends to be aroused by any situation involving the actual or imagined evaluation of an individual's behavior by others. Such audience situations are assumed to be anxiety arousing because of the possibility of unfavorable audience evaluation ("audience" referring to others functioning as evaluators and reinforcers). Shyness and embarrassment, which occur in the informal audience situations of everyday social interaction, presumably refer to milder forms of audience anxiety (cf. Heider, 1958; Lewinsky, 1941). This variable is assumed to function as a drive, prompting not only avoidance tendencies (cf. Miller, 1951; Mowrer, 1950) but having "arousal" properties as well, in accordance with the proposals of recent theorists (see, e.g. Bindra, 1959; Duffy, 1957; Hebb, 1955).

The direction and extent of the influence attributable to audience anxiety is assumed to depend on the level to which anxiety is raised (or lowered) by cues previously associated with performance in evaluational

situations, where such factors as size and prestige of the audience, value or importance of the task, probability of failure, etc., can have their effect.¹ Individual differences in reactions to audiences are attributed to audience sensitivity, which is regarded as an experientially-determined set or predisposition to react with varying degrees of anxiety in audience situations.² Prediction of behavior in audience situations would thus call for the measurement of audience sensitivity as well as of the relevant situational variables.

In view of the complexity of the phenomena it purports to encompass and the generally unsatisfactory objective status of such concepts as anxiety, the proposed model must be regarded as exceedingly crude. Nevertheless, its heuristic value and explanatory potential seem sufficiently great to warrant further study. A comprehensive general theory would be applicable to such apparently disparate research areas as studies of group influence, social conformity and success and failure experiences, each of which involves evaluation by some explicit or implicit audience as a crucial element (cf. Heider's [1958] discussion of the influence of the other person as an evaluating observer). Data supporting the utility of such a theory have been reviewed by the writer (Paivio: 1957, 1959).

1. Such variables as task-value and probability of failure require operational definition to be useful in this context. We simply take for granted here that they will be so definable.

2. There is no attempt here to restrict the manifestations of audience sensitivity to autonomic reactions. The phenomenon could, for example, show itself in perceptual or thought processes. Such an assumption was at the basis of an attempt (Paivio & Lambert, 1959) to indirectly measure the assumed underlying drive-state using the TAT-type technique introduced by McClelland et al (1953). The reasoning was that audience sensitivity would manifest itself as perceptual sensitivity to audience-related cues. The concept has been independently employed in this general sense by Zimmerman and Bauer (1958). For present purposes, however, pending further data, audience sensitivity shall be regarded as an emotional-motivational predisposition.

One of the most consistent findings of early studies involving audience situations was that individuals vary greatly in the extent to which they are influenced by the group (see, e.g. Dashiell, 1935; Hollingworth, 1935). Since the concept of audience sensitivity was introduced to account for such individual differences, an understanding of this "personality" variable is particularly important for the theory. Accordingly, the specific purpose of this study is to relate audience sensitivity to antecedent child-rearing variables in the hope of explaining the differential effects attributable to evaluating observers.

In a preliminary investigation of the above problem, Paivio and Lambert (1959) found significant negative correlations between audience sensitivity, as measured by a questionnaire (the "Audience Sensitivity Inventory" [ASI]) and frequency of public speaking experience, parental encouragement of conversation and public performing (singing, dancing, etc.), and instrumental importance, in childhood, of speaking ability. These findings supported the hypothesis that audience sensitivity is inversely related to the frequency of rewarded experience in audience situations. However, the interpretation of the correlations in the 1959 study is equivocal: the experiences (assuming empirical validity of the audience-experience items) might simply reflect prior differences in audience sensitivity. Furthermore, both antecedent and consequent variables were inferred from responses of the same subject. The present study attempts to remedy the above defects by obtaining data independently from both parents and children.

The theoretical analysis of audience sensitivity also requires more extensive consideration than it was given in the preliminary research. Since audience sensitivity is defined in terms of anxiety, it is appropriate to

emphasize the function of punishment as an antecedent of this motive, as well as to consider the importance of rewarded experience. Furthermore, it is objectively clear that people are motivated to seek audiences as well as to avoid them, and a complete understanding of audience influence requires consideration of both tendencies.

Such "opposing impulses of fear and attraction vis-a-vis audience situations" were recognized in the previous study (Paivio & Lambert, 1959) but the positive side was ignored. In connection with somewhat related research on "pride" and "shame" in children, conducted at Cornell University (cf. Baldwin & Levin, 1958; Levin & Baldwin, 1958), a questionnaire was developed in which items of the McGill ASI were translated into forms suitable for use with children and additional items constructed on the basis of the theory guiding research on pride and shame. This "Children's Audience Sensitivity Inventory" (CASI) attempts to incorporate an audience-seeking tendency ("exhibitionism") as well as avoidance behavior and thus permits us to at least introduce a discussion of both, although our attention will be directed primarily to audience sensitivity. We turn now to a consideration of the theory which directed this research.

Audience anxiety is assumed to be primarily acquired, i.e., aspects of audience situations which have been consistently associated in the past with unfavorable evaluation and punishment acquire anxiety arousing value. While the relevant learning experiences may involve formal "stage" situations, particular importance is attached to parents, teachers, peer groups, etc., as primary evaluators who may punish for failure to attain group-recognized standards. The effectiveness of the formal audience situation as an elicitor of anxiety is attributed to the fact that evaluation (the necessary condition for social reinforcement) is explicit, but, as in any

evaluation situation, the level of anxiety will depend on such factors as the power of the audience to reinforce and the nature of the required task (which may determine whether evaluation will be favorable or unfavorable).

Audience sensitivity (anxiety-potential) is assumed to be positively related to the frequency and intensity of unfavorable evaluation and punishment, and negatively related to the frequency of rewarded experiences with evaluating others. In cognitive terms, such experiences may affect the individual's characteristic perceptions of himself and of others. If he has been frequently disvalued and punished he may consider himself generally unsuccessful and expect others to be punitive in situations where his "performance" is to be appraised. Consequently, such situations may be anticipated with fear. On the other hand, if he has frequently been evaluated favorably, and infrequently punished for failures, he may generally anticipate success, or at least not perceive others as punitive.

In terms of parental variables, then, audience sensitivity should be related to such factors as the general rewardingness or punitiveness of the parents, the favorableness of their customary evaluations of the behavior of their children, and the level of their standards relative to the child's ability (which should affect the probability of the child attaining these standards and being favorably or unfavorably evaluated).

It is also possible that some audience situations, especially those involving large audiences, are anxiety-arousing simply because they are strange (cf. Hebb's discussion of "fear of the strange", 1946), and that frequent exposure results in adaptation to such situations.³ One function

3. This analysis raises the question, Why should "stage fright" apparently be so resistant to extinction, even in the case of veteran actors who repeatedly face large audiences? The answer might simply be that they receive aperiodic reinforcement, occasional negative experiences before audiences being sufficient to maintain anxiety-potential at high strength.

of early rewarded experience might then be the reinforcement of acts which would permit such adaptation to take place. Alternatively, if initial experiences are negative they could serve only to reinforce or intensify the original fear response. Thus, we might consider, as possible antecedents of audience sensitivity, the opportunities offered in the home for contact with varied "audiences" and special training factors which may determine the favorableness of these contacts, e.g. (a) specific training in audience-oriented skills such as singing and dancing, or simply in how to meet and talk with people, (b) "sociability" of the family, and (c) the kind of social model which a parent is for the child.⁴

No implication is intended in the above analysis that audience sensitivity involves a bipolar factor, i.e., low susceptibility to anxiety does not imply that the individual is motivated to seek out audiences. This tendency, referred to by such terms as "exhibitionism" and "need for recognition", may be uncorrelated with anxiety-potential, and requires independent consideration. In doing so, it is convenient to distinguish between public exposure as an end in itself and public exposure which is instrumental to the attainment of a goal (possibly exterior to the situation in which "performance" takes place). However, it may also be misleading to make distinctions in terms of instrumentality. As pointed out by Bindra (1959) any objective description of motives must be in terms of goal-directed activity which, by definition, is instrumental to the attainment of a goal (or avoidance of a negative goal). In connection with

4. It may be noted that throughout this discussion the emphasis is on experiential factors. It is not unlikely that audience sensitivity is also determined in part by constitutional factors, but since this study is not concerned with them, they will not be discussed here.

exhibitionism, then, we are concerned with the nature of the goal served by public exposure of the self or a self-product. Two possible interpretations of exhibitionism are (a) that recognition by others is intrinsically rewarding, and/or (b) that public "performance" mediates attainment of some goal other than audience-approval, although such approval may be a necessary condition for achievement of the ultimate goal.

The above proposals could be given specific theoretical interpretations. For example, (a) above may be conceptualized in terms of anxiety-reduction : audience approval may reduce anxiety concerning social acceptance and reinforce "exhibitionistic" responses which resulted in drive-reduction. On the other hand, as an instrumental behavior sequence (b, above), exhibitionism may be acquired through experiences in which public exposure has been rewarded in tangible ways, e.g. higher school grades, privileges, candy or other "goodies", etc.

However, it would be premature to make any predictions on the basis of such speculative distinctions, since this study is particularly exploratory in regard to audience-seeking tendencies. Thus it was assumed only that exhibitionism should be positively related to the frequency of parental rewards, regardless of the specific nature of these rewards.

In summary, audience sensitivity is assumed to be derived from experiences involving consistent unfavorable evaluation and frequent punishment, and inversely related to high evaluation and reward. Exhibitionism should be positively related to rewarded audience experience. One might speculate about the relations if audience experiences have frequently been both rewarding and punishing, or if they have been neither rewarding nor punishing, but no explicit predictions were made. We turn now to a brief consideration of relevant studies.

A number of studies concerned with socialization and personality development suggest antecedent variables for some kind of general social anxiety (timidity in school, submissiveness, etc.). In general there is agreement that parental punitiveness is related to anxiety in children (Baldwin, 1955; Sear, Maccoby and Levin, 1957; Whiting and Child, 1953). There is evidence also that possessive homes are conducive to fearfulness (Baldwin, 1949; Baldwin, Kalhorn and Breese, 1945; Levy, 1943), although it is not clear why the overprotected child should also be specifically timid, submissive and withdrawing with respect to people. One suggested explanation is that parents are themselves anxious (Baldwin, 1955). In the case of audience sensitivity this might mean that parents who are highly "sensitive" about audience situations communicate, through themselves as examples, their uncertainties to their children. A further possibility is that overprotected children have less opportunity for varied social contacts, and, consequently, are sensitive to strange audiences (cf. the above discussion of fear of the strange). However, anxiety is rather vaguely defined in some of the above studies and extensive interpretations of their data in terms of audience sensitivity are unwarranted.

Studies of correlates of speech skills are particularly relevant since verbal behavior is acquired entirely in audience situations, is highly valued, and presumably occurs only in the presence, or imagined presence of an audience. Also, there is evidence that speech proficiency is negatively related to audience sensitivity. Murray (1936), for example, compared responses on the Bernreuter Personality Inventory of 25 "inferior" and 25 "superior" speakers (selected on the basis of ratings of speech performance by a speech instructor). The two groups responded differently to a number of items in the inventory which refer to reactions to audience

situations. Since these items were part of the McGill ASI, we can state that Murray's inferior group was higher in audience sensitivity. While Murray presents no quantitative data on antecedents, the impression gained from interviews was that the inferior speakers were not reared in homes of high social or cultural status, had little or no planned speech training and their parents were not trained or effective speakers. The inferior speakers also report a preponderance of single negative early experiences, e.g. being slapped by a teacher in front of the class for not being loud enough. No extensive inferences about antecedents are warranted from these findings, however. Even assuming that the anecdotal data reflect reliable differences, we do not know, for example, that the superior and inferior speakers actually differ in the number of such "negative" experiences--the inferior may simply recall them more readily. If so, this might mean that the effects of such experiences were more traumatic for the inferior than for the superior speakers because they already had a higher level of audience sensitivity. It is possible, however, that the inferior speakers were both initially higher in audience sensitivity and also had more negative speech experiences because of greater communicational inefficiency.

Molyneaux (1950) found that verbally advanced children, as determined by the ratings of speech correctionists and teachers, and by performance scores in verbal ability, appeared to have been exposed to a greater amount of adult speech stimulation and specific speech training than children with delayed speech. However, lacking specific information on audience sensitivity, it is not safe to generalize from her results to relations between audience sensitivity and antecedent variables.

Studies of stuttering have shown that stutterers are characteris-

tically high in audience sensitivity, as indicated by measures operationally linked to that concept (see e.g. Bender, 1939). Here, too, caution is required because of the specific disability involved in stuttering, but we shall briefly discuss some relevant findings. Moncur (1951) found that significantly more mothers of stutterers than of non-stutterers reported employment of threats, shame or humiliation and physical punishment. The parents are also reported to be less consistent in their discipline, disagree more often about discipline, set excessively high standards for the child and tend to evaluate the child's behavior negatively. Grossman (1952) found that parents of stutterers interpret MMPI items more atypically than parents of non-stutterers, although she finds no consistent differences in the patterns. She also found that parents of stutterers, as compared to those of non-stutterers, place less emphasis upon active social participation and responsibility for their children. Further, they were relatively less efficient in assessing the desirability or undesirability of specific child behavior traits and of their own influence upon the child's emotional and social adjustment. Boland (1951), using a "Speech Anxiety Projective Test", obtained evidence suggesting that stutterers perceive their mothers as authoritarian figures, feel rejected by them as well as inadequate to meet the demands they make. These studies indicate the importance of parental standards, evaluations and reinforcements in the life history of individuals who are high in audience sensitivity. In addition to the problem of generalizing to a non-stuttering population, however, a further difficulty in interpreting the results is that the cause-effect sequence is obscure, although Moncur (1951) for example, feels that the "adverse" conditions were present prior to the onset of stuttering.

We consider next two studies which involve inventories highly similar to the McGill ASI, and the findings of which are therefore most relevant to this study. Knower (1938), in a study of speech adjustments and attitudes, related scores on a highly reliable "Speech Attitude Scale" (analogous in content to the ASI) to a number of case history items. He found significantly more "negative" speech attitudes (in our terms, higher audience sensitivity) in subjects from families with two or more older siblings than in subjects (Ss) who were the only or the oldest children, and in Ss from families where neither of the parents did any public speaking. Higher positive attitudes (low audience sensitivity) were found in Ss with fathers whose occupations suggest a relatively high level of "abstract and social intelligence". A number of "speech experience" items also correlated significantly with speech attitudes, but these may be regarded, along with the attitudes, as behavioral indices of audience sensitivity rather than as causal factors.

Gilkinson (1943) investigated the causes of social fears in college students, fearfulness being defined by scores on a questionnaire, the "Personal Report of Confidence as a Speaker" (PRCS). The PRCS has been found to correlate with independent indices of stage fright (Dickens et al, 1950; Dickens & Parker, 1951), and is similar in content to the ASI. We may, therefore, regard it as indexing audience sensitivity at least as adequately as the ASI. Gilkinson found that fearful, as compared to confident, speakers has received less formal training and experience in speech activities and characteristically indicated low preference for activities and vocations involving public speaking. Here, again, the cause-effect sequence is obscure. The experiential factors investigated refer to recent rather than early experiences in the history of the college Ss and may be

regarded as symptomatic of audience sensitivity. While employing different terminology, Gilkinson acknowledges such a possibility.

The above studies indicate that audience sensitivity is a measurable personality "syndrome" with ubiquitous behavioral manifestations, and while antecedent factors are not clearly identified, the data at least suggest an interaction between audience sensitivity and the kinds of experiences regarded in the earlier theoretical discussion as relevant antecedents of audience sensitivity.

Such theories of stage fright as have been proposed are also relevant to the present discussion inasmuch as they have been concerned primarily with the origins of individual differences in stage fright (a complete theory of stage fright should specify how anxiety level varies as a function of situational factors, as well as account for individual differences in stage fright potential). Little specific attention has been devoted to such an analysis since Hollingworth's summary (in 1935), where the phenomenon was discussed as (a) an instinctive adjustment to the danger of the assembled crowd, (b) a neurosis engendered by conflict between the opposing tendencies, or instincts, of "fear of the crowd" and "craving for an audience", and (c) an "emotional reintegration", the disabling emotion being reinstated by cues previously associated with a fear-arousing incident. The first two involve instinct theory of an outdated variety (although the second is interesting in that it is an early application of conflict theory, taking into consideration opposing behavior tendencies, and which, in a more sophisticated form, would undoubtedly be of value in the analysis of behavior in audience situations). The third, supported by Hollingworth, regards stage fright as a learned phenomenon and is therefore closest to the present approach to audience sensitivity. It differs

in its emphasis on a single, or at most a few, traumatic experiences. The position taken here does not deny the importance of such incidents, but assumes that these are secondary and build on an already-existing audience sensitivity resulting from long term experience.

Two further theoretical discussions of stage fright are those of Lomas (1937) and Gilkinson (1943). Lomas' discussion is limited to an analysis of a situational determinant of the occurrence of stage fright, i.e., inadequacy of available responses. Gilkinson attributes stage fright to an experientially-determined "generalized sense of inferiority". Particularly noteworthy is Gilkinson's statement, referring to his own data, that "The relatively high incidence of self-devaluation among fearful speakers is perhaps the most significant single fact emerging from the present (his) study" (p.81). Considered in conjunction with antecedent factors suggested by studies cited above, it points to a relation between parental standards, evaluations, and reinforcements on the one hand, and children's self-evaluations and anxiety in evaluational situations on the other, which supports our developmental interpretation of audience sensitivity.

We turn now to two studies specifically designed to identify relevant child-rearing antecedents of audience sensitivity. The first study relates two measures of audience sensitivity to the frequency of parental use of various rewards and punishments, parents' attitudes toward child-rearing practices, and frequency of punishment for specific misbehaviors or achievement failures. The second study attempts to replicate significant findings from the first, using different samples of parents and children. It also considers an increased number of variables, including parental standards, evaluations of their children on specific behaviors and the frequency with which they reward for successes and punish for failures in

these behavior areas. In the second study, consideration was also given to such factors as "sociability" of the parents and specific training in audience-oriented skills, and an attempt was made to test a specific hypothesis concerning sex differences, arising from the first study.

The Montreal Study

Subjects

The child sample consisted of 192 boys and girls from the third and fourth grades of a school in a middle-class, urban school district in Montreal, Canada. Complete data were obtained from 187 of these children and from 132 of their parents.

Materials: the Measurement of Audience Sensitivity

Two indices of audience sensitivity were used in this study. The first was an early version of the Children's Audience Sensitivity Inventory (CASI--see Appendix A) developed at Cornell and based in part on the McGill ASI. It consists of 31 items referring to reactions to typical audience situations which children are likely to encounter, and to concern about others' evaluations. The items require a "Yes" or "No" response.

The CASI was employed as a single scale in the first study, the item responses being scored in the direction indicative of high audience sensitivity. Subsequently, a factor analysis of the items, carried out at Cornell independently of this study, yielded two orthogonal factors. Factor I ("Exhibitionism") had high loadings on seven items, 6 of which are included in the form of the inventory employed in this study (items 4, 5, 8, 10, 22, and 28, Appendix A). Factor II ("Self-consciousness") had high loadings on six items, all of which are in the form used here (items 11, 18, 19, 21, 26, and 32, Appendix A).

Thus, results will be discussed for the two factor scores as well as

the total CASI score, scoring of appropriate items being reversed when they refer to an Exhibitionism score.

The second index of audience sensitivity was a composition (Comp) written by the children as ordinary classroom projects on either "Why I like to recite in front of the class" or "Why I do not like to recite in front of the class". They were urged to choose whichever theme correctly expressed how they felt. The Comp was employed as a dichotomous variable.

Teachers' and parents' ratings of the children on shyness, and school grades in a number of subjects, were also obtained but these were used only as validation for the CASI.

Antecedent Variables: Parent Data

Parents answered a questionnaire (see Appendix B) designed to provide information on a) frequency with which they use various types of rewards and punishments; b) frequency and type of disciplinary action for specific misbehaviors in the areas of social relations and achievement; c) ratings of children's persistence in "getting own way" by verbal means, and parents' attitudes regarding "giving in" to such demands; d) ratings of their children on shyness; e) their handling of shyness as a problem; f) attitudes toward children and child-rearing.

The reinforcement variables were based in part on descriptions of child-rearing variables and data-gathering procedures provided by Sears Maccoby and Levin (1957). Some of the attitude items were taken from the California F Scale (Adorno et al., 1950) and a number were developed specifically for the study. The criteria for inclusion of attitude items was that punitiveness or permissiveness of the parent may be inferred from the items, or, that they refer to attitudes toward behavior in audience situations. A Likert-type response scale was provided for the attitude

items and a four-category "scale" (Frequently, Occasionally, Rarely, Never) for the reinforcement items.

Procedure

The plan of the study and specific procedure were discussed with the school principal and modified in part by his suggestions. The aim was to obtain the necessary data as much as possible as if they were a part of the school program, thus the data were gathered entirely by the teachers of the 6 classrooms under instructions from the principal. In addition, the following mimeographed instructions were provided for the teachers:

Instructions to the teacher

1. The Questionnaire.

- a) Tell your class that this is not for your use, that you will not even see the answers.
- b) Read the instructions aloud to the class and clarify them in your own words so that they will be sure to understand. Suggest that they ask if they do not understand one of the statements.

2. Composition.

- a) They are to write a composition (of the length they usually write) on either:

"Why I like to recite in front of the class"

or

"Why I do not like to recite in front of the class"

Tell the class that they may write on either one, whichever they feel is true for themselves. Otherwise the procedure should not differ from your usual one for written compositions.

Make sure they write their names on the composition pages.

Both the questionnaire and composition data should be obtained on the same day so that conditions are as nearly similar for the two as possible, and also so that the same students are all present for both.

3. Shyness ratings.

Please rate each student on "shyness", assigning 0 if the child is less shy than average (i.e. confident), 1 if about average, and 2 if more shy than average (i.e. lacking in self-confidence).

No further description of shyness was given. A mimeographed form was provided for the shyness ratings, school grades (those referred to above) and the students names.

A second set of teachers' ratings was obtained about four months later, at the time the parent data were gathered.

The parent questionnaires were taken home by the children in sealed envelopes bearing their names. A mimeographed letter from the principal (Appendix B) accompanied the questionnaire, explaining in a very general way the nature of the study (without reference to the fact that data had been obtained from their children) and that names were not required. A blank envelope was provided for return of the questionnaire when completed. The questionnaires were coded by lightly going over one letter in each questionnaire with a pen, a different letter being assigned to each child so that a parent's and child's data could later be matched by indentifying the inked letter in the parent questionnaire. These data were obtained about four months after the children had answered the CASI and written the compositions. Every apparent precaution was thus taken to avoid systematically biasing the parents' responses.

It is to be noted that, except for two items calling for ratings of all children in the family and their listing by age and sex, the questionnaire does not provide data specifically related to the child from whom audience sensitivity data had been obtained. Rather, the answers represent parental practices with respect to their children in general.

Results and Discussion

The Measures of Audience Sensitivity

The means and standard deviations of Exhibitionism, Self-consciousness and total CASI scores, are shown in Table 1. It may be noted that

Table 1
Means and Standard Deviations of Total CASI, Exhibitionism
and Self-consciousness Scores

Group	N	Total CASI		Exhibitionism*		Self-consciousness	
		M	SD	M	SD	M	SD
Boys	100	11.54	4.39	3.34	1.62	3.63	1.58
Girls	87	10.35	4.37	4.00	1.69	4.01	1.57
Significance of Sex Diff. (<u>p</u>)		<.10	N.S.	<.01	N.S.	<.10	N.S.

*Scoring of Exhibitionism items is reversed as compared
to when they are included in the total score

boys are somewhat higher than girls in audience sensitivity (total scores). Paradoxically, girls are significantly higher ($p < .01$) than boys in Exhibitionism and almost significantly higher ($p < .10$) in Self-consciousness.⁵ Interpreting the items in terms of audience sensitivity, girls score lower in audience sensitivity, than boys, by Factor I items, higher in audience sensitivity by Factor II items. Such evidence suggests that the two factors do reflect different underlying processes, but the psychological interpretation of sex differences is not clear at this point. One possible explanation of the differences is that both boys and girls tend to respond to the items in the socially approved direction, and that it is more acceptable for girls than for boys to be both exhibitionistic and self-conscious.

Total CASI scores correlate $-.76$ with Exhibitionism scores and $.57$ with Self-consciousness. Exhibitionism and Self-consciousness correlate $-.18$. The split-half odd-even reliability of the total "scale", corrected for length, is $.79$ ($N = 192$).

Table 2 presents the individual items on which boys and girls differ in their responses. On nine of the items, significantly more girls than boys respond in the direction scorable as low audience sensitivity (or high Exhibitionism). On only one item is this reversed: more girls respond "Yes-like me" to the statement "Other people can hurt my feelings easily".

The compositions (Comps) were assigned a score of one or zero, according to whether a positive or negative theme was chosen. Fifty-eight % of

5. These differences occur again in the Dryden Study (this manuscript) and may, therefore, be regarded as reliable.

Table 2

Sex Differences in Responses to CASI Items

Item No.*	Item	Proportion of "Yes" Responses		C.R.	p of Diff.
		Boys (N=104)	Girls (N=90)		
1.	I usually raise my hand when the teacher asks someone to recite	.61	.79	2.69	.01
2.	I like to take part in plays at school	.74	.91	3.04	.01
4.	I like to show my work to my classmates	.62	.71	2.00	.05
7.	I like to sing in front of others	.42	.60	3.33	.01
8.	I like to tell a story in front of the class	.53	.72	3.43	.01
18.	I get nervous when someone watches me work	.42	.56	2.78	.01
24.	I am glad when the teacher calls on me in class	.84	.94	2.22	.05
25.	Other people can hurt my feelings easily	.52	.72	2.86	.01
30.	I like to recite poems in front of other people	.52	.73	3.04	.01
31.	I would like to be on the stage in front of many people	.41	.70	4.03	.001

*The number of the item in the questionnaire (Appendix A).

the boys and 67% of the girls wrote on "Why I like to recite in front of the class". The assumption regarding use of the biserial r are reasonably well met in the data, thus r_b s were computed between the CASI scores and "liking reciting" as expressed by the Comp theme. These correlations are presented in Table 3. "Liking reciting" correlates highly significantly ($p < .0001$) with CASI total scores ($r = -.58$ sexes combined) and with Factor I ($r = .67$) but only slightly with Factor II (although the girls' r_b of $-.24$ is significant at the $p = .05$ level).

The high correlation between Exhibitionism and Comp suggests that the Comp theme may also be interpreted as another Factor I item.

In terms of our theoretical assumptions, the crucial question is, How well do the different scores reflect a child's tendency to react with anxiety in audience situations? The only information we have, apart from the CASI items, are the children's answers to the questions "Why I like" or "Why I do not like to recite in front of the class". Eighty-five % of the Comps on "Why I do not like to recite" contain reasons clearly interpretable as anxiety, e.g. "because I feel scared", "I shake all over", "I feel shy", "I feel bashful", etc. In view of this, and the fact that the Comp correlates rather highly with CASI total scores and even more highly with the six Factor I items, there is some justification for regarding either total scores or Factor I as valid indices of anxiety-potential, i.e. audience sensitivity as we have defined it. Furthermore, the Comp data suggest that exhibitionism and audience sensitivity, if not bipolar, are at least highly negatively correlated, if we accept Factor I items as defining exhibitionism and the composition responses as defining anxiety-potential.

However, the above interpretations may not be tenable, since commit-

Table 3
Biserial Correlations Between "Liking Reciting" (Composition Theme)
and Total CASI, Exhibitionism and Self-consciousness Scores

Group	N	Total CASI	Exhibitionism	Self-consciousness
Boys	100	-.53**	.70**	-.04
Girls	87	-.58**	.64**	-.24*
Total	187	-.58**	.67**	-.11

* $p < .05$

** $p < .0001$

ment to the positive composition theme could have excluded the possibility of references to anxiety. Thus, if an S writes a composition on "Why I like to recite in front of the class" he is not likely to think in terms of fear although he may, in fact, experience anxiety to a greater or lesser degree during actual public recitation. That this might be the case is indicated by the fact that seven boys and seven girls who wrote compositions on the positive theme qualified their statements by some such statement as, "but sometimes I feel nervous".

An alternative interpretation is that avoidance of audience situations is always accompanied (mediated) by fear, but that adient behavior (exhibitionism) may or may not involve this emotion; one might "put up" with fear if the reward for public performance is sufficiently great. Unfortunately no definitive statement is possible at this time, and perhaps not at all with questionnaire data.

The other major classes of reasons given for not liking reciting, usually accompanying references to anxiety, are possibility of failure, (sixty-eight % of the negative theme Comps referred to forgetting words, making mistakes, etc.) and of being ridiculed (31 % refer to being laughed at, etc.). The only other reasons offered were "being looked at" (seven Ss), "because I giggle (or laugh)" (three Ss) and blushing (three Ss).

The reasons given for liking reciting are not as readily classified. The only suggestion of a theme is that recitation leads to such positive social reinforcements as good grades, applause, "belonging to a club later, like Mommy", etc.

The correlations of CASI with the ratings of children's shyness given by parents and teachers and with the report card items, are shown in Table 4. The teachers rated the children on a three-point scale (more shy than average,

Table 4

Correlations Between Audience Sensitivity (CASI Total Scores) and
Shyness Ratings by Parents and Teachers, and School Grades in
French Oral Reading Skill, Oral Expression of Ideas and
General Achievement

Group	Rating ¹	N	Variable Correlated With CASI				
			Shyness Ratings Parents	Teachers	Fr. Oral Reading	Expression of Ideas	General Ach.
Boys	(a)	102		.11	-.21*	-.14	--
	(b)	98	.36** (N=64)	.04	-.09	--	-.14
Girls	(a)	90		.38**	-.22*	-.14	--
	(b)	85	.26* (N=64)	.10	-.14	--	-.16
Total	(a)	192		.25**	-.22**	-.14	--
	(b)	183	.30** (N=128)	.07	-.12	--	-.16*

¹(a): Rating or grade at time children's data were obtained; (b): Rating or grade at time parent data were obtained, about 5 months after (a).

* $p < .05$, two-tailed test

** $p < .01$, two-tailed test

average, less shy than average) at the time the child data were obtained, and a second time (on a four-point scale) about five months later, when the parent questionnaires were sent out. Ideally, transformed scores should have been used, since each of six different teachers rated only the children in her classroom. However, these data were not to be used extensively and only the raw scores were correlated. The re-test reliability of the teachers ratings is .49. The parents used a four-point scale for their ratings, and no re-test data were obtained.

The ratings of shyness by parents correlate significantly with both boys' and girls' CASI scores ($r = .36$, $p < .01$ and $r = .26$, $p < .05$, respectively). The first teacher ratings correlate significantly ($r = .38$, $p < .01$) with girls', but not with boys', CASI, while the rs involving the second ratings are negligible. The picture is similar for oral skill in French (a new language for these children): the early grades correlate significantly with CASI scores ($r = .21$, $p < .01$, for boys and girls combined).

There is a possibility that the changes in the correlations between the earlier and later school data are not randomly determined. Means and variances of CASI scores were computed for the groups of Ss who improved, decreased, and remained the same in their oral French grades. The means do not differ significantly, but the variability is significantly lower for the improved group than for either of the other two groups (the F ratio is significant at less than the .05 level in each case). That is, the Ss who improved in French oral skill tended to cluster around the mean of the CASI scores more than those Ss whose grades either deteriorated or did not change. What this may mean is not clear. Perhaps it reflects the attainment of an optimal "arousal" level for the required learning, but the evidence is too weak to warrant speculation.

General achievement grades, obtained only at the time the parent data were obtained, correlate $-.16$, $p < .05$, with the combined sample CASI scores.

The significant correlations with independent data support the validity of the CASI as a measure of audience sensitivity as we have defined it. The r of $.30$ (boys and girls combined) between CASI scores and the parents' ratings of shyness is particularly encouraging, since their estimates are likely to be relatively stable.

Relations of Audience Sensitivity to Antecedent Variables

One hundred and thirty-two parents, seventy % of the total sent out, returned the questionnaires in a completed or nearly-completed form. No attempt was made to follow up those who did not contribute, as many of the families had moved out of the school district. Since the final sample was not large, all cases were retained in spite of omissions, so that the number of observations included in the computations of individual correlations varies from 53 to 65 for boys, and from 55 to 67 for girls.

The reported correlations with CASI scores are product moment r s, those with the Comp are point biserial r s. In the case of the major significant relations scatter diagrams were plotted and inspection of these indicated that the correlations are approximately linear.

Frequency of Reward

The correlations of CASI and Comp scores (the negative Comp theme being assigned the higher score) with reward items, considered individually and in combination, are presented in Table 5. For boys, the correlations with the five categories of reward are all negative, but only two are significant or nearly significant. These are Item (c), "candy or other 'goodies'", and Item (d), "Money or gifts". However, the sums of all reward items

Table 5

Correlations Between Two Measures of Audience Sensitivity (AS) and
Frequency of Parental Reward (Individual Items and Summed Scores)^a

Group	AS Measure	Type of Reward				Σ Reward
		Praise	Privileges	Candy & "Goodies"	Money or Gifts	
Boys (N=62-64)	CASI	-.07	-.09	-.14	-.23*	-.35***
	Comp	-.13	-.01	-.22*	-.20*	-.29**
Girls (N=63-67)	CASI	-.03	-.14	.12	.08	-.03
	Comp	.22	-.11	.10	.14	-.11

^aCorrelations with Comp are point biserial rs.

* $p < .10$

** $p < .05$

*** $p < .01$

correlate significantly with CASI total scores ($r = -.35$, $p < .01$) and with the Comp ($r_{pb} = -.29$, $p < .05$).⁶

None of the correlations is significant for the girls' sample, although they are in the same direction as those of the boys for the summed reward scores.

Thus, the expectation that frequency of parental reward should be negatively related to audience sensitivity is supported by the boys', but not the girls', data.

For boys, correlations involving Exhibitionism scores are slightly lower, and the Self-consciousness correlations are considerably lower, than those involving CASI total scores. Exhibitionism correlates .26 ($p < .05$) and Self-consciousness, -.18 (N.S.), with summed reward. For girls, the respective r s are .11 and -.11 (N.S.).

Frequency of Punishment

The correlations with frequency of punishment, (individual items and totals) are shown on Table 6. Item (d), "withholding affection", was eliminated from the computations because it showed low variability, i.e. most parents reported never employing it as a disciplinary technique. The individual item correlations are not high, but in the case of boys they are in the predicted direction, with the notable exception of "frequency of isolation", which correlates significantly negatively with both CASI total scores ($r = -.27$) and Comp ($r_{pb} = -.25$), $p < .05$ in each case. Summed frequency of punishment, all items included, correlated .12 with CASI and .15 with Comp, neither of which is significant. However, since the correlations of frequency of isolation with audience sensitivity differs markedly from those of the remaining punishment variables, and for theoret-

6. Although in most cases a directional hypothesis is involved, all significance tests used in this thesis are two-tailed.

Table 6

Correlations Between Two Measures of Audience Sensitivity (AS)
and Frequency of Parental Punishments

Group	AS Measure	Type of Punishment							
		Isolation	Depriv. of Privileges	Scolding	Physical Pun.	Shaming	Ridiculing	Σ Pun.	Σ Pun. (-Isolation)
Boys (N=63-65)	CASI	-.27*	.14	.03	.20	.04	.18	.12	.26*
	Comp (r_{pb})	-.25*	.02	.35**	.07	.20	.06	.15	.26*
Girls (N= 65-67)	CASI	.15	-.04	.04	-.10	-.12	-.21	-.02	--
	Comp (r_{pb})	.15	-.03	.20	.13	-.09	-.21	--	--

* $p < .05$

** $p < .01$

ical reasons discussed below, it seems appropriate to consider the total frequency of punishment with isolation excluded. Total punishment with isolation excluded correlates .26, $p < .05$, with both CASI total scores and the Comp, -.14 with Exhibitionism items and .03 with Self-consciousness.

Again, the findings are not significant for girls, and if anything, the correlations are in the unexpected direction. Thus the prediction of a positive relation between frequency of punishment and audience sensitivity tends to be confirmed with boys but not with girls.

The unexpected reversal in the case of isolation is understandable if we regard isolation as social deprivation which increases the need for social contact, i.e. for an audience. Such an interpretation is supported by two studies carried out by Gewirtz and Baer (1958a, 1958b) in which they found that the effectiveness of adult approval in strengthening a response in young children was enhanced by a preceding period of 20 minutes of social isolation. In the second study (1958b) they found, further, that following "social deprivation" there resulted a greater mean frequency of comments, questions, and attention-seeking responses by the children, than after a "non-deprivation" condition.

The relation between audience sensitivity and frequency of isolation, suggested by the data of this study, and Gewirtz and Baer's results, can be interpreted in terms of anxiety reduction. Social isolation may arouse anxiety concerning acceptance by others and attention may therefore be anxiety reducing and solicited by the isolated individual. Whether the analysis is made in terms of anxiety reduction or simply in terms of "need" for social contact (defined in terms of a deprivation schedule), we might expect that frequency of isolation would correlate particularly highly with exhibitionism. Actually, in this study frequency of isolation correlates

.28 with Exhibitionism scores for boys (-.08 for girls), which is one of very few instances in which the Exhibitionism r is slightly higher than that of the total CASI scores. Thus, the data tend to support the above interpretation.

This analysis of the possible function of isolation does not help at all in the case of girls and we can only assume that, if the isolation finding is reliable for boys, other variables confuse the relation for girls. Considering the relation with other reinforcement items, we find that, for boys, isolation correlates not at all with total reward, and only slightly with one of the punishment items (.23 with deprivation of privileges). For girls, isolation correlates .30 with deprivation of privileges, .21 with scolding and .31 with spanking, but since these variables do not correlate significantly with audience sensitivity they cannot aid in the understanding of the failure of isolation to correlate with audience sensitivity. We shall return to a consideration of sex differences following presentation of the remaining findings.

Interaction of Reward and Punishment

Correlations were also computed with the ratio of the sum of the reward variables to the sum of the punishment variables (R/P), with isolation excluded. For boys the r between R/P and CASI total scores is -.36 and the r_{pb} between R/P and the Comp is -.33. Though highly significant ($p < .01$), these do not represent substantial gains over the correlations with summed reward alone. However, a multiple correlation, with total reward and punishment scores as predictors, is .46 with CASI and .42 with Comp, $p < .001$ in each case (reward and punishment totals correlate .12). Thus, reward and punishment frequencies, considered together, account for roughly 20% of the variance in audience sensitivity of boys, as defined by either

the CASI or the children's compositions. For the girls no appreciable relation was found.

The interaction of reward and punishment may also be viewed in another way. According to frequency of rewards and punishments, the parents were grouped into 4 categories: high reward x high punishment (HRHP), low reward x low punishment (LRLP), high reward x low punishment (HRLP), and low reward x high punishment (LRHP), the high-low division being made at approximately the median of the summed scores (isolation excluded). More extreme categories would have been desirable but impractical because of the small Ns. The means of the CASI total scores and the number and percentage of Ss choosing "liking reciting" as the Comp theme, for each of the four groups, are presented in Tables 7 and 8.

In the case of boys, the over-all H-value (approximately distributed like chi square) for the CASI scores of the four groups is 7.67, $p = .06$, with $df = 3$. However, individual group comparisons show that the HRLP group CASI scores are significantly lower than those of the remaining Ss combined ($H = 7.41$, $p < .01$, $df = 1$). They are also significantly lower than the HRHP and LRLP group scores ($p < .01$ in each case), and almost significantly lower ($p = .07$) than the LRHP group scores, individually considered. Thus, while the over-all differences for the four groups are not highly significant, we may have considerable confidence in the statement that, of the four groups, children of high reward and low punishment parents are significantly lowest in audience sensitivity, which accords with theoretical expectations. The other expectation, that children of low reward and high punishment parents should be highest in audience sensitivity is not confirmed with CASI scores, however.

The Comp data for the four groups, shown in Table 8, are more striking.

Table 7

Mean CASI Total Scores for Children in High (H) and Low (L) Parental
Reward (R) and Punishment (P) Groups^a

		HRHP	LRLP	HRLP	LRHP	Sig. of Over-all Diff.(df=3) ^b H-test p	
Boys	N	20	17	18	10		
	CASI Mean	12.95	12.24	9.44	12.60	7.67	.06
Girls	N	22	12	20	12		
	CASI Mean	11.18	9.75	8.95	11.33	5.60	N.S.

Individual group comparisons:

Boys:

Groups Compared	Sig. of Diff. H-test p(df=1)	
HRLP < All Others	7.41	<.01
HRLP < LRHP	3.23	<.10
HRLP < HRHP	6.40	<.01
HRLP < LRLP	8.23	<.01
LRHP > All Others		N.S.
HRHP <u>vs</u> LRLP <u>vs</u> LRHP		N.S.

Girls:

HRLP	All others	5.14	<.05
------	------------	------	------

^aIsolation score excluded from boys Punishment scores

^bKruskal-Wallis Non-parametric analysis of variance (Mosteller and Bush, 1954); H distributed approximately like Chi².

Table 8

Number of Children Choosing Positive Composition Theme (Liking Reciting)
in High (H) and Low (L) Parental Reward (R) and Punishment (P) Groups

		HRHP	LRLP	HRLP	LRHP	Sig. of Over-all Diff. (df=3) ^a Chi ² p
Boys	Group N	20	16	18	10	
	No. Liking Reciting ^b	10 (50)	7 (44)	17 (94)	2 (20)	15.54 <.01
Girls	Group N	22	12	20	11	
	No. Liking Reciting ^b	13 (59)	9 (75)	14 (70)	5 (45)	N.S.

Individual group comparisons:

Boys:

Groups compared	Sig. of Diff. Chi ² p (df=1) ^a
HRLP > All Others	12.76 <.001
HRLP > LRHP	13.10 <.001
HRLP > HRHP	8.19 <.01
HRLP > LRLP	7.07 <.01
LRHP < All Others	4.42 <.05
HRHP <u>vs</u> LRLP <u>vs</u> LRHP	N.S.

Girls: No significant differences

^aChi square test, with Yates' correction for continuity

^bNumbers in parentheses are proportions

The over-all chi square of 15.54 is significant ($p < .01$, $df = 3$). The significance is attributable to the high proportion of boys in the high reward x low punishment group choosing "Why I like to recite in class" as the composition theme, which differs significantly from the proportions in each of the other groups. Particularly noteworthy is the HRLP-LRHP comparison, where the greatest difference would theoretically be expected: 17 out of 18 (94%) in the high reward x low punishment, as compared to 2 out of 10 (20%) in the low reward x high punishment group, chose the positive theme--a highly significant difference (chi square = 13.10, $p < .001$ with $df = 1$).

For girls, the over-all group differences are not significant. It should be noted, however, that the data are not incompatible with those of the boys, and in the case of the CASI scores, tend to support theoretical expectations. Thus, the HRLP group has the lowest, and the LRHP group the highest, CASI mean score. The scores for the HRLP group girls are substantial lower than those of the remaining Ss combined ($H = 5.14$, $p < .05$ with $df = 1$), but the finding must be regarded only as suggestive, since none of the other comparisons between groups approaches significance.

The boys' data, then, support the reinforcement theory interpretation of audience sensitivity. The most reliable finding, tending to be supported by the girls' CASI data as well as being clearly significant in both the boys' CASI and the Comp data, is that where parents reward frequently and punish infrequently, the children are consistently low in audience sensitivity.

This concludes the presentation of the findings which are regarded as the most important in the Montreal study. The remaining results shall be briefly summarized.

Frequency of Punishment for Specific Behaviors

The majority of correlations involving punishments for specific behavior are of zero-order, although consistently in the expected direction for boys and frequently in the opposite direction for girls. The only substantial one are the following: for boys, frequency of punishment for disobedience correlates .30 ($p < .05$) with CASI scores, punishment for low school achievement, .34 ($p < .01$) and punishment for "lack of initiative" .25 ($p < .10$), with Comp scores. That is, high audience sensitivity in boys tends to be associated with frequent punishment in these areas.

Number of Siblings

For girls, number of siblings correlates significantly negatively with CASI total scores ($r = -.32$, $p < .01$). Interestingly, this is the only variable which correlates significantly with Self-consciousness: $r = -.54$ ($p < .001$) for girls and $-.16$ (N.S.) for boys, i.e., less "self-conscious" girls come from larger families. Possibly this represents effects associated with opportunity for extensive social interaction in the home (adaptation to groups?), but in the absence of further information such interpretations are sheer speculation.

The corresponding correlations with Exhibitionism are .23 ($p < .10$) for girls and zero for boys.

The possibility that birth order might be related to "audience motives" was also checked on, but no relation was found.

Attitude Questionnaire Data

The responses to the attitude items were scored from 1 to 6 in the direction assumed on a priori grounds to be indicative of authoritarianism and disciplinary strictness (thus, of parental punitiveness). This assumed relation is supported by the correlation between the sums of the attitude

items and the sums of the punishment items (isolation excluded) which is .36 ($p < .01$) for boys and .27 ($p < .05$) for girls.

However, the correlations of these items with CASI and Comp scores are low. For boys they are generally in the expected direction and, again, in the opposite direction for girls, e.g., CASI total scores correlate .16 (N.S.) with the sums of the attitude items for boys, and $-.25$ ($p = .06$) for girls, indicating that authoritarian attitudes toward child rearing tend to be associated with high audience sensitivity in boys and low audience sensitivity in girls. The sex difference is significant ($p < .05$).

Of the individual items, only two correlate substantially with one or both measures of audience sensitivity. Agreement with the statement, "It is very important to correct, immediately and firmly, every mistake in speech that a child makes" (Item 3), correlates .21 ($p = .10$) with boys' CASI scores, suggesting a possible association between severe socialization in the area of speech behavior and audience sensitivity. However, the corresponding r of $-.23$ for girls differs significantly ($p = .02$) from that of the boys and contradicts the above interpretation.

Agreement with Item 12, "Children should avoid doing things in public which appear wrong to others, even when they know that these things are really right", correlates $-.25$ ($p < .10$) with boys CASI scores and $-.33$ ($p < .05$) with their Comp themes. The girls' r is insignificant, but in the same direction. Thus, children of parents who agree with Item 12 tend to have lower audience sensitivity scores than children of parents who disagree with the item. This is contrary to expectation, since agreement with the item has been used to index authoritarianism.

A possible explanation is that parents interpret the item as implying conformity to social amenities and accomplish this by reward for correct

behavior (conformity) rather than punishment for incorrect. If this is so we might expect parents who agree with Item 12 to be high rewarders. In fact, we do find a correlation (in the boys sample) of .32, ($p = .03$) between agreement with the item and the reward-punishment ratio. However, this evidence tells us nothing directly about the parents' interpretation of the item.

We must conclude that the attitude items in general contribute very little to our understanding of audience sensitivity, but tend to emphasize the importance of sex differences in the relation between audience sensitivity and antecedent variables.

Summary and Conclusions--Montreal Study

In the case of boys, a major prediction is supported by the results of this study. Audience sensitivity, as measured by CASI scores and the composition theme of liking or not liking recitation in front of the class, correlates negatively with general frequency of parental reward and positively with general frequency of punishment. A significant exception is frequency of discipline by isolation, which correlates negatively with audience sensitivity. These relations are most striking if reward and punishment are considered simultaneously: the multiple correlation of reward and punishment with audience sensitivity is highly significant, the two variables accounting for approximately 20% of the variance in both CASI scores and choice of composition theme. Considering the audience sensitivity associated with four combinations of parental reward and punishment frequencies (high-high, low-low, high-low, and low-high), we find that both the mean CASI score and the proportion of boys indicating dislike of recitation are significantly highest in the low reward x high punishment group.

Punishments for specific misbehaviors and failures also tended to correlate positively with boys' audience sensitivity, but only the rs involving disobedience, low school achievement and "lack of initiative" are sufficiently high to merit any consideration. Possibly these represent areas in which achievement (or conformity), for boys, is particularly valued by the parents and consequently, in which socialization practices are likely to be severe.

The attitude items were generally unsatisfactory as indices of relevant antecedent variables, but tended to correlate in the predicted direction with boys', and in the opposite direction with girls', audience sensitivity. Thus, they confirm a general impression of rather consistent sex differences in the data.

There are a number of possible explanations for the relative failure to demonstrate a relationship between audience sensitivity and antecedent variables in the case of girls. One is that there may be a sex-typed bias in the parents' responses to their questionnaires, such that in families with children of both sexes the answers are more representative of child rearing practices vis-a-vis boys than girls. Since the questionnaire did not seek information specifically concerning the particular child from whom audience sensitivity measures had been obtained, any relation between the children's and parents' responses would be more likely to show up in the boys', than in the girls', data. The above possibility can be checked in the first study by considering separately those families having children of only one sex and those having both. Unfortunately the Ns are so reduced by doing this that stable differences would be difficult to obtain even if they actually exist, and no significant differences were revealed. However, consideration of this kind led to an attempt in the study to obtain information about child rearing practices specific to the

child being tested for audience sensitivity.

A second possibility is that, in the case of girls, parents tend to change in their child rearing practices from a relatively non-restrictive, rewarding approach early in the child's life, to a more punitive, less rewarding approach at a later age, while with boys they are more consistent in their reinforcements throughout the childhood period. If this is true, the Montreal study may involve an attempt to relate contemporary child rearing practices to audience sensitivity scores which reflect enduring effects of earlier and, in the case of girls, different socialization practices. It may be argued, in addition, that an increase in punitiveness of the parent is a consequence of the effects of early positive reinforcement. The "cute" little girl, rewarded for her verbal ability, "showing off", independence, etc., may later employ these highly reinforced skills to "talk back" to her parents, to monopolize conversation, or to be "too" independent and, consequently, be more severely disciplined. This specific interpretation is not essential, however, and the hypothesis is simply that girls' audience sensitivity may, in fact, be related to earlier child rearing practices, although not to contemporary ones.

The possibility that child rearing practices are carried out less consistently with girls tends to be supported in a study by Sears et al (1953), on child rearing antecedents of aggression and dependency in young children. These investigators found that boys' experiences with maternal nurturance and frustration tended toward consistency from infancy through the fourth year of life, while there was some evidence that girls' experiences changed with respect to nurturance (of 12 intercorrelations between infancy scales and contemporary ones on nurturance, 8 indicated a reversal in maternal behavior and 4 indicated consistency). They conclude that,

"There is a suggestion that mothers become more severe and less tolerant with their daughters after the infancy period passes, and that those who were most permissive to begin with become the least permissive ." (p. 175). If this finding is verified it would lend support to the above interpretation of sex differences noted in the present study.

The theoretical analysis of audience sensitivity as an anxiety predisposition specifically associated with evaluational situations demands consideration of such factors as the normative and achievement standards which parents set for their children, their evaluations of the children's successes or failures in attaining those standards, and how rewarding the parents are when the child does succeed, and how punitive when he fails. Such variables are considered in the study now to be reported. The second study also attempts to replicate the major findings of the Montreal study, as well as test the hypothesis about sex differences, discussed above.

The Dryden Study

Subjects

The sample for the second study consisted of 223 children from the third, fourth and fifth grades of the school system serving the rural community of Dryden in New York State. One hundred and seventy seven parents (80%) contributed child rearing information.

Materials and Procedure

Audience sensitivity was measured by a revised CASI consisting of Exhibitionism items (increased in number to 13), the original Self-consciousness items, and a new Audience Anxiety (AA) "scale" consisting of 16 items referring to fear reactions in the same situations referred to by the Exhibitionism items. The AA items were added to the CASI as a

result of two considerations:(a) the desirability of including items which are directly analogous to the Exhibitionism items in situational reference (which Self-consciousness items are not), but referring to fear reactions rather than to liking of the situations, and (b) the fact that those compositions in the first study which were written on "Why I do not like to recite in front of the class" had such a preponderance of direct statements of fear. (Most of the AA items are, in fact, not only mirror images of Exhibitionism items, but reproductions of popular statements made by Ss in their compositions).

Of the above scales, AA is most directly related, operationally, to audience sensitivity (defined as an anxiety predisposition) and shall be so regarded in this study. The other two scales shall be interpreted as "exhibitionism" and "self-consciousness" as before. The interrelations of these scales will be discussed.

In addition to the three CASI scales, the questionnaire included the children's forms of the Test Anxiety (Sarason et al, 1958), and the Manifest Anxiety (Castaneda et al, 1956), Scales. The entire questionnaire, with the items indentified according to the scale in which they belong, is presented in Appendix C.

The revised CASI has been validated in a criterion audience situation where children were rated for eagerness to volunteer for public performance in a "skit", validity coefficients being the highest for the AA scale (.28, $p < .05$ in a boys' sample and .45, $p < .01$, in a girls' sample). In view of the empirical validation, the CASI was the only measure of childrens' motives used in this study, i.e., no composition data were obtained.

Parent information was obtained by a revised questionnaire (Appendix D) containing items designed to measure:

a. General frequency of rewards and punishments, as in the first study. Three new items were added, "hugging and kissing", "expressing disappointment", and "reasoning", and the shaming and ridiculing items were reworded. The response categories were increased to five.

b. Extent of use of a more than one kind of discipline at the same time (reasoning that the effects of one, e.g., isolation, may be obscured by others).

c. Intensity or severity of punishments (the previous study included only frequency of use of the various types of punishments).

d. The parents ratings of the importance (to them) of "good" behavior and high achievement from their children, in a number of areas. Each item was rated on a ten-point scale ranging from "Unimportant" to "Extremely Important".

e. The parents' evaluations of their children with respect to behaviors referred to in (d), (although not all items overlap in their referents), again on a ten-point scale.

f. Frequency of punishment, relative to incidence, for misbehaviors or failures in the areas referred to in (d) and (e). A five-point scale, with extreme categories of "Never" and "Everytime", was used.

g. Frequency of reward, relative to incidence, for "good" behaviors or successes in the above behavior areas, again on a five-point scale.

h. Change in the frequency of use of specific types of rewards and punishments, comparing the first three years in the child's life with the contemporary period ("the last six months"). These items represent one attempt to test the hypothesis concerning sex differences. A five-point scale was employed, with the response categories ranging from "much more often now" to "much less often now".

i. Changes in a few presumably relevant behaviors of the child, comparing the same periods referred to in (h).

j. The amount of early("the first 2 or 3 years") favorable attention the child received for various audience related behaviors. This set of items was intended as a further test of the hypothesis of sex differences in consistency of parental reinforcements.

k. Strictness of parental demands for obedience, and how early obedience was expected of the child.

l. How socially active the parents are, according to self-ratings on a five-category scale.

m. How much formal training the child has received in such audience related activities as singing, dancing, etc.

The procedure for obtaining the data from the children and their parents closely followed that described in the Montreal study. The study differs from the first in the following ways; a large part of the sample consists of families in rural-type occupations, in contrast to largely business oriented occupations in the Montreal sample; the age range of the children was increased to include fifth, as well as third and fourth grade, children; compositions were not used as an index of audience sensitivity; the AA scale was added to the CASI; the parent questionnaire was expanded to include measurements of parents' standards, evaluations, and reinforcements contingent on these evaluations, with respect to specific behaviors of a specific child; items which did not contribute to the understanding of audience sensitivity were eliminated, notably the opinion questionnaire; items were introduced which might conceivably explicate sex differences in previously obtained relations

In view of the above changes, particularly the change in the CASI (more

than half of the items in the version used in the Montreal study have been dropped), this study cannot be regarded as a strict replication of the first.

Results

CASI Data

Split-half odd-even reliabilities of the AA, Exhibitionism and Self-consciousness scales were computed, separately for boys and girls and individually for the three school grades. Neither the sexes nor the grades differed significantly in their correlations and the data were combined. The split-half reliabilities are: AA = .80, Exhibitionism = .67, Self-consciousness = .66. Thus, internal consistency of the AA items is higher than that of the other two CASI scales.

The intercorrelations of Exhibitionism, Self-consciousness, AA, TA and MA are presented in Table 9. These correlations are consistent with those obtained with two other samples of children in connection with studies carried out at Cornell and may be regarded as stable indices of the interrelations between the "scales". As may be seen, the correlations are all significant except for the Exhibitionism correlation with Self-consciousness and Manifest Anxiety in the boys' sample. However, the Exhibitionism correlations are generally lower than the others and we may regard Exhibitionism as relatively independent of the other scales. It correlates most highly, negatively, with AA. AA correlates about equally with Exhibitionism and Self-consciousness (negatively with the former and positively with the latter). Self-consciousness, AA, TA and MA are rather highly intercorrelated, the highest relation being between AA and TA.

In the presentation and discussion of results we shall be concerned only with the three CASI scales, with particular attention given to AA.

Table 9

Intercorrelations of the Three CASI Scales and the Children's
Forms of the Test Anxiety (TA) and Manifest Anxiety (MA)
Scales, (N = 99 for boys, 77 for girls)^a

	1	2	3	4	5
1. Exhibitionism		-.14	-.56	-.36	-.19
2. Self-consciousness	-.34		.56	.59	.67
3. Audience Anxiety	-.56	.65		.70	.62
4. Test Anxiety	-.44	.75	.78		.69
5. Manifest Anxiety	-.32	.64	.65	.69	

^aThe correlations for boys are above, those for girls below, the diagonal.

as the index of audience sensitivity. The results were also computed for TA and MA and these (especially TA) are generally comparable to those involving AA scores, although not always of the same magnitude.

Parent Questionnaire Data

The parents of 100 boys and 77 girls (80% of the number sent out) returned the questionnaires sufficiently completed to be usable. Since occasional blanks were left, as in the Montreal study, there is some variability in the number of observations involved in individual computations.

Scores on the individual items within various sections of the parent questionnaire were summed, thus giving total scores on parental rewards and punishments, standards, evaluations of their children, etc. The inter-correlations between the parental variables (total scores), as well as their correlations with the CASI scales, were computed and shall be referred to at relevant points in the discussion.

Since this research is still exploratory in many respects, rather detailed results will be presented--e.g. for individual items, even where the relations are generally low--but the more important general findings, and the attempts at replication, will be emphasized.

Relations to Parental Antecedents: Frequency of Reward

The correlations between the CASI scales and frequency of use of five types of reward (individual items and summed reward, Section 1 in the parent questionnaire, Appendix D) are presented in Table 10. For boys, summed frequency of reward correlates $-.17$ ($p < .10$) with AA scores, and more negligibly with both Exhibitionism and Self-consciousness. However, three of the individual reward items correlate somewhat more highly with AA than do the summed scores: frequency of "praise" and "privileges" each correlate $-.21$ ($p < .05$), and "hugging and kissing" $-.18$ ($p < .10$), with AA scores.

Table 10

Correlations Between Frequency of Parental Rewards and
Children's Scores on Exhibitionism (Exhib),
Self-consciousness (S-C) and Audience
Anxiety (AA)

Type of Reward	Boys (N = 99)			Girls (N = 77)		
	Exhib.	S-C	AA	Exhib.	S-C	AA
Praise	.19	-.01	-.21*	-.06	.18	.08
Privileges	-.05	-.16	-.21*	.10	.08	.05
Candy and "Goodies"	-.07	.01	.04	.04	.36**	.17
Money and Gifts	.02	.04	-.04	.06	.16	.19
Kissing and Hugging	.11	-.07	-.18	.09	.07	.02
Σ Reward Items	.02	-.04	-.17	.04	.35**	.18

* $p < .05$

** $p < .01$

Praise correlates almost significantly positively with Exhibitionism ($r = .19$, $p < .10$). None correlates significantly with Self-consciousness.

Thus, the AA correlates give some support to theoretical expectations: boys who are frequently praised, hugged and kissed, and granted privileges, are lower in audience sensitivity than those who are less frequently rewarded in these ways.⁷ The over-all relation does not appear to be as strong as in the Montreal study, however, and in the case of Exhibitionism previous results do not replicate.

The impression of sex differences given by the Montreal study are confirmed here. While not significantly greater than zero, the correlation of .18 between girls' AA scores and summed reward differs significantly from that of boys ($p < .05$). Furthermore, two correlations which also contradict the original theoretical prediction are clearly significant: Self-consciousness correlates .36 ($p < .01$) with frequency of giving "candy and goodies", and .35 ($p < .01$) with total reward, i.e., high self-consciousness in girls is associated with frequent parental reward. While no ready explanation is forthcoming, these anomalous findings require consideration and will be discussed.

Frequency of Punishment

None of the correlations involving frequency of use of different types of punishment, i.e., isolation, deprivation of privileges, spanking, etc.,

7. It is interesting to note, in passing, that, in the Montreal study the reward items correlating most highly with boys audience sensitivity refer to material rewards: giving candy or goodies, and, money or gifts. In the Dryden sample, these correlate negligibly with boys' audience sensitivity, while substantial correlations were obtained involving the "love oriented" rewards of praise and hugs and kisses. These differences may well be chance occurrences and will not be considered any further in this study. However, they suggest intriguing possibilities concerning differences in techniques employed by the two samples of parents.

(Section 2 in the parent questionnaire, Appendix D) is significant. The "isolation" finding for boys in the Montreal study tends to be confirmed, however, in that frequency of isolation correlates slightly positively with Exhibitionism ($r = .13$). For girls, frequency of deprivation of privileges correlates almost significantly positively with Exhibitionism ($r = .20$, $p < .10$).

No significant correlations were obtained involving combinations of the different types of disciplinary techniques or severity of punishment (Sections 3 and 4 in the parent questionnaire, Appendix D), and these shall be considered no further.

Interaction of Reward and Punishment

Since the correlations are low, effects associated with the interaction of the parental reward and punishment frequencies were analyzed using groups scoring above and below the median of the summed variables discussed in the preceding sections. As in the Montreal study, the four groups involved are the high reward x low punishment (HRLP), low reward x low punishment (LRLP), high reward x high punishment (HRLP), and low reward x high punishment (LRHP). The mean AA, Exhibitionism, and Self-consciousness scores of the children in these four groups are presented in Table 11.

For boys, the AA scores of the four groups differ significantly (overall $H = 8.68$, $p < .05$, $df = 3$). As in the Montreal study, the significance is largely attributable to the low scores in the HRLP group. These are significantly lower than the AA scores of the other groups combined ($H = 5.64$, $p < .02$, $df = 1$). However, the difference between the AA scores of the HRLP and LRHP groups, which we predicted to be the largest, does not reach significance.

The results for boys' Exhibitionism and Self-consciousness scores are

Table 11

Mean Audience Anxiety, Exhibitionism, and Self-consciousness Scores
of Children in High (H) and Low (L) Parental Reward
(R) and Punishment (P) Groups

		HRHP	LRLP	HRLP	LRHP	Sig. of Over-all Diff. (df = 3) H-test p	
Boys	N	20	29	23	26		
	AA	6.40	7.90	4.91	6.27	8.68	<.05
	Exhib	7.75	7.69	8.78	7.92	2.20	N.S.
	S-C	3.05	3.34	2.83	3.12		N.S.
Girls	N	9	21	26	15		
	AA	7.00	6.62	8.19	5.67		N.S.
	Exhib	8.00	8.24	8.46	9.13		N.S.
	S-C	4.22	3.10	4.38	3.40		N.S.

Individual group comparisons on Boys' AA scores:

Groups compared	H-test	p (df = 1)
HRLP < All Others	5.64	<.02
HRLP < LRHP	1.85	N.S.
HRLP < HRHP	1.24	N.S.
HRLP < LRLP	8.58	<.01
HRHP vs LRLP vs LRHP		N.S.

compatible with the AA data in that the HRLP group has the highest Exhibitionism and lowest Self-consciousness mean scores. However, none of the differences between groups is significant.

None of the differences is significant for girls, in fact they tend to be in a direction contrary to prediction.

Thus one predicted finding in the Montreal study is reconfirmed here: boys whose parents are relatively rewarding and non-punitive are lowest in audience sensitivity as measured by AA scores.

We consider next the relations between children's CASI scores and parental standards, evaluations of their children, and the frequency of their rewards and punishments for specific acts. Most interesting here are the effects associated with interactions of these antecedents, but we shall first present the data for each variable individually.

Parental Standards

Parental standards are inferred from responses to the items in Section 5 of the parent questionnaire (Appendix D), which asks the parents to indicate how important they consider "good" behavior or high achievement in a number of areas. For present purposes we make what seems to be a reasonable, if gratuitous, assumption, that the more parents value good behavior or achievement, the higher will be their standards of excellence in these areas.

Product moment correlations between CASI scores and parents' standards (individual items and summed scores) are shown in Table 12. Self-consciousness correlates most highly with the summed scores, the r s being .20 ($p = .05$) and .16 (N.S.) for boys and girls respectively, i.e., the higher the parental standards in general, the more self-conscious the children tend to be.

Table 12

Correlations Between Parents' Ratings of Importance of
Specific Behaviors and Children's Scores
on Three CASI Scales

Behavior Rated	Boys (N = 97)			Girls (N= 75)		
	Exhib	S-C	AA	Exhib	S-C	AA
Good Manners	.21*	.11	.03	.04	.06	.13
Speaking Ability	.17	.11	.00	-.04	-.05	-.01
Orderliness	.13	.03	.10	.21	.07	.04
Neat Appearance	.20*	.12	.07	.18	.00	.04
"Getting Along Well With Others"	.06	.22*	.13	.09	.03	.15
Obedience	.08	.24*	.16	.10	.01	.11
High Achievement in School	-.10	.25*	.21*	.12	-.09	-.11
Ability to Perform (Sing, dance, recite, etc.) Before Others	.07	.15	-.02	.17	.04	-.06
Participation in Many Sports	.19	.10	.10	.10	.13	.03
Public Speaking Ability	-.12	.14	.15	-.04	.15	.04
Excelling in Some Sport	-.05	.12	.14	.07	.11	.03
Achieving Fame	-.11	.13	.17	.13	.10	.03
Independence	.00	.12	-.10	.01	.08	.06
Σ All Items	.04	.20*	.11	.10	.16	.04

*p < .05

Of the individual items (for boys) Exhibitionism correlates significantly positively with importance of "good manners" ($\underline{r} = .21$) and "neat appearance" ($\underline{r} = .20$), $p = .05$ in each case, and almost significantly with "speaking ability" and "participation in many sports" ($\underline{r} = .19$ and $.17$, respectively, $p < .10$). Thus, the more highly parents value good manners, neat appearance, speaking ability and participation in sports, the higher the Exhibitionism scores of their sons tend to be.

Boys' Self-consciousness scores correlate significantly ($p < .05$ in each case) with importance of "getting along well with others" ($r = .22$), obedience ($\underline{r} = .24$), and high school-achievement ($\underline{r} = .25$). The AA correlations tend to be highest in the same areas as those of Self-consciousness, but only importance of school-achievement correlates significantly. Thus, the more parents value "getting along with others", obedience, and school achievement, the higher their sons' self-consciousness and audience anxiety tend to be.

It may be noted that the above correlations are positive, i.e., high Exhibitionism, as well as high AA and Self-consciousness scores, tend to be associated with high parental standards. However, inspection of Table 12 suggests that this is true primarily for the items which refer to social relations (good manners, orderliness, neatness, etc.). Correlations involving achievement items (school achievement, achieving fame, etc.) tend to be negative, i.e., where high importance is attached to achievement, Exhibitionism scores tend to be low. However, extensive speculations about the meaning of such difference are not warranted unless it can be established that we are dealing with independent "factors" in the parental data, e.g. as determined by factor analysis. This was not attempted in the present study.

None of the correlations involving parental standards is significant for girls.

Parental Evaluations of Their Children

Section 6 of the parent questionnaire asks the parents to evaluate their children on a number of items, many of which involve the same behaviors as those referred to in the preceding section on standards. Table 13 shows the correlations between CASI scores and the favorableness of the parents' ratings (individual items and sums).⁸

To the extent that a parent's written evaluations of a child reflect tendencies to evaluate the child in a similar manner in his or her presence, we would expect favorable evaluations to be associated with low audience sensitivity and high exhibitionism. Both AA and Self-consciousness scores should, therefore, correlate negatively, and Exhibitionism positively, with favorableness of the evaluations.

For boys, these expectations tend to be confirmed for AA and Exhibitionism, although again the relations are not strong. The sums of the parents' ratings correlate .24 ($p < .05$) with boys' Exhibitionism, and -.18 ($p < .10$) with their AA scores. For girls, only Exhibitionism correlates almost significantly with summed ratings ($r = .20$, $p < .10$).

A few of the individual item correlations are noteworthy. For girls, ratings of skill in public performing (e.g. singing, dancing, reciting) correlate .28, $p < .02$, with Exhibitionism, and -.22, $p = .05$, with AA. Ratings of their athletic ability correlates highly significantly with Exhibitionism ($r = .35$, $p < .005$), and slightly ($r = .17$) with AA scores. Thus, girls who are skilled in "public performing" and high in athletic

8. Rated scores on aggressiveness, "talking back", and frequency of the child's success in "getting own way" are not included in the summed scores, since the rating scales for these items do not imply a dimension of "favorableness".

Table 13

Correlations Between Favorableness of Parental Evaluations of Children
on Specific Behaviors, and Children's Scores on Exhibitionism,
Self-consciousness and Audience Anxiety

Behavior Evaluated	Boys (N = 95)			Girls (N = 73)		
	Exhib	S-C	AA	Exhib	S-C	AA
Mannerliness	.18	-.11	-.10	.07	.07	.04
Speaking Ability	.00	-.09	-.13	.07	-.03	-.04
Orderliness	.13	-.02	-.03	.03	.17	.15
Neatness (Appearance)	.18	.03	-.10	.08	.12	.04
School Achievement (How Satisfactory to Parent)	.12	-.08	-.12	-.06	.05	.00
Obedience	.09	-.11	-.09	.11	.13	.10
Responsibility	.17	.11	-.12	.12	.14	-.03
Skill in Performing (Singing, Reciting, etc.)	.02	-.01	-.14	.28*	.02	-.22
Athletic Ability	.03	-.17	-.07	.35**	-.14	-.17
Independence	.20*	-.06	-.15	.11	.08	-.13
Σ Evaluations ^a	.24*	-.08	-.18	.20	.11	-.03

* p < .05

**p < .01

^aNs for Sums: Boys = 91, Girls = 71

ability (according to parents' ratings) are high in exhibitionism and low in audience sensitivity.

No point would be served by further consideration of individual items. We may summarize Table 13 by saying that, in general, favorable ratings tend to be associated with high Exhibitionism, and low AA, scores, and that these relations are more consistent for boys than for girls. The causal relation is ambiguous in these data and will be discussed at a later point in the paper.

Parental Rewards and Punishments for Specific Behavior.

In Sections 7 and 8 of the parent questionnaire (Appendix D), the parents are asked to rate themselves on how frequently they reward for "good" behavior or high achievement, and punish for "bad" behavior or achievement failures, relative to the incidence of the behavior in question. That the attempt to obtain relative frequencies was successful is suggested by the fact that total scores for these two sections are virtually uncorrelated with the over-all favorableness of the parental evaluations while the scores on over-all frequency of punishment (summed scores on frequency of isolation, deprivation of privileges, etc., Section 2, Appendix D) correlate significantly negatively with favorableness of the evaluations, $r = -.34$ in the boys', and $-.36$ in the girls', sample ($p < .001$ in each case). However, none of the sections of the parent questionnaire which refer to positive reinforcement correlates with evaluations, a fact which has interesting implications and which we shall have occasion to discuss later.

Only one specific reward item, frequency of reward for "performing before friends or family", correlates significantly negatively with boys' Self-consciousness and AA scores ($r_s = -.20$ and $-.22$, respectively, $p = .05$).

This provides weak support indeed for the original prediction that audience sensitivity should correlate negatively with reward. All remaining correlations for both boys and girls are of zero-order and shall not be reported here.

The correlations between CASI scores and frequency of punishments for specific acts, relative to their incidence, are presented in Table 14.

For boys, none of the items correlates significantly with Exhibitionism. However, frequency of punishment for "lack of neatness" correlates .36 ($p < .001$) with boys' AA, and .25 ($p < .02$) with their Self-consciousness scores; other significant or suggestive positive correlations with AA and Self-consciousness scores involve punishment for dependence, improper speech and poor school work. Thus, the more frequently the parents punish for lack of neatness, dependence, improper speech and poor school work, the higher the audience sensitivity of their sons tends to be.

For girls, Exhibitionism correlates .23 with frequency of punishment for aggression against parents and .25 with punishment for "showing off" ($p < .05$ in each case), i.e. highly exhibitionistic girls are punished more often for these behaviors than the less exhibitionistic. This may simply mean that the former are more aggressive and "show off" more than the latter.

Frequency of punishment for "bad manners", disorderliness, and dependence correlate significantly or almost significantly positively with AA and/or Self-consciousness scores. Thus the prediction that high audience sensitivity should be associated with frequent punishment tends to be supported by these data in the case of girls as well as boys.

The sums of the specific punishment items also tend to correlate positively with AA and Self-consciousness, but the rs are insignificant.

Table 14

Correlations Between Frequency of Parental Punishment for Specific Behavior (Relative to Incidence of That Behavior) and Children's Scores on Exhibitionism, Self-consciousness and Audience Anxiety

Behavior Punished	Boys (N = 97)			Girls (N = 75)		
	Exhib	S-C	AA	Exhib	S-C	AA
Bad Manners	.09	.03	-.02	.08	.19	.09
"Talking Back"	.13	.14	.02	.05	.14	.11
Poor School Work	-.13	.20*	.12	.05	.13	.10
Disorderliness	.05	.06	.08	-.15	.21	.21
Disobedience	.00	.14	.05	.14	-.01	-.03
Aggression (Against Other Children)	-.07	.05	.07	.16	-.06	-.08
Aggression (Against Parents)	.08	-.05	.00	.23*	-.04	-.05
Irresponsibility	.04	.00	.03	.01	.14	.12
Dependence	-.13	.16	.17	-.01	.30**	.20
Improper Speech	-.13	.21*	.20*	-.01	.06	.04
Lack of Neatness	-.15	.25**	.36***	.05	.10	.08
"Showing Off"	.07	.08	.02	.25*	.07	.14
\sum All Items ^a	-.01	.14	.15	.08	.13	.10

* $p < .05$

** $p < .02$

*** $p < .001$

^aNs for sums: Boys = 91, Girls = 71

Interaction of Parental Evaluations and Punishments

We would expect particularly great differences in audience sensitivity between Ss whose social behavior and abilities are unfavorably evaluated by their parents and who are also frequently punished for misbehaviors, and Ss who are favorably evaluated and infrequently punished. To test this, the summed scores on the favorableness of the parents' evaluations of their children and the relative frequency of their punishments for specific acts (Sections 6 and 7 of the parent questionnaire, as discussed above) were dichotomized at approximately the median, and the AA scores of the children in the four groups thus formed were compared. We refer to these groups as high evaluation x high punishment (HEHP), low evaluation x low punishment (LELP), high evaluation x low punishment (HELP) and low evaluation x high punishment (LEHP) groups. The clear prediction is that the HELP group should have the lowest, and the LEHP group the highest, AA scores, i.e., that the greatest difference in audience sensitivity will be between these two groups.

As may be seen in Table 15, for boys, the prediction is confirmed. The over-all differences in AA scores are significant ($H = 10.57$, $p < .02$, $df = 3$). The largest difference is between the HELP and LEHP groups ($H = 7.00$, $p < .01$, $df = 1$).

The girls' results also tend to confirm the prediction, although the differences are not significant. The rankings of the mean AA scores for the four groups are precisely the same as the boys, and the HELP scores are almost significantly lower than the LEHP scores ($p < .10$). (It should be noted here that the two-tailed test does not take advantage of the directional hypothesis.)

Combining the data for boys and girls, the HELP-LEHP difference is

Table 15

Mean Audience Anxiety, Exhibitionism and Self-consciousness Scores for
Boys and Girls from High(H) and Low (L) Parental Evaluation (E) and
Punishment (P) Groups

		HEHP	LELP	HELP	LEHP	Sig. of Over- All Diff.(df=3) H-test p	
Boys	N	27	24	20	20		
	AA	6.78	5.71	4.75	7.90	10.57	< .02
	Exhib	7.48	7.62	9.35	8.15		N.S.
	S-C	3.33	3.08	2.35	3.35		N.S.
Girls	N	19	19	16	17		
	AA	7.21	6.89	5.75	8.24	2.30	N.S.
	Exhib	9.32	8.32	7.94	8.24		N.S.
	S-C	4.16	3.26	3.75	3.94		N.S.

Individual group comparisons, AA scores:

Boys:

Groups Compared	H-test	p(df = 1)
HELP < LEHP	7.00	< .01
HELP < All Others	5.89	< .02
HEHP <u>vs</u> LELP <u>vs</u> LEHP		N.S.

Girls:

HELP < LEHP	2.99	< .10
-------------	------	-------

highly significant by a median test (chi square = 10.00, $p < .002$, $df = 1$). Thus, we conclude with considerable confidence that the prediction is confirmed by these data: high audience sensitivity is associated with a history of relatively unfavorable evaluation and frequent punishment, low audience sensitivity with favorable evaluation and infrequent punishment.

The differences between groups on Exhibitionism and Self-consciousness scores are insignificant for both girls and boys. It may be noted, however, that the highest Exhibitionism and lowest Self-consciousness mean scores for boys are found in the HELP, and lowest Exhibitionism and highest Self-consciousness in the LEHP, group.

Interaction of Parental Standards, Evaluations and Punishments

If we consider at once parental standards, evaluations and punishments, we would expect that the least audience sensitive children would be those whose parents have high standards, evaluate their children favorably and punish infrequently. The reasoning here is that such children experience greatest success and would be most likely to anticipate success in evaluational situations in general. In addition, since they are infrequently punished, they should be least likely to anticipate anxiety-arousing social disapproval.

Thus, the AA scores for eight groups were compared: highs (H) and lows (L) on parental standards (S), evaluations (E) and punishments (P). In effect, each of the four groups involved in the previous interaction analysis (evaluation and punishment) was further dichotomized on the basis of high and low parental standards. The one prediction is that lowest AA scores should be associated with the high standard x high evaluation x low punishment (HSHELP) group.

From the previous interaction analysis, the choice as to which group

will be associated with highest audience sensitivity lies between the high standard x low evaluation x high punishment (HSLEHP) and the low standard x low evaluation x high punishment (LSLEHP) groups, but no predictions were made.

The results of this analysis are shown in Table 16. For boys, the eight groups differ significantly in their AA scores (over-all $H = 16.07$, $p < .05$, $df = 7$). The one prediction is confirmed: the HSHELP group AA scores are significantly lower than those of the remaining groups combined ($H = 8.15$, $p < .01$, $df = 1$). As may be seen, the highest mean score is that of the LSLEHP group.

For girls, considered by themselves, the sub-group differences in AA scores are not significant. However, it may be noted that the mean AA score for girls is lowest in the HSHELP, and highest in the LSLEHP, group, as in the case of boys. The rank-order correlations (ρ) between boys' and girls' AA mean scores for the eight groups is .93 ($p < .001$). This association indicates that the rankings of the groups are highly similar for the sexes, and suggests stability in the relation of AA scores to the three antecedent variables.

Combining the data for boys and girls, the AA scores for the high standard x high evaluation x low punishment group are significantly lower than those of the remaining Ss combined (median test chi square = 7.62, $p < .01$), and those of the low standard x low evaluation x high punishment group are significantly higher than those of the others combined (chi square = 4.91, $p < .05$).

On the basis of these data we conclude that there is a reliable relation between the audience sensitivity of children, as measured by the AA scale, and the characteristic standards, evaluations and punishments

Table 16

Mean Audience Anxiety Scores for Children from High (H) and Low (L) Combinations of Parental
Standards (S), Evaluations (E) and Punishments (P)

		HSHEHP	LSLELP	HSHELP	LSLEHP	HSLEHP	LSHELP	HSLELP	LSHEHP	Sig. of Over- All Diff. (df=7) H-test	p
Boys	N	22	20	9	8	12	11	4	5		
	AA Means	7.05	5.40	3.56 ^a	9.00 ^b	7.17	5.73	7.25	5.60	16.07	<.05
Girls	N	13	13	8	8	9	8	6	6		
	AA Means	7.08	6.08	5.13 ^a	8.75 ^b	7.78	6.38	8.67	7.50	2.30	N.S.

Individual group comparisons:

Boys: HSHELP < All Others H = 8.15, p < .01, df = 1

^aLowest AA mean score of the eight groups

^bHighest AA mean score of the eight groups

of the parents. This relation is such that, where parental standards are high, their evaluations of the children favorable, and they are relatively non-punitive with respect to normative or achievement failures, their children are low in audience sensitivity; where the standards are low, evaluations unfavorable, and punishments frequent, the children tend to be high in audience sensitivity.

No reliable relations were found, in this analysis, for Exhibitionism or Self-consciousness.

Interaction Effects Involving Reward for Specific Behavior

Similar analyses to the above were carried out involving parental standards, evaluations, and rewards for specific behaviors. While the results are generally in the direction one might predict, none of the differences between groups is significant. A possible explanation for this will be considered in the discussion section.

An incidental finding deserves mention. In a previous analysis (p. 48, this manuscript) the interaction effects of general patterns of reward and punishment were considered, i.e. the over-all frequency of use of different types of rewards and punishments (Sections 1 and 2 of the parent questionnaire). For boys, the high reward x low punishment group was found to have the lowest AA scores, as predicted, but the low reward x high punishment group did not have the highest AA scores. However, if the interaction analysis is carried out employing general reward, as in the earlier analysis (summed frequency of use of praise, privileges, etc.) and summed frequency of punishment for specific behaviors (Section 7 of the parent questionnaire)--rather than frequency of different types of punishment (Section 2)--the results are more clearly consistent with theoretical expectations. Thus, the lowest AA mean score (4.41) is that of the high

reward x low punishment group, and the highest (7.77) is that of the low reward x high punishment group. This difference is significant (a median test of the AA scores yields a chi square of 5.81, $p < .02$). The high-high, and low-low, group means are in between and appropriately ranked with respect to each other (HRHP = 6.75, LRLP = 5.49). Considered in conjunction with other information, this ex post facto analysis has theoretical implications which we shall return to later.

The remaining findings concern the home as an environment permitting experience in audience-oriented skills, and the sex-difference hypothesis.

Parents as Social Models

Both parents rated themselves on how active they are socially, using a five-category scale (Section 14, Appendix D). The correlations with CASI scores are presented in Table 17. For boys, both the mother's and father's social activity correlates significantly negatively with AA scores (the rs are $-.21$ and $-.20$, respectively, $p < .05$). The mother's social activity also tends to correlate positively with exhibitionism ($r = .13$).

For girls, all three CASI scales correlate significantly or nearly significantly with mother's social activity: AA correlates $-.32$, $p < .01$, Self-consciousness $-.19$, $p < .10$, and Exhibitionism $.21$, $p < .10$. Father's social activity and girls' CASI scores are uncorrelated.

Thus, the higher the mother's social activity, the higher the daughter's exhibitionism and the lower her audience sensitivity. The more active socially either the mother or the father, the lower the son's audience sensitivity. Father's social activity is unrelated to the daughter's "audience motives".

These data suggest the relatedness of experience per se, and/or identification with a role model, to the child's orientation to audience

Table 17

Correlations Between Sociability of Parents and Children's CASI Scores

	Boys (N = 95)			Girls (N = 74)		
	Exhib	S-C	AA	Exhib	S-C	AA
Mother's Sociability	.13	-.02	-.21*	.21	-.19	-.32**
Father's Sociability	.05	-.02	-.20*	.04	-.02	-.04

* $p < .05$

** $p < .01$

situations. They may also involve other factors, such as socially active parents employing child rearing methods that are conducive to high exhibitionism and low audience sensitivity.

Training in Audience-Related Skills

Special training in audience-related skills (Section 15, Appendix D) was used as a dichotomous variable, according to whether the child had or had not received training in any of the skills (music, singing, dancing, elocution, drama).

This variable correlates significantly with girls' AA scores (point-biserial $r = -.28$, $p < .01$) but only slightly with boys' AA ($r = -.08$). The correlations with Exhibitionism are insignificant and only the girls' correlation with Self-consciousness is almost significant ($r_{pb} = -.20$, $p < .10$). Thus, girls who have received special training in audience-oriented skills are less susceptible to audience anxiety than those who have not.

Number of siblings, which correlated significantly negatively with audience sensitivity in the Montreal study, and which was interpreted as possibly representing an "experience" factor (opportunity for social interaction), does not correlate with any of the CASI scales in the present study.

Consistency of Parental Reinforcement at Different Age Levels

Section 9 in the parent questionnaire (Appendix D) was intended to explicate sex differences in terms of a possible greater change in the case of girls, in reinforcements at different age levels. Thus the items ask for a comparison of an early period with the contemporary one with regard to use of rewards and punishments. The mean "change" scores for boys and girls do not differ on any of the items and the hypothesis is not

supported.

The correlations of relative increase (from the earlier to the later period) in rewards and punishments, for the summed variables, were also computed. For boys, increase in punishment correlates significantly positively with Exhibitionism ($r = .23$, $p < .05$), and tends to correlate negatively with AA ($r = -.14$). For girls, on the other hand, increase in punishment does not correlate with Exhibitionism but does correlate significantly positively with AA ($r = .23$, $p < .05$), i.e., high AA scores are associated with increase in punishment. One reward item, increase in "kissing and hugging", correlates significantly positively with Exhibitionism for both boys and girls ($r_s = .21$, and $.28$, respectively, $p < .05$, in each case), and negatively with AA for boys ($r = -.20$, $p = .05$). Thus, an increase in "hugging and kissing" from the early period to the contemporary one is associated with high exhibitionism in both boys and girls, and low audience sensitivity in boys.

In the case of punishment, the correlations again indicate that different variables may be operating in the case of girls than in that of boys (i.e., the AA correlations of the two sexes differ significantly, $p < .05$), but they do not support the proposed hypothesis. If anything, they suggest that parents are increasingly punitive (presumably, then, more permissive earlier) in the case of highly exhibitionistic and low audience-sensitive boys, rather than girls. If these findings are reliable, they are puzzling.

Early Positive Attention

Frequency of positive attention (summed score for all items, Section 11, Appendix D) during the first three years in the child's life correlates $-.21$, $p < .05$, with boys' AA, and $.14$ (N.S.) with their Exhibitionism scores, tending to support, again, the expected relation with positive

reinforcement. For girls, however, the correlations tend to be in the opposite directions: AA correlates .15, and Self-consciousness .19, with early attention. The girls' Exhibitionism correlation is negligible. These, and the individual item correlations, are presented in Table 18.

Of the individual items, frequency of being the "center of attention" tends to correlate in the theoretically expected direction for girls as well as boys. Thus, boys and girls who were more frequently the center of attention tend to be less audience sensitive, and the girls more "exhibitionistic", than those who were less often the center of attention.

The most outstanding contradiction in the case of the girls' data is that frequency of early favorable attention for physical appearance correlates positively, and significantly ($p < .05$), with Self-consciousness ($r = .29$) and with AA ($r = .27$)--the more the favorable attention for physical appearance, the higher the AA and Self-consciousness of girls. This finding, too, is difficult to explain, assuming the relation is "real". Possibly appearance is over-emphasized by the parents so that the girls become anxious about presenting a good appearance in public. Here, again, further information is required for confident interpretation of the data.

This concludes the presentation of the findings. We turn now to their discussion.

Discussion

In the discussion that follows we shall consider how well the theoretical assumptions which directed the research are supported by the findings, what modifications in theory are required or justified by them, and what theoretical problems of consequence remain or arise.

For boys at least, general patterns of parental rewards and punish-

Table 18

Correlations Between Scores on Three CASI Scales and Frequency of
Favorable Attention for Specific Behavior During the First Three
Years of Child's Life

Behavior Receiving Attention	Boys (N = 95)			Girls (N = 74)		
	Exhib	S-C	AA	Exhib	S-C	AA
Singing, Reciting Poetry, etc.	.16	.01	-.12	-.06	.17	.15
Drawing, Coloring, etc.	.15	.06	-.08	.00	.10	.16
Physical Appearance	.10	.04	-.03	.00	.29*	.27*
"Showing Off"	-.04	-.12	-.16	.01	.10	.07
Frequency of Being "Center of Attention"	.00	-.15	-.23*	.20	-.16	-.21
Σ Early Favorable Attention ^a	.14	-.06	-.21* (N = 96)	.02	.19	.15

*p < .05

^aNs for sums: Boys = 91, Girls = 71

ments are related to audience sensitivity as theoretically expected. The most consistent and most significant finding is that where parents are both rewarding and non-punitive, their children are low in audience sensitivity. The picture is less consistent for the converse expectation that highest audience sensitivity should be associated with a history of little reward and frequent punishment. In the first study the composition data lend support to this expectation while in the second study it is supported only if we consider the general reward value of the parents (over-all frequency of use of praise, privileges, etc.) and frequency of punishments for specific behaviors. A possible interpretation of this incidental finding will be suggested at a later point in the discussion, where it is relevant to an analysis of the functional significance of parental rewards and punishments.

Predicted effects associated with the interaction of evaluation and reinforcement were confirmed with both boys and girls, but in the case of punishment only. Significantly higher audience sensitivity was manifested by children who were evaluated relatively unfavorably and punished relatively frequently for failure to meet normative or achievement standards of the parents, than by those whose parents evaluated them favorably and punished infrequently. Even greater differences were found when parental standards were included in the interaction analysis, least audience sensitivity being shown by children whose parents have high standards in addition to evaluating favorably and being relatively non-punitive, and highest audience sensitivity by those whose parents have low standards, evaluate unfavorably and punish frequently. A possible explanation of the latter finding, for which no prediction was made, is that children who fail to meet even low parental standards are particularly unskilled and frequently experience

failure outside the home as well as within and, therefore, strongly anticipate failure in any evaluational situation. On the other hand, children who fail to attain high parental standards (i.e., those who are unfavorably evaluated) may nevertheless compete successfully with "performance" standards of groups outside the home and not generally anticipate failure. This hypothesis could be tested by having teachers evaluate the children in the Dryden sample on the same items which were presented to their parents. Children in the low standard and low evaluation group should be less favorably rated by teachers than those in the high standard-low evaluation group. This has not yet been done.

It will be recalled that, in our theoretical introduction, audience sensitivity was expected to be inversely, and exhibitionism positively, related to a history of favorable evaluation and frequent reward, i.e., where parental evaluations are favorable and their rewards frequent, children will be low in audience sensitivity and high in exhibitionism. The interaction analysis of parental evaluations and rewards, in the Dryden study, failed to support this prediction. Yet in both studies there was evidence that frequent parental rewards are associated with low audience sensitivity, and tend to be associated with high exhibitionism. (This is true for boys only; sex differences again require consideration and will be taken up below.) Thus, while parental evaluations and punishments interact in their effect on audience sensitivity, evaluations and rewards apparently do not. If this is true, one possible explanation is that rewards are less contingent on prior evaluation of specific behavior than are punishments, and therefore affect an aspect of audience sensitivity not specifically related to the evaluation process. Everyday observation indicates that we frequently reward our children, not because they have done something meritorious,

but because we are in a good "mood" or because it happens to be some special occasion, such as a birthday. This is less true of punishments. While punitive action may in part be determined by the mood of the parent, it is at least provoked by specific actions of the child.

Support for such an interpretation is found in the data of this study. For boys, total scores on all four sections of the parent questionnaire that are concerned with reward are virtually uncorrelated with parents' evaluations of the children, while two of the punishment categories correlate significantly negatively with favorableness of evaluation (frequency of use of different types of punishments, $r = -.34$, $p < .01$, and increase in punishment from the early period in the child's life to the present, $r = .27$, $p < .05$). To a lesser degree the same is true for girls: while two of the reward categories correlate significantly positively with evaluations, the correlations involving punishments are consistently higher. (As previously pointed out, frequency of punishment for specific misbehaviors does not correlate with evaluations, but this is explained by the fact that parents were asked to estimate frequencies relative to incidence of punishment-worthy behaviors.)

The above analysis implies that the reward value of others as audiences may be independent of the anticipated success or failure of one's "performance". In the extreme case, for example, the highly rewarded individual might expect not to perform well and yet expect the audience to be friendly rather than hostile.

Punishment, on the other hand, may have both generalized and specific consequences. The general effect may be determined by the degree to which parental punishments have been inconsistent or non-discriminating with respect to behavior; if they have been highly inconsistent, social stimuli

in general may be perceived as relatively punitive. The specific effect may be associated only with evaluational situations, and determined by the degree to which evaluation has in the past been a necessary condition for punishment. Accordingly, audience sensitivity might be analyzed into a general component (social anxiety?) and a specific component (audience anxiety).

Whatever the validity of the above interpretation, it does not deny that reward has a specific reinforcing effect. It is clear that parents intentionally employ rewards to reinforce particular acts, and further, that in the natural course of events some responses will be associated with reward more consistently than others. Such differential effects were noted in the present study: low audience sensitivity was associated with relatively high frequency of reward for "performing before friends or family", and both audience sensitivity and exhibitionism correlated appropriately with frequency of being "the center of attention". The point here is simply that reward may be relatively less consistently associated with specific evaluated acts (and evaluational situations in general) than punishment, and that this might explain why evaluation and reward interactions are not significantly related to children's questionnaire responses, whereas reward or punishment alone, and evaluation and punishment interactions, are so related. This notion might also explain why, in the Dryden study, the interaction analysis of reward and punishment showed that highest audience sensitivity is associated with infrequently rewarding and highly punitive parents only when a measure of the general reward value of the parents (over-all frequency of use of praise, privileges, etc.) and relative frequency of punishment for specific acts were employed in the analysis. If our interpretation of the functions of reward and punishment are valid,

that analysis took advantage of the best indices of effective rewards and punishments with respect to the behavioral situations involved.

The above analysis is admittedly speculative and ad hoc, but it makes use of general psychological principles which are widely accepted, namely reinforcement theory interpretations of the phenomena of generalization and discrimination. (However, our theorizing in general includes cognitive concepts such as "expectations", and is therefore most compatible with "mediation" type theories, such as that proposed by Osgood [1953], or the suggested formalization of Tolman's theory by MacCorquodale and Meehl [1954].) The analysis points to a conceptualization of audience sensitivity as an emotional predisposition comprised of a general component involving expectations vis-a-vis the friendliness or hostility of others and a specific component associated only with evaluational situations.

Theoretically, even "specific" audience sensitivity may vary along a specificity-generality continuum: one may be concerned about other's evaluations of few, or of many, aspects of the self. Conceivably, generality in this sense would be a function of the number of discriminable human characteristics parents value sufficiently to reinforce, and of the nature of these reinforcements (i.e. whether positive or negative, their frequency, etc). A factor analytic study by Dixon et al (1957) is relevant in this context. A 26 item inventory, referring to problems which could be classified as "social anxieties", was answered by 250 neurotic patients. A factor analysis of the items yielded a strong general factor which accounted for 19.7% of the total item-variance, and four group factors. These four factors were labelled "social timidity", "fear of loss of control (in public)", "fear of exhibitionism", and "fear of revealing inferiority". These factor names, as well as the items themselves, indicate that the questionnaire

would qualify as an index of audience sensitivity in our general sense, but the factors indicate further situational specificity. The study was not concerned with antecedent variables, but our speculative analysis would be that the specific factors represent the effects of differential punishments for misbehaviors or failures in areas where achievement is most valued by parents.

The over-all picture is somewhat less satisfactory for exhibitionism than it is for audience sensitivity. For boys, the data involving general antecedent variables, and interactions of variables, are not inconsistent with theoretical expectations, but the relations are not statistically significant. The one variable which correlates more highly with exhibitionism than with the other CASI scales, is parental evaluation: both boys and girls who are high in exhibitionism are more favorably evaluated than lows on exhibitionism. It is noteworthy that for girls, but not for boys, the highest correlations are with evaluations on the two most "public" behaviors included in the section, skill in performing before others, and athletic ability. The former is a feminine interest area (see, e.g. Terman, 1946), which might explain the correlation, but the latter is not. It is interesting also that the items on which highly exhibitionistic boys are rated more favorably than less exhibitionistic, are generally regarded as more feminine than masculine interest areas (mannerliness, neatness in appearance, responsibility). Since this is also true of the exhibitionism items, as previously pointed out, we may have a relationship between "femininity" scores: boys rated high on manners, etc., show other feminine interests, including exhibitionism. Perhaps because "good" behavior in these areas is expected of girls, the items correlate less highly with exhibitionism for them; similarly with athletic ability in the case of boys.

The above is speculative and regardless of its validity does not help in ascertaining antecedent variables for exhibitionism. Perhaps the correlations with parents' evaluations mean that exhibitionism is related to success, as inferred from the behavior ratings. The high "exhibitionists" are just that because their behavior has been favorably evaluated in the past and they strongly anticipate success in any evaluational situation. However, the correlations can easily be interpreted in the reverse direction as well: exhibitionism is reflected in interest and skill in areas that are valued by parents, thus affecting the favorableness of their evaluations.

Another possibility is that the Exhibitionism scale is less reliable than the AA scale. The lower split-half reliability indicates at least that the scale is less internally consistent.

Still a further interpretation is that exhibitionism reflects, not a history of reward, but a history of deprivation such as suggested by the significant positive correlation with frequency of isolation in the Montreal study (which is directionally compatible in the second study also). Such an explanation is consistent with contemporary theorizing concerning the acquisition of goal-directed activities (see, e.g. Bindra, 1959). Our analysis then might be that not only isolation, but other punishments, imply disapproval and that the highly exhibitionistic individual has acquired this "motive" because exhibition is effective in reinstating approval, i.e. the behavior sequence involved is terminally reinforced. Or, alternatively, that rewards in general are forthcoming only as a result of positive effort on the part of the child to procure them (such positive effort including exhibitionistic acts). Such an interpretation need not imply high correlations with the reward-value of the parent and would even tolerate negative

correlations: exhibition may be unnecessary if rewards are readily forthcoming (cf. the effects of variable-ratio reinforcement schedules). Unfortunately, this hypothesis would be difficult to test with human subjects.

It should be noted, however, that some reward items do tend to correlate positively with exhibitionism, viz. frequency of being the center of attention (for girls) and frequency of praise (for boys) in the Dryden study, and summed reward scores in the Montreal study. Beyond these, we find a positive relation between exhibitionism and parents', especially the mother's, sociability. Does more visitors in the home imply more frequent reinforcement of exhibitionistic behavior, as well as opportunity to "adapt" to social situations? Or is the effect chiefly a result of identification with a role model, as suggested by the data? We do not know, and must conclude in general that we have been less successful in extending the understanding of exhibitionism than that of audience sensitivity.

We are in no better a position now to explain sex differences in the data than we were after the Montreal study. To be sure, not all aspects of the data require such explanation. In the Montreal study, the relation of the interaction of reward and punishment to audience sensitivity for girls is not incompatible with that of the boys. In the Dryden study, the interaction of evaluation and punishment, and of standards, evaluations, and punishments, relate to the girls' Audience Anxiety scores in almost exactly the same manner as to those of the boys, only at lower confidence levels. The difference occur with individual variables.

Thus, in the Dryden study, summed reward correlates $-.17$ with boys, and $.18$ with girls', Audience Anxiety scores, a significant difference. Also in that study, frequency of early favorable attention correlates $.15$ with girls', and $-.21$ with boys' Audience Anxiety, a highly significant

difference. The latter finding contradicts the hypothesis advanced in the Montreal study, that low audience-sensitive girls may have been highly rewarded early in life.

However, the hypothesis might still be valid if even earlier periods in the child's life were considered. Sears et al (1953), whom we cited previously in this regard, were concerned with the period from infancy through the fourth year, and their suggestion was that "mothers become more severe and less tolerant of their daughters after the infancy period passes" (p. 75). We may not have obtained the postulated relation because the assumed change in mother's restrictiveness occurred prior to the period the questionnaire items made reference to (the first three years). Furthermore, retrospective reports by parents about practices 5 to 9 years earlier may be quite unreliable. Nevertheless, as far as the data of the present study go, the hypothesis was not supported.

The alternative suggestion that the sex differences noted in the Montreal study might result from a sex-typed response set on the part of the parent, when completing the questionnaire, was also not supported by the second study. The parents were asked to answer the questions as they refer to a specific child, rather than to describe child rearing practices in general, yet sex differences occur. Thus we are unable to specify at this point, the variables that are responsible for the observed differences. If there is any solace to be had, it is in the fact that other investigators have been confronted with the same problem (e.g. Sears et al, 1953; Davidson et al, 1958). Indeed, sex differences are so ubiquitous in personality research that it stands as one of the most important problems for future investigation.

A question which may be raised with respect to every aspect of the data we have discussed is, To what extent are unequivocal interpretations of

causal relations justified? Apart from the fact that the relations in many cases make good theoretical sense only if the child-rearing variables are assumed to be truly antecedent to audience sensitivity, there is evidence in the data which mitigates the converse possibility that behavior patterns correlated with audience sensitivity somehow determine the parents' actions. In the Montreal study the parent questionnaire asked for general child-rearing practices, not ones that were specific only to the child from whom audience sensitivity data had been obtained. Thus, it is reasonable to argue that such parental "traits" as rewardingness or punitiveness, as inferred from the questionnaire, are not uniquely determined by the one child in the family we had information on, but are stable, causal factors.

It is nevertheless possible that some kind of circular relation is involved, or that some of the correlations may be explained entirely in terms of the child's effect on the parent's responses. The latter point has already been discussed in connection with the positive correlations between parental evaluation and exhibitionism. The possibility is less strong in the case of audience sensitivity. For instance, although we expected some correlation between parental evaluations and audience sensitivity because evaluations define success or failure, the strongest relations are found when we consider the consequences associated with evaluation, rather than evaluation alone. To put it concretely, "bad" children are audience sensitive only if they are frequently punished.

We conclude that a significant portion of a child's emotional or motivational reaction to audience situations--his audience sensitivity--is attributable to his experiences with parents as primary evaluators and reinforcers. We may assume that such "significant others" as peer groups, siblings and teachers also leave their mark, but research along

these lines has not been undertaken. Numerous possibilities suggest themselves. For example, it should not be difficult to obtain samples of relatively punitive and non-punitive teachers and to consider the differences in "audience behavior" of children in these classrooms, e.g. CASI scores, composition themes, readiness to volunteer for reciting in front of the class or for work at the board, etc. Or, one might seek to determine if sociometric choices within a group of children is in any way related to audience sensitivity scores.

At least as interesting would be the experimental investigation of the effects associated with the manipulation of audience situations, concomitantly varying audience sensitivity or exhibitionism. Audience effects were, of course, popular as a research area early in the history of social psychology (from Triplett, 1897, through Floyd Allport, 1924), but only recently have individual differences been systematically considered along with experimental variables (e.g. Beam, 1955, Paivio and Lambert, 1959). Research is currently under way at Cornell University which considers the effect of varying audience conditions on various characteristics of verbal behavior, and employing subjects differing in exhibitionism and self-consciousness. To date the results look highly promising.

A further specific research problem stems from the earlier discussion of social isolation. In view of the results of the first study (which tended to be confirmed in the second), where frequency of isolation was found to be positively correlated with exhibitionism, and Gewirtz and Baer's (1958a, 1958b) theoretical discussion and results, we would expect that a pre-experimental task period of social deprivation would differentially affect the behavior of highs and lows on exhibitionism. For instance, high exhibitionists may show a relatively greater increase in attention-

seeking responses. This provides an experimental approach to the understanding of exhibitionism.

From the viewpoint of the writer, the ultimate aim of such studies, as well as of the two that have been presented in this paper, is the understanding of the nature of social influence. Evaluation of others is a ubiquitous and influential process in human interaction. The audience situation provides a convenient paradigm for the investigation of such processes because in it the relevant variables are thrown into relief. Presumably it was such considerations that directed the attention of early experimental social psychologists to these phenomena. With new conceptual tools such studies may take on added significance for social psychological theory.

Summary

Two studies sought to relate audience sensitivity and exhibitionism to antecedent child rearing variables. Audience sensitivity was defined as a tendency to be anxious about "performing" before others (hence an avoidance tendency), while exhibitionism was regarded as an audience-seeking tendency. These variables were measured by sub-scales of a Children's Audience Sensitivity Inventory and by compositions written by children either on why they like, or why they do not like, to recite in class. Information about selected aspects of child rearing techniques was obtained independently from parents by questionnaire. One study involved 132, another 177, parents and their children.

Assuming evaluation and potential reinforcement by others to be the crucial motivating features of an audience situation, it was hypothesized that audience sensitivity would be positively related to parents' unfavor-

able evaluation and to their punishment frequencies, and negatively related to favorable evaluation and reward. Exhibitionism was tentatively assumed to be related primarily to rewarded experiences with evaluating others. The studies also considered the effects of parents as social models and the opportunities provided by the home for developing audience-oriented skills.

The results generally confirm theoretical expectations in the case of audience sensitivity. Major findings indicate that: (a) children whose parents reward frequently and punish infrequently are consistently low in audience sensitivity; (b) high audience sensitivity is associated with unfavorable parental evaluation of the child's social behavior and achievements coupled with frequent punishments for failure to meet parental standards; low audience sensitivity associates with favorable parental evaluation and infrequent punishment. These findings are most reliable for boys and consistent sex differences could not be adequately explained. Over-all favorableness of parents' evaluations correlated positively with exhibitionism for both boys and girls, but fewer significant relations were obtained involving exhibitionism than audience sensitivity.

The following relations were also obtained: special training in audience-oriented skills correlated negatively with girls' audience sensitivity; sociability of the mother correlated negatively with audience sensitivity for both boys and girls and positively with exhibitionism for girls; father's sociability correlated (negatively) only with the son's audience sensitivity. These findings suggest that children's orientations toward audiences are related to the adequacy of the role-model presented by parents and, possibly, to opportunities provided by the home for developing social skills.

Some theoretical expectations were thus confirmed by the findings--more reliably in the case of boys than girls, and for audience sensitivity rather than for exhibitionism. Theoretical reappraisals and possible future research directions were discussed.

Appendix A

The instructions and items for the first form of the Children's Audience Sensitivity Inventory, used in the Montreal study, are presented below. A negative sign in parentheses (-) following an item indicates that a "No-Not Like Me" response is scored for audience sensitivity. For all other items, a "Yes-Like Me" response is scored. Items followed by "(L)" are "lie" items which were not included in the scoring. Spaces for the appropriate answers followed each item, as suggested by the instructions.

Instructions to the Subject

Please mark each statement in the following ways: If the statement describes how you usually feel or what you usually do put a check () in the column "Yes-Like Me". If the statement does not describe how you usually feel or what you usually do put a check () in the column "No-Not Like Me". Answer every statement. This is not a test. There are no right or wrong answers.

Items

1. I usually raise my hand when the teacher asks someone to recite. (-)
2. I like to take part in plays at school. (-)
3. I like everyone I know. (L)
4. I like to have my work hung on the bulletin board. (-)
5. I like to show my work to my classmates. (-)
6. I show my parents what I have done in school. (-)
7. I feel that others do not like the way I do things.
8. I like to sing in front of others. (-)
9. I am always kind. (L)
10. I like to tell a story in front of the class. (-)
11. I am bashful with most strangers.
12. I talk a lot when I'm with others. (-)
13. I always have good manners. (L)

14. I like to tell jokes to other children. (-)
15. If I were in a play, I would probably forget my lines.
16. I feel someone will tell me I do things the wrong way.
17. I am always good. (L)
18. I feel funny when I walk into a room full of people.
19. I often wonder what others think of me.
20. I am always nice to everyone. (L)
21. I feel bad when someone sees me goof.
22. I like to show things I make to other children. (-)
23. I get nervous when someone watches me work.
24. I like to let other children know what I think about things. (-)
25. I never get angry. (L)
26. I often worry about what people think of me.
27. If I know the answer, I usually raise my hand in class. (-)
28. I would like to make something while the whole class watches me. (-)
29. It is fun to have visitors in class who watch us work. (-)
30. I never lie. (L)
31. I am glad when the teacher calls on me in class. (-)
32. Other people can hurt my feelings easily.
33. I usually go right over when I see a group of my classmates in the schoolyard. (-)
34. I like to show my schoolwork to my friends. (-)
35. I make friends easily. (-)
36. I am pleased when the teacher asks me to run an errand. (-)
37. I like to recite poems in front of other people. (-)
38. I would like to be on the stage in front of many people. (-)

The questionnaire items were followed by spaces for the child's name, school, classroom and date.

Appendix B

The Parent Questionnaire--Montreal Study

The following letter, signed by the principal of the school, accompanied the questionnaire:

Dear Parent:

The enclosed questionnaire is sent to you by the Department of Psychology of McGill University and is part of a research project concerning current child rearing techniques. It is being forwarded to you with the permission of the school authorities and you are earnestly requested to complete and return it as soon as possible.

You may rest assured, since signatures are not required, that this is a general fact finding questionnaire and there is no attempt being made to check on the doings of individuals.

The Questionnaire Items

1. Some parents reward their children quite a bit when they are good, and others think that you ought to take good behavior for granted and that there's no point in rewarding a child for it. We are interested in how often you reward your children, and in the kinds of rewards you use when you are pleased with them. Please indicate how often you use each of the following rewards by encircling or underlining one of the words (frequently; occasionally; rarely; never) that follows the type of reward.*
 - a) Praise (for example, kissing, hugging, telling the child you are proud of him or her, etc.)

Frequently; Occasionally; Rarely; Never
 - b) Privileges (for example, allowing the child to do something he or she especially likes)
 - c) Candy or other "goodies"
 - d) Money or gifts

Which of the above rewards do you use most often? Encircle or underline the appropriate one of the following:

Praise; Privileges; Candy or goodies; Money or gifts

2. What kinds of disciplinary measures do you use with your children when they need correcting? As in question 1, please indicate how often you use each of the following disciplinary measures:

*The four-category response scale followed each of the items in Questions 1 and 2, as illustrated in the case of "Praise" (Item 1a, above).

- a) Isolation (placing the child on a chair in the corner, or alone in his or her room, etc.)
 - b) Deprivation of privileges (not permitting child to go out after supper, putting him or her into bed early, etc.)
 - c) Scolding and looking "cross"
 - d) Withholding of affection (telling child that Mommy won't like him or her, not speaking to the child, etc.)
 - e) Spanking or slapping
 - f) Shaming (pointing out the fault, or scolding, before other children or adults, etc.)
 - g) Ridiculing (laughing at the child for dressing or behaving in a ridiculous manner, etc.)
3. It is uncertain whether reward or discipline is more effective in teaching children proper behavior. In general, which do you use more often, reward or discipline? (Check the correct one.)

Reward more often () Discipline more often ()

4. Children differ of course, so if you have more than one child you may find it necessary to treat them differently. Please indicate for each of your children whether reward or discipline is used more often (referring to each child by age and sex):

Age of child	Sex of child	Reward more often	Discipline more often
_____	_____	()	()

(A number of spaces were provided)

5. Which of you (wife or husband) generally disciplines the children more often?

Wife () Husband ()

6. Which of you generally rewards the children more often?

Wife () Husband ()

7. You may have some special comments to make about basic differences in your children and how you cope with these differences--or about child rearing in general. If you do, we would appreciate your mentioning them in the space below:

(A space was provided)

8. This question is concerned with the types of misbehaviors that require disciplinary control. Please indicate how often you discipline your

children for each of the following types of behavior by writing the appropriate number opposite that behavior, in the column headed, "Frequency of Discipline", in the following manner:

- 3: discipline for that behavior is required frequently
- 2: discipline is required occasionally
- 1: discipline is rarely required
- 0: discipline is never required

Also, please indicate which type of discipline you use most often for each type of misbehavior by writing, in the column headed "Type of Discipline used", one of the following disciplinary measures: a) Isolation; b) Deprivation of privileges; c) Scolding; d) Withholding of affection; e) Spanking or slapping; f) Shaming; g) Ridiculing.

<u>Social relations:</u>	Frequency of discipline	Type of discipline used
i. Smutty language (swearing, etc.)	_____	_____
ii. "Talking back" to parents or other adults	_____	_____
iii. Bad manners ("grabbing at the table, being impolite to others, etc.")	_____	_____
iv. Untidy appearance (hair not combed, torn clothes, unwashed, etc.)	_____	_____
v. Disobedience	_____	_____
vi. Aggression toward adults (kicking or shouting at parents, etc.)	_____	_____
vii. Aggression toward other children (fighting, kicking, scratching, biting)	_____	_____
<u>Achievement:</u>		
i. Poor work in school	_____	_____
ii. Lack of initiative (not trying hard enough to do well in school, not doing chores without being told, etc.)	_____	_____
iii. Too dependent on parent (being a mother's boy, etc.)	_____	_____
iv. Not speaking properly (errors in pronunciation, or in grammar, not speaking clearly, etc.)	_____	_____

- v. "Clamming up" when conversation is called for _____

9. Children often try to talk their way out of difficulties, or try to talk their way into getting what they want. Do you feel that it is often or sometimes a good thing to give in to them, or do you feel that it is better never to give in?

Often good to give in ()
Occasionally good to give in ()
Never good to give in ()

10. Children differ in how much they will persist in trying to convince others of their point of view (for example, trying to talk their parents into giving in to some wish, or in talking their way out of difficulties or punishments). Referring, again to your children by age and sex, please indicate how persistent each of your children is in this respect by writing, opposite the child, in the column headed "Persistence", the number 1, 2, or 3, as follows:

3: he or she is very persistent
2: he or she is moderately or averagely persistent
1: he or she is not very persistent

Age of child Sex of child Persistence Sociability(see questions 11 below)

(A number of spaces were provided)

11. Children differ in sociability, some being rather shy and preferring to play by themselves rather than with others, do not join readily into conversation with others, etc. Others are not shy at all, prefer company to being alone, mix readily with others, etc. In question 10, above, there is a column headed "Sociability". In this column, please rate each of your children for sociability using one of the numbers, 0, 1, 2, or 3, as follows:

0: not shy at all
1: somewhat shy
2: more shy than average
3: very shy

12. Some parents consider shyness a problem, others feel that it is nothing to worry about and that children will grow out of it. Please tell us how you feel shyness should be handled by parents by checking off the statement that you consider appropriate among those that follow:

Shyness should just be ignored ()

When a child acts shy he or she should be encouraged to join into activities with others ()

When a child acts shy, we should firmly insist that he or she join into activities with others ()

Shyness is unnecessary and to overcome it, it is sometimes necessary for a parent to punish a child for acting shy ()

Attitude Questionnaire

The following statements refer to attitudes toward children and child raising with which some people agree and others disagree. Please mark each statement in the left-hand margin according to your agreement or disagreement, as follows:

- | | |
|----------------------------------|--|
| +1 : slight support, agreement | -1 : slight opposition, disagreement |
| +2 : moderate support, agreement | -2 : moderate opposition, disagreement |
| +3 : strong support, agreement | -3 : strong opposition, disagreement |
-
- _____ 1. Children should be seen and not heard.
 - _____ 2. Obedience and respect for authority are the most important virtues children can learn.
 - _____ 3. It is very important to correct, immediately and firmly, every mistake in speech that a child makes.
 - _____ 4. Too much praise can give a child a "swelled head".
 - _____ 5. If I had to choose between happiness and greatness for my children, I'd choose greatness.
 - _____ 6. Children should never be allowed to "talk back" to their parents.
 - _____ 7. Children should be encouraged to "perform" (for example, to sing, dance, or recite) before friends or family.
 - _____ 8. Children should not be "show offs".
 - _____ 9. Parents today do not discipline their children nearly enough.
 - _____ 10. Children should not be encouraged to "talk with their hands", that is, to gesture too much, when speaking.
 - _____ 11. It is important that children learn to be "proper" at all times.
 - _____ 12. Children should avoid doing things in public which appear wrong to others, even when they know that these things are really right.
 - _____ 13. Children should feel an undying love, gratitude, and respect for their children.
 - _____ 14. The most important thing for a child is to have a good personality and to be popular.

Appendix C

The instructions and items for the revised Children's Audience Sensitivity Inventory, used in the Dryden study, are presented in this appendix. The abbreviation in parentheses following each item identifies the scale in which the item belongs: Audience Anxiety (AA), Exhibitionism (Exhib), Self-consciousness (S-C), Test Anxiety (TA) and Manifest Anxiety (MA). As in Appendix A, the lie (L) items are identified, but were not employed in the study. Items not followed by a label are not in any of the scales and were not scored. A dash following the abbreviation (Exhib -) denotes that a "No-Not like Me" answer is scored for Exhibitionism; for all other items a "Yes-Like Me" answer is scored.

Instructions

Here are some sentences that tell what you might do or how you might feel about things and some questions about what you do and how you usually feel. Mark them to show how you feel and what you usually do. This is not a test. There are no right answers and no wrong answers. You are the one who knows how you feel.

If a sentence tells what you usually do or how you usually feel, put a check in the first blank next to it, under "Yes, like me". If it does not tell what you usually do or how you usually feel, put a check in the second blank, under "No, not like me". If the answer to a question is "yes", put a check in the first blank, "Yes, like me". If the answer is "no", put a check in the second blank, under "No, not like me". Be sure to check one blank for each sentence or question. [The instructions were followed by an example.]

Items

1. I worry that I might forget my lines when I recite poems in front of the class. (AA)
2. Do you worry when the teacher says that she is going to ask you questions to find out how much you know? (TA)
3. I like to recite poems in front of other people. (Exhib)
4. Sometimes I raise my hand when I am not sure of the answer.
5. I do not like acting in plays because I am afraid that people will laugh at me. (AA)

6. Others seem to do things easier than I can. (MA)
7. Do you worry about being promoted, that is, passing at the end of the year? (TA)
8. Nothing I do is worthwhile unless other people like it.
9. Other people hurt my feelings easily. (S-C)
10. In school, I always raise my hand if I know the answer. (Exhib)
11. I feel nervous when others look at work I have done. (AA)
12. I feel alone even when there are people around me. (MA)
13. I get nervous when things do not go the right way for me. (MA)
14. When the teacher asks you to get up in front of the class and read aloud, are you afraid that you are going to make some sad mistakes? (TA)
15. I am always good. (L)
16. I worry about what my parents will say to me. (MA)
17. When the teacher says that she is going to call upon some boys and girls in the class to do arithmetic, do you hope that she will call on someone else and not you? (TA)
18. I get nervous when someone watches me work. (MA)
19. Do you sometimes dream at night that you are in school and cannot answer the teacher's questions? (TA)
20. Everytime I get a chance to do something in front of the class I take it. (Exhib)
21. When the teacher says that she is going to find out how much you have learned, does your heart begin to beat faster? (TA)
22. When the teacher is teaching you about arithmetic, do you feel that other children in the class understand her better than you? (TA)
23. I have trouble swallowing. (MA)
24. When you are in bed at night, do you sometimes worry about how you are going to do in class the next day? (TA)
25. It's all right if no one sees me do it, as long as they like what I've done when it is finished.
26. Even if I know the answer, I usually do not raise my hand. (Exhib -)
27. When the teacher asks you to write on the blackboard in front of the class, does the hand you write with sometimes shake a little? (TA)

28. When the teacher is teaching you about reading, do you feel that other children in the class understand her better than you? (TA)
29. I feel embarrassed when I am asked to sing in front of others. (AA)
30. If I wrote a prize-winning poem, I would rather have someone else read it in front of the whole class. (Exhib -)
31. I often worry about what other people think of me. (S-C)
32. If my paper is hung on the bulletin board, I'd rather not have my name on it. (Exhib -)
33. I feel bad when someone sees me goof. (S-C)
34. When you are at home and you are thinking about your arithmetic lesson for the next day, do you become afraid that you will get the answers wrong when the teacher calls upon you? (TA)
35. My knees shake when I recite in class. (AA)
36. I often wonder what others think of me. (S-C)
- 37.. I worry that I will make a mistake when I give a report in front of the class. (AA)
38. I am always kind. (L)
39. If you are sick and miss school, do you worry that you will do more poorly in your school work than other children when you go back to school? (TA)
40. I never feel one bit nervous when I recite. (AA)
41. I like to show things I make to other children. (Exhib)
42. I tell the truth every single time. (L)
43. I would like to make something while the whole class watches. (Exhib)
44. I worry about what is going to happen. (MA)
45. I am always nice to everyone. (L)
46. When it is my turn to get up and recite in class, I feel my heart pounding hard. (AA)
47. Do you sometimes dream at night that other boys and girls in your class can do things you cannot do? (TA)
48. I do not like reciting in class because I might make a mistake and others would laugh at me. (AA)
49. I like to show my work to my classmates. (Exhib)

50. I like to sing in front of others. (Exhib)
51. When you are home and thinking about your reading lesson for the next day, do you worry that you will do poorly on the lesson? (TA)
52. I often do things I wish I had never done. (MA)
53. When the teacher says that she is going to find out how much you learned, do you get a funny feeling in your stomach? (TA)
54. I can figure out the answers to harder arithmetic problems than we have in class.
55. I like to tell a story in front of the class. (Exhib)
56. If you did very poorly when the teacher called upon you, would you probably feel like crying even though you would try not to cry? (TA)
57. I am afraid that other children will laugh at me when I show my work to them. (AA)
58. I am bashful with most strangers. (S-C)
59. I never lie. (L)
60. I often worry about what could happen to my parents. (MA)
61. Do you sometimes dream at night that the teacher is angry because you do not know your lessons? (TA)
62. Sometimes I shake all over when I am asked to recite in class. (AA)
63. I feel funny when I walk into a room full of people. (S-C)
64. Sometimes my voice shakes when I recite in class. (AA)
65. I worry when I go to bed at night. (MA)
66. I feel that others do not like the way that I do things. (MA)
67. I feel someone will tell me I do things the wrong way. (MA)
68. I never say things I shouldn't. (L)
69. I always have good manners. (L)
70. Do you think you worry more about school than other children? (TA)
71. I blush easily. (MA)
72. Once I had to something in front of an audience and I was really scared. (AA)
73. I would like to be on the stage in front of many people. (Exhib)

- 74. I feel scared when I recite in front of the class. (AA)
- 75. I never get angry. (L)
- 76. I am very nervous if the whole class watches me while I am making something. (AA)
- 77. I like every one I know. (L)
- 78. If my paper is hung on the bulletin board, I like everyone who sees it to know that it's mine. (Exhib)
- 79. When I recite in class I often wonder what others are thinking about me. (AA)

Appendix D

The revised parent questionnaire used in the Dryden study is presented below. It was accompanied by a letter similar to that shown in Appendix B, but signed by the head of the Department of Child Development and Family Relationships at Cornell University, rather than by the principal of the school.

In the actual questionnaire sent to the parents, a response scale followed each item. Here the scale is shown only for the first item within a section, except in cases where the wording of the scale is specific to the item (for example, in Section 6, the ten-point bipolar scale is shown for item 6(a), and the bipolar terms of the response scale are shown for each of the remaining items in that section).

Biographical Information and Instructions to Parent

In most families it will probably be the mother who answers this questionnaire, but she may wish to discuss the questions with her husband. Where a question asks how often something is done by the parents, try to think of the total for both parents rather than for one or the other only. If you can't agree on an answer, let the answer be that of the mother rather than father.

- A. We would like to know how many children you have, as well as their ages and sexes. Please list your children below by age and sex, and put a circle around the one who brought home this questionnaire:*

Age of child

Sex of child

- B. Please indicate the father's occupation, or occupations, during the last five years* _____

- C. Try to answer every question. When you have finished, you may have some special comments to make about your views on child rearing. If you do, we would appreciate your turning back to this page and mentioning them in the space below:*

*Appropriate spaces were provided for the requested information.

Since we are interested in child rearing practices at specific age-levels the questions below apply only to the child who brought this questionnaire home to you. Please answer the questions as they apply to this child rather than to all your children. If you have more than one child who brought a questionnaire home please answer separately for each.

Items

1. Some parents reward their children quite a bit when they are good, and others think that you ought to take good behavior for granted and that there's no point in rewarding a child for it. We are interested in how often you reward this child and in the kinds of rewards you use when you are pleased with him or her. Please indicate how often you use each of the following rewards by encircling or underlining one of the words (Very frequently; quite frequently; occasionally; rarely; never) that follows the type of reward:

- a) Praise (for example, telling the child that you are proud of him or her, etc.)

Very frequently; Quite frequently; Occasionally; Rarely; Never

- b) Privileges (for example, allowing the child to do something he or she especially likes)
- c) Candy or other "goodies".
- d) Money or gifts.
- e) Kissing or hugging.

2. What kinds of disciplinary measures do you use with this child when he or she needs correcting? As in Question 1, please indicate how often you use each of the following disciplinary measures:

- a) Isolation (placing the child alone in his or her room, or on a chair in a corner, etc.)

Very frequently; Quite frequently; Occasionally; Rarely; Never

- b) Deprivation of privileges (not allowing the child to watch TV; not permitting child to go out after supper, etc.)
- c) Scolding and looking "cross"
- d) Expressing disappointment (for example, saying to the child, "I'm disappointed in you")
- e) Spanking or slapping
- f) Pointing out the misbehavior or scolding before other people
- g) Laughing at the child (for behaving in a "childish" manner, or for ridiculous dress, etc.)

h) Reasoning (explaining or discussing the incident, appealing to the child's reason, etc.)

3. Often we use more than one of the above at the same time, or in succession. We are interested in how you combine some of these:

a) When you spank or slap this child, how often do you scold and look cross in addition? (Encircle or underline the most correct answer)

Everytime; Most of the time; About half the time; Only sometimes; Never

b) When you isolate your child, how often is this preceded by a scolding?

c) When explaining why some behavior is wrong, how often do you sound cross and scold at the same time?

d) When you isolate your child, how often is it preceded by a spanking?

4. Some parents feel that punishment is most effective when it is severe while others think that mild punishment works better; Try to think only about how severe your discipline is rather than how often you correct your child. Check one of the following 5 statements which most nearly applies to you.

_____ When I discipline my child it is always good and stiff. The spanking hurts, the scolding is severe, if the child is deprived it is of something important, and isolation is complete and long.

_____ When I discipline my child it is rather severe on the whole, but is inclined to be lenient under some circumstances. Mostly misbehaviors are not tolerated.

_____ My penalties are moderate but usually severe enough to result in a change in behavior.

_____ My penalties are mild. They may be severe in critical situations, but often they don't have much effect on the child's behavior.

_____ My penalties are extremely mild. Nothing more severe than mild scolding is ever used, whatever the misbehavior.

5. People differ in how important they consider different skills or habits. Please indicate how important you consider each of the following for your child by putting a circle around the number which reflects your feeling about that item. Encircling number 10 would mean that you consider that item extremely important, while encircling number 1 would mean that you consider it unimportant. The middle numbers refer to something in between these extremes. Please encircle any one of the numbers from 1 to 10, but be sure you give the highest numbers to those items you consider most important:

a) How important do you consider good manners (saying "Please", "thank you", being polite to others, not reaching or grabbing at the table, etc.)?

1	2	3	4	5	6	7	8	9	10
Unimportant							Extremely important		

- b) How important do you consider speaking ability (speaking clearly, using words precisely, good vocabulary, etc.)?
- c) How important do you consider orderliness (keeping room tidy, hanging up clothes, etc.)?
- d) How important do you consider neat appearance (hair combed, clean hands and face, clothes neat, etc.)?
- e) How important do you think it is to be able to get along well with other people?
- f) How important do you consider obedience?
- g) How important do you consider high grades in school?
- h) How important do you consider independence (learning early to do things without help from others)?
- i) How important do you think it is to be able to perform before others (e.g., sing, dance, act, recite, etc.)?
- j) How important do you consider participating in many sports?
- k) How important do you consider public speaking ability?
- l) How important do you consider excelling in some sport?
- m) How important is it for your child to achieve great fame in some endeavor?

6. Please describe your child on each of the following items by circling the number that best tells how he or she is at present. Feel free to use any of the numbers from 1 to 10. What low and high numbers refer to is indicated under the numbers in each case:

- a) How mannerly is your child? (saying "please", "thank you", being polite to others, etc.)

1	2	3	4	5	6	7	8	9	10
Extremely poor manners							Extremely well mannered		

- b) How is your child's speaking ability (clearness, vocabulary, etc.)?

Low in speaking ability---Extremely high in speaking ability

- c) How orderly is your child (about clothes, room, toys, etc.)?

Very disorderly---Extremely orderly

d) How talkative is your child?

Extremely quiet---Extremely talkative

e) How neat in appearance is your child?

Very often not neat---Extremely neat

f) How well does your child get along with others?

Very often does not get along well---Always gets along well

g) How satisfactory are your child's school grades to you?

Very unsatisfactory---Very satisfactory

h) How obedient is your child?

Very frequently does not obey---Always obeys

i) How responsible is your child (how well does he or she do things without being told)?

Never does things without---Always does things without
being told being told

j) How well can your child perform in some way before others (sing, dance, recite, or act, etc.)?

Not skilled at performing---Very skilled at performing

k) How sociable is your child?

Extremely shy, prefers---Not shy at all, always
own company prefers company of others

l) How good is your child in sports?

Low in athletic ability---Very high in athletic ability

m) How persistent is your child in getting his or her own way with parents (by persuasive talk)?

Not persistent at all---Extremely persistent

n) How often does your child get his own way with his parents by persuasive talk?

Rarely gets his or her own way---Very often gets own way

o) How often does your child show aggression against other children (fighting, kicking, scratching, biting, etc.)?

Very rarely show aggression---Very frequently shows aggression

- p) How often does your child show aggression against parents (shouting, kicking, etc.)?

Very rarely shows aggression---Very frequently shows aggression

- q) How often does your child "talk back" to parents?

Very rarely talks back---Very frequently talks back

- r) How independent is your child (how often does he or she do things without help from others)?

Not at all independent---Extremely independent

7. We are interested now in how you handle specific misbehaviors which your child may show. Please indicate how often you discipline your child for each of the following types of behavior (by discipline we are referring to any form of punishment: isolation, deprivation, of privileges, spanking, scolding, etc.). Encircle the most appropriate number, where these numbers mean the following:

- 1: Never punish for this behavior. We ignore the behavior when it occurs.
- 2: Punish occasionally for this. Often we ignore this behavior.
- 3: Punish about half the time this behavior occurs.
- 4: Punish most of the time this occurs-more than half the time.
- 5: Punish for this behavior every time it occurs.

Try to think only of how often you discipline for that behavior when it occurs, rather than about how often the behavior occurs. For example, even if the behavior occurs in your child only rarely, but you punish for it every time, the appropriate number to circle would be 5.

- a) How often do you discipline when your child shows bad manners (grabbing at the table, being impolite to others)?

1	2	3	4	5
Never				Everytime

- b) How often do you punish for "talking back" to you?

- c) How often do you punish when your child does poor work in school?

- d) How often do you punish when your child is disorderly (clothes not hung up, room untidy, etc.)?

- e) How often do you punish when your child disobeys?

- f) How often do you punish for aggression against other children (fighting, hitting, scratching, etc.)?

- g) How often do you punish for aggression against parents (shouting at parent, kicking, etc.)?

- h) How often do you punish for being irresponsible (not doing things without being told, etc.)?
 - i) How often do you punish for being too dependent (relying too much on others to do things, etc.)?
 - j) How often do you punish for improper speech (not pronouncing words properly, not speaking clearly, etc.)?
 - k) How often do you scold or otherwise punish for not being neat in appearance (not washed properly, hair not combed, etc.)?
 - l) How often do you express disapproval when your child "shows off" or wants to be the center of attention?
8. Please indicate how often you reward (give praise, privileges, gifts, candy, etc.) when your child shows the following types of good behavior and abilities. (Again, try to think only about how often you reward for these things when they occur, rather than about how often the behavior occurs.) Encircle the appropriate number, where these mean the following:
- 1: Never reward for this when it occurs. Behavior is taken for granted
 - 2: Occasionally reward for this, but most of the time do not.
 - 3: Reward about half the time this behavior occurs.
 - 4: Quite frequently reward for this (more than half the time).
 - 5: Very frequently reward for this - almost every time this occurs.
- a) How often do you reward when your child shows good manners (says "please" and "thank you", asks for things to be passed at the table, etc.)?
- 1 2 3 4 5
- b) How often do you reward when your child speaks particularly well (speaking clearly, using words correctly, using new words, etc.)?
- c) How often do you reward your child for being orderly (picking up room, hanging up clothes, etc.)?
- d) How often do you show that you are pleased when your child participates in a school play, skit or concert?
- e) How often do you reward your child for neat appearance?
- f) For getting along particularly well with others?
- g) For winning in a spelling contest - or some other event of this kind, including debates, musical ability, public speaking?
- h) For obeying you immediately?
- i) For getting a high grade in a school subject?

- j) For accepting responsibility readily?
- k) For being independent (doing things without help from others)
- l) For performing before friends or family (singing, dancing, reciting, telling stories, etc.)?
- m) For being outstanding in an athletic event?

9. Sometimes we are required to change our behavior as the child grows older. For each of the items listed below, compare what you are doing now or within the last 6 months with how you treated the child up to the time he or she was 2½ or 3 years of age. We are interested here only in comparisons, not in how often you do each of the following, thus, if you never use a particular reward or discipline (either now or earlier) your appropriate answer would be "about as often now as earlier". Try to think only of what you do rather than the behavior of the child. Check the most appropriate answer:

- a) Praise (telling the child that you are proud of him or her, that he or she is a fine boy or girl, etc.)

_____ Praise much more often now than during the first 2 or 3 years.
_____ Praise somewhat more often now than during the first 2 or 3 years.
_____ Praise about as often now as during the first 2 or 3 years
_____ Praise somewhat less often now than during the first 2 or 3 years.
_____ Praise much less often now than during the first 2 or 3 years.

- b) Isolation (putting child in his or her room alone, or in a chair in the corner, etc.)

_____ Isolate much more often now than during the first 2 or 3 years.
Etc.

- c) Scolding and looking "cross"

_____ Scold much more often now than during the first 2 or 3 years.
Etc.

- d) Giving Privileges (allowing the child to do something he or she especially likes)

_____ Extend privileges much more often now than during the first 2 or 3 years.
Etc.

- e) Pointing out misbehavior or scolding before other people.

_____ Much more often now than during the first 2 or 3 years.
Etc.

- f) Deprivation of privileges (taking away toys, not allowing TV, can't go out, etc.)

_____ Deprive privileges much more often now than during the first 2 or 3 years.
Etc.

- g) Giving candy or other "goodies"

_____ Give candy or goodies much more often now than during the first 2 or 3 years.
Etc.

- h) Expressing disappointment in the child (saying "I'm disappointed in you, etc.)

_____ Much more often now than during the first 2 or 3 years.
Etc.

- i) Spanking or slapping

_____ Spank or slap much more often now than during the first 2 or 3 years.
Etc.

- j) Kissing and hugging

_____ Kiss and hug much more often now than during the first 2 or 3 years.
Etc.

- k) Laughing at child for behaving in a ridiculous manner.

_____ Much more often now than during the first 2 or 3 years
Etc.

- l) Giving gifts (toys, money, etc.)

_____ Give gifts much more often now than during the first 2 or 3 years.
Etc.

- m) Reasoning (explaining why a misbehavior is wrong, discussing, appealing to reason, etc.)

_____ Reason much more often now than during the first 2 or 3 years.
Etc.

10. Comparing your child's behavior now or within the last 6 months, with his or her behavior during the first 2½ or 3 years of his or her life, please indicate what changes have occurred in each of the following items. (Again, we are interested only in comparisons, not in how often the

child behaves in a particular way. Thus, if your child has never shown a particular kind of behavior, either now or earlier, your appropriate answer would be "about as often now as during the first 2 or 3 years", etc. Check the appropriate answer:

a) Obedience

- ☐ Obeys much more promptly now than during the first 2 or 3 years
- ☐ Obeys somewhat more promptly now than during the first 2 or 3 years
- ☐ Obeys about as promptly now as during the first 2 or 3 years
- ☐ Obeys somewhat less promptly now than during the first 2 or 3 years
- ☐ Obeys much less promptly now than during the first 2 or 3 years

b) "Talking back" to parents

- ☐ Talks back much more often now than during the first 2 or 3 years
- ☐ Etc.

c) Sociability (entering into group activities, conversations, not being shy, etc.)

- ☐ Much more shy now than during the first 2 or 3 years
- ☐ Etc.

d) General activity (within child's range of ability at each age)

- ☐ Much more active now than during the first 2 or 3 years
- ☐ Etc.

e) Talkativeness (taking into consideration differences in ability at the 2 ages)

- ☐ Much more talkative now than during the first 2 or 3 years
- ☐ Etc.

11. Parents differ a great deal in how much they "make a fuss" (lavish attention, praise, hugs and kisses, etc.) over what their young children do. Please describe yourselves on how much outward attention and affection of this kind you gave your child during the first 2 or 3 years of his or her life (encircle the most appropriate of the words: Very frequently; Quite frequently; Occasionally; Rarely; Never; where these refer to how often you gave lavish attention and affection for that behavior):

a) How much, in general, did you "make a fuss" over this child (lavish attention, praise, hugs and kisses, etc. on him or her)

Very frequently; Quite frequently; Occasionally; Rarely; Never

- b) How much lavish attention and affection did this child receive for saying new words?
- c) For saying "cute" things?
- d) For singing, reciting poetry, etc.?
- e) For drawing, coloring, etc.?
- f) For physical appearance?
- g) For physical ability (crawling, walking, climbing, etc.)?
- h) For "showing off"?
- i) How often was he or she the "center of attention"?

12. How strict are you in your demands for obedience when you ask your child to do something?

- _____ Very strict, demand immediate and complete obedience without exception when he or she is asked to do something
- _____ Quite strict, demand obedience most of the time, but permit exceptions.
- _____ Only moderately strict; don't expect child to obey every time.
- _____ Rather lenient; frequently do not demand obedience when something is asked of him or her.
- _____ Very lenient; don't press for obedience at all. Child does what he or she is requested to do if he or she wants to.

13. At about what age did you expect your child to start obeying you? Encircle the most appropriate answer:

1 year; 2 years; 3 years; 4 years; 5 years; 6 years or later

14. Families differ greatly in the kinds of social life they lead. Some are constantly active in clubs, frequently have visitors etc., while others are happier with much less contact with people outside their immediate family. Please describe yourselves on this by checking the statement which most closely applies to you (Mother check to the left of the statement, Father to the right of it):

Mother

Father

- | | |
|---|-------|
| _____ Very active socially; active in clubs, always interested in new friends, have visitors as often as several times a week and generally consider self a good mixer. | _____ |
| _____ Quite active socially; have visitors once every week or two, some club activity, mix fairly readily | _____ |

_____ Neither particularly active nor particularly inactive; _____
mix when required to, have visitors once a month or so.

_____ Moderately inactive socially; prefer company of family _____
members most of the time, neither avoid nor initiate
social activities.

_____ Very inactive socially; seldom go out visiting, rarely _____
entertain, definitely prefer the company of own family
members.

15. Would you please indicate whether or not your child has had
special training in any of the following; (check Yes or No and the
number of months or years if any):

a) Music lessons Yes () No () No. of months or years _____

b) Singing lessons

c) Dancing lessons

d) Elocution (speech)

e) Dramatic lessons

References

- Adorno, T. W., Frenkel-Brunswick, Else, Levinson, D. J., & Sanford, R. N. The authoritarian personality. New York: Harper, 1950.
- Allport, F. H. Social psychology. Boston: Houghton Mifflin, 1924.
- Baldwin, A. L. The effect of home environment on nursery school behavior. Child Developm., 1949, 20, 49-62.
- Baldwin, A. L. Behavior and development in childhood. New York: Dryden, 1955.
- Baldwin, A. L., Kalhorn, J., & Breese, F. H. Patterns of parent behavior. Psychol. Monogr., 1945, 58, No. 3 (Whole No. 268).
- Baldwin, A. L., & Levin, H. Effects of public and private success or failure on children's repetitive motor behavior. Child Developm., 1958, 29, 363-372.
- Beam, J. C. Serial learning and conditioning under real-life stress. J. abnorm. soc. Psychol., 1955, 51, 543-551.
- Bender, J. F. The personality structure of stuttering. New York: Pitman, 1939.
- Bindra, D. Motivation: a systematic reinterpretation. New York: Ronald, 1959.
- Boland, J. L. A comparison of stutterers and non-stutterers on several measures of anxiety. Unpublished doctor's dissertation, Univer. of Michigan, 1951.
- Castaneda, A., McCandless, B. R., & Palmero, D. S. The children's form of the manifest anxiety scale. Child Developm., 1956, 27, 317-326.
- Dashiell, J. F. Experimental studies of the influence of social situations on the behavior of individual human adults. In C. Murchison (Ed.), Handbook of social psychology. Worcester: Clark Univer. Press, 1935. Pp. 1097-1158.

- Davidson, K. S., Sarason, S. B., Lighthall, F. F., Waite, R. R., & Sarnoff, I. Differences between mothers' and fathers' ratings of low anxious and high anxious children. Child Developm., 1958, 29, 155-160.
- Dickens, M., Gibson, F., & Prall, C. An experimental study of the overt manifestations of stage fright. Speech Monogr., 1950, 17, 37-47.
- Dickens, M., & Parker, D. R. Physiological, introspective and rating-scale techniques for the measurement of stage fright. Speech Monogr., 1951, 18, 251-259.
- Dixon, J. J., DeMonchaux, Cecily, & Sandler, J. Patterns of anxiety: an analysis of social anxieties. Brit. J. Med. Psychol., 1957, 30, 107-112.
- Duffy, E. The psychological significance of the concept of "arousal" or "activation". Psychol. Rev., 1957, 64, 265-275.
- Gewirtz, J. L., & Baer, D. M. The effect of brief social deprivation on behaviors for a social reinforcer. J. abnorm. soc. Psychol., 1958a, 56, 49-56.
- Gewirtz, J. L., & Baer, D. M. Deprivation and satiation of social reinforcers as drive conditions. J. abnorm. soc. Psychol., 1958b, 57, 165-172.
- Gilkinson, H. A questionnaire study of the causes of social fears among college speech students. Speech Monogr., 1943, 10, 74-83.
- Grossman, Donna J. A study of the parents of stuttering and non-stuttering children using the Minnesota Multiphasic Personality Inventory and the Minnesota Scale of Parents' Opinions. Speech Monogr., 1952, 19, 193. (Abstract)
- Hebb, D. O. On the nature of fear. Psychol. Rev., 1946, 53, 259-276.
- Hebb, D. O. Drives and the C.N.S. (conceptual nervous system). Psychol. Rev., 1955, 62, 243-254.

- Heider, F. The psychology of interpersonal relations. New York: Wiley, 1958.
- Hollingworth, H. L. The psychology of the audience. New York: American Book Co., 1935.
- Knower, F. H. A study of speech attitudes and adjustments. Speech Monogr., 1938, 5, 130-203.
- Levin, H., & Baldwin, A. L. The choice to exhibit. Child Developm., 1958, 29, 373-380.
- Levy, D. M. Maternal overprotection. New York: Columbia Univer. Press, 1943.
- Lewinsky, Hilde. The nature of shyness. Brit. J. Psychol., 1941, 32, 105-113.
- Lomas, C. W. The psychology of speech fright. Quart. J. Speech, 1937, 23, 35-44.
- McClelland, D. C., Atkinson, J. W., Clark, R. A., & Lowell, E. L. The achievement motive. New York: Appleton-Century-Crofts, 1953.
- MacCorquodale, K., & Meehl, P. E. Edward C. Tolman. In W. K. Estes and others, Modern learning theory. New York: Appleton-Century-Crofts, 1954. Pp. 177-266.
- Miller, N. E. Learnable drives and rewards. In S. S. Stevens (Ed.), Handbook of experimental psychology. New York: Wiley, 1951. Pp. 735-772.
- Molyneaux, Dorothy, M. Environmental factors differentiating children of advanced speech development from those with retarded speech. Speech Monogr., 1950, 17, 283-284. (Abstract)
- Moncur, J. P. Environmental factors differentiating stuttering children from non-stuttering children. Speech Monogr., 1951, 18, 312-325.

- Mosteller, F., & Bush, R. R. Selected quantitative techniques. In G. Lindzey (Ed), Handbook of social psychology. Cambridge, Mass.: Addison-Wesley, 1954. Pp. 289-333.
- Mower, O. H. Learning theory and personality dynamics. New York: Ronald, 1950.
- Murray, E. A study of the factors contributing to the mal-development of the speech personality. Speech Monogr., 1936, 3, 95-108.
- Osgood, C. E. Method and theory in experimental psychology. New York: Oxford Univer. Press, 1953.
- Paivio, A. A study of stage fright. Unpublished master's thesis, McGill Univer., 1957.
- Paivio, A. A theory of social influence. Unpublished manuscript, Cornell Univer. Library, 1959.
- Paivio, A., & Lambert, W. E. Measures and correlates of audience anxiety ("stage fright"). J. Pers., 1959, 27, 1-17.
- Sarason, S. B., Davidson, K., Lighthall, F., & Waite, R. A test anxiety scale for children. Child Developm., 1958, 29, 105-113.
- Sears, R. R., Maccoby, Eleanor, E., & Levin, H. Patterns of child rearing. Evanston, Ill.: Row, Peterson, 1957.
- Sears, R. R., Whiting, J. W. M., Nowlis, V., & Sears, Pauline S. Some child-rearing antecedents of aggression and dependency in young children. Genet. Psychol. Monogr., 1953, 47, 135-234.
- Terman, L. M. Psychological sex differences. In L. Carmichael (Ed), Manual of child psychology. New York: Wiley, 1946. Pp. 954-993.
- Triplett, N. The dynamogenic factors in pacemaking and competition. Amer. J. Psychol., 1897, 9, 507-533.

- Whiting, J. W. M., & Child, I. L. Child training and personality:
A cross-cultural study. New Haven: Yale Univer. Press, 1953.
- Zimmerman, Claire, & Bauer, R. A. The effect of an audience upon
what is remembered. In Eleanor E. Maccoby, T. M. Newcomb, &
E. I. Hartley (Ed.), Readings in social psychology. New York:
Holt, 1958.