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FIGURES FOLLOWING ENACTMENT; PLAYING A ROLE.

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CHANGES IN CONSTRUCTION OF PARENT AND CHILD FIGURES

FOLLOWING ENACTMENT; PLAYING A ROLE

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

Barbara MacPhail Abma, B.A., M.A.

* * * * * *

The Ohio State University
1969

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Adviser
Department of Psychology
PLEASE NOTE:

Not original copy. Blurred and faint type on several pages. Filmed as received.

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I acknowledge the helpful assistance of the staff and use of the facilities at the OSU Computer Center. My thanks go to Dr. Eugene Gendlin and W. W. Norton and Company for permission to quote from their copyrighted works.
I, Barbara MacPhail Abma, was born in Bay City, Michigan, where I graduated from Bay City Central High School and Bay City Junior College. I received my B.A. degree in 1954 and my M.A. degree in 1955 from The Michigan State University, with a major in experimental psychology and a minor in counseling psychology. I was employed as a psychologist by the State of Ohio, at the Columbus State School for Mentally Retarded, from 1955 to 1962. Concurrently I pursued the program in clinical psychology, with a minor in physiological psychology, at The Ohio State University until the present time. I was a psychology intern at Upham Hall, The Ohio State University Hospital, in 1964.
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INTRODUCTION

The accomplishments of human enterprise depend to a large extent upon human interaction. Very few achievements are gained by people in complete independence of others: there is nearly always some point at which cooperation from other people is requisite to completion of a goal. Often, indeed, the cooperation of many people throughout the total development of a project is necessary to its success.

The quality of human interaction thus becomes an important issue. If we wish to know how interaction can develop most fruitfully, we need to conceive of and test various approaches to the question.

One frame of reference which people can adopt is suggested by George A. Kelly in his Psychology of Personal Constructs. The Sociability Corollary states: "To the extent that one person construes the construction processes of another, he may play a role in a social process involving the other person" (Kelly, 1955, p. 95). Thus, one who wishes to interact constructively with another person may do so better if he tries to understand the dimensions or constructs which the other person uses to interpret the objects and events that make up his life. He may then "play a role," or carry out his own activities in a way that takes cognizance of the other person's outlook.
CHAPTER I

BACKGROUND

Other theorists have recognized the importance to the human enterprise of "playing a role"; several of their contributions will now be compared with Kelly's in an elaboration of the concept. Although the terms used are not the same as Kelly's, the meaning is similar.

When the sociologist and economist, Max Weber (1947, pp. 97-120) refers to the understanding by a person of other people's subjective outlooks, he evidently thinks of this ability as the building-block of the individual's relationship to society. To quote from Abrahamson (1966), "If an action is to be considered social...Weber stipulated that the subjective meaning the actor attaches to it must take into account the behavior of other and be oriented accordingly" (p. 39). Most of Weber's theorizing deals with groups and institutions and their economic and social relationships rather than the individual. Kelly, the clinical psychologist, on the other hand, focuses his concern on the individual and the processes and structures he uses in coping with the world. In a sense, Kelly's theory has dealt primarily with antecedents or issues preceding and leading up to "playing a role," and Weber's works have dealt with consequents or issues subsequent to "role-playing."

To George Herbert Mead (1934), "taking the role of the other" is
the central feature, the *sine qua non* of development, the very cornerstone of an unfolding intelligence and sociality. He states:

This putting of one's self in the place of others, this taking by one's self of their roles or attitudes, is not merely one of the various aspects or expressions of intelligence or of intelligent behavior, but is the very essence of its character. Spearman's "X factor" in intelligence... is simply... this ability of the intelligent individual to take the attitude of the other... thus realizing the signification or grasping the meanings of the symbols or gestures in terms of which thinking proceeds; and thus being able to carry on with himself the internal conversation with these symbols or gestures which thinking involves (p. 141).

H. T. Head goes on to elaborate the concept of "taking the role of the other" as the basis for the individual's development of a self-concept which is in part a reflection of how one perceives others to be perceiving him. In contrast to Mead, Kelly does not use "playing a role" as the foundation of his theory; his fundamental postulate conceives of another process. "Playing a role" is a derivative of previously stipulated assumptions. The Sociality Corollary and the Commonality Corollary bridge the gap between individual processes and social processes. To quote Kelly:

"Here we have a take-off point for a social psychology. By attempting to place at the forefront of psychology the understanding of personal constructs, and by recognizing, as a corollary of our Fundamental Postulate, the subsuming of other people's construing efforts as the basis for

---

1Fundamental Postulate: A person's processes are psychologically channelized by the way in which he anticipates events (Kelly, 1955, p. 46).

2Commonality Corollary: To the extent that one person employs a construction of experience which is similar to that employed by another, his psychological processes are similar to those of the other person (Kelly, 1955, p. 90).
social interaction, we have said that social psychology must be a psychology of interpersonal understandings, not merely a psychology of common understandings" (1955, p. 95).

Focusing on development, Jean Piaget (1954) describes the emergence of the child's ability to represent to himself the perspective of someone else. The child subject, reporting his conception of a model of three mountains, at first attributes his own perspective of the mountains to those who view the mountains from any other position. In the next developmental phase, the child uses a mixture of his own and others' perspectives; finally he is able to describe the mountains as they appear from any other angle. Thus the child moves...

...from egocentrism to objectivity...admitting of true generalization, that is, taking into account the point of view of others and all possible points of view as well as his own (pp. 375-376).

This process is paralleled in the learning of right and left, when at first the child conceives of these directions relative to himself and only later can indicate them relative to another person's position. He acquires...

...a sort of detachment from one's own point of view of the moment, enabling one to place oneself at that of others and to reason first from premises admitted by them.../and/ be able to remain on the plane of mere assumption without surreptitiously returning to one's private point of view or to that of the reality of the moment (Piaget, 1959, p. 71).

Piaget attributes the development of these transitions to social interaction and the necessity to communicate verbally to others (Piaget, 1954, p. 367). For Kelly, the person who has not developed much beyond the egocentric attitude operates at the level of the Commonality Corollary. Kelly does not discuss these processes in
developmental terms.

Contemporary social psychologists may be introducing the role-playing concept through the avenue of communications theory. For example, Hartley and Hartley (1959) devote a large section of their book to communications, wherein they discuss the necessity for a communicator to be aware of the communicant's frame of reference in order to prepare a message which will be properly understood. They say,

We consider next an extremely important aspect of the communicator's task: an understanding of the communicant. The communicator must be able to predict how the recipient will respond to his communiqué. To predict such a response he must have some knowledge of the other person, the intended communicant. This knowledge, which must guide the framing of the communication, we may call the "image of the other" (pp. 39-40).

The authors then discuss various ways in which the "image of the other" is built up. Their methods, while useful to the sociologist or social psychologist, are quite general and are based mainly on culturally shared behavior. The clinical psychologist would want to elicit a person's personal constructs within the framework of his particular culture. Methods described by Kelly are more within the range of convenience of clinical practice.

A researcher in communications theory, Robert Monaghan (1968), also articulates the role-playing point of view. He states:

In communications research we are working with people and the subjective properties of human experience...we need to know how the viewer thinks and feels and acts from his own frame of reference. We need to try to empathize with the experiences of those directly involved....The logic-of-science here, then, indicates that we consider the viewer from his own vantage point, being careful and respectful at each step not to intrude upon his reality with our own and not to impose our theoretical constructs on his meanings. We want to discover what choices he sees himself as having (p. 32).
Since Monaghan as a colleague of Kelly's adapted relevant parts of Personal Construct Theory to his own area of interest, his definition of playing a role is very similar to Kelly's. The difference lies in the application of the concept—Monaghan to the field of communications, Kelly to clinical psychology. Communications theorists wish to tie into people's construct systems in order to phrase messages that will be understood and appreciated and will contribute something to their audience. Clinical psychologists also wish to interact with people in terms that are understood by them and that will help them to explore alternatives for change and growth.

A clinical psychologist, Carl Rogers, subscribes to the pertinence of what he calls "understanding" or "empathy" as an essential condition for a relationship that facilitates personal growth.

Understanding...means to see the expressed idea and attitude from the other person's point of view, to sense how it feels to him, to achieve his frame of reference in regard to the thing he is talking about (Rogers, 1961, pp. 331-32).

Again,

To sense the client's inner world of private personal meanings as if it were your own, but without ever losing the "as if" quality, this is empathy...without your own meaning getting bound up in it...the client's world is clear to the counselor and he can move about in it freely (Rogers, 1967, p. 92).

Rogers adds:

Once you have been able to see the other point of view, your own comments will have to be drastically revised (1961, pp. 332-33).

While Personal Construct Theory differs in important respects from the Client-centered theory (Kelly, 1955, pp. 401-02), they do seem to parallel each other at this one point.
To recapitulate, several theorists have been cited who have used a concept similar to Kelly's "playing a role." In each case some differences were pointed out in order to broaden for the reader the context of Kelly's position regarding the concept. The contrasts are summarized in Table I.

**Table 1. Comparison of Kelly's Role Playing Concept with Similar Concept of Other Theorists**

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<th>Personal Construct Theory</th>
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<td>Kelly—&quot;Playing a role&quot; Theory deals primarily with individual processes</td>
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<td>Theory deals with large group processes</td>
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<td>Mead—&quot;Taking the role of the other&quot;</td>
<td>Kelly—&quot;Playing a role&quot; Other processes more fundamental</td>
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<tr>
<td>Basis of intelligence as well as social development</td>
<td>Necessary for a social psychology</td>
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<td>Necessary for a person's self-concept</td>
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<td>Piaget—&quot;From egocentrism to objectivity and true generalization&quot;</td>
<td>Kelly—&quot;Playing a role&quot; Developmental approach not used by Kelly</td>
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<tr>
<td>Presupposes adaptation to others and social coordination</td>
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<td>Hartley and Hartley—&quot;The image of the other&quot;</td>
<td>Kelly—&quot;Playing a role&quot; Built upon individual's unique construct system</td>
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<td>Built mainly upon culturally shared behavior</td>
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<td>Monaghan—&quot;Audience's frame of reference&quot;</td>
<td>Kelly—&quot;Playing a role&quot; Application is helping clients grow psychologically</td>
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<td>Application is phrasing messages for audience appeal</td>
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<td>Rogers—&quot;Empathy&quot;</td>
<td>Kelly—&quot;Playing a role&quot; Concerned with developing fruitful interaction with life, people and processes going on around a person</td>
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<td>Helps client develop qualities found within himself</td>
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Before leaving the topic of playing a role, two points should be made to allay questions which often arise. The first concerns the accuracy of one person's construction of another person's constructs; the second concerns the acceptance by the first person of the other's constructs. Neither of these conditions is necessary for playing a role, according to Kelly's definition. Kelly makes this point explicit:

...If I make an attempt to see the world through the other person's spectacles--through his constructs, I mean--and I structure my own actions in the light of what I think I see, what I do then is, for me, a role. This is not to say that my interpretation of his viewpoint is accurate, or even that I shall then choose to act in a manner compliant with his wishes. Indeed, my perception may be grossly inaccurate--which could result in considerable confusion--and I may even choose to use my version of his outlook to undo him--which also could have chaotic consequences. But in any case, my actions would constitute a role (Kelly, 1966, p. 4).

It should be noted that playing a role is not conceptualized as the exclusive property of scientists. As Kelly repeatedly emphasizes, methods employed by scientists are simply refinements of what people in general do anyway. Since the scientist is a man, he cannot do what man cannot do. Thus playing a role is available and useful not only to sociologists and psychologists but also to any person. It is with this premise in mind that the present research was conducted.
The purpose of this study was to investigate the effects of having subjects enact the part of another person. The question was, more specifically, is enactment an effective way to induce a role-playing orientation and what, if any, changes in construction may a person make following enactment.

What Enactment Is

Enactment was given impetus as a therapeutic device when Moreno (1953) evolved the form he called "psychodrama." Enactment is also commonly called "role playing" by those who use it for group or individual therapy, but since Kelly attaches a different meaning to the phrase "playing a role," as described in the previous section, the term "enactment" is used here, following Kelly, except when reporting the work of someone else who calls it "role playing."

What Is Required

When someone is asked to pretend momentarily that he is another person, real or imaginary, and interact with others as if he were that person, he is called upon to change his whole perspective of what the world looks like. This means that he must adopt a construction system different from his own: for if he tries to pretend he is someone else
while maintaining his own customary framework, he can only respond bit by bit to other people--each statement must be calculated to see if it is a proper response; whereas, if he can successfully adopt the other person's outlook and structure the world as that person does, he can act spontaneously as an organized personality. Once having done this, and then having returned to his own perspective, it is likely that he will find it easier to imagine what things are like for the person he was pretending to be. He may also change some of his own construction system to incorporate the new viewpoint, and his actions may then fit in with his own social milieu more fruitfully.

Related Findings

At least one report lends some support to this proposition. Gould (1967), in his efforts at psychotherapy with lower class subjects, had more success using role playing than he had using the conventional methods which seem to help middle-class subjects. He felt that his lower class male clients responded better when there was more action and symptom treatment and less transference or interpretation. Their marriage problems were often worked out by role playing what a wife's life is like, what she wants and expects from marriage. Although this was not a research study, it does suggest that helpful changes may take place when people "play a role" in accordance with Kelly's definition of the term and that enacting someone else's part helps a person to "play a role" toward the person who is actually in that part.¹

¹Gould's position is consonant with Kelly's view of the role of enactment in psychotherapy. Kelly says: "Psychoanalysts usually object to the client's 'acting out' instead of 'talking.' The emphasis
Harth's research (1966), while not shedding light on the processes involved, does suggest behavior modification following enactment therapy. Harth worked with five emotionally disturbed children of average intelligence who failed a grade and continued to do failing work. He held two role playing sessions a week for five weeks wherein the students portrayed school personnel in various problem situations centered around school. The classroom behavior of these children was measured by a Peabody Inventory Scale on Emotional Disturbance on 35 school relevant traits such as: easily managed, dependable, forceful, talkative, and impulsive. Their behavior changed in a positive direction (significant at .05 level) while a matched control group of five children made no significant change. Neither group changed significantly on pre- and post-tests using a semantic differential which evaluated concepts of school, teacher, principal, homework and tests or on the Child's Rosenzweig Picture-Frustration Study measuring reaction to frustration. The experimenter concludes that

Role playing is essentially a behavior changing technique which will eventually bring about attitude change. As the subject's behavior becomes more acceptable, he begins to reap the rewards of better personal relationships, which in turn should lead to attitude changes....In this short experimental period not enough time was available for attitude change to occur...

that the psychology of personal constructs places upon enactment techniques...seems to be in opposition to this view. Perhaps it is because we see psychotherapy as embracing a greater variety of psychological processes at the technical level, no one of which is necessarily of itself either healthy or unhealthy, therapeutic or pathologic. Psychotherapy is the intelligent manipulation and organization of various psychological processes" (Kelly, 1955, p. 1071).
Also, Harth claims that pre-tests were biased in a positive direction because children were afraid to present their true feelings.

Harth quotes from Glasser (1965),

Waiting for attitudes to change stalls therapy, whereas changing behavior leads quickly to a change in attitude, which in turn can lead to fulfilling needs and further better behavior.

Harth does not indicate what the control group conditions were or what precautions may have been taken against bias on the part of teacher raters. If these things were not properly controlled, it cannot be assumed that the change was a result of the particular treatment, for perhaps any treatment or any opportunity for the children to be excused from classes would have resulted in change (something like a "Hawthorne effect"); also, teachers' knowledge of which children were doing role-playing could have influenced their treatment or their ratings of these children. However, if it is assumed that there were adequate controls, Personal Construct Theory would suggest that since changes in behavior were evidently taking place, the children were probably reconstruing the situation in some manner not revealed by the measures used. Kelly (1955) states: "Psychological movement in oneself is subject to construction, and once a person can say, 'Look, I have changed, haven't I?' he is more likely to be able to say, 'I can change!'" (1955, p. 372).

Other Uses of Enactment

Moreno has been using psychodrama at the Moreno Psychodrama Institute in New York for more than 35 years, and many studies have been made, some involving the outcomes of the treatment and some the
process. In a study of role playing, Culbertson (1957) states:

Psychodramatic literature indicates that the dynamic elements that differentiate role playing through role reversal from other learning situations are through:

(a) role reversal, the taking on of attitudes, feelings and behaviors that differ from one's own; (b) projection of needs and feelings, Moreno's "s" factor; and (c) development of self-insight (p. 230).

Her study did find favorable change in attitudes of role playing participants toward integrated housing of Negroes and whites and in generalized attitude toward the Negro. Role participation seems to have led to greater degrees of motivation and involvement in the drama than did mere observation. A recent study by Deane and Marshall (1965) found that subjects who had participated in a 3-day psychodrama institute made changes on an attitude scale which covered three points of reference: what the subject thinks of himself, how he thinks he is perceived by others, and how he conceives of the mentally healthy person. The changes were still present when measured at three different intervals, up to 8 weeks. There was also some evidence that the subjects' behavior had changed.

Behavior theorists and therapists sometimes use enactment as a part of their experimentation or therapy. Sarbin (1965), for example, using role theory as his unifying concept, explored the ability of subjects to enact the role of a hypnotized subject (p. 352) and also compared subjects' hypnotizability with their acting ability and found significant positive correlations (p. 350). In his effort to give a modern interpretation to the phenomenon of hypnosis, Sarbin was most interested in how well subjects could enact the hypnotic role, and it was of no concern to him whether or not enactment had any effect on
subjects afterwards. Personal Construct Theory, on the other hand, is not concerned with how well persons can enact; in fact, Kelly suggests that this factor may be irrelevant to the processes of therapy. He says:

Much of the enactment takes place on a nonverbal basis. The verbal fluency of the client and therapist is not a measure of the success of the procedure. Sometimes a client can get a great deal out of an enactment session, even though he seems utterly unable or unwilling to express himself. Just sitting there and feeling that he is cast in a certain part, or that he is perceived as being in a certain part, is, in itself, a form of adventure which he is not likely to pass off lightly. As the therapist, enacting his own part, keeps insinuating that the client is cast in the opposite part, the client is forced to do some thinking. How can he defend himself? How is this different from 'real' life? What words would he like to say? How strange it is to be perceived in this fashion! What would happen if anyone really saw him in this light? All of these are questions which may urgently arise in his mind, even though he never says a word during the enactment period (1955, p. 117).

Of concern here is the effect that the effort to enact may have upon the subject's construction system, including his perception of himself, rather than his observable acting ability.

Thus there is a contrast between the aims of role playing in psychodrama and behavior therapy, on the one hand, and the aim of enactment in the present study. The former schools are attempting to modify attitudes or change behavior, while the latter seeks as its outcome the construing of other people's viewpoints.

Related to enactment is a therapeutic device developed by Kelly which he calls "fixed role" therapy. In it a client assumes a make-believe identity tailored by the therapist to the client's particular psychological make-up. The client enacts this character prescription
for about two weeks. Incorporated in the description of the character is always a set to play a role with other people. Kelly found fixed role therapy to be indicated and helpful with about one in fifteen of his therapy cases (Kelly, 1966). Descriptions and outcomes of some cases in which fixed role therapy was used are chronicled by Kelly (1955) and also by Edwards (1943). Fixed role therapy differs from the type of enactment investigated in this study; the latter covers a brief time span of a few minutes and is analogous to a small part within a more conventional therapy session.

Follow-up after Enactment

Those who use enactment as a psychotherapeutic device (e.g., Kelly, Gould, Moreno) usually follow the enactment with a discussion or some type of analysis with the client of the material that was produced. This follow-up phase is considered an integral part of the therapy, and it is not usually referred to as a separate treatment. What occurs in this period is not always specified. Kelly describes the tenor of the interaction:

The enactment provides material for immediate discussion. Here the client and the therapist have both observed the client's handling of a problem. The data are clearly remembered; they are only a few minutes old. The discussion which follows is based on common perceptual ground. This is what the client meant; that is what the therapist meant. The client has seen himself in action and now he can immediately look at his performance with some detachment and perspective. He has not held anything back from the therapist, as he may have held back in reporting events occurring on the outside. The discussion which follows an enactment session is likely to have relatively few gaps and relatively few misperceptions (Kelly, 1955, p. 1147).

The content of the follow-up would doubtless be determined by
conditions which are given very adequate coverage in Kelly's second volume (1955). In the present study, in addition to the investigation of enactment itself, it seemed especially desirable to assess the contribution of a follow-up treatment to the role-playing orientation of the subjects. If they not only enact the part of another person but also elaborate and clarify their feelings in that part, they might have an even stronger sense of empathy for someone who is in real life cast in that part.
CHAPTER III

THE STORY OF THE EXPLORATION

Students who have written their dissertations with Professor Kelly know that one of his usual recommendations was for a chapter describing the story of the exploration. His reason was that those who read dissertations most often are other students who are writing dissertations. He thought it would be helpful to them to be acquainted with the problems other students have met and the steps they have gone through in developing their research. In keeping with Kelly's suggestion, then, this chapter is being included.

The evolution of this dissertation is probably atypical of most dissertations in several respects. For one thing, the time span required from its inception to its conclusion has been long. This was due partly to the extensive nature of the study itself and partly to interruptions in the author's work. In addition, the author's longtime adviser, Professor George A. Kelly, left the University for another before the research was launched; he maintained chairmanship of the committee through the prospectus phase, the running of subjects, and the early returns from the data. A tragic event then occurred--Professor Kelly's death. Another member of the faculty kindly assumed chairmanship and work proceeded on the remaining stages of the study. Communication with Mrs. Kelly was helpful in supplying further
information regarding Kelly's writings, and their son, Joseph Kelly, cleared up some issues regarding computer programming for analysis of the data.

Development of Independent Variables

Changes in construction through enactment

Originally the author's intent had been to investigate the parent-child relationship and the nature of change in the relationship. The medium for exploration was to be enactment, in which a subject would be asked to portray a character or characters different from himself. It was thought that this might (1) introduce the subject to some constructs he had not considered using before and (2) challenge some of the constructs he had been using.

The first step was to ascertain whether or not people's orientations during enactment could be manipulated by means of instructions given prior to enactment. An experimental paradigm was used in which two people were to be asked to enact with each other a parent and a child discussing a topic commonly occurring in families, such as the amount of money the child should have to spend, a report card from school, etc. Instructions for a self-centered set were given to the parent actor: "Discuss the chosen topic with the child with the purpose of explaining to him your point of view on the topic. Try to be sure that he thoroughly understands what you think or how you feel about it." Instructions for an other-centered set were: "Discuss the topic with the purpose of finding out the child's point of view. Try to be sure that you thoroughly understand what he thinks or how he
feels about it." A few trials in which college students read the instructions and then enacted a parent indicated that the instructions were inadequate to produce the desired set—there was very little difference in the way a subject behaved from one kind of instruction to the other.

In an effort to provide more context for enactment, the author prepared three character sketches describing three hypothetical parents having different interpretations of the meaning of parenthood. These parents can be described as essentially directive, nondirective and role-relating. The correspondence of the sketches to the concepts of directive, nondirective or role-relating behaviors was not an issue in this research, however, for the sketches were meant only as a vehicle to convey different types of personalities. Each of the character sketches begins with a statement of the hypothetical parent's underlying philosophy concerning the rearing of children, proceeds with his or her expected outcomes for children who are reared in this manner, and puts into operational terms a description of how verbal interactions between parent and child are carried out under the particular philosophy. (See Appendix A, p. 161.) Further pilot work demonstrated that the character sketches did serve the purpose of inducing subjects to play the part of a parent in different ways. One proposition that could now be explored was that enacting different types of parents might result in people's revising their constructions about parents and about children.
Consequences of enactment—playing a role

Discussion with Kelly also brought out the point that a parental relationship could be improved if the parent played a role with his child, that is, tried to construe the child's constructs or see the world as it looks to the child. This might be accomplished by having a parent take the part of a child in an enactment session. Consequently the parent might be in a position to construe the child more adequately and to behave in a manner which is more experimentally fruitful to the child as well as to the parent.

An event during the pilot work lent support to this proposition. One psychology student with whom the experimenter tried out the enactment was a married lady with children. This lady was concerned about a friend whose son was behaving very recalcitrantly, so much so that the friend was afraid he might become delinquent. The parent had tried very hard to control the child, with no success. The subject did not know what she could say to help her friend or what she would do herself if she had a similar problem. It happened that in the enactment the experimenter took the part of a directive, rather authoritarian parent and the subject spontaneously played the part of the child as she thought her friend's child might behave. During the enactment the "mother" quite arbitrarily refused to give permission for the child to go to a party at the home of an older child who had a poor reputation and whose influence on her child she did not like. The child in the enactment finally said, "Oh, all right! I'm going up to my room to read," and that ended the encounter. Immediately the subject disclosed that she had only appeared to submit to the mother's judgment, but what
she was really thinking was that she would go up to her room, sneak out of the house and go to the party anyway. The subject was quite elated and seemed to have had an "aha" experience; she said she could see exactly how her friend's child felt and how the way the friend was handling it was perhaps making the situation worse rather than better.

This led to the proposition that enacting the part of a child might bring adults closer to readiness for a role relationship with children.

Follow-up of enactment

During the exploratory work with pilot subjects, the experimenter sometimes enacted a parent and sometimes a child. Enactments were recorded on tape. On one occasion, after enacting the 12-year-old child opposite a rather domineering type of "parent," the experimenter listened back to the tape of this interaction; after each statement which the "parent" made, the experimenter stopped the tape recorder and wrote down as many adjectives as came to mind to describe the feelings or emotions which the "parent's" statement aroused in her. She was amazed to find how vivid, varied, numerous, and rapidly changing these feelings were, and yet the adjectives, which were written down rapidly one after another, and which quickly filled up several columns on a sheet of paper, were inadequate to describe completely the totality of the way the experimenter felt as the child. Each statement of the "parent" evoked a new surge of feelings, some statements eliciting more than others. The reactions to the "parent" when he made a "loaded" statement were particularly startling. (Sample transcripts of enactment are included in the Appendix.)
Another surprising feature of the experience was the genuineness of the experience, how much in the role of a child the experimenter felt, and how alike these feelings were to the way she had felt as a child when interacting with her own parents. A difference, however, was that the feelings were now more accessible to articulation than they had been in childhood. Although the present feelings seemed very similar to those experienced in childhood, the experimenter had a larger vocabulary, and perhaps fewer inhibitions about expressing her feelings to herself than she had then.

In an effort to see if other people had the same type of experience, the procedure was repeated with several subjects--playing back to them the taped recording of the enactment, with the experimenter as parent and the subject as child. The first such subjects produced only a few adjectives, possibly being inhibited by the experimental situation and perhaps not understanding fully what was wanted. To facilitate the production of descriptions of feeling, an adjective check list was provided so the subject could check off words describing his experience. He was also invited to add any words he thought of to the list. The check list came from words the experimenter had used, words the subjects used, and seemingly appropriate words from other adjective check lists. Several of the subjects verbalized an experience similar to the experimenter's--that it was surprising to find that they had so many and varied reactions to the "Parent." The use of the check list seemed to have the desired effect, and subjects were able to use it to elaborate the way they were feeling after listening to the taped recording of each statement made by the partner during the enactment.
The exploratory work suggested, then, that a person who has enacted a child becomes more aware of a child's feelings, especially when he has opportunity to articulate his own reactions to parent statements.1

During this work the experimenter usually felt that she understood why the subject felt as he did. At times, however, the feelings he expressed were puzzling and she asked why he felt this way. His explanation always made sense, although it was not what the experimenter would have felt. Added to the procedure, therefore, was the process of asking for the rationale behind the feelings reported, which often contributed to the understanding of the subjects' outlooks.

The fruitfulness of these experiences led to the decision to incorporate in the study a third feature, a follow-up in which the subject listened to the tape of his enactment and analyzed or elaborated on the enactment experience. It was expected that the follow-up might play an essential part in the effectiveness of enactment.

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1Further elaboration of such experiences can be cited from Gendlin (1962): "Experiencing is something so simple, so easily available to every person, that at first its very simplicity makes it hard to point to. Another term for it is 'felt meaning,' or 'feeling.' However, 'feeling' is a word usually used for specific contents—for this or that feeling, emotion, or tone, for feeling good, or bad, or blue, or pretty fair. But regardless of the many changes in what we feel—that is to say, really, how we feel—there always is the concretely present flow of feeling. At any moment we can individually and privately direct our attention inward, and when we do that, there it is. Of course, we have this or that specific idea, wish, emotion, perception, word, or thought, but we always have concrete feeling, an inward sensing whose nature is broader. It is a concrete mass in the sense that it is 'there' for us. It is not at all vague in its being there. It may be vague only in that we may not know what it is. We can put only a few aspects of it into words. The mass itself is always something there, no matter what we say 'it is.' Our definitions, our knowing 'what it is,' are symbols that specify aspects of it, 'parts' of it, as we say. Whether we name it, divide it, or not, there it is... (p.11)."
Development of Dependent Variables

The writer had had experience with the Role Construct Repertory Test (Rep Test) which was developed by Kelly (1955, p. 219 ff.) in conjunction with Personal Construct Theory. It appeared to be an instrument of versatility which could be easily adapted to this research and would give a large amount of information for the time and effort required for its use. Another advantage to using the Rep Test was that much of the research on Personal Construct Theory has utilized it and comparisons could be made between previous research (reviewed by Bonarius, 1965) and this study. The format of the test will be described in more detail in a later chapter. A modification of the Rep Test was devised to elicit subjects' constructs concerning parents and another form to elicit constructs concerning children. These tests were tried out with pilot subjects and were found to yield scorable responses for a pre-test to be given to subjects before they began the experiment. A continuation of the test with each subject was also possible during the experiment, so that measures of the processes occurring in the experiment could be made—that is, after enacting a scene, the subject could give new constructs concerning the event which had just taken place.

"When you pay attention you can notice that it is really never just any given definable quality or tone or content. It can always be further differentiated and further aspects of it can be specified. A concrete aspect of experiencing accompanies every description, every meaningful thing you say. Above and beyond the symbols there is always also the feeling referent itself (p. 13)."
It was noted during this phase of trial tests that when college student subjects enacted a parent and then made up new constructs concerning the enactment, they tended to word their constructs in terminology appropriate to a parental construction of events: for example, constructs showing responsibility for the child, as "religious training is important." Conversely, when subjects enacted a child, the constructs they made up seemed to be of a type that would be expected from a child's world: for example, concern with school events or children's playtime and social events, such as "plays baseball." Their responses seemed to indicate that subjects were orienting their psychological processes toward the part they had enacted. It was decided to try to use this phenomenon as a measure. Orientation is considered a measure of the direction of the subject's role-playing posture at the time he makes a statement. A parent-oriented construct is one that a parent would be more likely to think of and to use, and a child-oriented construct is one that a child would be more likely to think of and to use. The experimenter asked several people to rate some sample constructs on this dimension, either parent-oriented or child-oriented. A group of 14 judges had about 75 per cent agreement on the constructs presented.

It was further noted that, in addition to alterations in orientation, constructs generated following enactment had a greater quality of empathy or of subjectivity concerning the person being construed. For example, a subject who used the term "tolerant" to construe a figure before the enactment, said, "Concerned and tolerant--genuine concern
for the performer and the performance," following the enactment. The subject's amplification implies "acceptance" which Kelly (1955) defines as "a willingness to see the world through the other person's eyes." He continues, "It thus becomes a precondition for the intentional adoption of role relationships." The dimension of empathy seemed to be another relevant measure of subjects' involvement in the enactments. Empathy is considered to be a measure of the degree to which a subject is trying to place himself in the framework of the other person. A sample of constructs was rated for empathy in the same manner as for orientation, and results showed an average of about 70 per cent agreement among 6 raters. It was thought that the lower agreement in this case could be improved by the use of a manual which had been developed by Carpenter (1966) giving objective criteria on which to base judgments.

As a subject fills out a Rep Test, he makes a pattern of marks on a grid consisting in this case of pluses and minuses. Many measures can be derived from the mathematical properties of these patterns. Bieri, Lemcke and Morse have developed some measures which could be applied to this research and which are referred to here as cognitive complexity, cell reversals, and identification of others with self. Another measure based on the construct pattern which appeared to have significance with pilot subjects was what Kelly termed "lopsidedness" of construct extension. All these measures appeared to be candidates for measurement of subjects' changes of construction during or following the experimental interventions. They are described further in the section on measures.
Choice of Subjects

The experimenter had hoped to keep the experiment as naturalistic as possible by having each enactment team consist of a parent paired with his own child. A friend whom the experimenter met at a PTA meeting agreed to allow her 14-year-old son to be a pilot subject and to be a subject herself, and a nearby YMCA permitted use of a room for the interviews. The boy enacted the child's part against the experimenter's enactment of the parent, and he also filled out an exploratory version of a Rep Test. The boy's mother, in separate sessions, also enacted child and parent parts as requested. Two more children were also tested. It soon became apparent, however, that there were a great many obstacles to carrying on the research in this manner. To obtain the large number of pairs of parent and child needed for the total design would have been a tremendously time-consuming task, and to schedule these people in the midst of their busy lives would have been very complicated. Moreover, the possible consequences of this kind of interaction between parent and child could not be followed up or controlled, and the experiment could conceivably lead to some deterioration of relationship. Therefore the experimenter decided to use college students for the larger group of subjects, with one smaller group of actual parents for comparison. The subjects, then, would all be young or middle aged adults who would enact either parent or child parts as needed.

Shift in Emphasis

As stated earlier, the writer had at first wished to explore the
area of parent-child relationships. As this research progressed, it became apparent that the implications of the experiment were not confined to relationships between parents and children but pertained to any relationship between two people. The focus of the study is on enactment, and the parent-child paradigm is merely the arena in which the exchange takes place. This choice turned out to be fortunate, however, for it provided a contrast in outlooks which might not be as obvious in other social relationships. The contrast in outlooks permitted use of two separate tests, the Parent Rep Test and the Child Rep Test, and it produced the dimension of parental orientation versus child orientation (as described above) for one of the measures. In addition, since all people have had experience in the role of a child, and many people have imagined how they would behave if they were parents, subjects could be counted on to have a repertoire of constructs regarding the nature of parents and of children.
CHAPTER IV

GENERAL HYPOTHESES

Kelly proposed that when people make choices they intend either to expand their construction systems or to define their construction systems. The present study would have to be characterized as more expansive than definitive, more exploratory than precise in nature. It might have been possible to explain the processes of enactment in the terms of the basic assumption and corollaries of Personal Construct Theory, but the writer chose a different course.

It is understandable why enactment should be germane to a theory which is grounded in constructive alternativism, as is Personal Construct Theory. Through enactment, people have the opportunity to act out on a strictly hypothetical, transient basis, constructs which they would not dare to ascribe permanently to their concept of themselves. Having tried out the constructs, they are in a position to make a re-evaluation of the consequences of their acts, and it may be easier for them to change some aspects of their construction systems and to construe events in an alternative fashion.

The first two general hypotheses which the author explored were related to Personal Construct Theory, though not in a definitive sense.
These hypotheses were:

1. Enactment entails the temporary adoption of a construction system different from one's own. As a result of the enactment subjects retain a construction of the part they enacted which helps them to understand the outlook of another person who is in that part in real life.

2. As a result of the enactment, subjects do some measurable changing of construct patterns and of their evaluations of people, reflecting validation and invalidation which occur during enactment.

The third hypothesis was based upon subjects' elaboration of their feelings and the reasons behind their feelings, a procedure derived from personal experience and supported earlier by reference to Gendlin. Kelly did not subscribe to a separation of "emotional" and "cognitive" functions; neither, however, did he deny that people may describe their own experiences in these terms, and that such descriptions are valid material for the researcher to construe in whatever dimensions are useful to his explorations. The procedure chosen as a follow-up of enactment was thought to represent the procedures used by psychotherapists in general.

The third hypothesis was:

3. A follow-up analysis of some of the events of enactment, representative of the type of analysis usually following such procedures, adds a measurable increment to the effects of the enactment.
CHAPTER V

 METHODOLOGY AND VARIABLES

Subject

All 60 student subjects for this experiment were recruited from elementary psychology courses at The Ohio State University. A requirement of the elementary course was to serve in 5 hours of research, and the pool of subjects available was ample. To obtain 48 of the student subjects, the experimenter posted a request on a bulletin board, describing the experiment as one on parent-child relationships in which subjects would be asked to role play, and explaining that their total 5 hours would be required for this one experiment. A control group of 12 additional student subjects were obtained in the same manner except that they were asked to serve 4 of their required hours on this experiment, and role playing was not mentioned as a part of the procedure.

During pilot stages of the experiment, it was found that two of the subjects who came had had very little contact with children and professed little or no interest in the topic of parent-child relationships. These subjects found it very difficult to fill out the Rep tests, and their results were barren and unusable. When it was time to do the experiment itself, therefore, the experimenter stipulated that subjects who signed up should have had some experience working with children, and columns were provided on the sign-up sheet for checking
the kind and amount of experience they had had. Most subjects reported to the experimenter an interest in the area of parent-child relationships as one of their reasons for choosing this experiment. Several mentioned that they were not interested in being in the type of experiment in which they had to push buttons or learn nonsense materials or receive an electric shock. They felt that this experiment would be more meaningful to them. Some said they also liked the idea of getting all 5 hours of time credit at once. Many of the subjects gave teaching as their major area of study. About 80% of the subjects were females and 20% males.

In addition to the 60 student subjects, a group of 12 adults was obtained. They consisted of 8 volunteer parents of sixth graders at the University Elementary School, two nursery school teachers, one dentist and one college teacher. Nine were females and 3 were males. The University School sixth grade class was promised $10 in return for the time of the parents who volunteered. Other characteristics of the subjects are given in Appendix C, p. 192.

As much as possible, groups were composed of an equal representation of age levels, amount of experience with children, and male or female subjects. In a few cases this was not possible due to scheduling conflicts.
Independent Variables

Enacting

In this experiment with enactment, subjects were presented with character sketches of three types of parents (Appendix A, p. 161) and were given opportunity during a pre-testing session to familiarize themselves with the characters. The sketches were used as prescriptions which the subjects were to enact during the next portion of the experiment. Two of the prescriptions incorporated the usual advice given to parents, either to control their children's behavior or to leave it free. The third prescription implied that a parent can try to subsume the construct system of the child, and having done so, proceed to engage with him in life's enterprises. The prescriptions were thought to provide a range of familiarity, from concepts which are common and well-known in our culture to some which are relatively rare. Subjects would probably encounter some ideas which were new to them as well as some which they had met before.

In addition to acquainting subjects with the three types of parents, the pre-testing procedure called for subjects to consider what the children of such parents would be like at about 12 years of age.

Experimental subjects were asked to enact 6 times, as follows: some were asked to enact the 3 parent prescriptions, twice for each prescription; some were asked to enact only the child, opposite to these 3 parent prescriptions, twice for each prescription; and some subjects were asked to enact parent and child alternately, once for each parent prescription and once for each child opposite the parent (see Design, p. 148). The first 3 enactments were done immediately
following the pre-testing period, with the experimenter enacting the
part opposite to the subject. The second 3 enactments were done in
another session, with two subjects enacting the parts opposite to each
other and with the experimenter serving as observer, time keeper, etc.

Enactments were five minutes each and were recorded on tape.
The topic for the first enactment session was the low grade on the
hypothetical report card which the child had received that day. The
three prescriptions were enacted consecutively in order to maximize
the contrast of the three types of parent characters. The topic for the
second enactment session was a new club the child was thinking of
joining.

Analyzing enactment

The next intervention for some subjects consisted of the analyzing
of the tapes of their own enactments. In both the first and second
sessions this event took place after the enactments of the three pre-
scriptions. The procedure was for the experimenter to play back the
tape to a place where a statement had been made which might be ex-
pected to have significance (a judgment made by the experimenter). For
purposes of exposition, we shall refer to Enactor A and Enactor B.
Enactor A, the subject to whom the statement was made, was asked to
write down his feelings and the reason for feeling as he had at that
point in the enactment; Enactor B, who had made the statement, was
asked to write down how he thought Enactor A would feel and the reason
for it, at that point in the enactment—in other words, to make a pre-
diction of how he expected Enactor A to respond to the statement he had
made in the enactment. Thereupon, the two enactors compared notes, the predictor (Enactor B) stating the prediction he had written and Enactor A either verifying or correcting the predictor's statement; Enactor A also wrote a plus or minus for correct or incorrect on Enactor B's paper. The procedure was repeated but with subjects reversed as to predictor and predictee.

The object of this procedure was twofold. In the first place, a subject was given opportunity to elaborate and clarify his interpretation of events in the enactment. This follow-up was thought to be parallel to a kind of evaluation that might be done in psychotherapy after enactment. It could also emphasize for the subject any reconstructing and reevaluating he might have done during the enactment. In the second place, having his predictions of other people's reactions to his statements either confirmed or challenged could give further impetus to the subject's process of reconstructing social interaction.

The playing back of a tape might be a threatening matter to a person, and Kelly warned that in psychotherapy it can be "strong medicine." The author believed, however, that in an experimental setting such as this the threat would not be great. For one thing, therapy is a quite different matter, for people in therapy are likely to be less stable than the average population, and therapy may at some intervals unstabilize them even more. Furthermore, the importance of the relationship of a therapist to a client is much greater than the importance of the transitory relationship of an experimenter to a subject.
Listening to tapes of others' enactment

A different sort of intervention following enactment was devised as a partial control condition. After the three enactments of the first session were completed, instead of analyzing their own enactments, some subjects listened to taped enactments of the three prescriptions done by two people other than themselves. Subjects thus had opportunity to compare their own constructions with someone else's constructions of the prescriptions. It was expected that a subject's attention would be focused less on himself and his partner and more on the nature of the prescriptions, providing a less in-depth and less personal kind of experience than the analysis of one's own enactment.

Controls

As a further control condition, some subjects did not do any enacting but did analyze tapes of others' enactments, while other subjects who did not enact merely listened to tapes of others' enactments.

All subjects in the above groups returned in approximately a week after the second enactment session and took a post-test.

Finally, a group of subjects did no enacting, no analyzing of tapes and no listening to tapes but did take the pre-test and the post-test approximately a week later.

Thus there is a series of graduated conditions of participation for the subjects, as follows:

1. Enactment followed by quasi-therapeutic analysis of own enactment

2. Enactment followed by listening to others' enactments
3. Quasi-therapeutic analysis of others' enactments
4. Listening to others' enactments
5. No interventions--tests only

Dependent Variables--Measures

Description of Rep Test

All measures were taken from a Parent Role Construct Repertory Test (Parent Rep Test) and a Child Role Construct Repertory Test (Child Rep Test). Before the experimental intervention began, these two tests were administered individually by the experimenter to all subjects, with half the subjects taking the Parent Rep Test first and half taking the Child Rep Test first. The same tests were given again in the same manner approximately a week following the experimental intervention. These pre-tests and post-tests yielded measures of overall changes. In addition, experimental groups of subjects continued the tests following each intervention, that is: (1) after each enactment, (2) after each analysis of a taped enactment and (3) after each time spent in listening to a taped enactment. These tests yielded process measures of the interventions.

The Parent Rep Test requires subjects to construe certain parents they know, in the way these parents interact with their children, and also a hypothetical "ideal parent," defined as "the kind of parent you would like to be." The Child Rep Test requires them to construe certain children they know, and also a hypothetical "ideal child," which is "the kind of child you would like to have been." Upon completion

1The complete Role Title List is given in Appendix A, p. 157.
of this part of the test, subjects were given the three character sketches, or prescriptions, to read. They were then asked to evaluate these hypothetical parents on the constructs they had already made up and then to make up new constructs to describe the prescription parents. In like manner they construed the hypothetical children of these parents as they imagined they might be at 12 years of age.

If a subject started to use a static construct and contrast to describe people, such as "blue eyes--brown eyes," he was asked to try instead to make up constructs regarding the personality or character of the people, which resulted in more dynamic dimensions, those on which people can change. Subjects were asked also not to repeat constructs; if they could not think of a new construct, they were asked to think of some different facet of it or at least to word the construct a little differently. This procedure seemed necessary in grids of comparatively small size in order to have sufficient range of differences within subjects. More detailed description of the procedure used in administering the Rep Tests is given in the Appendix A, p. 151.

From these tests two kinds of measures (described previously on pp. 24-26) were taken: the written verbal responses and the grid patterns generated when subjects evaluated their figures on these verbal responses. There are two verbal response measures, Orientation and Empathy, and seven grid pattern measures, Cell Reversals, Least-approved-prescription, Identification-with-self, Identification-with-ideal, Construct Extension, Cognitive Complexity, and Differentiation. Each of the nine measures will now be described in more detail.
Orientation

For the measure called Orientation (introduced on page 25), the experimenter rated a sample of the written constructs of subjects and also had another judge rate them. Criteria were developed by which to determine a rating of parent-oriented or child-oriented construct. The two judges conferred and checked agreement on 100 constructs at a time, five times. Agreement ranged from 76% on the first 100 to 86% on the last 100 constructs. The second rater moved out of town, and it was not possible to pursue the rating to a higher level of agreement.

Then another approach was discovered, one that was almost completely objective and did not require a second rater. By the use of the Dale Word List (1948b) and the instructions for inclusion of words on the list, all constructs were rated in a way that required minimal subjective judgment and could be repeated by another rater.

The Dale list of approximately 3000 familiar words represents words known in reading by at least 80 per cent of the children in Grade IV. This would be children of about 9-10 years of age, somewhat younger than the 12-year age level which subjects in this experiment were asked to enact. However, the word list represents words known in reading, which are at a more advanced level than words used in speaking or writing. Probably, therefore, the list represents words that a 12-year-old child would use in speech and writing. The criterion, if biased, is biased in a conservative direction.

Each of the 10,800 constructs and contrasts was examined for vocabulary level; if all its words were on the Dale familiar words list, it was judged a child-oriented construct or contrast and was
given the rating C (for Child). If any single word was not on the Dale list, the construct or contrast was judged parent-oriented and was rated P (for Parent). In a few instances subjective judgment was required, such as for slang or idiomatic words, which are not included in the Dale list. (See Appendix C, p. 190).

This change of method for ratings of the measure, Orientation, on the basis of vocabulary level alone appeared reasonable because it seemed that when a subject was genuinely involved in enactment, he used the vocabulary appropriate to his part. When the experimenter took the part of a child during the enactment, she was aware of inappropriateness when she used a word that was on an adult level. Furthermore, subjects enacting a child resorted to terminology such as "Gee, whiz," which they probably no longer used as adults. Their constructs on the tests might be expected to reflect the vocabulary level used during enactment.

For this measure, almost complete objectivity means that anyone can replicate the ratings made in this study. Also, anyone can use this dimension for other studies in which the level of vocabulary used by a subject is a useful variable. As will be shown later, the measure had discriminatory power.

After constructs and contrasts were rated, the number of parent-oriented constructs and contrasts on the pre-tests, experimental tests, and post-tests were counted, resulting in a score for each test for all subjects. Differences between subjects and between conditions could then be compared.
Empathy

As stated on pages 25 and 26, ratings of Empathy were made with the use of Carpenter's manual (1966) for rating the dimension he calls personal-impersonal. The writer chose the terms "objective-subjective" for rating subjects' constructs and contrasts, but it is in essence the same dimension as Carpenter's. Carpenter applied his rating scale to sentences and in some cases could make more refined discriminations than was possible with the predominantly adjectival responses in this study. Using the manual, the experimenter and another rater estab­lished criteria upon which to base judgments. Examples are given in Appendix C, p. 191. Ratings were made on a dichotomous basis, to which the statistical test of a phi coefficient was applied, with an outcome of .811 and $X^2$ of 265.95, which is significant beyond a .001 level of probability.

The remaining constructs were rated, and tests were scored for Empathy.

Cell Reversals

The pre-test which all subjects took produced two 12x12 grids, one concerning their constructions about parents and the other their constructions about children. At the final session, the last phase was for the subjects to superimpose constructs generated for the pre-test against a blank grid (called post-test II) and rate again, using the constructs from the pre-test and the same names as were on the column headings on the pre-test (the role title list). If on the pre-test a subject had rated his mother, for instance, on the
"strict" side of the dimension "strict-lenient," and he now rated her on the "lenient" side, he would be making a reversal in the grid cell intersected by the "mother" column and the "strict-lenient" construct row. Pre-tests were compared with post-test II and the number of such Cell Reversals on each test was scored.

Identification

Another piece of information that can be gleaned from the Rep Test is how much a person identifies with other people he has named on his test. By looking at the pattern of pluses and minuses under the "self" column, his rating of himself with any other figure can be compared. If, for example, he rates his mother plus for every construct he marked himself plus for and minus for every construct he marked himself minus for, it can be said that in his construction system he sees his mother and himself as being very similar. In other words, he identifies closely with his mother. Using the same system, it can be seen how much a person identifies with any other figure in the test and how much he sees any other people on the test as being alike or different, either from himself or from each other.

The changes in identifications subjects made between themselves and other people between pre-test and post-test were explored. The first such measure was called "Identification of self with others" or just "Identification-with-self." In like manner, subjects' identifications between columns called "ideal parent" and "ideal child" and other people were compared. This measure was "Identification of ideal with others" or just "Identification-with-ideal." Both of these
measures were scored and compared for the pre-test and the post-test. The post-test referred to here, Post-test I, was distinct from the post-test described under Cell Reversals. Post-test I, like Post-test II, kept the same role title list as on the pre-test but it left subjects free to make up new constructs for the people named in the role title list. Jones (1961) found a similar measure of identification with others to be a useful indicator of social adjustment of psychiatric patients during hospitalization.

**Least-approved-prescription**

The measure called Least-approved-prescription was derived by comparing subjects' column patterns for the prescription figures with the column pattern labelled "self." The comparison could show which of the three prescription figures, directive, nondirective or role-relating, the subject perceived to be least like himself. The figure with the fewest matches with "self" was determined for each subject, and the changes in identification of that figure with the "self" were ascertained for the experimental tests (constructs made up immediately following the interventions) and for the post-tests. This measure is called "Identification of self with least approved prescription," or Least-approved-prescription for short.

The Least-approved-prescription is likely to represent the subjects' prejudices. Those who investigate attitude change have speculated on the nature of the processes which bring about such change under various conditions. Janis (1953), for one, comments:
...Let us suppose that a person who is passively exposed to a communication fails to be convinced by many of the arguments because, although he comprehends their meaning, he fails to have the sort of anticipations which would motivate him to change his mind. When the communicatee rehearses the argument that there is a critical shortage of skilled personnel in the military services, he may think of this in purely abstract terms, wonder whether it is really true, but remain unconvinced. But when the same person is required "to put this idea across" in an informal talk, he may become motivated to think up a variety of vivid illustrations and elaborations which make it a much more impressive argument.

This hypothesis assumes that when a person is induced to improvise his own ideas in support of a communicator's conclusions the chances are increased that he will experience the types of anticipations which make for acceptance. Improvised role playing could be viewed as a technique whereby the communicatee is stimulated to help make the communication as effective as possible, to think up exactly the kinds of arguments, illustrations, and motivation appeals that he regards as being most convincing. In effect, the communicatee is induced to "hand-tailor" the content so as to take account of the unique motives and predispositions of one particular person—namely, himself (p. 237).

This analysis includes one of the basic tenets of the psychology of personal constructs. It is supported by the studies on the usefulness of "own" as opposed to "provided" constructs (Mitsos, 1961; Bieri, 1966).

Construct Extension

The extension of a construct across the row of a grid presents a pattern of pluses and minuses just as the column under the heading of someone's name does in the measures of Identification. The extension of a construct may vary from being evenly divided (half pluses and half minuses) to being "lopsided" (most cells plus and few or none minus, or vice versa). There seemed to be a difference in the constructs repre-
sented by these two kinds of patterns. On the pre-tests, the constructs about the prescription figures appeared to be more often lopsided than constructs about real people. Perhaps the prescriptions suggested some new or less familiar constructs. This matter of changes in Construct Extension between the pre-test and post-tests was examined.

**Cognitive Complexity**

A concept which has been getting much attention recently is cognitive complexity. Among some Personal Construct Theory researchers, it is operationally a measure derived from a Rep grid, and it refers to the degree of similarity of row patterns to each other. If a subject uses a fairly similar pattern of pluses and minuses for each new construct, meaning that he sees certain people as being alike on most things and other people as being unlike the first set of people, he would be called cognitively simple. If a subject varies in his application of pluses and minuses from one row to another, he is called cognitively complex.

Cognitive Complexity was measured for the pre-tests, experimental tests, and post-tests of this experiment. The measure used was based on the nonparametric factor analysis of the Rep grids as programmed by J. Kelly (1963) for a 7094 computer. One of the outputs of this program is a "center of cluster" which is the row pattern and the column pattern which are most representative of the rows and columns of the grid as a whole. The number of matches of the grid with the center of cluster is given, and this number was used as the
index of Cognitive Complexity. A similar index was also used by Napoli (1966) in his investigation of intra-individual factors of cognitive complexity.

Differentiation

Differentiation is a measure developed by Morse (1966) with which he ordered people according to their identification with family members on their Rep tests. Those who identified significantly with their parents and siblings were said to have Similar Personal Identity (SPI); those who identified negatively with family members (family members rated opposite to "self" ratings) had Opposite Personal Identity (OPI); and those who did not rate themselves significantly like or unlike family members were said to have a Differentiated Personal Identity (DPI). In this study the measure of Differentiation was compared to other measures.

Differentiation here is a much less "pure" measure than it was for Morse. From a large number of Rep tests, he chose those which were clearly similar to, opposite to, or differentiated from three out of four family members, namely, the parents and two siblings. The present study was restricted to the subjects it had, and relatively few subjects' tests fitted the criteria which Morse set in his study. The criteria for this study were: a subject was called SPI if his "self" column matched with the column for the same-sexed parent on 9 to 12 constructs; he was called DPI if it matched on 6 to 8 constructs; and he was called GPI if it matched on 5 or less constructs. Only the Parent Rep Test was analyzed, not the Child Rep Test, as
many subjects had only one or no siblings. Several subjects named foster parents or adoptive parents, or one parent had died when the subject was young. (Incidentally, of the subjects who had foster parents, more ended up in the OPI category than in the other categories, perhaps suggesting that it is more common to identify opposite to a foster parent than to a real parent.)
Design

Subjects were divided into 6 groups of 12 each. Sixty of the subjects were college students (Groups I, II, III, V and VI below) and 12 were adults who were parents of at least one child in the 12-15 age range (Group IV below).

Group I subjects enacted consecutively the parts of the three parents, as described in the prescriptions, against the experimenter and the subjects in Group II.

Group II subjects enacted consecutively the part of the child against the experimenter and the subjects in Group I.

Group III subjects enacted the part of the parent-child-parent or child-parent-child, against the experimenter and the other subjects in Group III.

Group IV subjects, the adults, followed the same procedure as Group III.

Group V subjects did not enact but followed the post-enactment procedure.

Group VI subjects did not enact or follow the post-enactment procedure.

Half of each experimental group, Groups I-V, analyzed the taped recordings of the enactment and gave affective adjectives and rationale. The other half listened to tapes of others enacting for a period of time comparable to the time taken for the analysis.

All subjects took a pre-test and two post-tests, each consisting of the Parent Rep Test and the Child Rep Test. Experimental groups filled in additional Rep tests following each phase of the experiment; enacting, analyzing tapes, or listening to tapes.
Summary of Design

Pre-test & begin experiment  Finish experiment 3-4 days later  Post-test a week after experiment

GROUPS--Psychology students, elementary course (except Group IV)

12 subjects per group, 6 per sub-group

I a Enact parent part according to 3 prescriptions, each twice—first session with E, second session with another S

   plus Analyze own and partner's enactment

   b Enact parent same as a

   plus Listen to tapes of others' enactments

II a Enact child part opposite 3 parent prescriptions, each twice—first time with E, second time with another S

   plus Analyze own and partner's enactment

   b Enact child same as a

   plus Listen to tapes of others' enactment

III a Enact both—parent part according to 3 prescriptions, each once—first session with E, second session with another S

   --child part opposite 3 prescriptions, each once—first session with E, second session with another S

   plus Analyze own and partner's enactment

   b Enact both same as a

   plus Listen to tapes of others' enactments

IV Real parents—follow same procedure as Group III

V a Analyze tapes of others' enactments

   b Listen to tapes of others' enactments

VI Pre-test and post-test only
HYPOTHESIS I. Enactment will produce effects on the orientation and empathy of subjects' constructs.

A. Orientation is considered a measure of the direction of the subject's role-playing (PCT sense of the word) posture at the time he makes a statement. A parent-oriented construct is one that a parent would be more likely to think of and to use, and a child-oriented construct is one that a child would be more likely to think of and to use.

1. After the enactment, subjects enacting the parent part will generate more constructs judged parent-oriented and fewer constructs judged child-oriented than they did before the enactment.

2. After the enactment, subjects enacting the child part will generate more constructs judged child-oriented and fewer constructs judged parent-oriented than they did before the enactment.

3. After the enactment, subjects enacting both parent and child parts consecutively will generate constructs more
appropriately oriented (that is, constructs generated about the child will be more frequently child-oriented, and constructs generated about the parent will be more frequently parent-oriented) than they did before the enactment.

4. A week following the experimental intervention, on a post-test which duplicates the pre-test in form, subjects' constructs will differ in orientation from the pre-experimental constructs in the same direction as during the experiment only to a lesser degree, but more than the control group which has not done the enactment. The ranking of the groups on appropriateness of orientation scores on the post-test is expected to be: Parent-Child enactment group, most appropriate; control group, less appropriate (same score as on pretest); Parent enactment group and Child enactment group, most oriented toward the part they enacted.

B. Empathy is a measure of the degree to which a subject is trying to place himself in the framework of the other person.

1. All subjects will give more constructs judged subjective (the measure for empathy) following the enactment than they do before the enactment.

2. A week following the experimental condition, on a post-test which duplicates the pre-test in form, subjects' constructs will differ in empathy from the pre-experimental constructs in the same direction as during the experiment but to a lesser degree, but more than the control group which has not done the enactment.
HYPOTHESIS II. Factors considered evidence for validation and invalidation related to the experimental intervention of enactment.

A. Reversals in scoring between pre-test and post-test II, that is, change from + to - or from - to + on any one cell of the grid, will be more frequent for prescription figures than for real figures and will be more frequent for experimental subjects than for control subjects.

B. Prescriptions which, on the pre-test, have the greatest number of mis-matches with "self" or "ideal" (indicating dislike or disapproval of the prescription by the subject) will, when enacted by the subject, have a greater proportion of matches with the "self" or "ideal" on the experimental grid. Changes in number of matches with "self" or "ideal" between the pre-test and post-test I will be more frequent for prescription figures than for real figures, and this change will be greater for experimental subjects than for control subjects.

C. Constructs which were generated on the prescription figures in the pre-test and which showed evidence of being alien to the subject's customarily used construction system (that is, the construct is scored + for one, two or three figures only, and - for the rest of the figures, or vice versa, thus being lopsided) will on post-test II show evidence for having been better incorporated into the subject's construction system by having additional figures added to the minority side, thus giving a more even distribution of scores for those constructs.
This equalizing of distribution will occur more frequently for experimental subjects than for control subjects.

D. Experimental subjects will generate fewer alien or lopsided constructs on the prescription figures in the post-test than will control subjects.

HYPOTHESIS III. Follow-up treatment effects

A. Effects of analysis by subjects of their own enactments

1. Effects on Orientation

   (1) For subjects playing the child part only or the parent part only, constructs generated during the analysis will be oriented more appropriately than constructs generated before the analysis.

   (2) For subjects enacting both parent and child parts, the tendency toward appropriateness of constructs will be even greater than for subjects who enact one part only.

   (3) A control group doing no enactment but analyzing tapes of others' enactments will generate constructs most similar in orientation to the constructs they generated before the analysis.

   (4) A week following the experimental procedure, effects of differential treatment will be evident in the post-test. All groups which analyze tapes will be higher in appropriateness of orientation than their parallel groups which listen to tapes but do not analyze them.

2. Effects on Empathy

   (1) For all subjects in this condition, constructs
generated following analysis will be more frequently empathic than constructs generated before analysis.

(2) This effect will be manifest a week following the experimental procedure when on the post-test subjects who have done the analysis will give more empathic constructs than subjects who have not done the analysis.

3. Effects on validation and invalidation

For all subjects in this condition, effects outlined under Hypothesis II will be greater than for subjects who do not do the analysis.

B. Effects of listening to tapes of others' enactments

1. Effects on Orientation

(1) For subjects playing one part only, constructs generated from listening to tapes will be orientated toward the part they have enacted to the same or a greater degree than constructs generated before listening to tapes.

(2) For subjects enacting both parts, the tendency toward appropriateness of constructs will be the same or greater than before listening to tapes.

(3) A control group doing no enactment but formulating constructs from the enactments they listen to on tapes will have orientation scores most similar to scores before the listening condition.

(4) A week following the experimental procedure, relationships between groups as outlined above will be maintained or be slightly decreased.
2. Effects on empathy

All subjects listening to tapes will generate the same or fewer empathic constructs than they did following enactment and before listening to tapes, and this effect will still be evident on the post-test a week following the experimental condition.

3. Effects on validation and invalidation

For all subjects listening to tapes, effects outlined under Hypothesis II will be less than for subjects who do the analysis of their own enactments.

HYPOTHESIS IV. Related Research

A. Subjects whose pre-test grids are more cognitively complex will show more variability in their sorting of figures for constructs generated on the experimental test. Subjects whose grids are more cognitively complex will have greater change scores for Empathy, Orientation, and validation-invalidation than subjects whose grids are more cognitively simple.

B. Subjects whose constructs are more differentiated for family members will have greater change scores than subjects whose constructs are less differentiated.

C. Subjects will give more "dynamic" constructs on the post-test than on the pre-test and the experimental groups will give more dynamic constructs than the control groups.

D. There will be differences between Parent Rep Test grids and Child Rep Test grids according to "closeness" of the subjects
in their present life experience to the parent condition or the child condition. Subjects who are older or are either parents already or closer to the parent condition (for example, being older in a family with much responsibility for younger sibs), will generate more complex and differentiated grids about parents than about children. Subjects who are younger, or who have had little experience in taking responsibility for children, will generate more complex and differentiated grids about children than about parents.
CHAPTER VII

OUTCOMES

The outcomes reported in this chapter are presented in a minimal context as they were proposed in the specific hypotheses of the preceding chapter. Usually the report on the main experimental group is accompanied by a report on the auxiliary experimental and control groups and relevant combinations of these groups.

Additional outcomes will be presented in the Discussion section.

Hypothesis I. Movement toward Playing a Role

A. Orientation

1. After the enactment, subjects enacting the parent part only will generate more constructs judged parent-oriented and fewer constructs judged child-oriented than they did before the enactment.

The hypothesis was not supported. Student t-test equals 1.35 (.10 probability), indicating a trend, but in the wrong direction. See Table 2.

2. After the enactment, subjects enacting the child part only will generate more constructs judged child-oriented and fewer constructs judged parent-oriented than they did before the enactment.

The hypothesis was not supported. The t equals .89, not significant and in the wrong direction.
Table 2. ORIENTATION: CHANGE IN NUMBER OF PARENT-ORIENTED CONSTRUCTS FROM PRE-TEST TO ENACTMENT TEST FOR COMBINED PARENT AND CHILD REP TESTS

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-Enact parent</td>
<td>12</td>
<td>-5.42</td>
<td>4.02</td>
<td>1.35</td>
<td>.10</td>
</tr>
<tr>
<td>II-Enact child</td>
<td>12</td>
<td>-6.25</td>
<td>7.03</td>
<td>.89</td>
<td>.20</td>
</tr>
<tr>
<td>III-Enact both</td>
<td>12</td>
<td>-8.58</td>
<td>5.77</td>
<td>1.49</td>
<td>.10</td>
</tr>
<tr>
<td>IV-Adults, enact both</td>
<td>12</td>
<td>9.0</td>
<td>5.94</td>
<td>1.52</td>
<td>.10</td>
</tr>
<tr>
<td>I, II, III-Students</td>
<td>36</td>
<td>-6.75</td>
<td>3.40</td>
<td>1.98</td>
<td>.025</td>
</tr>
</tbody>
</table>

*aSign indicates relationship to predicted direction.

3. After the enactment, subjects enacting both parent and child parts consecutively will generate constructs more appropriately oriented (that is, constructs generated about the child will be more frequently child-oriented, and constructs generated about the parent will be more frequently parent-oriented) than they did before the enactment.

The hypothesis was not supported. The t equals .10 for the Parent Rep Test and 2.3 for the Child Rep Test (see Table 3), or 1.49 (.10 probability) for both together (Table 2), indicating a trend, but in the wrong direction.

When results for the three student groups are pooled, t equals 1.98 (probability .025), showing significance in the direction opposite to the prediction (Table 2).

Results for the adult subjects enacting both parent and child parts were, t equals 1.35 for the Parent Rep Test and 1.12 for the Child Rep Test (Table 3), or 1.52 for both tests together (.10 probability, Table 2), indicating a trend, and in the predicted direction.
TABLE 3. ORIENTATION: CHANGE IN NUMBER OF PARENT-ORIENTED
CONSTRUCTS FROM PRE-TEST TO ENACTMENT TEST FOR
PARENT REP TEST AND CHILD REP TEST

<table>
<thead>
<tr>
<th>Groups</th>
<th>Parent Rep Test</th>
<th>Child Rep Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>III-Students,</td>
<td>12</td>
<td>-5</td>
</tr>
<tr>
<td>enact both</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV-Adults,</td>
<td>12</td>
<td>3.42</td>
</tr>
</tbody>
</table>

4. A week following the experimental intervention, on a post-test
which duplicates the pre-test in form, subjects' constructs
will differ in Orientation from the pre-experimental constructs
in the same direction as during the experiment only to a lesser
degree, but more than the control group which has not done the
enactment. The ranking of the groups on appropriateness of
Orientation scores on the post-test is expected to be: Parent-
Child enactment group, most appropriate; control group, less
appropriate (same score as on pre-test); Parent enactment
group and Child enactment group, most oriented toward the part
they enacted.

The hypothesis was not supported. Most scores which were in the
wrong direction following enactment were again in the wrong direction
on the post-test. See Table 4. The scores were not at a significant
level, however. The t equals .67 for the Parent enactment group and
.03 for the Child enactment group, both not significant and in the
wrong direction. The t equals 1.05 for the Parent-Child enactment
group Parent Rep Test in the predicted direction but not significant
(see Table 5); t equals 1.47 (.10 probability) for this group's Child
Rep Test indicating a trend but in the wrong direction. The t equals
.52 for both tests together, not significant and in the wrong
direction.
### TABLE 4. ORIENTATION: CHANGE IN NUMBER OF PARENT-ORIENTED CONSTRUCTS FROM PRE-TEST TO POST-TEST FOR COMBINED PARENT AND CHILD REP TESTS

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>N°</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-Enact parent</td>
<td>12</td>
<td>-3.5</td>
<td>5.21</td>
<td>.67</td>
<td>.30</td>
</tr>
<tr>
<td>II-Enact child</td>
<td>12</td>
<td>-2.25</td>
<td>7.69</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>III-Enact both</td>
<td>12</td>
<td>-2.25</td>
<td>4.36</td>
<td>.52</td>
<td></td>
</tr>
<tr>
<td>IV-Adults, enact both</td>
<td>12</td>
<td>1.5</td>
<td>3.51</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>VI-Control</td>
<td>12</td>
<td>-2.5</td>
<td>3.24</td>
<td>.77</td>
<td>.30</td>
</tr>
</tbody>
</table>

*aSign indicates relationship to predicted direction

### TABLE 5. ORIENTATION: CHANGE IN NUMBER OF PARENT-ORIENTED CONSTRUCTS FROM PRE-TEST TO POST-TEST FOR PARENT REP TEST AND CHILD REP TEST

<table>
<thead>
<tr>
<th>Groups</th>
<th>Parent Rep Test</th>
<th>Child Rep Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>III-Students, enact both</td>
<td>12</td>
<td>3.25</td>
</tr>
<tr>
<td>IV-Adults, enact both</td>
<td>12</td>
<td>1.25</td>
</tr>
</tbody>
</table>

For the adult Parent-Child enactment group, on the Parent Rep Test t equals .31, in the predicted direction but not significant, .82 on the Child Rep Test, in the wrong direction and not significant, and for both tests together t equals .43, in the wrong direction and not significant.
An appropriateness ratio for the Parent Rep Tests was derived by counting the number of individuals in each group who gave more Parent-oriented constructs on Parent Rep Test post-tests than they had on the pre-tests and the number of individuals who gave more Child-oriented constructs on Parent post-tests than on pre-tests. The first number was divided by the second number. An appropriateness ratio for the Child Rep Tests was derived by the same procedure, reversed. These ratios were added to give the total score.

The prediction of order of ranking was not supported. See Table 6. The Child enactment group ranked highest on the

<table>
<thead>
<tr>
<th>Group</th>
<th>Appropriateness Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child enactment</td>
<td>2.4</td>
</tr>
<tr>
<td>Control</td>
<td>1.92</td>
</tr>
<tr>
<td>Parent-Child enactment</td>
<td>1.63</td>
</tr>
<tr>
<td>Parent enactment</td>
<td>1.0</td>
</tr>
<tr>
<td>Adult Parent-Child Enactment</td>
<td>1.22</td>
</tr>
</tbody>
</table>

appropriateness ratio score, contrary to prediction. The control group ranked second highest and the Parent-Child enactment group third highest. The Parent enactment group ranked lowest, as was predicted, but differences between groups were not significant.

B. Empathy

1. All subjects will give more constructs judged subjective (the measure for empathy) following the enactment than they do before the enactment.
The hypothesis was supported. For student subjects the $t$ of 6.75 is highly significant, with probability beyond the .001 level. For adult subjects, the $t$ equals 4.57 with probability also less than .001. See Table 7.

**Table 7. Empathy: Decrease in Number of Objective Constructs From Pre-Test to Enactment Test**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>$M$</th>
<th>s</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, II, III-Students</td>
<td>36</td>
<td>30.42</td>
<td>4.51</td>
<td>6.75</td>
<td>.001</td>
</tr>
<tr>
<td>IV-Adults</td>
<td>12</td>
<td>30.42</td>
<td>6.65</td>
<td>4.57</td>
<td>.001</td>
</tr>
<tr>
<td>I-IV</td>
<td>48</td>
<td>30.42</td>
<td>3.74</td>
<td>8.14</td>
<td>.001</td>
</tr>
</tbody>
</table>

2. A week following the experimental condition, on a post-test which duplicates the pre-test in form, subjects' constructs will differ in empathy from the pre-experimental constructs in the same direction as during the experiment but to a lesser degree, but more than the control group which has not done the enactment.

The hypothesis was supported. Student subjects who enacted produced more subjective and fewer objective constructs on the post-test than on the pre-test, $t$ equal to 2.77, significant beyond a probability of .005. For adult subjects $t$ equals 1.47 with probability less than .10, suggesting a trend. See Table 8.

Student and adult groups showed more change than the control group with t's of 1.92 and 1.47, significant beyond a .05 level of probability. See Table 9.
TABLE 8. EMPATHY: DECREASE IN NUMBER OF OBJECTIVE CONSTRUCTS FROM PRE-TEST TO POST-TEST FOR ENACTMENT AND CONTROL GROUPS

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, II, III-Students</td>
<td>36</td>
<td>7.42</td>
<td>2.68</td>
<td>2.77</td>
<td>.005</td>
</tr>
<tr>
<td>IV-Adults</td>
<td>12</td>
<td>6.25</td>
<td>4.25</td>
<td>1.47</td>
<td>.10</td>
</tr>
<tr>
<td>VI-Control</td>
<td>12</td>
<td>-3.25</td>
<td>4.86</td>
<td>.67</td>
<td>.30</td>
</tr>
</tbody>
</table>

TABLE 9. EMPATHY: DECREASE IN NUMBER OF OBJECTIVE CONSTRUCTS FROM PRE-TEST TO POST-TEST FOR ENACTMENT GROUPS COMPARED TO CONTROL GROUP

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Md</th>
<th>sMd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, II, III-Students</td>
<td>36,12</td>
<td>10.67</td>
<td>5.55</td>
<td>1.92</td>
<td>.05</td>
</tr>
<tr>
<td>IV-Adults</td>
<td>12,12</td>
<td>9.5</td>
<td>6.46</td>
<td>1.47</td>
<td>.10</td>
</tr>
<tr>
<td>I-IV</td>
<td>48,12</td>
<td>10.38</td>
<td>5.18</td>
<td>2.0</td>
<td>.023</td>
</tr>
</tbody>
</table>

Hypothesis II. Validation and Invalidation Related to Enactment

A. Cell Reversals. Reversals in scoring between pre-test and post-test II, that is, change from plus to minus or from minus to plus on any one cell of the grid will be more frequent for prescription figures than for real figures and will be more frequent for experimental subjects than for control subjects.

The hypothesis was supported. Students doing the enactment made more Cell Reversals on prescription figures than on real figures, t equal to 3.72, significant beyond the .0001 level of probability. See Table 10. This difference was greater than the difference in the control group, t equals 2.15, significant at the .02 level. See Table 11.
For adults, Cell Reversals on prescription figures were not significantly greater than reversals on real figures, $t$ being equal to .72. Moreover, adults' number of cell reversals was not significantly different from the control group's, $t$ being equal to .57.

B. Identification

1. Least-approved-prescriptions. Prescriptions which, on the pre-test, have the greatest number of mis-matches with "self" or "ideal" (indicating dislike or disapproval of the prescription by the subject) will, when enacted by the subject, have a greater proportion of matches with the "self" or "ideal" on the experimental grid.

The hypothesis was supported. Student subjects who enacted increased the number of matches between "self" and least-approved-

---

**TABLE 10. CELL REVERSALS: DIFFERENCE BETWEEN REAL AND PRESCRIPTION FIGURES FROM PRE-TEST TO POST-TEST II**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, II, III-Students</td>
<td>36</td>
<td>37.89</td>
<td>10.18</td>
<td>3.72</td>
<td>.0001</td>
</tr>
<tr>
<td>IV-Adults</td>
<td>12</td>
<td>7.92</td>
<td>11.76</td>
<td>.72</td>
<td>.30</td>
</tr>
<tr>
<td>VI-Control</td>
<td>12</td>
<td>-4.0</td>
<td>17.34</td>
<td>.23</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 11. CELL REVERSALS: REAL-PRESCRIPTION FIGURE DIFFERENCES FOR ENACTMENT GROUPS COMPARED TO CONTROL GROUP**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N, M</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, II, III-Students</td>
<td>36,12</td>
<td>41.89</td>
<td>19.48</td>
<td>2.15</td>
<td>.016</td>
</tr>
<tr>
<td>IV-Adults</td>
<td>12,12</td>
<td>11.92</td>
<td>20.96</td>
<td>.57</td>
<td></td>
</tr>
</tbody>
</table>
prescription, with a t of 3.84, significant beyond the .001 level of probability. Adults who enacted did not increase the number of matches significantly, t being equal to .93. See Table 12.

**TABLE 12. LEAST-APPROVED-PRESCRIPTION: INCREASE IN NUMBER OF MATCHES WITH SELF FROM PRE-TEST TO ENACTMENT TEST**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, II, III-Students</td>
<td>36</td>
<td>4.72</td>
<td>1.23</td>
<td>3.84</td>
<td>.001</td>
</tr>
<tr>
<td>IV-Adults</td>
<td>12</td>
<td>.83</td>
<td>.90</td>
<td>.93</td>
<td></td>
</tr>
</tbody>
</table>

2. Identification-with-self and -ideal. Changes in number of matches with "self" or "ideal" between the pre-test and post-test I will be more frequent for prescription figures than for real figures, and this change will be greater for experimental subjects than for control subjects.

The hypothesis was supported. The analysis of variance between the two sets of scores for the "self" and "ideal" was F equals 6.34, significant at the .05 level and F equals 9.16, significant at the .005 level, respectively. See Table 13.

The experimental group difference was greater than the control group difference for "self" with z equal to 1.49 and probability level of .068, indicating a trend. For "ideal" the z equals 3.36, with a probability at the .001 level of significance. See Table 14.

C. Construct extension

Constructs which were generated on the prescription figures in the pre-test and which showed evidence of being alien to the subject's customarily used construction system (that is, the construct is scored plus for one, two or three figures only, and minus for the rest of the figures, or vice versa, thus being lopsided) will on post-test II show evidence
Table 13. IDENTIFICATION-WITH-SELF AND -IDEAL: ANALYSIS OF VARIANCE FOR CHANGE IN SCORE FROM PRE-TEST TO POST-TEST I

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Between Subjects</th>
<th>Within Subjects</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>d.f.</td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification-</td>
<td>Identification-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with-self</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
</tr>
</tbody>
</table>

Note--A refers to follow-up conditions: analyzing tapes or listening to tapes. B refers to enacting conditions: enact parent, enact child, enact both, adult, or no enacting. C refers to real figures or hypothetical figures on tests. D refers to Parent or Child Tests.

for having been better incorporated into the subject's construction system by having additional figures added to the minority side, giving a more even distribution of scores for those constructs. This will occur more frequently for experimental subjects than for control subjects.
The hypothesis was partially supported. For the student experimental subjects, constructs which on the pre-test were lopsided were on post-test II less lopsided as opposed to more lopsided, with a $z$ of 3.93, probability beyond the .001 level. For adult subjects, $z$ equals 1.97, probability of .025. See Table 15. However, neither group differed significantly from the control group, the $z$ being .083 and .226 for students and adults respectively. See Table 16.

### TABLE 15. CONSTRUCT EXTENSION: NUMBER OF LOPSIDED CONSTRUCTS FOR PRESCRIPTION FIGURES ON PRE-TEST THAT WERE LESS LOPSIDED AS OPPOSED TO MORE LOPSIDED ON POST-TEST II

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>$x_f$</th>
<th>$s$</th>
<th>$z$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, II, III-Students</td>
<td>66</td>
<td>16</td>
<td>4.06</td>
<td>3.94</td>
<td>.001</td>
</tr>
<tr>
<td>IV-Adults</td>
<td>21</td>
<td>4.5</td>
<td>2.29</td>
<td>1.96</td>
<td>.05</td>
</tr>
<tr>
<td>VI-Control</td>
<td>19</td>
<td>4.5</td>
<td>2.18</td>
<td>2.06</td>
<td>.05</td>
</tr>
</tbody>
</table>

D. Construct extension

Experimental subjects will generate fewer lopsided constructs on the prescription figures in post-test I than will control subjects.
The hypothesis was not supported. The experimental groups generated more lopsided constructs on prescription figures on post-test I than on the pre-test, while the control group generated fewer.

The difference between student subjects and the control group gave a t of 4.25, significant beyond the .001 level of probability, but in the direction opposite to the prediction. See Table 17. The difference between adult subjects and the control group gave a t of 1.61, with probability of .10, suggesting a trend in the same direction as the student subjects. The t for student and adult groups together was
Hypothesis III. Follow-up Treatment Effects

A. Analysis effects

1. Orientation.

(1) For subjects playing the child part only or the parent part only, constructs generated during the analysis will be oriented more appropriately than constructs generated before the analysis.

The hypothesis was not supported. Orientation of constructs following analysis was not significantly different from orientation before analysis for these subjects. See Table 18 and Table 19. There was a

<table>
<thead>
<tr>
<th>Groups</th>
<th>Parent Rep Test</th>
<th>Child Rep Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>Ia- Enact parent</td>
<td>6</td>
<td>-1.33</td>
</tr>
<tr>
<td>IIa- Enact child</td>
<td>6</td>
<td>3.33</td>
</tr>
<tr>
<td>IIIa- Enact both</td>
<td>6</td>
<td>2.0</td>
</tr>
<tr>
<td>IVA-Adults, Enact both</td>
<td>6</td>
<td>1.33</td>
</tr>
</tbody>
</table>

a Increase in appropriateness is a positive score on the Parent Rep Test and a negative score on the Child Rep Test.

trend for the group enacting the parent to be less appropriate following analysis.
### TABLE 19. ORIENTATION: APPROPRIATENESS of Change from enactment test to analysis test for combined parent and child Rep tests

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia-Enact parent</td>
<td>6</td>
<td>-6.67</td>
<td>3.53</td>
<td>1.89</td>
<td>.10</td>
</tr>
<tr>
<td>Ila-Enact child</td>
<td>6</td>
<td>4.0</td>
<td>3.88</td>
<td>1.03</td>
<td>.20</td>
</tr>
<tr>
<td>Ia, Ila-Enact one part</td>
<td>12</td>
<td>-1.33</td>
<td>3.05</td>
<td>.44</td>
<td>.35</td>
</tr>
<tr>
<td>IIIa-Enact both</td>
<td>6</td>
<td>-4.0</td>
<td>8.82</td>
<td>.45</td>
<td>.35</td>
</tr>
<tr>
<td>IVa-Adults</td>
<td>6</td>
<td>-.67</td>
<td>4.89</td>
<td>.14</td>
<td>.33</td>
</tr>
<tr>
<td>Va b-No enacting</td>
<td>6</td>
<td>4.0</td>
<td>10.6</td>
<td>.38</td>
<td></td>
</tr>
</tbody>
</table>

*aAppropriateness is an increase in the Parent Rep Test score and a decrease in the Child Rep Test score.

bFrom pre-test to analysis test.

(2) For subjects enacting both parent and child parts, the tendency toward appropriateness of constructs will be even greater than for subjects who enact one part only.

The hypothesis was not supported. Orientation of constructs following analysis was not significantly different from orientation before analysis for these subjects, and it was not significantly different from subjects who enacted one part only. See Table 19 and Table 20.

(3) A control group doing no enactment but analyzing tapes of others' enactments will generate constructs most similar in orientation to the constructs they generated before the analysis.

The null hypothesis was supported. For the control group there was no significant difference in orientation of constructs from the pre-test to the test following analysis. See Table 21.
Table 20. Orientation: Appropriateness of change from enactment test to analysis test by groups enacting both parts compared to groups enacting one part

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M_δ</th>
<th>s_δ</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIIa vs. Ia &amp; IIa-</td>
<td>12.6</td>
<td>2.667</td>
<td>9.34</td>
<td>.285</td>
</tr>
<tr>
<td>Both vs. one part</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IVa vs. Ia &amp; IIa-</td>
<td>12.6</td>
<td>.667</td>
<td>5.78</td>
<td>.115</td>
</tr>
<tr>
<td>Adult vs. one part</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 21. Orientation: Change in number of parent-oriented constructs from pre-test to analysis test

<table>
<thead>
<tr>
<th>Group</th>
<th>Parent Rep Test</th>
<th>Child Rep Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>Vа-No enactment, analysis only</td>
<td>6</td>
<td>6.17</td>
</tr>
</tbody>
</table>

(h) A week following the experimental procedure, effects of differential treatment will be evident in the post-test. All groups which analyze tapes will be higher in appropriateness of orientation than their parallel groups which listen to tapes but do not analyze them.

The hypothesis was not supported. Both groups were less appropriate in the orientation of constructs on the post-test than on the pre-test, and the subjects who analyzed tapes were less appropriate than the subjects who listened to tapes, but not significantly so.

See Table 22.
TABLE 22: ORIENTATION: APPROPRIATENESS OF CHANGE FROM PRE-TEST TO POST-TEST FOR ANALYSIS GROUPS COMPARED TO LISTENING-TO-TAPES GROUPS

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>sMd</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia-Va-Analysis</td>
<td>30</td>
<td>-.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ib-Vb-Listening</td>
<td>30</td>
<td>-.067</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a vs. b-Analyzing vs. listening</td>
<td>60</td>
<td>.7</td>
<td>1.43</td>
<td>.49</td>
</tr>
</tbody>
</table>

2. Empathy

(1) For all subjects in this condition, constructs generated following analysis will be more frequently empathic than constructs generated before analysis.
The hypothesis was supported. Student subjects' constructs were more frequently empathic following analysis than following enactment, t equal to 6.56, significant beyond the .001 level of significance.

See Table 23. This was true for adult subjects too, t equal to 6.21,

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>la-IIIa-Students</td>
<td>18</td>
<td>9.83</td>
<td>1.5</td>
<td>6.56</td>
<td>.001</td>
</tr>
<tr>
<td>IVa-Adults</td>
<td>6</td>
<td>12.0</td>
<td>1.93</td>
<td>6.21</td>
<td>.001</td>
</tr>
<tr>
<td>la-IVa</td>
<td>2h</td>
<td>10.38</td>
<td>1.22</td>
<td>8.50</td>
<td>.001</td>
</tr>
<tr>
<td>Va(^a)-Analysis only</td>
<td>6</td>
<td>16.04</td>
<td>3.3</td>
<td>4.84</td>
<td>.005</td>
</tr>
</tbody>
</table>

\(^a\)From pre-test to analysis test

significant beyond the .001 level of significance. For student and adult groups together t equals 8.50, significant beyond the .001 level.

The student subjects who did not enact but did analyze tapes generated constructs following the analysis that were more frequently empathic than constructs on the pre-test, t equal to 4.84, which is significant beyond the .005 level of probability.

(2) This effect will be manifest a week following the experimental procedure when on the post-test subjects who have done the analysis will give more empathic constructs than subjects who have not done the analysis.

The hypothesis was partially supported. For student subjects, the difference from the control group showed a t of 2.0, significant
at the .025 level of probability. See Table 24 and Table 25.

**TABLE 24. EMPATHY: DECREASE IN NUMBER OF OBJECTIVE CONSTRUCTS FROM PRE-TEST TO POST-TEST FOR ANALYSIS AND CONTROL GROUPS**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia-IIIa-Students</td>
<td>18</td>
<td>1.94</td>
<td>1.22</td>
<td>1.59</td>
<td>.10</td>
</tr>
<tr>
<td>IVa-Adults</td>
<td>6</td>
<td>3.33</td>
<td>1.98</td>
<td>1.69</td>
<td>.10</td>
</tr>
<tr>
<td>Ia-IVa</td>
<td>24</td>
<td>2.29</td>
<td>1.03</td>
<td>2.22</td>
<td>.025</td>
</tr>
<tr>
<td>Va-Analysis only</td>
<td>6</td>
<td>3.5</td>
<td>2.47</td>
<td>1.42</td>
<td>.15</td>
</tr>
<tr>
<td>VI-Control</td>
<td>12</td>
<td>-1.08</td>
<td>1.62</td>
<td>.67</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 25. EMPATHY: DECREASE IN NUMBER OF OBJECTIVE CONSTRUCTS FROM PRE-TEST TO POST-TEST FOR ANALYSIS GROUPS COMPARED TO CONTROL GROUP**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M_d</th>
<th>s_d</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia-IIIa-Students</td>
<td>18,12</td>
<td>3.03</td>
<td>2.0</td>
<td>1.52</td>
<td>.10</td>
</tr>
<tr>
<td>Ia-IVa-Students &amp; adults</td>
<td>24,12</td>
<td>3.38</td>
<td>1.85</td>
<td>1.82</td>
<td>.05</td>
</tr>
<tr>
<td>Ia-Va</td>
<td>30,12</td>
<td>3.62</td>
<td>1.81</td>
<td>2.0</td>
<td>.025</td>
</tr>
</tbody>
</table>

3. Effects on validation and invalidation

(1) Cell Reversals. For all subjects in this condition (analyzing tapes), reversals in scoring between pre-test and post-test II will be more frequent for prescription figures than for real figures and will be more frequent for experimental subjects than for control subjects.

The hypothesis was supported. For student subjects who enacted as well as analyzed tapes of the enactment, cell reversals were more
frequent on prescription figures than on real figures, \( t \) being equal to 4.99, significant beyond the .001 level of probability. See Table 26.

**TABLE 26. CELL REVERSALS: DIFFERENCE BETWEEN REAL AND PRESCRIPTION FIGURE CHANGES FOR ANALYSIS GROUPS**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia, IIa, IIIa-Students</td>
<td>18</td>
<td>45.83</td>
<td>9.18</td>
<td>4.99</td>
<td>.001</td>
</tr>
<tr>
<td>IVa-Adults</td>
<td>6</td>
<td>7.67</td>
<td>19.54</td>
<td>.39</td>
<td></td>
</tr>
<tr>
<td>Va-Analysis only</td>
<td>6</td>
<td>60.67</td>
<td>17.17</td>
<td>3.53</td>
<td>.01</td>
</tr>
<tr>
<td>Ia-Va</td>
<td>30</td>
<td>41.17</td>
<td>7.99</td>
<td>5.15</td>
<td>.001</td>
</tr>
</tbody>
</table>

Students who analyzed tapes only (no enactment) also made more cell reversals on prescription figures than on real figures, \( t \) equal to 3.53, significant beyond the .01 level. Adult subjects who analyzed tapes did not make significantly more cell reversals on prescription figures than on real figures, \( t \) being equal to .39. For all subjects together in this condition, \( t \) equals 5.15, significant at the .001 level of probability.

Furthermore, for student subjects in this condition the difference between real figure-prescription figure cell reversals was more than for the control group. For students who enacted and analyzed tapes of enactment, the difference gave a \( t \) of 2.54, significant at the .01 level of probability. See Table 27. For students who did not enact but did analyze tapes, the \( t \) equals 2.35, significant beyond a .025 level. For adult subjects the difference was not significant, \( t \) being .413. For all groups \( t \) equals 2.71, significant at the .01 level of probability.
TABLE 27: CELL REVERSALS: REAL-PRESCRIPTION FIGURE DIFFERENCES FOR ANALYSIS GROUPS COMPARED TO CONTROL GROUP

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Md</th>
<th>$s_Md$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia, IIa, IIIa-Students</td>
<td>18,12</td>
<td>45.83</td>
<td>18.02</td>
<td>2.54</td>
<td>.01</td>
</tr>
<tr>
<td>IVa-Adults</td>
<td>6,12</td>
<td>11.67</td>
<td>28.27</td>
<td>.413</td>
<td></td>
</tr>
<tr>
<td>Va-Analysis only</td>
<td>6,12</td>
<td>64.67</td>
<td>27.54</td>
<td>2.35</td>
<td>.025</td>
</tr>
<tr>
<td>Ia-Va</td>
<td>30,12</td>
<td>45.17</td>
<td>16.66</td>
<td>2.71</td>
<td>.01</td>
</tr>
</tbody>
</table>

(2) Least-approved prescriptions. For all subjects in this condition (analyzing tapes), prescriptions which have the greatest number of mis-matches with "self" on the pre-test will, following analysis of tapes by the subjects, have a greater proportion of matches with the "self" than before the analysis.

The hypothesis was supported. For student subjects, there were fewer mismatches of the least-approved prescription with the self following analysis, $t$ equal to 2.36, significant at the .025 level of probability. See Table 28. For the adult subjects, $t$ equals 3.16,

TABLE 28. LEAST-APPROVED-PRESCRIPTION: INCREASE IN NUMBER OF MATCHES WITH SELF FROM ENACTMENT TEST TO ANALYSIS TEST

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia, IIa, IIIa-Students</td>
<td>18</td>
<td>.94</td>
<td>.40</td>
<td>2.36</td>
<td>.025</td>
</tr>
<tr>
<td>IVa-Adults</td>
<td>6</td>
<td>1.33</td>
<td>.42</td>
<td>3.16</td>
<td>.025</td>
</tr>
<tr>
<td>Ia-Va</td>
<td>2h</td>
<td>1.04</td>
<td>.32</td>
<td>3.3</td>
<td>.005</td>
</tr>
<tr>
<td>Va-Analysis only</td>
<td>6</td>
<td>2.17</td>
<td>.79</td>
<td>2.74</td>
<td>.025</td>
</tr>
</tbody>
</table>

*Pre-test to analysis test.*
also significant at the .025 level, and for both groups t equals 3.3, significant at the .005 level of probability. For subjects who did not enact but did analyze tapes t equals 2.74, significant at the .025 level.

(3) Identification-with-self. Changes in number of matches with "self" between the pre-test and post-test I for all subjects in this condition (analyzing tapes) will be more frequent for prescription figures than for real figures, and this change will be greater for experimental subjects than for control subjects.

The hypothesis was partially supported. For student subjects who enacted and analyzed the tapes of the enactment, the change in number of matches with the "self" figure from the pre-test to post-test I was more frequent on prescription figures than on real figures, t equal to 2.89, significant at the .005 level of probability. See Table 29.

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia, IIa, IIIa-Students</td>
<td>18</td>
<td>26.0</td>
<td>8.99</td>
<td>2.89</td>
<td>.005</td>
</tr>
<tr>
<td>IVa-Adults</td>
<td>6</td>
<td>5.67</td>
<td>7.01</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Va-Analysis only</td>
<td>6</td>
<td>11.83</td>
<td>14.36</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>Ia-Va</td>
<td>30</td>
<td>19.1</td>
<td>6.31</td>
<td>3.03</td>
<td>.005</td>
</tr>
<tr>
<td>VI-Control</td>
<td>12</td>
<td>9.25</td>
<td>7.51</td>
<td>1.23</td>
<td>.15</td>
</tr>
</tbody>
</table>

Adult subjects with the same treatment conditions did not change number of matches with "self" significantly more for prescription figures than for real figures, t being equal to .81. The group that analyzed
tapes without having enacted did not show a significant difference between prescription and real figures, $t$ equal to .82. For all subjects who analyzed tapes combined, $t$ equals 3.03, significant at the .005 level of probability.

The difference between real figures and prescription figures for analysis groups was not significantly more than the control group. For student subjects, however, the $t$ equals 1.33, with probability of .10, suggesting a trend in the predicted direction. See Table 30.

Adult subject scores were in the opposite direction, changing less than the control group, but not significantly so.

**TABLE 30. IDENTIFICATION-WITH-SELF: REAL-PRESCRIPTION FIGURE DIFFERENCES FOR ANALYSIS GROUPS COMPARED TO CONTROL GROUP**

<table>
<thead>
<tr>
<th>Groups</th>
<th>$N$</th>
<th>$M_d$</th>
<th>$s_{M_d}$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia,IIa,IIIa-Students</td>
<td>18,12</td>
<td>16.75</td>
<td>12.63</td>
<td>1.33</td>
<td>.10</td>
</tr>
<tr>
<td>IVa-Adults</td>
<td>6,12</td>
<td>-3.58</td>
<td>11.81</td>
<td>.30</td>
<td></td>
</tr>
<tr>
<td>Va-Analysis only</td>
<td>6,12</td>
<td>2.58</td>
<td>14.59</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>Ia-Va</td>
<td>30,12</td>
<td>9.85</td>
<td>11.08</td>
<td>.89</td>
<td></td>
</tr>
</tbody>
</table>

(h) Identification-with-ideal. Changes in number of matches with "ideal" between the pre-test and post-test for all subjects in this condition (analyzing tapes) will be more frequent for prescription figures than for real figures, and this change will be greater for experimental subjects than for control subjects.

The hypothesis was partially supported. For student subjects who enacted and analyzed the tapes of the enactment, the change in number of matches with the "ideal" figure from the pre-test to the
post-test was more frequent on prescription figures than on real figures, $t$ equal to $4.14$, which is significant at the .001 level of probability. See Table 31. Adult subjects with the same treatment

### Table 31. Identification-with-Ideal: Change in Number of Matches with "Ideal" for Real Figures Compared to Prescription Figures for Analysis Groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>$N$</th>
<th>$M$</th>
<th>$s$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia, IIA, IIIa-Students</td>
<td>18</td>
<td>38.22</td>
<td>9.24</td>
<td>4.14</td>
<td>.001</td>
</tr>
<tr>
<td>IVa-Adults</td>
<td>6</td>
<td>-2.67</td>
<td>16.82</td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>Va-Analysis only</td>
<td>6</td>
<td>14.67</td>
<td>20.63</td>
<td>.71</td>
<td></td>
</tr>
<tr>
<td>Ia-Va</td>
<td>30</td>
<td>25.33</td>
<td>8.0</td>
<td>3.17</td>
<td>.005</td>
</tr>
<tr>
<td>VI-Control</td>
<td>12</td>
<td>14.58</td>
<td>15.33</td>
<td>.95</td>
<td></td>
</tr>
</tbody>
</table>

conditions did not change number of matches with "ideal" significantly more for prescription figures than for real figures, $t$ being equal to .16; in fact, their change was in the opposite direction. The group that analyzed tapes but did not enact showed no significant difference, $t$ equal to .71. All groups together which analyzed, however, had a significant difference, with $t$ of 3.17, significant at the .005 level of probability.

The difference between prescription figures and real figures for analysis groups was not significantly more than for the control group. See Table 32. For student subjects, however, the $t$ equals 1.41, with a probability of .10, suggesting a trend in the predicted direction.
(5) Construct Extension. For subjects who analyzed tapes, constructs which were generated on the prescription figures in the pre-test which were lopsided will on post-test II have a more even distribution of scores for those constructs. This shift will occur more frequently for experimental subjects than for control subjects.

The hypothesis was partially supported. For the student subjects who analyzed the tapes of their own enactments, constructs which on the pre-test were lopsided were on post-test II less lopsided as opposed to more lopsided, with a z of 2.12, probability at the .025 level of significance. See Table 33. However, the subjects did not differ

### Table 32. Identification-with-Ideal: Real-Prescription Figure Differences for Analysis Groups Compared to Control Group

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M_d</th>
<th>s_Md</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia, IIa, IIIa-Students</td>
<td>18,12</td>
<td>23.64</td>
<td>16.83</td>
<td>1.41</td>
<td>.10</td>
</tr>
<tr>
<td>IVa-Adults</td>
<td>6,12</td>
<td>17.25</td>
<td>21.85</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>Va-analysis only</td>
<td>6,12</td>
<td>.08</td>
<td>26.16</td>
<td>.003</td>
<td></td>
</tr>
<tr>
<td>Ia-Va</td>
<td>30,12</td>
<td>10.75</td>
<td>15.91</td>
<td>.68</td>
<td></td>
</tr>
</tbody>
</table>

### Table 33. Construct Extension: Number of Lopsided Constructs for Prescription Figures on Pre-Test That Were Less Lopsided as Opposed to More Lopsided on Post-Test II for Analysis Groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>σ</th>
<th>t</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia, IIa, IIIa-Students</td>
<td>27</td>
<td>5.5</td>
<td>2.60</td>
<td>2.12</td>
<td>.025</td>
</tr>
<tr>
<td>Ia-IVa-Students &amp; adults</td>
<td>37</td>
<td>7.5</td>
<td>3.04</td>
<td>2.47</td>
<td>.01</td>
</tr>
<tr>
<td>Ia-Va-Students, adults &amp; analysis only</td>
<td>45</td>
<td>9.5</td>
<td>3.35</td>
<td>2.83</td>
<td>.005</td>
</tr>
<tr>
<td>VI-Control</td>
<td>19</td>
<td>4.5</td>
<td>2.18</td>
<td>2.06</td>
<td>.05</td>
</tr>
</tbody>
</table>
significantly from the control group, t equal to .35. See Table 34.

TABLE 34. CONSTRUCT EXTENSION: NUMBER OF LOPSIDED CONSTRUCTS FOR PRESCRIPTION FIGURES ON PRE-TEST THAT WERE LESS LOPSIDED AS OPPOSED TO MORE LOPSIDED ON POST-TEST II FOR ANALYSIS GROUPS COMPARED TO CONTROL GROUP

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>$X_{pD}$</th>
<th>$S_{pD}$</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia, IIa, IIIa-Students</td>
<td>27,19</td>
<td>.0331</td>
<td>.094</td>
<td>.35</td>
</tr>
<tr>
<td>Ia-IVa-Students &amp; adults</td>
<td>37,19</td>
<td>.0341</td>
<td>.0848</td>
<td>.40</td>
</tr>
<tr>
<td>Ia-Va-Students, adults &amp;</td>
<td>45,19</td>
<td>.0257</td>
<td>.0790</td>
<td>.33</td>
</tr>
<tr>
<td>analysis only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When adult subjects were included, constructs were even less lopsided, t equal to 2.47, significant at the .01 level of probability, but were still not significantly different from the control group, with t of .40. When the subjects who did not enact but who analyzed tapes of others' enactments were included, constructs were again less lopsided on post-test II, t equal to 2.33, significant beyond the .005 level of probability, but were still not significantly different from the control group, with t of .33.

(6) Construct Extension. Subjects who analyze tapes of the enactment will generate fewer lopsided constructs on the prescription figures on post-test I than on the pre-test compared to subjects who do not do the analysis.

The hypothesis was not supported. Student and adult subjects who analyzed tapes of their enactment generated more lopsided constructs on prescription figures on post-test I than the control group, t equal to 3.03, significant at the .002 level of significance. See Table 35. The student subjects who did not enact but analyzed tapes
TABLE 35. CONSTRUCT EXTENSION: DIFFERENCE IN NUMBER OF LOPSIDED CONSTRUCTS ON PRESCRIPTION FIGURES BETWEEN PRE-TEST AND POST-TEST I FOR ANALYSIS GROUPS COMPARED TO CONTROL GROUP

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Md</th>
<th>sMd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia, IIa, IIIa-Students</td>
<td>18,12</td>
<td>1.38</td>
<td>.64</td>
<td>2.18</td>
<td>.025</td>
</tr>
<tr>
<td>IVa-Adults</td>
<td>6,12</td>
<td>.83</td>
<td>.40</td>
<td>2.10</td>
<td>.025</td>
</tr>
<tr>
<td>Ia-IVa</td>
<td>24,12</td>
<td>1.25</td>
<td>.58</td>
<td>3.03</td>
<td>.002</td>
</tr>
<tr>
<td>Va-Analysis only</td>
<td>6,12</td>
<td>-.167</td>
<td>.77</td>
<td>.22</td>
<td></td>
</tr>
<tr>
<td>Ia-Va</td>
<td>30,12</td>
<td>1.03</td>
<td>.56</td>
<td>1.85</td>
<td>.05</td>
</tr>
</tbody>
</table>

scored in the predicted direction but were not significantly different from the control group.

B. Effects of listening to tapes

1. Effects on orientation

   (1) For subjects playing one part only, constructs generated from listening to tapes will be oriented toward the part they have enacted to the same or a greater degree than constructs generated before listening to tapes.

   The hypothesis was supported. Subjects who played one part only did not change the orientation of constructs significantly following the listening to tapes condition. See Table 36. The changes that did occur were in the direction of the parts enacted rather than in the appropriate direction.

   (2) For subjects enacting both parts, the tendency toward appropriateness of constructs will be the same or greater than before listening to tapes.

   For student subjects, the hypothesis was supported. There was no significant difference in orientation of constructs following.
TABLE 36. ORIENTATION: CHANGE IN NUMBER OF PARENT-ORIENTED CONSTRUCTS FROM ENACTMENT TEST TO LISTENING-TO-TAPES TEST FOR GROUPS ENACTING ONE PART ONLY

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib-Enact parent</td>
<td>6</td>
<td>2.0</td>
<td>5.54</td>
<td>.36</td>
</tr>
<tr>
<td>IIb-Enact child</td>
<td>6</td>
<td>4.0</td>
<td>11.12</td>
<td>.36</td>
</tr>
<tr>
<td>Ib &amp; IIb</td>
<td>12</td>
<td>3.0</td>
<td>5.87</td>
<td>.51</td>
</tr>
</tbody>
</table>

*aSign indicates relationship to predicted direction.

listening to tapes. See Table 37. For adult subjects, the hypothesis was not supported. Constructs were significantly less appropriately oriented following the listening to tapes, t equal to 2.06, significant at the .05 level of probability.

TABLE 37. ORIENTATION: APPROPRIATENESS OF CHANGE FROM ENACTMENT TEST TO LISTENING-TO-TAPES TEST FOR GROUPS ENACTING BOTH PARTS

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIIb-Students</td>
<td>6</td>
<td>-2.67</td>
<td>5.72</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>6</td>
<td>-14.67</td>
<td>7.13</td>
<td>2.06</td>
<td>.05</td>
</tr>
<tr>
<td>Vb*-Listening only</td>
<td>6</td>
<td>-9.17</td>
<td>4.74</td>
<td>1.94</td>
<td>.10</td>
</tr>
</tbody>
</table>

*aFrom pre-test to listening-to-tapes test

(3) A control group doing no enactment but formulating constructs from the enactments they listen to on tapes will have orientation scores most similar to scores before the listening condition.

The hypothesis was supported, but there was a trend in the
direction of less appropriateness of constructs following listening to tapes, $t$ equals $1.94$, probability at the .10 level.

(4) A week following the experimental procedure, relationships between groups as outlined above will be maintained or be slightly decreased.

The hypothesis was supported. Between the listening-to-tapes test to post-test I there were no significant changes in orientation of scores by students or adults who enacted and then listened to tapes of others' enactments. See Table 38. However, the students who did

**TABLE 38. ORIENTATION: CHANGE IN PREDICTED DIRECTION OF PARENT-ORIENTED CONSTRUCTS FROM LISTENING-TO-TAPES TEST TO POST-TEST I**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib-Enact parent</td>
<td>6</td>
<td>2.5</td>
<td>7.65</td>
<td>-1.42</td>
<td>.25</td>
</tr>
<tr>
<td>IIb-Enact child</td>
<td>6</td>
<td>5.33</td>
<td>8.57</td>
<td>.25</td>
<td>.30</td>
</tr>
<tr>
<td>Ib &amp; IIb</td>
<td>12</td>
<td>-1.42</td>
<td>5.6</td>
<td>-1.42</td>
<td>.25</td>
</tr>
<tr>
<td>IIIb-Enact both</td>
<td>6</td>
<td>5.62</td>
<td>4.25</td>
<td>.005</td>
<td>.005</td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>6</td>
<td>-3.67</td>
<td>5.62</td>
<td>.65</td>
<td>.30</td>
</tr>
<tr>
<td>Vb-Listening only</td>
<td>6</td>
<td>-18.83</td>
<td>5.28</td>
<td>.005</td>
<td>.005</td>
</tr>
</tbody>
</table>

not enact but did listen to tapes changed the orientation of their constructs significantly to the direction of child-orientation, $t$ equals 3.57, significant at the .005 level of probability.

2. Effects on Empathy. All subjects listening to tapes will generate the same or fewer empathic constructs than they did following enactment and before listening to tapes, and this effect will still be evident on the post-test a week following the experimental condition.
The hypothesis was not supported. Student subjects who listened to tapes of enactment generated more empathic constructs rather than fewer empathic constructs following the listening-to-tapes condition, and the difference was significant with \( t \) of 2.43, probability level of .025. See Table 39. Adult subjects' results were in the direction predicted by the hypothesis, in contrast to student subjects, but the difference was not significant. Student subjects who listened to tapes without having had enactment greatly increased the number of their empathic constructs following the listening-to-tapes condition compared to the pre-test, \( t \) equal to 10.74, significant beyond the .001 level. This was the same direction found for the other student subjects and contrary to the prediction.

A week following the experimental condition the subjects who listened to tapes generated more empathic constructs on post-test I than on the pre-test, contrary to the prediction. For student subjects who enacted the \( t \) was 1.95, significant at the .05 level of significance.

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, IIb, IIIb-Students</td>
<td>18</td>
<td>11.78</td>
<td>4.85</td>
<td>2.43</td>
<td>.025</td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>6</td>
<td>-2.0</td>
<td>6.18</td>
<td>.32</td>
<td></td>
</tr>
<tr>
<td>Vb(^a)-Listening only</td>
<td>6</td>
<td>50.5</td>
<td>4.70</td>
<td>10.74</td>
<td>.001</td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>30</td>
<td>16.77</td>
<td>4.60</td>
<td>3.65</td>
<td>.001</td>
</tr>
</tbody>
</table>

\(^a\)From pre-test to listening-to-tapes test
TABLE 40. EMPATHY: DECREASE IN NUMBER OF OBJECTIVE CONSTRUCTS FROM PRE-TEST TO POST-TEST FOR LISTENING-TO-TAPES GROUPS

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, IIB, IIIb-Students</td>
<td>18</td>
<td>3.0</td>
<td>1.54</td>
<td>1.95</td>
<td>.05</td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>6</td>
<td>.83</td>
<td>2.07</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>Vb-Listening only</td>
<td>6</td>
<td>5.67</td>
<td>2.35</td>
<td>2.42</td>
<td>.05</td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>30</td>
<td>3.10</td>
<td>1.02</td>
<td>3.05</td>
<td>.005</td>
</tr>
</tbody>
</table>

See Table 40. Adult subjects' change was not significant. Student subjects who did not enact but listened to tapes increased in empathy score, t equal to 2.42, significant at the .05 level of probability. All groups together had a t of 3.05, significant at the .005 level.

3. Validation and invalidation

(1) Cell Reversals. Subjects who listen to tapes will have less difference in frequency of reversals between real and hypothetical figures than subjects who do the analysis of enactment. Subjects who listen to tapes will not be significantly different in this factor from control subjects.

The hypothesis was not entirely supported. For student subjects, the difference from students who did the analysis was in the predicted direction, but not significant. See Table 41. For the students who did not enact the difference was in the predicted direction and significant, t equal to 3.26, at the .005 level of probability.

For student subjects, the difference from the control group indicated a trend, with t of 1.33, significant at the .10 level of probability. See Table 42. Other groups supported the hypothesis of no significant differences from the control group.
TABLE 41. CELL REVERSALS: REAL-PRESCRIPTION FIGURE DIFFERENCES FROM PRE-TEST TO POST-TEST II FOR LISTENING-TO-TAPES GROUPS COMPARED TO ANALYSIS GROUPS

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Md</th>
<th>sMd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, Iib, IIIb-Students</td>
<td>18,18</td>
<td>15.89</td>
<td>20.77</td>
<td>.77</td>
<td>.30</td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>6,6</td>
<td>-.5</td>
<td>24.68</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>Vb-Listening only</td>
<td>6,6</td>
<td>79.17</td>
<td>24.29</td>
<td>3.26</td>
<td>.005</td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>30,30</td>
<td>25.27</td>
<td>14.54</td>
<td>1.74</td>
<td>.05</td>
</tr>
</tbody>
</table>

TABLE 42. CELL REVERSALS: REAL-PRESCRIPTION FIGURE DIFFERENCES FROM PRE-TEST TO POST-TEST II FOR LISTENING-TO-TAPES GROUPS COMPARED TO CONTROL GROUP

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Md</th>
<th>sMd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, Iib, IIIb-Students</td>
<td>18,12</td>
<td>29.94</td>
<td>25.45</td>
<td>1.33</td>
<td>.10</td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>6,12</td>
<td>12.17</td>
<td>22.98</td>
<td>.53</td>
<td></td>
</tr>
<tr>
<td>Vb-Listening only</td>
<td>6,12</td>
<td>-14.5</td>
<td>24.41</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>30,12</td>
<td>19.9</td>
<td>21.18</td>
<td>.94</td>
<td>.20</td>
</tr>
</tbody>
</table>

(2) Least-approved-prescriptions. Subjects who listen to tapes of enactment will make fewer increases in number of matches between "self" and least-approved-prescriptions following this intervention than subjects who analyze the enactment.

The hypothesis was partially supported. Student subjects who listened to tapes had fewer increases in number of matches between "self" and least-approved-prescriptions than subjects who analyzed tapes, but the difference was not significant. See Table 43. Adult subjects who listened to tapes did have significantly fewer increases
than adult subjects who analyzed tapes, t equal to 2.01, significant at the .05 level of probability. All groups together, including student subjects who did not enact but listened to tapes of others' enactments, did have significantly fewer increases than all parallel analysis groups together, t equal to 1.83, significant at the .05 level of significance.

**TABLE 43. LEAST-APPROVED-PRESCRIPTIONS: INCREASE IN NUMBER OF MATCHES WITH "SELF" FROM ENACTMENT TEST TO LISTENING-TO-TAPES TEST FOR LISTENING-TO-TAPES GROUPS COMPARED TO ANALYSIS GROUPS**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Md</th>
<th>S_md</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, Iib, IIIb-Students</td>
<td>18</td>
<td>0.44</td>
<td>0.57</td>
<td>0.78</td>
<td></td>
</tr>
<tr>
<td>IIVb-Adults</td>
<td>6</td>
<td>1.16</td>
<td>0.58</td>
<td>2.01</td>
<td>0.05</td>
</tr>
<tr>
<td>VbA-Listening only</td>
<td>6</td>
<td>1.25</td>
<td>1.06</td>
<td>1.18</td>
<td>0.15</td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>30</td>
<td>0.75</td>
<td>0.41</td>
<td>1.83</td>
<td>0.05</td>
</tr>
</tbody>
</table>

*From pre-test to listening-to-tapes test*

(3) Identification-with-self. From pre-test to post-test I, subjects who listen to tapes will show less difference between real and prescription figure matches with "self" than subjects who analyze tapes of the enactment. Subjects who listen to tapes will not differ from control subjects on this factor.

The hypothesis was supported. Student subjects who enacted and listened to tapes scored in a direction opposite to student subjects who analyzed tapes, making more changes for real figures than for prescription figures. See Table U3. The difference between student subjects who listened to tapes and parallel groups which analyzed tapes gave a t of 3.03, significant beyond the .005 level of probability.
TABLE 44. IDENTIFICATION-WITH-SELF: REAL-PRESCRIPTION FIGURE DIFFERENCES FROM PRE-TEST TO POST-TEST I FOR GROUPS THAT ANALYZE TAPES AND GROUPS THAT LISTEN TO TAPES

<table>
<thead>
<tr>
<th>Groups</th>
<th>Analyze Tapes</th>
<th>Listen to Tapes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-Enact parent</td>
<td>25.83</td>
<td>-8.83</td>
</tr>
<tr>
<td>II-Enact child</td>
<td>9.83</td>
<td>-6.33</td>
</tr>
<tr>
<td>III-Enact both</td>
<td>43.33</td>
<td>-8.5</td>
</tr>
<tr>
<td>IV-Adults, enact both</td>
<td>5.67</td>
<td>20.17</td>
</tr>
<tr>
<td>V-No enactment</td>
<td>11.83</td>
<td>-4.83</td>
</tr>
<tr>
<td>VI-Control</td>
<td>9.25</td>
<td>9.25</td>
</tr>
</tbody>
</table>

aGroup mean scores.

TABLE 45. IDENTIFICATION-WITH-SELF: REAL-PRESCRIPTION FIGURE DIFFERENCES FROM PRE-TEST TO POST-TEST I FOR LISTENING-TO-TAPES GROUPS COMPARED TO ANALYSIS GROUPS

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Md</th>
<th>sMd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, IIb, IIIb-Students</td>
<td>18,18</td>
<td>33.89</td>
<td>11.17</td>
<td>3.03</td>
<td>.005</td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>6,6</td>
<td>14.9</td>
<td>18.94</td>
<td>.77</td>
<td>.25</td>
</tr>
<tr>
<td>Vb-No enactment</td>
<td>6,6</td>
<td>16.66</td>
<td>18.26</td>
<td>1.10</td>
<td>.15</td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>30,30</td>
<td>21.90</td>
<td>8.51</td>
<td>2.57</td>
<td>.01</td>
</tr>
</tbody>
</table>

See Table 45. This reversed order of scoring was also found for subjects who did not enact but listened to tapes, and they were different from the parallel subjects who analyzed tapes, t equal to 1.10, indicating a trend at the .15 level of probability. Adult subjects
who listened to tapes showed more change for prescription figures over real figures than did the adult subjects who analyzed tapes, contrary to the prediction. The difference was not significant, however.

Student groups which enacted and listened to tapes showed significantly less difference between real and prescription figure changes than the control group, t equal to 1.71, significant at the .05 level of probability, contrary to the prediction. See Table L6. The student group which did not enact but listened to tapes scored in the same direction as the other student groups but was not significantly different from the control group. The adult group was also not significantly different from the control group.

### TABLE L6. IDENTIFICATION-WITH-SELF: REAL-PRESCRIPTION FIGURE DIFFERENCES FROM PRE-TEST TO POST-TEST I FOR LISTENING-TO-TAPES GROUPS COMPARED TO CONTROL GROUP

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Md</th>
<th>sMd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, IIb, IIIb-Students</td>
<td>18,12</td>
<td>17.14</td>
<td>10.02</td>
<td>1.71</td>
<td>.05</td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>6,12</td>
<td>10.92</td>
<td>19.13</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>Vb-Listening only</td>
<td>6,12</td>
<td>14.03</td>
<td>13.56</td>
<td>1.04</td>
<td>.20</td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>30,12</td>
<td>24.3</td>
<td>9.49</td>
<td>2.56</td>
<td>.01</td>
</tr>
</tbody>
</table>

(l) Identification-with-ideal. From pre-test to post-test I, subjects who listen to tapes will show less difference between real and prescription figure changes than subjects who analyze tapes of the enactment. Subjects who listen to tapes will not differ from control subjects on this factor.

The hypothesis was partially supported. Student subjects who listened to tapes showed less difference between real and prescription
figure changes than subjects who analyzed tapes, t being 1.61, which approaches significance at the .05 level. See Table 47. Adult

TABLE 47. IDENTIFICATION-WITH-IDEAL: REAL-PRESCRIPTION FIGURE DIFFERENCES FROM PRE-TEST TO POST-TEST I FOR LISTENING-TO-TAPES GROUPS COMPARED TO ANALYSIS GROUPS

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>( \bar{M} )</th>
<th>( s_{\bar{M}} )</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, IIb, IIIb-Students</td>
<td>18</td>
<td>28.28</td>
<td>15.07</td>
<td>1.61</td>
<td>.10</td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>6</td>
<td>12.5</td>
<td>24.59</td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>Vb-Listening only</td>
<td>6</td>
<td>13.17</td>
<td>23.76</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>30</td>
<td>15.3</td>
<td>11.45</td>
<td>1.34</td>
<td>.10</td>
</tr>
</tbody>
</table>

Subjects and student subjects who did not enact but listened to tapes also made changes in the predicted direction, but the differences were not significant.

All subjects who listened to tapes did not differ significantly from the control group, as was hypothesized. See Table 48.

TABLE 48. IDENTIFICATION-WITH-IDEAL: REAL-PRESCRIPTION FIGURE DIFFERENCES FROM PRE-TEST TO POST-TEST I FOR LISTENING-TO-TAPES GROUPS COMPARED TO CONTROL GROUP

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>( \bar{M} )</th>
<th>( s_{\bar{M}} )</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, IIb, IIIb-Students</td>
<td>18</td>
<td>4.64</td>
<td>19.41</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>6</td>
<td>4.75</td>
<td>23.60</td>
<td>.20</td>
<td></td>
</tr>
<tr>
<td>Vb-Listening only</td>
<td>6</td>
<td>16.08</td>
<td>19.34</td>
<td>.83</td>
<td>.25</td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>30</td>
<td>4.55</td>
<td>17.38</td>
<td>.26</td>
<td></td>
</tr>
</tbody>
</table>
(5) Construct Extension. Lopsided constructs generated on prescription figures in the pre-test will show less difference on post-test II for groups listening to tapes than for groups analyzing tapes. Groups listening to tapes will not be different from the control group. The hypothesis was not supported. Groups which listened to tapes showed more difference than groups which analyzed tapes, although the differences were not significant. See Table 49.

**TABLE 49. CONSTRUCT EXTENSION: NUMBER OF LOPSIDED CONSTRUCTS FOR PRESCRIPTION FIGURES ON PRE-TEST THAT WERE LESS LOPSIDED AS OPPOSED TO MORE LOPSIDED ON POST-TEST II FOR LISTENING-TO-TAPES GROUPS COMPARED TO ANALYSIS GROUPS**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>$x_f$</th>
<th>$\sigma_f$</th>
<th>$z$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, IIb, IIIb-Students</td>
<td>39,27</td>
<td>.066</td>
<td>.076</td>
<td>.86</td>
<td>.20</td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>11,10</td>
<td>.027</td>
<td>.140</td>
<td>.20</td>
<td></td>
</tr>
<tr>
<td>Vb-Listening only</td>
<td>9,8</td>
<td>.139</td>
<td>.13</td>
<td>1.07</td>
<td>.15</td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>59,45</td>
<td>.069</td>
<td>.06</td>
<td>1.138</td>
<td>.127</td>
</tr>
</tbody>
</table>

The hypothesis regarding the control group was supported, as groups which listened to tapes were not significantly different from the control group, except that the group which did no enactment showed a trend in the direction of a greater difference than the control group. See Table 50.

(6) Construct Extension. Subjects who listen to tapes of others' enactments will generate more lopsided constructs on the prescription figures on post-test I than on the pre-test compared to subjects who analyze tapes.

The hypothesis was not supported. Student and adult subjects who listened to tapes generated fewer lopsided constructs on prescription
TABLE 50. CONSTRUCT EXTENSION: NUMBER OF LOPSIDED CONSTRUCTS FOR PRESCRIPTION FIGURES ON PRE-TEST THAT WERE LESS LOPSIDED AS OPPOSED TO MORE LOPSIDED ON POST-TEST II FOR LISTENING-TO-TAPES GROUPS COMPARED TO CONTROL GROUP

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>x-f</th>
<th>s-f</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, IIb, IIIb-Students</td>
<td>39,19</td>
<td>.032</td>
<td>.08</td>
<td>.41</td>
<td></td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>11,19</td>
<td>.01</td>
<td>.114</td>
<td>.084</td>
<td></td>
</tr>
<tr>
<td>Vb-Listening only</td>
<td>9,19</td>
<td>.152</td>
<td>.102</td>
<td>1.49</td>
<td>.068</td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>59,19</td>
<td>.043</td>
<td>.069</td>
<td>1.625</td>
<td>.20</td>
</tr>
</tbody>
</table>

figures in post-test I than student and adult subjects who analyzed tapes, t equal to 2.58, significant at the .01 level of probability.

See Table 51. Student subjects who did not enact but listened to tapes generated more lopsided constructs, in the direction of the prediction, but they were not significantly different from the comparable group which analyzed tapes.

TABLE 51. CONSTRUCT EXTENSION: DIFFERENCE IN NUMBER OF LOPSIDED CONSTRUCTS ON PRESCRIPTION FIGURES BETWEEN PRE-TEST AND POST-TEST I FOR LISTENING-TO-TAPES GROUPS COMPARED TO ANALYSIS GROUPS

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Md</th>
<th>sMd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ib, IIb, IIIb-Students</td>
<td>18,18</td>
<td>-1.56</td>
<td>.57</td>
<td>2.74</td>
<td>.005</td>
</tr>
<tr>
<td>IVb-Adults</td>
<td>6,6</td>
<td>-.333</td>
<td>.95</td>
<td>.35</td>
<td></td>
</tr>
<tr>
<td>Ib-IVb</td>
<td>24,24</td>
<td>-1.25</td>
<td>.48</td>
<td>2.58</td>
<td>.01</td>
</tr>
<tr>
<td>Vb-Listening only</td>
<td>6,6</td>
<td>1.50</td>
<td>1.16</td>
<td>1.30</td>
<td>.15</td>
</tr>
<tr>
<td>Ib-Vb</td>
<td>30,30</td>
<td>-.70</td>
<td>.47</td>
<td>1.50</td>
<td>.10</td>
</tr>
</tbody>
</table>
Hypothesis IV. Related Research

A. Cognitive Complexity

1. Subjects whose pre-test grids are more cognitively complex will show more variability in their sorting of figures for constructs generated on the experimental test.

The hypothesis was supported with one exception. Correlations were highly significant between cognitive complexity of pre-test grids and enactment test grids, and between pre-test grids and listening-to-tapes test grids. See Table 52. Correlations were less significant or not significant between pre-test grids and analyzing-tapes test grids.

TABLE 52. COGNITIVE COMPLEXITY: CORRELATIONS\(^{a}\) OF PRE-TEST COMPLEXITY WITH EXPERIMENTAL TEST COMPLEXITY

<table>
<thead>
<tr>
<th>Cognitive Complexity of Constructs (Rows)</th>
<th>Cognitive Complexity of Elements or Figures (Columns)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enactment Test</td>
<td>Analyze Tapes Test</td>
</tr>
<tr>
<td>Pre-test p</td>
<td>.521 (0.005)</td>
</tr>
</tbody>
</table>

\(^{a}\)Pearson's r

2. Subjects whose grids are more cognitively complex will have greater change scores for Empathy, Orientation, and validation-invalidation than subjects whose grids are more cognitively simple.

The hypothesis was not supported for Orientation, although scores were in the predicted direction. When changes in Orientation scores
were sorted from high to low and Cognitive Complexity scores on the pre-test were sorted from high to low on the Parent Rep tests, chi-square equaled 5.54, which is not significant, but does suggest a trend. See Table 53.

<table>
<thead>
<tr>
<th>Measure</th>
<th>r</th>
<th>p</th>
<th>Chi-square</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td></td>
<td></td>
<td>5.54</td>
<td>.125</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td></td>
<td>5.58</td>
<td>.125</td>
</tr>
<tr>
<td>Cell Reversals</td>
<td>.436</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Least-approved-prescriptions</td>
<td></td>
<td></td>
<td>1.72</td>
<td></td>
</tr>
<tr>
<td>Identification-with-self</td>
<td>.234</td>
<td>.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification-with-ideal</td>
<td>.063</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lopsidedness of Construct Extension</td>
<td></td>
<td></td>
<td>4.74</td>
<td></td>
</tr>
</tbody>
</table>

The hypothesis was not supported for Empathy. Chi-square for a high to low sorting of Empathy change scores and Cognitive Complexity pre-test scores was 5.58, which is not significant but approaches the .10 level of probability, suggesting a trend in the predicted direction.

The hypothesis was supported for Cell Reversals. The correlation between number of Cell Reversals and Cognitive Complexity of columns on the Parent Rep Test grids was \( r = .436 \), which is significant at the .001 level of probability.
The hypothesis was supported for Identification-with-self. The correlation between amount of change on this measure and Cognitive Complexity on the Parent Rep Test grid was .234, significant at the .05 level of probability.

The hypothesis was not supported for Identification-with-ideal. The correlation between amount of change on this measure and Cognitive Complexity on the Parent Rep Test grid was .063, which is not significant.

The hypothesis was not supported for Least-approved-prescriptions. The chi-square between these scores and Cognitive Complexity on the Parent Rep Test grid was 1.72, which is not significant.

The hypothesis was not supported for Construct Extension (lopsidedness). The chi-square between change on this measure from pre-test to post-test I and Cognitive Complexity was 4.74, which is not significant.

B. Differentiation

Subjects whose constructs are more differentiated for family members will have greater change scores than subjects whose constructs are less differentiated.

For the measure of Orientation, the results were in the direction predicted by the hypothesis, with differentiated (DPI) subjects showing more change than subjects with similar (SPI) or opposite (OPI) identification with parents, but the level of significance indicated only a trend between the highest and lowest scoring groups. See Table 5h.

For the remaining measures, the hypothesis was not supported. For Empathy, Least-approved-prescription, Identification-with-self and Identification-with-ideal, the OPI subjects made the most change,
TABLE 54. DIFFERENTIATION: CHANGE SCORES ON OTHER MEASURES FOR GROUPS OF SUBJECTS SORTED ACCORDING TO DEGREE OF IDENTIFICATION WITH SAME-SEXED PARENT—DIFFERENTIATED PERSONAL IDENTITY, SIMILAR PERSONAL IDENTITY, OR OPPOSITE PERSONAL IDENTITY

<table>
<thead>
<tr>
<th>Measure</th>
<th>Group Means</th>
<th>t-test Levels of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DPI</td>
<td>SPI</td>
</tr>
<tr>
<td>Orientation</td>
<td>4.36</td>
<td>3.36</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.16</td>
<td>2.72</td>
</tr>
<tr>
<td>Least-approved-prescription</td>
<td>5.0</td>
<td>4.41</td>
</tr>
<tr>
<td>Identification-with-self</td>
<td>18.36</td>
<td>16.91</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2) and (3) .005</td>
</tr>
<tr>
<td>Identification-with-ideal</td>
<td>19.64</td>
<td>18.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2) and (3) .05</td>
</tr>
<tr>
<td>Lopsidedness of Construct Extension</td>
<td>1.84</td>
<td>1.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1) and (3) .083</td>
</tr>
<tr>
<td>Cell Reversals</td>
<td>22.72</td>
<td>23.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2) and (3) .02</td>
</tr>
</tbody>
</table>

DPI subjects made an intermediate amount of change and SPI subjects made the least change. In most of these cases the DPI group score was not significantly higher than the SPI group score, but the OPI group score was significantly higher than the SPI group score. Cell Reversals were similar in that OPI subjects changed most, but DPI subjects changed least and SPI subjects were in the middle; the difference between them was very small and not significant.
For one measure, Construct Extension, the outcome was opposite to the direction predicted by the hypothesis, with the DPI group making the least change in scores compared to SPI and OPI groups. DPI was significantly lower in score than the highest scoring group but was not significantly lower than the intermediate group.

C. Dynamic Constructs

Subjects will give more "dynamic" constructs on the post-test than on the pre-test, and the experimental groups will give more dynamic constructs than the control groups.

"Dynamic Constructs" was found to be a non-meaningful measure in this study because of the instructions given subjects to base their constructs on the personality or character of their test figures. This instruction resulted in virtually all constructs being "dynamic." The measure had been suitable in Lemcke's study (1959), where it was first developed, because the directions to subjects for formation of constructs did not include this stricture.

D. Experience factor. Cognitive Complexity and Differentiation as related to "closeness" of tests to subjects' current life experiences.

Subjects who are parents or are closer to the parent condition will generate more complex and differentiated grids about parents than about children. Subjects who are younger will generate more complex and differentiated grids about children than about parents.

The hypothesis was supported in part. Student subjects and student and adult subjects together showed a significant difference in complexity for the test representing the life condition they were closest to, i.e., the Child Rep Test for the students and the Parent Rep
TABLE 55. COGNITIVE COMPLEXITY OF SUBJECTS' PRE-TEST GRIDS ON PARENT REP TEST VS. CHILD REP TEST
(Students more complex on Child Rep Test, adults more complex on Parent Rep Test)

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M_d</th>
<th>sMd</th>
<th>r</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>48</td>
<td>13.88</td>
<td>6.68</td>
<td>.312</td>
<td>2.21</td>
<td>.025</td>
</tr>
<tr>
<td>Adults</td>
<td>12</td>
<td>1.92</td>
<td>12.73</td>
<td>.233</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>Combined</td>
<td>60</td>
<td>11.48</td>
<td>5.93</td>
<td>.280</td>
<td>2.01</td>
<td>.025</td>
</tr>
</tbody>
</table>

Test for the adults. See Table 55. Adults alone, however, showed no significant difference in complexity between the two tests, although the data were in the predicted direction.

Differentiation on the Child Rep Test was not used because of the large number of subjects who had no siblings or only one. The Parent Rep Test alone did not distinguish the adult and student subjects; the two groups had nearly identical percentages in the "differentiated from same-sexed parent" group.
CHAPTER VIII

DISCUSSION

Orientation

The emergence of the concept of Orientation as a measure has been described on page 25; its final form and rating procedures are presented on pages 39-40. In essence, constructs and contrasts containing only words at a simple vocabulary level were rated child-oriented, and constructs and contrasts containing any words at a higher vocabulary level were rated parent-oriented.

Characteristics of the measure

First of all, it may be asked whether Orientation demonstrates any features that qualify it as a reliable and valid indicator of something, whatever that something may be. The correlation of its use by subjects between similar, though not parallel forms of the test taken at the same time (pre-test forms of the Parent Rep Test and the Child Rep Test) was .56. This moderate amount of correlation lends a modicum of support to the measure's reliability. The correlation of the Parent pre-test with the Parent post-test was .32, but this was after the experimental intervention and could not be expected to be as high as a simple test-retest score. The correlation of the Parent post-test and
Child post-test was .48, also reflecting the effects of experimental intervention. For the 12 control subjects who had no experimental interventions but who took the same test over, one to two weeks later, the correlation on the Parent Rep Test was .79 and on the Child Rep Test was .76. This is comparable to results of other studies of the reliability of the Rep Test over a span of time, as reviewed by Bonarius (1965).

It was expected that the adults in the study would score somewhat differently on this vocabulary level measure from the students, and they did. The adults and students were similar in the level of vocabulary they used to describe parents on the Parent Rep Test (pre-test), but on the Child Rep Test adults used the same or a higher level of vocabulary in describing children, while students used a significantly lower vocabulary level to describe children compared to describing parents (p equals .01). This finding lends support to the validity of the differentiating power of the measure. It is interesting to note that these college students, while they demonstrated the capacity to use a vocabulary level as advanced as the adults, resorted to a lower vocabulary level when they wrote constructs about children on the pre-test. The adults, on the other hand, maintained the same vocabulary level in both circumstances. This difference may be indicative of a greater psychological distance of adults from the childhood state over time and continued existence in the adult world.

Finally, that the test is sensitive to experimental events which intervened between pre-test and post-test is suggested by the fact that the control group shifted less (absolute change—either more parent-
oriented or more child-oriented) than the experimental groups in their Orientation scores (z equals 5.12, p less than .001).

Interpretation of outcomes

Enacting. —To recapitulate, during the research subjects took the part of either a parent or a child in a brief enactment and then wrote a construct and contrast on the Parent and Child Rep Tests describing their own part and another construct and contrast concerning their partner's part in the enactment. It was expected that when a subject had taken the part of a child, his descriptions would be child-oriented, that is, at a simpler level of vocabulary, and when a subject had taken the part of a parent his descriptions would be parent-oriented, or at a higher level of vocabulary.

The intriguing results of the statistical analysis, as reported on pages 57-58, suggested that for adult subjects this tendency may be present (p equals .087 in the predicted direction), but for student subjects the reverse seemed to be the case—construing was done in language closest to the part of the opposite member of the enactment (p less than .05). See the summary of results, Table 56.

| TABLE 56. CHANGE IN ORIENTATION GROUP MEAN SCORES FOLLOWING ENACTMENT FOR ADULT AND STUDENT SUBJECTS |
| (A positive score indicates more parent-oriented, a negative score indicates more child-oriented.) |
| Adults | Students |
| Parent Rep Test | Child Rep Test | Parent Rep Test | Child Rep Test |
| 3.4 | -5.6 | -2.2 | 5.0 |
Since results for the adult and student samples were in opposite directions, some explanation is in order. An explanation may be made in terms of the Personal Construct Theory concept of threat, defined as "the awareness of imminent comprehensive change in one's core structures (Kelly, 1955, p. 489)." Core constructs or structures are "those which govern a person's maintenance processes--that is, those by which he maintains his identity and existence (p. 482)." The enactment of a child or a parent may represent a threat to a young adult's concept of his own identity or personality. He is no longer a child, he has outgrown that stage, and yet he is not so sure of his more mature identity that he could not slip back into the childish ways of behaving. Neither is he a parent, and the prospect that before too long he may be changing his identity to incorporate this kind of part is also a threat. The students could have been manifesting the result of an internal process which achieves psychological distance from the parent and child parts represented in the enactment.

Actually, the results of the data for the student subjects are explained better by the threat dimension than by some variation of the original hypothesis of the study, which anticipated that taking the part of a child only would result in a more child-like orientation in both Parent and Child Rep Tests, and taking the part of a parent only would result in a more parent-like orientation in both Parent and Child Rep Tests. A prediction based on threat would predict that enacting in a parent-child interaction should result in increase in parent-oriented language (higher vocabulary level) when construing a child and an increase in child-oriented language (lower vocabulary level) when
construing a parent. Moreover, when student subjects take the part of a parent only, they would be threatened more by the parent role than by the child role. When student subjects take the part of a child only, they would be threatened more by the child role than by the parent role. In the first case, their Parent Rep Tests will show more change, in the second case their Child Rep Tests will show more change. The results for the student groups were generally in these directions, though not always significantly so.

TABLE 57. CHANGE IN ORIENTATION GROUP MEAN SCORES FOLLOWING ENACTMENT FOR TWO STUDENT GROUPS
(A positive score indicates more parent-oriented, a negative score indicates more child-oriented.)

<table>
<thead>
<tr>
<th>Groups</th>
<th>Parent Rep Test</th>
<th>Child Rep Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-Enact parent</td>
<td>-7.58</td>
<td>2.17</td>
</tr>
<tr>
<td>II-Enact child</td>
<td>1.47</td>
<td>4.8</td>
</tr>
</tbody>
</table>

It may be concluded then that the experiment suggested that for adult subjects enactment seemed to result in their orienting themselves psychologically toward the parts they played. Thereupon, they might be ready for the changes which Personal Construct Theory implies—-to construe the construction processes of another person and to engage in a social process involving the other person; that is, be ready to play a role with him.

Also, it may be tentatively said that for young adult subjects parent-child enactment constitutes a threat to their transitional status between these two roles and challenges their identity as no
longer children but not yet parents. To counteract the threat, they construe the child part in parent-oriented terms and the parent part in child-oriented terms, thus achieving some psychological distance from the threatening parts.

Analyzing tapes and listening to tapes.—Since its origin centered about the pilot enactment procedures, the focus of convenience of the measure Orientation might have been restricted to the enactment section of the experiment. However it did seem worthwhile speculating on what might happen to this dimension in the remaining phases of the experiment. Few of the hypotheses using the appropriateness of Orientation interpretation were supported for the conditions of analyzing tapes (pp. 70-72) or listening to tapes (pp. 83-84). When a threat hypothesis is applied, it would mean that a higher score on a Parent Rep Test implies less threat concerning the parental role and a lower score on a Child Rep Test implies less threat concerning the child role.

Table 58 suggests that immediately following the condition of analyzing a tape of the enactment, subjects generally construed the parental part as less threatening and the child part as more threatening than they did following enactment. If the parent part represents a change facing subjects in the future and the child part represents a change from a past core structure, it could be said that the analysis condition allayed the threat of the future and emphasized threat related to the past.

Under the condition of listening to tapes of others' enactments, subjects generally construed both parts as more threatening than they
TABLE 58. CHANGE IN ORIENTATION GROUP MEAN SCORES FROM ENACTMENT TEST TO FOLLOW-UP TESTS
(A positive score indicates increase in parent-oriented responses, a negative score indicates increase in child-oriented responses)

<table>
<thead>
<tr>
<th>Groups</th>
<th>Analyze Tape</th>
<th>Listen to Tape</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parent Rep Test</td>
<td>Child Rep Test</td>
</tr>
<tr>
<td>I-Enact parent</td>
<td>T -1.33</td>
<td>T 5.33</td>
</tr>
<tr>
<td>II-Enact child</td>
<td>3.33</td>
<td>-1.67</td>
</tr>
<tr>
<td>III-Enact both</td>
<td>2.00</td>
<td>T 6.0</td>
</tr>
<tr>
<td>IV-Adults-enact both</td>
<td>1.33</td>
<td>T 2.0</td>
</tr>
<tr>
<td>V-No enactment</td>
<td>6.17</td>
<td>T 2.17</td>
</tr>
</tbody>
</table>

Note.--T indicates a score in the direction of threat.

did following enactment, especially the adult subjects—they construed parent and child parts as even more threatening in the listening-to-tapes condition than did the other subjects. This result is in contrast to the enactment condition, under which adults did not give evidence of threat. Perhaps when adults listened to other people's enactments, the prospect of changing in relation to the enactment was especially imminent for them. Student subjects who did not enact showed evidence of threat only from the child part, not from the parent part.

Overall results.--Changes in Orientation scores over the time period from pre-test to post-test did not support the hypotheses made on the basis of appropriateness of direction of change. The following interpretations offered on the basis of a threat hypothesis are post facto
and are at a very low level of confidence.

The enactment group showing the most effect of threat over this period of time was the student group which enacted the parent part. See Table 59. Threat effects appeared in Parent and Child Rep Tests

TABLE 59. CHANGES IN ORIENTATION GROUP MEAN SCORES FROM PRE-TEST TO POST-TEST
(A positive score indicates increase in parent-oriented responses, a negative score indicates increase in child-oriented responses.)

<table>
<thead>
<tr>
<th>Groups</th>
<th>Analyze Tape</th>
<th>Listen to Tape</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parent Rep Test</td>
<td>Child Rep Test</td>
</tr>
<tr>
<td>I-Enact parent</td>
<td>T -8.0</td>
<td>T 5.0</td>
</tr>
<tr>
<td>II-Enact child</td>
<td>3.5</td>
<td>T .5</td>
</tr>
<tr>
<td>III-Enact both</td>
<td>T -.5</td>
<td>T 6.0</td>
</tr>
<tr>
<td>IV-Adults-enact both</td>
<td>5.0</td>
<td>T 3.0</td>
</tr>
<tr>
<td>V-No enactment</td>
<td>T -3.0</td>
<td>-6.0</td>
</tr>
<tr>
<td>VI-Control</td>
<td>T -4.5</td>
<td>-4.5</td>
</tr>
</tbody>
</table>

Note.—T indicates a score in the direction of threat.

for both analyzing-tapes and listening-to-tapes subgroups. The enactment group showing the least effect from threat over time was the student group which enacted the child part. It appeared that a student enacting the part of a parent retained the threat implied by future imminent change, while for a student enacting the part of a child the threat which implied comparison of his present self with his past self
was dissipated over time. Also minimally threatened over time was the partial control group which did not enact but analyzed tapes or listened to tapes of enactment. Adult and student groups enacting both parts showed intermediate threat effects, more on the Child Rep Test than on the Parent Rep Test. Even the control group which only repeated the Rep Tests showed threat effects on the Parent Rep Test.

Summary

In summary, the results of the measure Orientation suggested that adult subjects who enacted a parent-child scene therupon construed parents in a more adult language and construed children in a more child-like language. The inference from this result was that they were attempting to construe the construction processes of another person, or play a role.

Student subjects, on the other hand, construed in the opposite manner, using a more child-like language to describe parents and a more adult language to describe children. This finding could not be explained satisfactorily by a derivative of the appropriateness interpretation offered by the hypothesis. The Personal Construct Theory concept of threat resulted in a more satisfactory interpretation of the results. If threat is seen as a person's awareness of imminent change in his core structures—his constructs concerning his own identity—then it may be that students were threatened by the enactment of either a child, which identity they were still growing out of, or a parent, an identity which they might be faced with before long. To construe in a language opposite to either of these parts might be the result of an
internal effort to achieve distance from the threatening part.

Results of Orientation scores following analyzing-tapes and listening-to-tapes conditions did not support an appropriateness hypothesis. When a threat interpretation was used, results were equivocal, but it did appear that listening to tapes could represent threat to the adult group, while analyzing tapes or listening to tapes posed a threat only for the child part to the student group that did not enact. When viewed over a time span of a week the results suggested tentatively that the students who enacted a parent retained threat from the parental role while students who enacted a child decreased in amount of threat from the child role.

**Empathy**

Like Orientation, the measure Empathy was expected to reflect a subject's more refined understanding of another's point of view after an enactment and after the ensuing analysis of the enactment. No particular expectations were held for the relationship of these two measures to each other. Actually, Orientation and Empathy were very much independent, with a non-significant correlation of .041.

As stated earlier, Orientation was thought of as the direction of a person's role playing posture (whether focused on his own part or the other person's part) at the time he makes a statement, and Empathy as the degree to which he tries to place himself in the framework of another person or part.

**Outcomes**

**Enacting.**—The results strongly indicated that subjects used more
empathic or subjective descriptions of events following a make-believe social interaction (enactment) with another person than they did when describing people in the more impersonal setting of test-taking (pre-test). This result was true of both adult and student subjects (p. 62).

Further analysis of the results shows some relationships which were not hypothesized but which are of interest. All groups which enacted increased in Empathy for the child more than for the parent. See Table 60. Perhaps the theme of the enactment sessions--the

| TABLE 60. INCREASE IN EMPATHY GROUP MEAN SCORES FROM PRE-TEST TO ENACTMENT TEST |
|-----------------------------|-----------------------------|
| Groups                      | Parent Rep Test | Child Rep Test |
| I-Enact parent              | 4.8             | 16.1           |
| II-Enact child              | 7.8             | 28.8           |
| III-Enact both              | 7.1             | 26.8           |
| IV-Adults, enact both       | 8.4             | 22.0           |

problems of the report card and of joining a club--cast the child in a dependent position which subjects interpreted more subjectively than the more independent characteristics of a parent.

The subjects who enacted only the child part increased in Empathy for the child more and showed more difference between child and parent Empathy scores than the subjects who enacted only the parent part. The latter subjects showed the least increase in Empathy for the child, and the student subjects who enacted both parts had
intermediate scores. The adult subjects had a higher Empathy score for the parent than the student groups but the difference was not significant.

These trends indicated that experimental conditions called forth a more empathic interpretation of the child than of the parent, that enacting a child part heightened empathy for that part more than did enacting a parent part and that being a parent, as opposed to being a student, resulted in more empathy for the parent part.

Analyzing tapes and listening to tapes.—Results indicated very significantly (as predicted) that when subjects had taken part in a pseudo-therapeutic analysis of the interaction they used even more empathic descriptions than they had following the interaction. Adult subjects and student subjects both followed this pattern. There was a more significant effect from enacting plus analyzing tapes than from analyzing tapes without enacting.

It had been hypothesized that subjects would be less empathic (more objective) after listening to tapes of others' enactments. Adult subjects did construe with more objective constructs than they used following enactment, but the difference was not significant. Student subjects did not conform to the hypothesis but instead used somewhat more empathic (more subjective) constructs than they did following enactment. Possibly student subjects, who have not been exposed a great deal to advice, lectures, reading materials, etc., and are more naive concerning the rearing of children, have a more receptive, sympathetic approach when they listen to an enactment and
thus they may describe the interaction in more subjective and less judgmental terms than would real parents.

Again, results beyond those hypothesized are of interest. The graduated conditions of participation of subjects are listed on page 36. The list is repeated here with some modifications, in order of Empathy scores, from highest to lowest.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>74.46</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>64.17</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50.5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>41.5</td>
<td>24</td>
</tr>
<tr>
<td>5</td>
<td>36.21</td>
<td>24</td>
</tr>
<tr>
<td>6</td>
<td>30.42</td>
<td>48</td>
</tr>
<tr>
<td>7</td>
<td>8.33</td>
<td>24</td>
</tr>
</tbody>
</table>

The condition designed to have maximum impact, enacting plus analyzing tapes, yielded the maximum score. The condition which was the focus of convenience for this measure, analyzing tapes, had the most impact of any single condition, as anticipated. Listening to tapes had a fairly large impact, but when it was preceded by enactment its effect was greatly decreased. Listening to enactment may be relatively unstable in its effect, easily modified by other conditions.
When Empathy scores on Parent Rep Tests are compared with scores on Child Rep Tests, it appears that in addition to the enacting condition, the conditions of analyzing alone and listening alone produced more Empathy for the child than for the parent. See Table 61.

**TABLE 61. INCREASE IN EMPATHY GROUP MEAN SCORES ON FOLLOW-UP TESTS**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Analyze Tape</th>
<th>Listen to Tape</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parent Rep Test</td>
<td>Child Rep Test</td>
</tr>
<tr>
<td>I-IV Enactment first</td>
<td>26.5</td>
<td>15.0</td>
</tr>
<tr>
<td>V No enactment</td>
<td>15.08</td>
<td>17.0</td>
</tr>
</tbody>
</table>

Analyzing and listening conditions used tapes of the enactment in which the child was in a dependent position. As suggested on page 110, perhaps the child's position creates a bias toward empathic constructions of the child, even when the scene is merely heard and not enacted.

Under the analysis condition which followed enactment, the tests indicated the presence of more Empathy for the parent than for the child. It may be recalled that this condition required subjects to specify how they felt at certain points in the enactment and to discuss with each other their predictions regarding each other's feelings. In such an interaction they were not taking a part but were being themselves. Perhaps in interacting as two adults on an equal level, with neither one dependent upon the other, the biasing effect was reduced.
and subjects could construe the child part more objectively. It appeared that the bias even shifted in the other direction so that subjects construed parents more empathically than children.

**Overall results.**—As a whole, experimental groups indicated less Empathy on the post-test than they had immediately following the interventions, but still they scored higher in Empathy on the post-test than they had on the pre-test. This fact indicated that even if the experimental procedures contained a bias toward more subjective responses (discussed later under the heading "Criticism"), a significant amount of the subjective or empathic mood remained a week following the experiment. This evidence is even more striking when compared with the control group, whose responses on the post-test were less empathic than on the pre-test. Listening-to-tapes-alone seemed to be the condition under which most retention of Empathy occurred. Student subjects gained more empathy for the child than for the parent, while adult subjects gained more for the parent than for the child.

**Summary**

Most of the hypotheses regarding the measure Empathy were supported and they indicated that subjects construed figures more subjectively following enactment and analysis of tapes of their enactment. Empathy decreased on the post-test a week after the experimental intervention, but it was greater than on the pre-test and also, as predicted, was greater than that of the control group. The hypothesis that did not receive support was that subjects would construe figures more objectively after listening to tapes of others' enactments; instead,
student subjects construed figures more subjectively, but not to the same extent as the subjects who analyzed tapes.

Subjects construed children more empathically than parents under some conditions and parents more empathically than children under other conditions. It seemed likely that the enactment procedures placed the child part in a dependent relationship to the parent part and when subjects enacted or heard tapes of such an enactment they were more empathic toward the dependent child. When they analyzed tapes, the subjects were behaving as adults and construed the adult part more empathically.

**Cell Reversals**

At issue in the measure, Cell Reversals, is how a person changes the way he applies his own constructs after the interval of time during which he took part in the experimental interventions. It is implied that if a subject changes his evaluation of a person from the construct to the contrast side, say, changing his mark for a prescription figure from "rejects children" to "likes children," then some of his construction system has been validated or invalidated. The subject has re-evaluated the people on his grid in the light of events which have presented themselves in the experiment.

The hypothesis regarding this measure applies to discussion by Kelly (1955) under the topic "Changing Construction."

It is helpful if a fresh set of elements is provided as the context in which a new construct is to emerge. The elements, being relatively unbound by old constructs which would be seen as being incompatible with the new construct, do not involve the person with the old constructs until he has brought the new into a state of usefulness (p. 161).
Again,

The composition and playing out of artificial roles, as elements upon which to create new constructs which in turn are later to have more vital meanings, is another example of the use of fresh elements to develop new constructs. The patent artificiality of the role is the very feature which prevents the tender shoots of new ideas from being trampled in the frantic rush to maintain oneself in his previous role (p. 162).

The comparison of subjects' changes regarding the prescription figures with their changes regarding the real figures on their tests was meant to be an evaluation of Kelly's proposition that it is easier for people to change constructions about hypothetical people than about real people. The very significant outcome in the predicted direction upholds Kelly's proposition.

As was stated in the chapter on Outcomes on pages 63, 74 and 87, most of the hypotheses regarding Cell Reversals received support. Experimental subjects who enacted had higher scores for the hypothetical figures than for the real figures, and this difference was greater than for the control group. Subjects who enacted and analyzed tapes of their own enactment had higher scores for the hypothetical figures than for the real figures and this difference was greater than for the control group. The hypothesis that was not supported was that subjects who enacted and listened to tapes would receive significantly lower scores than subjects who enacted and analyzed tapes, although scores were in the predicted direction. Also, the subjects who enacted and listened to tapes indicated a trend toward higher scores than the control group, contrary to the prediction. The groups that analyzed tapes or listened to tapes without enacting showed a large difference
from each other in scores, as was predicted.

There were more changes on Child Rep Tests than on Parent Rep Tests. However, the correlation between the two tests was .68, significant beyond the .005 level of probability, showing that subjects were quite consistent in the number of changes they made between these two forms of Rep tests.

The adult subjects in the study showed less change than the student subjects, but their scores were generally in the predicted direction. Kelly comments,

The constructs of persons who have had experience with parenthood are probably of a different order from students'. On the one hand they may be more tested—I am sure they are more tested. If the constructs have been validated, or if attempts to use alternative constructs have been invalidated, it will take more to change them (Personal letter, June 23, 1966).

Differences between individuals in number of Cell Reversals were noticeable and might have clinical value. For example, the number of changes ranged from a low of only 4 for one subject to a high of 104 for another subject. It seems that one person (a female student) was so certain in her application of constructs that she could mark 284 out of 288 cells in exactly the same way that she had twelve days earlier, while another person (a male adult) was so changeable that he marked 108 out of 288, or more than one-third, of the cells in a reverse manner after the same period of time. To continue the quotation from Kelly,

On the other hand a parent who is in hot water with his children and is looking for a psychological way out may grasp at straws and change his construction in a frantic manner without quite knowing why he is doing it.
Least-approved-prescriptions

This measure was chosen to see what would happen to one particular figure from the beginning to the end of the experiment, specifically the make-believe figure representing the negative poles of the subjects' constructs or the most unlike-self qualities. It was expected that in the process of enacting this character the subject would try to see the world from a perspective which he was not used to. As a result he would see the character as being more like himself, or himself as more like the character, or at least see the two of them as sharing more constructs. This prediction implies some shifting of the construction system.

A figure that is construed as unlike self may represent a stereotype or a prejudice. It may be related to what happens in studies of attitude change. Kelly's position regarding an attitude approach was stated thus:

It deals only with the valence of the attitude, as so many conventional studies do, and not with the changes of construction system which underlie superficial attitude change.... Limitation to such a measure, in my opinion, is what makes most attitude studies rather unenlightening to a psychologist who wants to know the nature of the human processes involved.

What is genuinely important, in my opinion, is the dimensions of appraisal in terms of which one's constructions of the sketches and of parents and children shift. The shift may be one way on one dimension and in another direction along another line of thought. This makes it important to know the coordinates of the psychological space in which the changes take place. Of this I am now reasonably sure: They are not necessarily the same coordinates in terms of which the experimenter is inclined to observe overt behavior.\(^a\)

\(^a\)Kelly continues,

When the problem is viewed in this way it becomes
The valence of the change toward the least-approved-figure was shown by the results for this measure, wherein student subjects fulfilled the prediction of more matches with the "self" following enactment, analysis of tapes, and even, contrary to prediction, when listening to tapes (pages 65, 76 and 87). Also, adult subjects changed in this direction following analysis of tapes and listening to tapes, but not to a significant degree following enactment.

Some glimmer of process may be evident from the remarks one adult subject made during the experiment. She completed the pre-test and construed one of the prescription figures in a negative light; then she enacted the prescription. She was instructed to write down her construction of the figure as it had seemed in the enactment. She began

important to know whether the coordinates in terms of which the movement is taking place, even though it may be no more than a brief and furtive movement, are those in terms of which adult personalities are plotted by the respondents, or coordinates in terms of which the world of the child is sensed. And, further than this, what indeed are the coordinates--the various relevant coordinates--like? Do they involve the parental sketches enacted or against which the subject has attempted to portray a child's role? Do they bridge the gap between child and adult, or do children and adults occupy different conceptual realms in the outlook of the respondent? What is the nature of the experience of the enactment itself, what are its turning points, at what level of awareness does the subject sense that something is challenged within him, what impact jars loose a recollection of his own childhood, when does the enactment seem to strike home, and does a pointed recall of the enactment experience--aided by replaying the tape--bring one closer to the experiential world of the child? These questions are the ones that seem to me to be worthy of a psychologist's concern--not simply whether or not one's liking for three descriptive sketches is altered for a week by a few moments of "role play" (Personal letter, June 24, 1966).
to write something less derogatory, then she glanced at what she had written in the pre-test, and she remarked something like, "No, I guess I'd better be consistent," and she wrote instead a less favorable construct. The subject apparently had to choose between altering her construction of this figure or sticking with the construction she had already used, and in this case the latter course was her choice. As the experiment progressed, however, it seemed that she did pull herself further away from her initial evaluations--as though the evidence in favor of this prescription finally piled up to a point that she could no longer overcome. It may be quite a difficult matter for a person to truly reconstrue in an area in which he is currently and personally involved. Kelly commented in his correspondence that subjects would probably not develop a whole new factor in their construct system on the basis of a brief enactment but might develop a new construct or two that might represent a slightly different facet on one of the basic clusters in the system.

This may be an appropriate place to comment upon the quotation from Kelly cited above regarding "the dimensions of appraisal in terms of which one's constructions of the sketches and of parents and children shift. The shift may be one way on one dimension and in another direction along another line of thought." The outcomes from the various measures in this experiment do seem at times to be contradictory. The measure of Least-approved-prescriptions is a measure of the valence of the attitude change, but Orientation and Empathy may indicate something of the nature of the process. Thus Orientation showed students and adults moving in opposite directions while Empathy showed them moving
in the same direction. For adults, the process revealed by Orientation was their attempt to construe in the language of the person they were construing, while for students the process was interpreted as their perception of threat to their core structures or self concept as they construed the parent and child parts. Empathy supposedly measured the quality or depth of all subjects' attempts to immerse themselves in the personal feeling quality of the person they were construing.

In considering further the question of what conditions produced the most attitude change, it appears that student subjects who enacted both parent and child parts, as opposed to one or the other, and followed up with analysis of tapes, as opposed to listening to tapes, made the most overall positive change toward the least-approved-prescription. See Table 62. This could be interpreted as mainly an invalidational

<table>
<thead>
<tr>
<th>Groups</th>
<th>Analyze Tape</th>
<th>Listen to Tape</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - Enact parent</td>
<td>4.33</td>
<td>1.17</td>
</tr>
<tr>
<td>II - Enact child</td>
<td>3.17</td>
<td>2.17</td>
</tr>
<tr>
<td>III - Enact both</td>
<td>7.67</td>
<td>3.0</td>
</tr>
<tr>
<td>IV - Adults, enact both</td>
<td>3.67</td>
<td>1.17</td>
</tr>
<tr>
<td>V - No enactment</td>
<td>5.5</td>
<td>-1.67</td>
</tr>
<tr>
<td>VI - Control</td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Note.--Scores are group means.
process, since a figure that was originally disapproved, or at least was "unlike self" became more acceptable by the end of the experiment. It appears that the condition of listening to tapes without enactment led to a negative change of attitude and perhaps a validational process, since the originally disapproved figure became even more disapproved on the post-test.

**Identification-with-self**

The amount of identification which subjects indicated between themselves and the other figures on their grids was compared for the pre-test and post-test I. This was different from Cell Reversals, which compared changes between the pre-test and post-test II. Post-test II used the same constructs which were produced on the pre-test; post-test I used new constructs which subjects generated at the time of the final session of the experiment. The former test measures re-evaluations of figures relative to old or previously used constructs; the latter measures re-evaluations of figures relative to the self, and on fresh constructs. The correlation between these two measures was .46.

Identification-with-self was consistent with Cell Reversals in that subjects generally made more changes on hypothetical figures than they did on real figures and in that these changes were greater for experimental subjects than for control subjects. The increment furnished by the therapeutic-like analysis following enactment was demonstrated by the significantly higher scores of this subgroup over the control group and over the subgroup which listened to tapes.
A feature of the results for this measure was more extreme than in the case of Cell Reversals and may suggest processes occurring under the different interventions. Student subjects who analyzed tapes (both those who enacted first and those who did not) made more changes on prescription figures than on real figures, as predicted (p. 75); but student subjects who listened to tapes (both those who enacted first and those who did not) made more changes on real figures than on prescription figures (p. 86). The quotation from Kelly (1955) on page 115 would lead us to expect new constructs to be developed on hypothetical figures (fresh elements) more easily than on known figures. To use reverse logic, perhaps when it is found that hypothetical figures are changed more than known or real figures, new constructs are being developed, and when real figures are changed more than hypothetical figures, old constructs are being used. The research may have pointed up some situations under which subjects were developing new constructs and some under which they were using old constructs. Analyzing tapes may have elicited new constructs from students; listening to tapes may have elicited old constructs.

Other parameters which Identification-with-self shared with Cell Reversals were: there were more changes on Child Rep Tests than on Parent Rep Tests; and the student subjects made more changes than the adult subjects.

Identification-with-ideal

The identification which subjects indicated between the ideal
figure and other figures on the grid was investigated to see how it compared with identification with the self figure. In most instances the results paralleled those of Identification-with-self, although the areas of significant differences were not always the same.

For Identification-with-ideal, subjects who enacted definitely made more changes relative to prescription figures than they did for real figures and this difference was significant at a high level.

Subjects who analyzed tapes following enactment, as in Identification-with-self, reflected the greater impact of this condition by the trend toward significant differences from the group which listened to tapes and the control group.

The correlation between Identification-with-self scores and Identification-with-ideal scores was .63, significant beyond a .005 level of probability, showing a large similarity in the way subjects applied these two measures overall.

Construct Extension

Constructs which were lopsided (defined on page 44) on the pre-test were thought to represent a special kind of construct which subjects seemed to develop quite frequently on prescription figures, although they also appeared in connection with the real figures on the test (whether more lopsided constructs were developed on prescription than on real figures was not analyzed in this study). Possibly the character descriptions on which subjects formulated these constructs brought forth some ideas which they did not ordinarily use in their daily interactions.
There has been much investigation into whether subjects use their own constructs more usefully or constructs provided for them by the experimenter, and several studies have shown the greater power of "own" over "provided" constructs. (Bierei, 1966; Mitsos, 1961). Presumably the "provided" constructs lack relevance or meaningfulness for the subject and do not permit him to use his construct system in a coherent way. It would be interesting to compare "own" constructs generated spontaneously, as at the beginning of the current pre-test, with constructs (which were certainly "own") generated from reading something like the character descriptions, with "provided" constructs. Perhaps the constructs generated from the reading would fall in an intermediate area of usefulness.

Before the study was run, the experimenter had the notion that lopsided constructs represented strange or "alien" constructs for the subject, or constructs which he did not ordinarily use. After considering them more closely in the collected data, the experimenter thought they might instead represent superordinate constructs or core constructs that are so important to the subject that he takes them for granted in his daily dealings, the qualities that almost everybody has or that almost nobody has.

One difference that has been found by Cromwell (1962) in the use of "provided" versus "own" constructs for making ratings is that subjects use own constructs in a more extreme way. This process seems similar to the usage of lopsided constructs.

Following the original conception of what lopsided constructs represent, and utilizing Kelly's notion of easier change of construction
on hypothetical figures, it was predicted that these constructs would be less lopsided when used again following the interventions than they were on the pre-test. The prediction was upheld when comparing constructs which were less lopsided with constructs which were more lopsided. The experimental groups followed the predicted pattern more than the control group, but there was not a significant difference. However, in comparing constructs which did not change at all in lopsidedness, the control group had significantly more, meaning that subjects who had no intervention between pre-test and post-test had the most constructs that remained the same in extension.

Again, using the original idea regarding lopsidedness, it was predicted that on a new post-test permitting new constructs, subjects would use fewer lopsided constructs on the figures they had enacted. Instead, they used more. This result may mean that when subjects have dealt with the hypothetical figures through enactment, etc., the original superordinate (or core) construction which the hypothetical figure represented to them becomes more subordinated (or more peripheral), but when the figures are freely re-construed it is in terms of other superordinate (or core) constructs.

The follow-up condition which was designed to be more similar to therapy procedures, analysis of own tapes, resulted in more lopsided constructs on post-test I, rather than fewer, contrary to the prediction. On the other hand, the partial control condition, listening to tapes, resulted in fewer lopsided constructs.

The results from these two measures may have especially important theoretical implications. They may be indicative of processes
occurring when people are faced with changing constructions. A person may have to make a choice of retaining his old construct and refining it a little to handle a new element (definition of the construction system), or of expanding his construction system by regarding the event in a new light.

In the present example, when the subjects came in for the final session, they took post-test I first, and here they had the opportunity to use new constructs which may have occurred to them during or since the experiment. Rather than subordinating some of the prescription figures as might be indicated if they had used fewer lopsided constructs, the subjects drew out other superordinate constructs from their repertoires under which to categorize the prescription figures. When the subjects were presented with their pre-test constructions, they added more elements to the short end of these constructs, perhaps a sign that the constructs were subordinated.

Poch (1952) found a similar outcome. Kelly reports it thus:

Poch structured the issues in this way: when a person discovers that his prediction has gone awry, just what does he do about it? Does he change his prediction only? Does he turn to another construct in his repertory and base his next prediction on that instead? Or does he revise the dimensional structure of his construct system?

...Available research evidence indicates clearly enough that persons ordinarily do change their predictions when they find that they have made mistakes. But Poch's questions penetrate much deeper than this. Her evidence indicated quite clearly that her subjects tended to turn to other construct dimensions in their repertoires when their predictions were invalidated. There was also a tendency for them to shift their construct system with respect to the aspects employed in the invalidated predictions. (Kelly, 1955, p. 159).
Cognitive Complexity

The stability of the measure Cognitive Complexity from the pre-test to the experimental conditions was explored. It was expected that people whose pre-test grids were most complex would generate the most complex experimental test grids, and people whose pre-test grids were most simple would generate the most simple experimental test grids. Analysis of construct complexity upheld this prediction (reported on page 91), and correlations between pre-test and enactment test, and pre-test and listening-to-tapes test were highly significant; the correlation between pre-test and analyzing tapes test was less significant. Analysis of element or figure complexity also upheld the prediction between pre-test and enactment test, and pre-test and listening-to-tapes test at a high level of significance; between pre-test and analyzing-tapes test the correlation was not significant.

This result indicates that it is possible to predict quite accurately the complexity of experimental test constructs from the complexity of tests before the experiment. It is also possible to predict quite accurately the complexity of figures for enactment test and listening-to-tapes test from complexity of tests before the experiment. However, the complexity of the analyzing-tapes test figures is not predictable from tests given before the experiment. Apparently the situation of analyzing tapes was quite different from the other conditions; subjects did not evaluate their figures with the same level of complexity.

The next hypothesis dealt with the relationship of Cognitive Complexity to change, which has been shown to be a complex function
(Lundy, 1957; Bieri, 1966; Epton, 1967; Leventhal, 1957). The assumption here was that subjects whose perception of parent-child relationships is more complex would be more affected by the experimental situations of enactment, analysis and listening to tapes and would reflect this influence by higher change scores on all the measures. It would seem that someone who possesses more dimensions and more variations within dimensions would have more psychological space in which to move around and so probably he would move around more. Generally, the outcome was in the predicted direction, although several of the relationships did not reach a significant level.

For comparison with Cognitive Complexity, Orientation scores and Empathy scores used were absolute or bi-directional values, so that the scores reflect the amount of shifting that occurred on vocabulary level and on objectively-subjectively rated words. Because of the limited range of these scores (the maximum shifting a person could do from one test to another was $2^h$), a Pearson $r$ was not appropriate. Chi-square for both Orientation and Empathy approached significance, suggesting that the subjects with the most complex pre-test grids did shift the most on these dimensions. In some other studies results were contradictory to this, possibly because Cognitive Complexity was compared to a uni-directional change, whereas in this study it was compared to bi-directional change. The nature of the experimental interventions, too, must have a bearing upon the differing outcomes.

Cell Reversal scores and Identification-with-self scores were significantly related to Cognitive Complexity. Identification-with-ideal, however, was not significantly related. Evidently cognitive
structure has little to do with the way subjects changed their perceptions of people relative to their "ideal" person.

Relationships between Cognitive Complexity and change on Least-approved-person and Lopsided constructs were not significant. The ranges on these two measures were very limited, perhaps the reason that no differences were apparent.

**Differentiation**

Because of the "impurity" of the classification of subjects into SPI, OPI and DPI groups in this study (see page 146), results and interpretations with regard to Differentiation are made at a very low level of confidence on the part of the writer.

The prediction that differentiated subjects would change most on the measures in this study was not supported. Change in scores was generally highest for the OPI, the subjects who identify least with their same-sexed parent, and lowest for the SPI, subjects who identify most with their same-sexed parent. DPI subjects, those whose identification with the same-sexed parent is neither similar nor opposite, generally scored between the other two groups.

The exception which was in the predicted direction, that DPI subjects would change most, was the Orientation measure. Two other measures showed the DPI group making the least change.

When Differentiation was compared with Cognitive Complexity on the pre-test, the group which was most complex was the OPI group, with DPI in the middle range and SPI the least complex. This ranking contrasts with Morse's result, in that he found the DPI's were the most
complex and OPI's in the middle range; however it agrees with Morse's finding of SPI's as most cognitively simple.

The reason for the conflicting results for OPI and DPI might be found in the nature of the Rep tests administered to the two groups of subjects. Morse's subjects filled out a standard Rep test, which elicits constructs covering a relatively broad representation of the construction system. The tests used for the present research involved the more specific area of parent-child relationships. Perhaps the constructions of parent-child relationships cover the arena in which OPI's conflicts have taken place and for which they have elaborated a complex system. They may have "hang-ups" in the narrow area of their relations with their parents and may not be exercising their capacities on a broader scale. For DPI's, parent-child relationships may be less vital; they may have outgrown the relationship, disassociated themselves from it, or resolved conflictual issues and so have not formulated or retained as elaborate a system. They have been able to go on about the broader business of construing people and events in the world at large.

Additionally, SPI's may be considered as having little or no conflict with their parents or family group because they use the same constructions as the family. DPI's may be seen as having resolved most conflicts with family members, and OPI's as still being in conflict regarding the constructions of family members. Assuming the foregoing, the data suggest that people who have accepted the constructions of the family as their own construe family events and all other events in a cognitively simple way, perhaps because they do not try to elaborate or expand or explore the world. People who have had some
conflicts with family issues but have resolved them do not need to remain at the family doorstep but can go out into the world where they will engage in further conflicts, resolutions and elaborations (and develop a complex cognitive structure for a broader range of events). People who deny the family construction of events remain thrashing around in this milieu of unresolved issues, and their construction system which revolves around the family is quite complex. They might make attempts to get out and interact with the world but they keep getting pulled back into the welter of conflicting constructions. This is not to say that conflict is the only base from which complexity may be developed, but perhaps it is one.

Predictions about the relationship between Differentiation and change on other measures seemed to have the same relationship as Differentiation and Cognitive Complexity, and perhaps for the same reasons, with OPI groups changing the most, DPI's in the middle range, and SPI's the least. An exception was on the measure of Orientation, where DPI's changed the most, OPI's the least, and SPI's in the middle range. It may be recalled that Orientation was interpreted as a reflection of threat that students perceived concerning the enactment. The data under discussion would fit quite well into this interpretation: the OPI group would perceive the most threat in an interaction involving parent and child roles and would change the least; the DPI group would be least threatened and could change the most.

Experience Factor

It has been found in several studies that cognitive complexity is
not correlated with intelligence. This fact seems paradoxical, for why should an intelligent person not construe events in a relatively complex way? The writer felt that the answer might lie in the nature of the events a person is asked to construe—the elements on the grid. Rep tests usually have as their elements some people the subject knows, and perhaps for some subjects other people are not particularly relevant; such subjects just do not elaborate their construction systems very much with regard to people. For instance, a bright person who has done his work in the field of chemistry might generate a simple grid with people as the elements but might generate a complex grid when chemical events were the elements. Even a very dull person might have a complex structure about the events that are most relevant to him. Such results would still show that cognitive complexity and intelligence are not necessarily related; they would support the contentions of those who criticize our concept of intelligence as it is measured by intelligence tests (Liverant, 1953).

The proposition explored here was that subjects would be most complex about the area of experience that is most relevant to them, the assumption being that childhood would be more relevant to student subjects and parenthood more relevant to the adult subjects. The evidence gave support to the prediction for students, and for adults it was in the predicted direction but not significant. Perhaps for these adults childhood is relevant too, since they have children and deal with them daily. Adults who are not parents might generate significantly less complex grids on a Child Rep Test than on a Parent Rep Test.

A further refinement of this phenomenon appeared in the data.
In the area in which subjects had the more complex structure, their constructs were often more complex than their elements. Thus the adult grids were more complex for rows (constructs) than for columns (elements or figures) on the Parent Rep Test, and on the Child Rep Test they were more complex for columns (elements) than for rows (constructs). Also, student grids were more complex for columns (figures) than for rows (constructs) on the Parent Rep Test. On the student Child Rep Test the proposed relationship did not occur, for columns were slightly more complex than rows.

The final hypothesis was that young subjects would generate more differentiated grids about children than about parents and that adult subjects would generate more differentiated grids about parents than about children. Strictly speaking, this hypothesis could not be tested, as explained on page 99. However, to explore the prediction somewhat loosely, analysis of Differentiation on the Child Rep Test was attempted by restricting the sample to subjects who listed an own parent and own same-sexed sibling. The differences between the Parent and Child Rep Tests were in the predicted direction; adults had a higher percentage of DPI's on the Parent than on the Child Rep Test (36% vs. 20%), and students had a higher percentage of DPI's on the Child than on the Parent Rep Test (52% vs. 43%).

**Criticism**

A feature of this research which might have been designed differently was the sequence in which the interventions were taken up. Some confounding of the data may have been produced because the tape
condition had to be inserted between enactments. This sequence seemed necessary to keep related events fresh in subjects' memories. However, it would have been neater for design purposes to have all the enacting done first.

The number of subjects in subgroups (six) was not large enough in many instances to permit incipient trends of differences between groups to be significantly apparent.

The analysis condition required that subjects use words to describe their feelings as well as the reasons they felt as they did. The use of emotionally toned words may have been carried forward by the subjects to the constructs they wrote on the test form after the analysis, and such words were more likely to be rated empathic. In that case, some of the Empathy attributed to the analysis condition was an artifact of the procedure.

The possibility that students might regard the experiment as threatening was not foreseen. The extent to which extraneous factors, such as interacting with the adult experimenter, or simply being required to enact, may have contributed to the threat for the student subjects could not be determined from the present analysis.

Student subjects who took part in the full or partial experimental conditions were enrolled in the summer quarter at the University, while students who made up the control group were enrolled in the winter quarter. It is possible that summer term students differ from winter term students, creating a bias in the results.

Bonarius (1965) suggests that reliability should be established for each modification and measure developed from the Rep Test.
Reliability was examined for some measures in this study but not for all of them. Also, some analyses could have been better controlled by comparisons with other comparable data. The Least-approved-prescription, for example, might have been compared with the most-approved-prescription and with the least-approved real figure to ascertain if Least-approved-prescription changes were an artifact of regression toward the mean.

More extensive analyses of variance might have been informative but were felt to be beyond the scope of the study as originally proposed.

Probably some additional pilot work should have been done with the measures to sort out the most meaningful ones and to eliminate overlap. An alternate arrangement or statement of the original hypotheses might have brought the issues of the research into sharper focus.

Implications for Clinical Diagnosis and Treatment

This research suggests that the language a person uses may afford a clue to the areas representing threat to him. If a client in psychotherapy were speaking about adults and used a more child-like vocabulary than was customary for him, the therapist might suspect that the prospect of change to adulthood was giving him some trouble. If a client described children or childhood in a very adult-like terminology, it might be inferred that he lacked confidence in his own growth beyond childhood. Relationships other than parent-child might also afford contrasting speech patterns by which a therapist could detect a client's areas of threat. Employer-employee, teacher-student, and
husband-wife are examples of the areas that might qualify for this kind of diagnosis.

The footnote on pages 10-11 refers to a quotation from Kelly, who views psychotherapy as "the intelligent manipulation and organization of various psychological processes." Kelly discusses conditions in which a therapist might wish to allay dimensions of transition, or change, as well as conditions in which he might wish to stimulate them. The appearance of symptoms of threat in this research suggests how enactment may be used by a therapist to introduce threat and how the choice of type of follow-up may moderate it.

In like manner, the long-range or short-range amount of empathy elicited from clients may be controlled to some extent by the choice of treatment.

The measure Cell Reversals suggested that over a time span of a week following the interventions, people's evaluations of real and imaginary figures changed and that the change was sensitive to the type of intervention. A therapist could focus attention upon a certain figure and choose the intervention to stimulate re-evaluations by his client. For example, if the therapist had a student client whose constructions of real (as opposed to hypothetical) children were overly rigid, the intervention which might loosen up his constructions the most in this area would be enacting the part of a child he knows and also enacting the parent of the child, followed by listening to tapes of someone else's enactment.

The "ideal" figure may offer potential material for clinical diagnosis. An adult who scores the "ideal parent" exactly the same as
himself must surely use a different basis of construction than does the person who scores the ideal as quite different from himself. The former person may limit the constructs that enter into use in his system to the most trite, obvious cultural mores. He may refrain from dealing with issues that are controversial. Or he may feel that his position regarding any issue is the right one. The person who sees himself as deviating from the ideal may use more controversial constructs and perhaps may be open to change on these issues, since he calls it more ideal to be at the other pole of the construct. Also, since he feels that he is so far away from what is ideal, he may be experiencing excessive guilt.

When subjects first construed the prescriptions, they often used lopsided construct extensions. The prescription in that case seemed to represent an extreme construct, a quality that almost everybody has or that almost nobody has. Such constructs might be superordinate constructs or core constructs. A therapist who found the progress of his client impeded by such a construct could develop a character description to represent the construct and ask the client to enact and analyze the character. The research suggests that this procedure might enable the client to subordinate the troublesome construct.

These suggestions need further exploration, of course, before their dependability as processes could be assumed.

Implications for Further Research

Additional topics for further research include some that are contained in the present data.
The computer program for cognitive complexity turned out a comparison between complexity of each grid as a whole and the individual prescription figures. It would be possible to see how the constructs for these figures fit into the construction system before the experiment and the direction of change during and a week following the interventions. Presumably the interventions familiarized the subjects with the prescriptions and matches with the rest of the grid increased.

It could be seen if figures from the subjects' past were changed more or less than figures from the present on the measures of Cell Reversals and Identification. This analysis might have some relevance to Napoli's (1966) study of subjects' involvement with the figures in their Rep Tests.

The amount of change on the self figure compared to average change on Cell Reversal and Identification scores for this study could be compared to amount of change on self found by Lemcke (1959) under a different set of conditions.

Research topics that go beyond the present data were also opened up. During the analyzing of their tapes, subjects predicted each others' reactions to their statements. It seemed that if Subject A made an erroneous prediction which Subject B corrected, the next time around Subject A would predict more in the direction of Subject B's correction of the first prediction. The second prediction was not necessarily correct either, though, for by this time B might feel the way A had expected him to feel at first. The analysis of enactment could be a useful way to explore the pursuit of the effects of invalidation on future prediction in social interaction. For example, under
one condition subjects could be given knowledge of whether their predictions were correct or not, and this outcome could be compared with a condition where they did not have such knowledge, to find how much the presence of feedback (validation or invalidation) alters future prediction.

The research, as it was designed, did not attempt to assess the differences in subjects' responses to directive, non-directive or role-playing actions. This might be a fruitful area of exploration. The prescription which was most frequently criticised was the non-directive. This approach (called permissiveness) also seems to be taking the brunt of public criticism as people try to analyze the current student dissent on college campuses. As the experimenter played the part of the non-directive parent, some subjects acted confused and overwhelmed by the freedom of choice they were given. Other subjects sometimes toyed with the notion of using their freedom destructively; before the session ended, however, they invariably made the "right" (socially acceptable) decision of their own accord. This kind of decision might be less frequent among other populations, say, perhaps, young children, juvenile delinquents, black militants, or people who are bent upon experimentation beyond culturally approved forms of behavior. It might be revealing of alternate processes to repeat this experiment with other populations.

The meaning of types of construct extension, especially lop-sidedness, might be elaborated by examining standard Rep Test results and Hinkle's (1966) Implications grid, through which superordinate constructs are elicited.
A natural sequel to the present experiment would be to compare the fruitfulness of problem-solving behavior when subjects work with another person who behaves in a directive, a non-directive, or a role-relating manner.

Conditions which lead to threat or absence of threat could be explored further. Student subjects who were threatened by enacting a parent or a child might not be threatened by enacting figures in their own age group.
CHAPTER IX

SUMMARY

The purpose of this experiment was to explore the types of changes which might occur if subjects took part in an enactment process followed by an analysis of the taped recording of the enactment. It was thought that these interventions might prepare a person to assume a posture for playing a role, as defined by Personal Construct Theory, and might also result in some validation and invalidation of constructs.

Playing a Role

The hypothesis that subjects would reflect their role-taking posture by the kind of language they used to construe the enactment was supported for adult subjects, who construed children with a more childlike vocabulary and construed adults with a more adult vocabulary. The student subjects did the opposite, which was interpreted as their means of obtaining psychological distance from the threatening nature of enactment when threat is conceptualized as a person's awareness of comprehensive change in core structures (loosely, self-concept) either recently attained or facing him in the future. For student subjects the child part was a threat from the past which they had (almost) just outgrown, and the parent part was a threat
from a comprehensive change which lay ahead.

All subjects did, as predicted, use more empathic terminology following enactment and analysis of tapes. Adult subjects used somewhat less empathic language after listening to tapes of others' enactment; student subjects, contrary to prediction, used more empathic language following this condition, but not as much as subjects who analyzed tapes.

Validation and Invalidation

The expectation that subjects can alter their evaluations of hypothetical people more readily than they can those of real people was borne out by three overall measures—Cell Reversals, identification of test figures with the "self" figure, and identification of test figures with the "ideal" figure. The evaluation of the least-approved-prescription figure was traced through the experimental conditions, and it was found that it received greater approval when the subject had enacted the prescription, even more approval when the subject analyzed the tape of the enactment, and somewhat less approval when the subject listened to a tape of the prescription being enacted.

Change in lopsided construct extension for hypothetical figures was analyzed on two post-tests, and results suggested that following the experimental interventions subjects used more lopsided constructs than before, which might be seen as use of more core constructs or more superordinate constructs. When required to use the same constructs they had used on the pre-test, subjects tended to use
them less lopsidedly, which was interpreted as a subordination or peripheralization of the constructs.

**Related Research**

Figure and construct Cognitive Complexity on the pre-tests correlated significantly with Cognitive Complexity on all the experimental tests except for figure complexity of the analysis-of-tapes test. The process of evaluating figures during analysis of tapes evidently called for a different level of complexity from the subjects.

Cognitive Complexity on the pre-test correlated in a positive direction with most other measures of change from pre-test to post-test. The contradiction with some other studies where there was a negative correlation may have been due to the bi-directional nature of the present measures or to the types of interventions presented to the subjects.

When subjects' test results were sorted into categories based on similar, opposite, or differentiated personal identity (SPI, OPI, or DPI) with their same-sexed parents, contrary to prediction, DPI's generally made less change in their scores than OPI's. Supporting the prediction, DPI's did have more change in scores generally than SPI's. Relationship to Cognitive Complexity on the pre-test was aligned in the same manner and was a reversal of Morse's results with regard to DPI and OPI. This contrast was attributed to the difference in the tests used in the two studies. On Morse's standard Rep Test DPI subjects had opportunity to exercise their cognitive complexity over a broad range of events; on the Parent and Child Rep tests used
for this study OPI subjects could apply themselves to the arena of parent-child relationships where much of the elaboration of their construct systems takes place.

The one Differentiation measure which agreed with the hypothesis for this study was Orientation, the measure thought to reflect threat. It would be plausible to consider OPI's as most threatened by the procedures and therefore changing little in the type of language they use, while DPI's would be least threatened and most flexible in their choice of language.

The existence of a relevance-of-experience factor was supported by the greater cognitive complexity of Rep Test grids most appropriate to the subjects' current life situations.

The Tests

Rep Tests modified to reflect constructs in the area under consideration proved to be feasible and useful, as did the two contrasting forms (Parent Rep Test and Child Rep Test) presented together. The extension of these tests throughout the experiment provided continuing measurement of the processes of construction. The number of different measures derived from the Rep Tests made possible the consideration of some complexities present in research of this type.

Other Results

Generally, certain outcomes were prominent. Four of the nine measures dealt with processes occurring immediately following enactment and follow-up conditions. (1) Following enactment, adult subjects used vocabulary consistent with the person they were describing, and
student subjects used vocabulary inconsistent with the person they were describing. (2) Subjects used more terms rated as empathic following enactment, following analysis of tapes, and even following listening to tapes (except for adult subjects). (3) Subjects rated the prescriptions which they least approved as more like themselves following enactment and analyzing tapes, and to a lesser degree following listening to tapes. (4) Subjects used a similar level of Cognitive Complexity on the pre-test and experimental tests for both figures and constructs, with the exception that they used a different level for figures following the analyzing of tapes.

Most measures showed changes from pre-test to post-tests in all experimental groups, usually more significantly than the control groups. Frequently the differences between the subjects who analyzed tapes and subjects who listened to tapes were significant, with the analysis groups scoring higher. To some degree the follow-up procedures had an effect in their own right even when not preceded by enactment. In several cases adult subjects showed less change than student subjects. Subjects generally changed on their Child Rep Tests more than on their Parent Rep Tests. Overall changes were not generally significant among student groups which enacted only a parent, only a child, or both parts—the lapse of time modified differences which were present just after the interventions.

General Results

Referring to the general hypotheses of the study outlined in Chapter IV, subjects apparently did try to construe the parts they
enacted, though not necessarily in the expected direction. Also, some validation and invalidation of constructs apparently took place during or consequent to the enactment. Finally, the presence and type of procedures used as a follow-up to enactment made a difference in outcomes.
APPENDIX A

TEST MATERIALS AND PROCEDURES

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Introduction

This experiment concerns the nature of the interaction between parents and children. The first part requires that you complete a test describing ways in which you perceive certain parents and children. For the purposes of the experiment, it does not matter if your perceptions of the people are accurate or not—what is important is the way they seem to you or the way you think they would be. In general, the experiment is concerned with children about ten to fourteen years of age; you may want to keep this in mind as you proceed.
INFORMATION SHEET (Adult Form)

Name ___________________________ Date __________________
Address ___________________________ Telephone ____________

Present occupation ____________________________

Former occupations you have had ______________________________

Town or towns in which you grew up ______________________________

Completed high school? _____ Years of college? _____ Degrees _________

Major in school _______________________________

Father's (or stepfather's) name ___________________________ Occupation ____________

Mother's (or stepmother's) name ___________________________ Occupation ____________

Spouse's name ___________________________ Occupation ____________

First names of your brothers and sisters, the oldest first. Include your own first name in chronological order.

Names and ages of your children

Did you have a great deal, an average amount, or little experience with children before having your own family?

What was the nature of this experience, briefly (for example, babysitting, caring for brothers or sisters, teaching, etc.)

Is parenthood and the raising of children about what you had expected it to be or different from what you expected?

Write a sentence or two describing your home life as you were growing up.

INTRODUCTION

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General Procedures and Instructions Given Verbally to Subjects by Experimenter

Subjects were met at the office and escorted to the experimental room by the experimenter or by the office secretary. The experimental room contained some files, a small bookcase, a lamp, a table with papers and a tape recorder on it, and two or three chairs. The experimenter offered to put the subject's books and coat aside and invited him or her to sit down. The subject was asked to fill out an information sheet (Appendix A, pages 149-150). In this interval the experimenter prepared test papers and made note of time, order of tests, etc.

The subject was given a test sheet (example on page 156), with half of the subjects taking the Child Rep Test first and half taking the Parent Rep Test first.

Instructions were given as follows:

"I will ask you to fill in these spaces (pointing at vertical lines over grid) with the names of some people you know. In the first space write down your own first name with the words 'as a parent' (or 'as a child') in parentheses after it. (Pause while subject writes.) In the next space write the first name of your mother (or sister or brother).

Names were asked for as listed on the Role Title Lists, Appendix A, pages 157-160. The subject was asked not to repeat any names. The names of the prescription parents and children occupied spaces 10, 11, and 12 and were briefly alluded to by the experimenter as described on the Role Title Lists.

Upon completion of the names, the experimenter continued, "Turn the paper lengthwise and look at the first row of squares under the names. Put this piece of paper underneath it to separate it from the rest of the rows. You will notice that three of the squares contain circles. Look at the names above the three squares with circles and see which three parents (or children) are indicated there. Think of a way in which two of these parents interact with their children that is similar to each other and different from the third parent (or think of a way in which two of these children are alike and different from the third)." (Pause until subject indicated he had thought of something.) "Now mark X in the circles under the two that are alike and - in the circle under the one that is different". (Pause.) "In the column to the right under Construct write a word or short phrase describing what it is the two parents (or children) marked X have in common and in the column under Contrast write what you consider to be the opposite of this as represented by the third parent (or child)." The experimenter examined the construct and contrast to see if the subject had followed directions. If the con-
struct was of an impermeable or static type, such as "men-woman," the experimenter asked the subject to think of something else that would describe the people's characters or personalities. "Look at the rest of the names from 1 to 9 and think if each person is more like the persons you marked X or more like the one you marked -, and put the corresponding mark under the name. Mark yourself as you think you probably will be when you become a parent (or as you were when you were a child). If No. 14 is not a parent, mark him (or her) the way you think he (she) will be when he (she) becomes a parent. Do not mark numbers 10, 11, and 12 yet; they are to be filled in later."

(Pause.)

"Move your paper down to the second row of squares. Look at the names above the three squares containing circles and think of a way in which two of these parents interact with their children which is alike and different from the third parent (or, think of a way in which two of these children are alike and different from the third). Write the way the two are alike under Construct and the way the one is different under Contrast as you did the first time. Mark the rest of the parents from 1 to 9 either X or -, according to whether they are more like the construct or the contrast. Move to the third row and continue the same procedure through the first nine rows. Try not to repeat the same construct, though you may use a slightly different facet or wording of a similar construct. If you have any questions, feel free to ask them. Tell me when you are finished." When he was finished, the subject was administered the Parent Rep Test or the Child Rep Test, whichever he had not yet done.

Following this portion of the tests, the instructions proceeded: "I would like you to read some descriptions of three types of parents who have different ideas or philosophies about bringing up children." The subjects were handed the character sketches (Appendix A, pages 161-164) with the order of reading systematically randomized among subjects. When the subject was through reading, the experimenter said, "Starting with the first sketch you read, please fill out on your Parent Rep Test the column under this character's name, scoring him (her) X or -, according to whether he (she) would fit best under the construct or the contrast." (Pause while the subject complied.) "Now think of a characteristic or trait of this character which seems important or stands out to you, and write it down as a construct on the appropriate line of the test form, and mark an X under the character's name." (Pause.) "Think of what the opposite of this construct would be and write it down under Contrast." (Pause.) "Now mark the rest of the figures on your test with an X or - for this construct, according to whether the person fits better under the construct or the contrast." (Pause.) "Follow the same procedure for the next description you read, and then for the third." (Pause.) "Now complete the Child Rep Test in the same way for the children of these hypothetical parents as you think they would turn out, having been raised this way." (Pause.) "This completes the beginning test portion of the experiment. Your grids at the top of the two test sheets should be completely
filled in." (The experimenter and subject looked to see that this was so.)

"Now I will ask you to role play these characters with me. I will take the part of the mother and you take the part of the child (or vice versa, depending upon which group the subject is in), starting with the first description you read, and we will imagine that the child is just getting home from school with his (her) report card which has a bad grade on it. We will discuss the report card for about five minutes, when this bell will go off, and the mother will make an excuse to end the conversation. I will tape the discussion so that we will have it to listen to for the next part of the experiment. Do you have any questions?" The experimenter took a few moments to start the tape recorder, asked the subject if he was ready, and set the timer. If the experimenter was taking the part of the child, she began with, "Hi, Mom, I'm home," and if the subject was taking the part of the child, the experimenter told the subject to begin.

The first enactment was completed (for sample enactment protocol see Appendix B, pages 183-188) and the experimenter said, "Think of something about this child (or parent) as you role played it that you can make into a construct, and write it down on the next blank line of your Child Rep Test (Parent Rep Test)." (Pause.) "Put an X under the name of the character you are describing. Write the opposite of the construct under Contrast and mark the rest of the figures of your test X or - in that row, as you did for the first part of the test." (Pause.) "Think of something about the parent (child) as I role played it that you can make into a construct on the Parent Rep Test (Child Rep Test), and fill in the next blank line of that test." (Pause.) "We will role play the second character sketch you read, using the same report card situation, but acting as we think this person would act." Enactment and test responses proceeded for this and for the third prescription in the same manner as for the first prescription.

Subjects who were assigned to the groups which analyzed tapes were instructed: "I will play back the role playing we have done, beginning with the first one. I will stop the tape following a statement I have made to you, and you will write down on this form how my statement made you feel and the reason that you felt that way." (See Appendix A, page 166). "Here is a list of adjectives which describe feeling states. (See Appendix A, page 165)." If you wish you may refer to it to help you pick out a word or words that help you describe most accurately the way you felt during the role playing when that statement was made to you. I will also write down how I thought you felt at the time I made the statement. Do you understand?" The experimenter played the tape from the beginning of the first enactment and stopped it following a statement made by her which might have emotional impact. "Write down how you felt at this point in the role playing and the reason you felt that way." The experimenter wrote her prediction down on her own form, using the list of adjectives if needed. When the subject was finished writing, the experimenter said,
"I will read you what I wrote down, and then you read what you wrote down, and we will see how close I came to knowing how you actually felt." Following the reading the subject was asked to place a plus sign on the experimenter's paper if her prediction was essentially correct and a minus sign if it was incorrect. The experimenter continued, "Please take your Rep Test for the part you played and make up another construct representing the way you construed your part at the time of the interaction we just listened to. Place an X under the name of the part you played, write down the construct and contrast, and mark the remaining figures X or -." (Pause.) "We will continue listening to the tape, and this time I will stop it after a statement you have made to me, and I will write down my feelings at that point and the reason for it, while you write down how you think I feel and the reason for it. We will compare notes again and I will score you on the accuracy of your prediction of my feelings." This was done, and the experimenter went on, "Take the Rep Test for the part I played and make up a construct and contrast representing this person at the point where we stopped the tape." (Pause.) The experimenter moved the tape ahead to the second enactment and repeated the analyzing procedure for it and for the third enactment. The first session ended and an appointment was made for the second session which was to be with another student as role-playing partner.

For subjects assigned to groups which did not analyze their own tapes but listened to tapes of others' enactments, the experimenter said, "I will play for you some tapes of two other people role-playing the same situation according to the character sketches which you and I just used. When I am finished playing the first one I will stop the tape and ask you to write down a construct and contrast describing the characters as they are role played here." The experimenter played the first tape, stopped it and waited for the subject to write down his constructs and contrasts and to fill out the rows with X's and -'s for the remaining figures of both Parent and Child Rep Tests. The other two tapes were played and construed by the subjects in the same manner, and the session ended. An appointment was made for the second session with another student as role-playing partner.

The second session began when both students had arrived in the experimenter's office. The experimenter said, "I will ask you to role play opposite each other today using the same character descriptions as before but changing the situation. Please read the descriptions again to refresh your memory." The experimenter told them which one would role play the parent and which the child. "The situation will be this: the child wants to get the parent's opinion of a new club that is being started by some other children at school, and whether or not he should join it. You may make up the type of club you wish, basing it on your own childhood experiences if you wish. For the first role play, use the character sketch of ----, acting as you think this parent and child would. Discuss the topic for about five minutes, when the bell will ring, and the parent may draw the discussion to a close. The
person playing the part of the child may start." The experimenter turned on the tape recorder, set it properly, and said, "Ready?" If so, they began. The procedures followed the same pattern as in the first session, with one of the students taking the place of the experimenter in the enacting and analyzing of tapes, and also filling out his own Rep Tests. The experimenter spent her time working the tape recorder, making note of good places in the interaction for analysis, and assisting the subjects when necessary. This time subjects were asked to make up two new constructs and contrasts per test following each enactment and analysis, and for the groups which listened to tapes, the experimenter stopped the tape at two places in each enactment to ask for constructs and contrasts. The experimental grid was completely filled in when the session was over. The experimenter made individual appointments with the subjects for the third and final session.

In the third session the subject was administered another Parent and Child Rep Test as in the first part of the first session. The test forms were filled in ahead of time with the same names the subject gave before in response to the Role Title Lists. The subject was again asked to look at the first row, consider the three people whose names had a circle under them (different combinations of figures were indicated this time), think of a way in which two of them were like each other and different from the third, etc. The part of the grids representing the real figures plus the ideal was completed first, the character descriptions were presented and read again, then construed, and the remainder of the grids was completed.

The subject was now given the test forms he filled out the first day, folded in such a manner that he could see his original constructs and contrasts but not the patterns of X's and -'s he made on the grid. A fresh grid was superimposed beside the original constructs and the subject was asked to re-assess all the figures with X's and -'s in terms of the original constructs and contrasts.

When the testing was completed, the experimenter conducted the terminal interview as given in Appendix A, page 176. The experimenter thanked the subject for his participation, and if the experiment had run over the contracted time she offered him 50¢ an hour for the overtime.
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Role Title List for Parent Rep Test (Student Form)

Do not repeat any names.

1. Your own first name, and the words (as a parent). In the next part of the test think of yourself as you probably will be when you are a parent.

2. Your mother's first name (or if you grew up with a stepmother, her first name).

3. Your father's first name (or if you grew up with a stepfather, his first name).

4. The first name of your present best friend of the opposite sex, or your spouse, if you are married.

5. The mother (father)\(^1\) of one of your best friends when you were about 10 to 14 years old.

6. A father (mother) you know at present whom you have observed interacting with his (her) children. This can be a neighbor, a relative, a friend of the family, etc.

7. A mother (father) you know at present whom you have observed interacting with her (his) children.

8. A mother (father) you know or used to know whose way of raising children you disagree with, at least in part.

9. The Ideal Parent is a hypothetical person, and you are to think of her (him) as the kind of parent you would like to be when you are a parent.

10. This is the name of a hypothetical parent who will be described for you later on.

11. Same as 10

12. Same as 10

---

Note.—If a subject does not remember the name of one of the figures he is told to use another name or an initial that will remind him of the person he is referring to.

\(^1\)Alternate figures in parentheses used for male subjects.
Role Title List for Child Rep Test (Student Form)

Do not repeat any names.

1. Your own first name, and the words (as a child). In the next part of the test think of yourself as you were when you were about 10 to \(\frac{11}{2}\) years old.

2. The first name of your sister closest in age to yourself. If you did not have a sister, name a cousin or other relative or friend who was like a sister to you.

3. The first name of your brother closest in age to yourself. If you did not have a brother, name a cousin or other relative or friend who was like a brother to you.

4. One of your best girl (boy)\(^1\) friends when you were about 10-\(\frac{11}{2}\) years old.

5. A boy (girl) who was a friend of yours when you were about 10-\(\frac{11}{2}\) years old.

6. A girl (boy) you know now who is about 10-\(\frac{11}{2}\) years old.

7. A boy (girl) you know now who is about 10-\(\frac{11}{2}\) years old.

8. A girl (boy) about 10-\(\frac{11}{2}\) that you know or used to know that you disapproved of or did not like.

9. The Ideal Child is a hypothetical person and you are to think of her (him) as the child you would like to have been when you were a child.

10. This is a hypothetical child who will be described for you later on.

11. Same as 10

12. Same as 10

\(^1\)Alternate figures in parentheses used for male subjects
Role Title List for Parent Rep Test (Adult form)

Do not repeat any names.

1. Your own first name.

2. Your husband's (wife's) first name.

3. Your mother's (father's) first name.

4. Your father's (mother's) first name.

5. The mother (father) of one of your best friends when you were a child.

6. The mother (father) of your own child's best friend.

7. A father (mother) you know at present whom you have observed interacting with his (her) children.

8. A parent you know or used to know whose way of raising children you disagree with, at least in part.

9. The Ideal Parent is a hypothetical person and you are to think of her (or him) as the kind of parent you would like to be.

10. This is the name of a hypothetical parent who will be described for you later on.

11. Same as 10

12. Same as 10

^Alternate figures in parentheses used for male subjects
Role Title List for Child Rep Test (Adult Form)

Do not repeat any names.

1. Your own first name and the words (as a child). In the next part of the test think of yourself as you were when you were about 10 to 14 years old.

2. The first name of your sister or brother closest in age to yourself. If you did not have a sister or brother, name a cousin or other relative who was like a sister or brother to you.

3. One of your best girl (boy)¹ friends when you were 10 to 14.

4. A boy (girl) who was a friend of yours when you were 10 to 14.

5. The first name of one of your children who is in the age group 10 to 14.

6. A good friend of your child's.

7. An opposite-sex friend of your child's.

8. A child you know or used to know that you disapproved of or did not like.

9. The Ideal Child is a hypothetical child and you are to think of her (him) as the kind of child you would like to have been.

10. This is the name of a hypothetical child who will be described for you later on.

11. Same as 10

12. Same as 10

¹Alternate figures in parentheses used for male subjects
Prescriptions

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Mrs. Riley has a deep affection for her children, and she wants more than anything else to fulfill completely her duty as a parent, to ensure that her children will grow up happily and become good citizens. She believes that participation in wholesome activities will help them have a full, meaningful life, and she wants them to do their best to excel at the things they attempt.

Mrs. Riley realizes that, to begin with, children have very primitive emotions, and she sees one of her tasks to be that of teaching them self-control. She tries to avoid spoiling them or giving in too much, by being firm and consistent in her requirements for them. She knows that habits are more easily broken in their early stages than when they are well-established, and when her children are disobedient they are disciplined at once so they will not repeat the behavior.

As the children grow older, Mrs. Riley tries to keep abreast of their needs in areas such as the social graces and ethical values. She reminds them of the social skills that will make a person acceptable to others, and she exposes them to the code of values that she has worked out for herself and which she believes represents the best teachings of our culture.

Mrs. Riley encourages her children to bring their problems to her so that she may help them decide what to do about them. She listens attentively to what they say and then endeavors to have them understand how she feels about it and why. She is proud that her children feel very secure in knowing how they stand with her and that she will back them up whenever they are trying to carry through a goal or an action that she approves.
To Mrs. Innis, the raising of children is an exhilarating and satisfying experience, because it is like a series of experiments in living in which the outcomes are never known for sure ahead of time, but which can be counted on to involve her and her children in vital new experiences. She finds that children are remarkably attentive to the events going on around them, and, as they grow, they use their progressive experience to assign new meanings to what happens in their lives. Thus she keeps trying to understand how they perceive situations, or how things appear to them. If she finds that a particular limit that was established to safeguard one of her children in his ventures is not working well or is no longer appropriate to his developing modes of inquiry, she explores, with the child's help, better ways of tailoring it to his expanding perspectives.

Mrs. Innis wants her children to try out new ventures, and she expects that they will make some mistakes and experience some failures in the process. She tries to help them see mistakes and failures not as crushing defeats to be avoided, but as normal experiences of life that may be analyzed and understood. She suggests to them that it is not so important to succeed on the first trial as it is to gain meaningful experience that may be the basis of better and more important undertakings.

When Mrs. Innis talks things over with one of her children, she tries to see it from the child's point of view, so that she may be more sensitive to his ways of exploring the world and, on occasion, play appropriately the roles he assigns her in his ventures of inquiry. They often talk in terms of what the possible choices for action are and what might be their outcomes; then they both try to envision which plans would give the more valuable experiences for expansion and growth. Often the issue is not closed but is left open to future exploration and change.
Mrs. Sellers believes that all people, children included, are by nature basically good. If children are given maximum freedom in making choices and in expressing their interests, they will develop a healthy, spontaneous zest for life that will persist through adulthood. They will then be in an ideal position to make a real contribution to society, because they will put their full efforts into whatever work they choose to do. She feels that children and adolescents today are often overprotected, overcontrolled and required to behave according to adult standards, and that it would be more conducive to the creativity of individuals and of society if they were given greater freedom to develop in ways that are more natural to children.

Mrs. Sellers tries to provide a warm and understanding atmosphere in the home, where her children feel accepted and free to experiment with a variety of ways of expressing themselves. She thinks that in the process of doing what they really want to do, children will learn to set limits upon themselves and will learn self-control without having controls forced upon them from the outside. Thus she avoids setting limits as much as possible and does so only when she feels it is essential to the welfare of the child or the family.

When her child has a problem, Mrs. Sellers conceives her role to be that of providing a sounding-board for him to use to clarify his thoughts and develop his ideas. She wants him to feel that, while she is vitally interested in him and his affairs, she can still accept his attempts to experiment with life, and so she is generally non-critical. She is sensitive to the direction in which his thinking is going but tries not to influence him. She encourages him to look within himself and examine his true needs and feelings. Finally, she always tries to leave the responsibility for a decision up to the child.
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165
ADJECTIVES

Uncertain
Apprehensive
Fluctuating
Doubtful
Concerned
Uneasy
Confused
Worried
Tense
Nervous
Disbelieving
Troubled
Pitying
Anxious
Defeated
Discouraged
Conflicted
Insecure
Disturbed
Threatened
Challenged
Afraid

Unconcerned
Indifferent
Resentful
Hurt
Pessimistic
Annoyed
Critical
Provoked
Stubborn
Fault-finding
Blaming
Sarcastic
Hostile
Mean
Angry
Overbearing
Irritable
Overbearing
Displeased
Hopeless
Squelched
Overwhelmed
Miserable

Guilty
Unhappy
Sad
Disappointed
Embarrassed
Acquiescent
Disillusioned
Helpless
Frustrated
Lonely
Disturbed
Childish
Immature
Ashamed
Punished
Depressed
Discouraged
Overwhelmed
Defensive
Persecuted
Panic

Relieved
Convinced
Attentive
Assured
Broad-minded
Satisfied
Reasonable
Confident
Relaxed
Aware
Helpful
Calm
Comfortable
Competent
Hopeful
Encouraged
Eager
Free
Responsible
Accepted
Agreeable
Successful

Hopeful
Reassured
Forgiving
Accepting
Sympathetic
Understanding
Friendly
Gratified
Trusting
Agreeable
Optimistic
Delighted
Enlightened
Encouraged
Efficient
Effective
Considerate
Helped

Sincere
Cheerful
Thoughtful
Alert
Ambitious
Independent
Happy
Pleasant
Secure
Steady
Worthy
Comfortable
Mature
Calm
Tender
Protocol of Enactments Taped During Pilot Study

These are the enactments which were played in the first session for subjects who were assigned to the condition of listening to tapes of others' enactments. The experimenter took the part of the mother and a freshman student took the part of the child. The order of the enactments is: first, Mrs. Riley, the directive parent; second, Mrs. Sellers, the non-directive parent; third, Mrs. Innis, the role-playing parent.

Parent: Helen, did you bring your report card home today? They were due out, I believe.
Child: Yes, mother (laugh). Ah, I-I went down this time. I didn't mean to, though (laugh).

P: Oh, you did? What subject did you go down in?
C: I went down in English. Because, ah, you'll just say I'm making excuses, though, if I tell you some of the reasons why I went down, so--

P: Well, you know that I don't like it when your grades go down, that there's always, a, other things that interfere, but that studies are very important for your future, and that they really should come ahead of a lot of other things. But you tell me what it is that you--

C: Well, you know I was in a play this time, and, and you even helped me learn some of my lines, so that takes quite a lot of time, and I just didn't have as much time to put into everything, and, and I think I like my other subjects better, so English was the one I slighted a little bit, and

P: Uh-hm.

C: And, well everybody's gone down in English, but you always told me you don't care what everybody else does, you just care about what I get (laugh).

P: You remember that, don't you?
C: Yeah (laugh), I do.

P: Well, that's the way I feel, that you can't set your own standards by the other people around you, that you have to have standards of your own. I didn't realize that the play was going to interfere so much with your studying. Ah, how soon is the play? When will it--rehearsals be over?

C: Ah, in another two weeks we'll be completely finished, and then maybe I could bring my grade back up next six weeks, I'll try to.

P: Um-hm. I certainly hope so. Ah, is there anything else that we might do to give you more time for English? Anything that we could cut out? If you're having to do too much cleaning of your room or something like that, I might be able to take part of that responsibility so that you'd have more time on the weekends.

C: Yeah, mom, well you work too, though, and I think I'd better help you do that, so--
P: Well, I appreciate that, but I'd be glad to put in the--a family effort, if need be, to help you keep your grades up.

C: Well, I think I'll try to put myself on a schedule. You know, write it down every day and everything, and maybe if I come home and, and Jack's always got the television on a lot, and that makes me want to watch it too, so I'll just go upstairs, since you've got my desk up there and study up there.

P: Um-hm.

C: And maybe if--if I do my English first every time I'll be sure I've got it done.

P: Well, that's a good plan. Is English the one you like the least, is that why you put it off?

C: Well, I always liked it before, but I didn't like it off the--our teacher now.

P: Oh.

C: So, he's, I-I don't know, I don't admire and respect him as much as the other ones, so I guess I don't think his opinion counts as much, and--

P: Oh.

C: And so I don't, I don't strive as hard. (Pause) I-I should, I-I mean the grade still goes down, and it's important for college later, so I'd better--

P: Umm, even though you don't agree with him, you still--

C: I still better please him in order to get a good grade.

P: (laugh) It's hurting yourself if you hold—if you allow that to interfere with doing your work. Well, a, if you have trouble tearing yourself away from the TV, maybe I can give you some help there, too, and I might remind you from time to time, or ask you if you've done your homework yet.

C: Thanks, mom (laugh). I know, I don't want to expl-- you know, disappoint you either, so--I'll know that you're doing it for my own good, probably, since you've asked to help me like that.

P: All right, fine. I'll sign your card for you, and you can take it back.

C: Thanks, mom.

P: Okay. (laugh)

P: Helen, is today the day you got your report card?

C: Yes, mom.

P: Could I look at it?

C: Mmm (laugh) yes. A, here.

P: Oh, I see one of the grades is down, from what it was before. How do you feel about that?

C: Well, I'm sorry Mom, I didn't mean to disappoint everybody, you know, I mean, I know you always expect me to do well, and--

P: But how does it make you feel?--Inside, when your grade goes down?
C: I feel sort of guilty. Because, I-I know that since I got better the last time, I-I know that I'm capable, and yet I didn't, I didn't put forth the effort this time, or else I would have gotten as good a grade.

P: You felt guilty about it?

C: Yeah, I still feel guilty about it.

P: What's the guilt in relation to?

C: Well, that I d—-I must have thought other things were more important, and spent more time on them. And yet when your grade card comes out you think that's the most important, but you don't think about it until it comes.

P: Oh.

C: So--

P: But at the time you decided to do the other things, you thought they were more important?

C: I must have. Or I just--liked doing them better, so I just put it off. It didn't seem that immediate, like it had to be done right now, an--

P: Your being in the play was important to you?

C: Yes, I was real--it seemed it, I mean, that's what most—it was different, it was exciting, and, a--a lot of other people were in it too, and you just get sort of wrapped up in it and don't pay attention to the other stuff as much.

P: Um-hm. That's very understandable. It's fun to be in the play, isn't it?

C: Yeah, I like it real well, you know that, 'cause I-I like all that kind of stuff. Really, I-I've learned more English since, since I've been in the play than I did before. You know, because, why, and I've really studied harder since I've been in the play, but not on the things that count, I guess, and the things that count on the report card anyway, but--extracurricular stuff is supposed to count sort of too. I mean, if you want in honor society or anything you have to be in some other things before they--you know, consider you sometimes. 'Cause there's character, and, and service and all that goes into it.

P: Oh, yes. Is that one of your goals, to be in honor society?

C: Mm-hmm, and yet you've got to have the grades before they'll consider you too, so I guess I'd better start on my--the grades more (laugh).

P: (Laugh)

C: But, well, I was watching my other subjects, though, and, and, I mean, I wasn't, I wasn't too worried, I knew I wasn't going to come down that much. I guess English is just what I dropped in, just, it just dropped (laugh).

P: Well, you made the decision to be in the play, and you knew it would take some time, and I guess you were running the chance of your grades coming down.

C: Uh-hmm.

P: But maybe you made the right decision.
C: I know, I-I should have done my best and just tried to do-- you know, just as good in both. And yet this seemed like it was the most immediate thing, because the play'll be over, you know, in a couple of weeks, and you have to know the lines right then, and yet, in English, if I bring my grade up next six weeks it won't hurt me that much. And yet if I'd studied the English right now and, and didn't study the play, it would've come around and I'd've been in trouble right then (laugh), and-- But I shouldn't have looked at it that way, I know I shouldn't.

P: Why not?

C: Well, it's just—I, I knew down deep if I tried hard enough in both of 'em I could have done just as well. You know, and--. I think I could have.

P: Um, you don't want to be up all night and ruin your health, Yeah (laugh)

C: Get sick, anything like that. So you have to weigh everything in the balance.

C: Yeah. Well, just so you and Daddy are proud of me, you know, about the play too, and and don't worry too much about the grade. That's what I was worried about.

P: We want you to do what's most important to you, and get the most out of life that you can.

C: That you can. And the way that you do it is a matter of your choice.

P: We want you to make your own decisions about which way you think is best to accomplish what you want to do.

C: Well, which do you think is most important, mom? (laugh) I mean, you know, do you think I did—did what was right, or not, 'cause I-I'm not sure myself that I--

P: Well, you, a--

C: I mean, I only dropped one grade, and, it, and, you know, Uh-hm.

P: And--it didn't really hurt me that much.

C: Uh-hm.

P: And yet, I-I, you know, I always try to do good.

C: You said yourself, by being in the play, you added to your-- to the number of things that you're able to do.

P: Um-hm.

C: And enjoyed it too.

P: Yeah. Well, maybe, maybe the por—important thing is, if I promise to bring it up next time, you know, and—I mean, if I won't have the play next time, you know, it would be a poor excuse not to—get the good grade. Or maybe if I bring it up two grades or something. You know, I had a B, I went to a C, if I brought it up to an A, that would cover up for this whole last time.

P: You'd get a B average.
C: Um-hmm.
F: Well, if it's important to you, you can solve it that way if you want to.
C: Yeah.
F: If it's important to you to study that much.
C: Yeah. It is, I-I-I, I know it's, I hope it's pretty important to you, too, 'cause I want you to, you know—I--sometimes I feel like I need a push (laugh).
F: (Laugh) Well, if it's important to you, it's important to me.
C: Oh, good. Then I'll, I'm going to try.
F: Okay, I'll sign your card.

P: Well, Helen, I see you have your grade card. May I see how it is this time?
C: Yes, Mom, here.
F: Oh, you went down a grade in a, geography, I see. That is, isn't it--your science?
C: Yeah, mom, it is.
F: What happened in your geography class?
C: A, a, I'm not sure, I just--I-I went down, and I shouldn't have, 'cause I want to get good grades. And yet, I was just real busy, and I-I don't know, it's, it's, it's harder to keep good grades once you get 'em than it is to-to strive for 'em. Because once you get them, you just think, oh, I'm doing real well in this, an', you don't worry about it as much or something. (laugh).
P: You mean at the beginning of the quarter--at the beginning of the school, you work real hard because you're, a, real interested in it or something, and then--
C: Yeah.
F: It gets more boring, maybe, as the (laugh) year goes on?
C: Well, sort of, and too, you just think, you know, well, I did this well so it won't take as much studying the next time, well maybe you just--
F: Oh--Maybe you get overconfident.
C: Yeah, I think that's part of it. I think I was a little bit overconfident an-- not that I didn't like it, I just, was just there, you know.
P: Um-hm. Did you expect to get a B, or did you expect to go down?
C: Yeah, after a while, I started worrying about it (laugh) when it came, you know, just this week, when I realized the grades were coming out, I--tried to figure out what I had, and I-I realized I was.
F: Uh-hm.
C: But, I-I guess I let it slip and didn't worry about it enough at first, and that's why I am down.
F: Um-hm. Do you think that a good--a better grade in geography is worth working for?
C: Yeah, I do think so. I—I mean, since I know I can do it, I should've. If I'm capable, I mean, if I had studied my hardest, and, and yet hadn't gotten it, I—I don't think you would have had any reason to—you know, to—to want me to do better. I--because you've always just tried to influence me to do my best.

P: Mm, that's right, we don't want you to push yourself beyond what you're capable of.

C: Yeah. But I know that wasn't my best. So that's why I feel bad about it.

P: Oh. A, is there anything you can do to, a, schedule your time better or something, so that--

C: Yeah, maybe I'd better do that, a, try and start doing my geography more and--I don't know, maybe if I try for an A, I'll be sure to, you know, or try to, try to get the highest grade or something, and I'll—I'll at least be sure of getting a B then.

P: Is geography boring to you?

C: A, it's a lot of reading, and, I don't know. When you do math problems you get new ones all the time, and you, it's sort of, you know, it's sort of fun, some of them are. But geography, you just keep, you're reading different stuff, but still there's this 20 or 30 pages a night to read, and, it's something you can just put off, you think. (laugh)

P: Mm (laugh). Is there something that might make it more interesting to you, like, a, if you're studying a certain country we could get out the Atlas and look up some facts about that country, and--

C: Yeah, maybe I should do that. If I just, I don't know. And I might start doing my geography first, and then I'll be sure to do it. And--

P: Maybe you could come and tell me about what you read after you get through reading it.

C: Oh, that'd probably be good. And that would save time, too, because I'd really learn it more that way, and I wouldn't have to go back over it so much, if I just read it every night. And if I know I'm supposed to come and tell you, then I'll be sure to read it, I mean. Yeah, if you just check up on me a little (laugh).

P: (Laugh) Good. Sometimes if we say a thing, we—remember it better than if we just read it.

C: Uh-huh.

P: If we only read it.

C: Yeah. I'll try that, mom, that sounds like it'll work pretty good.

P: Okay. And, a, you'll try to keep your other subjects the way they are, hmm?

C: Yeah, I'll try to.

P: Fine. We're really proud of you, because you're a good student. We appreciate all the effort you put in your school,
your education. I'm sure it's going to pay off in future years, you'll be glad that you--that you did.

C: Yeah, thanks, mom. I--that's why, another reason why I want to get the good grades, 'cause I know that you and dad are always proud when I do, and, you know, I-I hate to let you down like that.

P: Um-hm. Well, we're proud of your ability as well as a, the fact that you try to do your best. So, I'll sign your report card (laugh).

C: Okay, thanks, mom.

P: You're welcome.
SYNOPSIS OF PROCEDURAL STEPS:

First Session

1. S fills out an information sheet.
2. S is given Parent Construct Rep test and Child Construct Rep test, resulting in two 9x9 grids with 9 constructs and 9 contrasts for each.
3. S reads prescriptions.
4. S sorts prescriptions on first 9 Parent constructs.
5. S makes up a new construct and contrast for each prescription, representing what he considers to be something significant about them, and sorts the rest of the figures on the grid for these constructs, yielding a 12x12 grid.
6. S repeats 4 and 5 on Child Construct Rep test, as he thinks the children of the prescription parents will probably turn out.
7. S enacts a parent according to one prescription, or a child against E who enacts the prescription, for about 5 minutes.
   (Topic described on preceding page)
8. S makes up a new construct for parent as enacted and for child as enacted, starting two new grids (experimental grids) with the same figures as in the pre-test for elements.
9. S and E enact the second prescription, S makes up another construct and contrast for each test.
10. S and E enact the third prescription, S makes up another construct and contrast for the two tests.
   (The experimental grids are now 12x3)

For S's doing analysis:
11. Part of the tape of the first enactment is played back and S writes down on a form how he felt at the time a particular statement was made to him and his reasons for feeling as he did. E writes down how she thinks S felt and why. They report to each other what they have written and if E has predicted S correctly, S gives E a plus mark on her form, and if E is incorrect, a minus mark. S makes up one construct and contrast on the grid for the role he was enacting, based on his analysis.
12. More of the tape is played back and they write down how E felt and why after a statement S has made. They again compare notes and E marks S plus or minus on his form. S makes up another construct and contrast for the role he was playing opposite to.
13. This process (11 and 12) is repeated for the other two enactments (only a portion of each enactment is played back).
   (The experimental grids are now 12x6)

For S's who listen to tapes but do no analysis:
11. S listens to a 5-minute tape of an enactment between the experimenter and a subject other than himself.
12. S makes up a construct and contrast for each test based on this enactment.
13. Steps 11 and 12 are repeated with tapes of the other two prescriptions as enacted by two people other than this S. (These grids are also now 12x6.) This completes the first session and takes about 2-2½ hours.

Second Session
1. The experimenter meets with two subjects who have both had the training sessions. They are assigned the child part or parent part, according to the group they are in and are instructed to enact with each other, as in the training session, and the topic for discussion is described.
2. Following enactment, they make up two new constructs for each of the tests, as the prescription was enacted.
3. The next two prescriptions are enacted and the S's make up two new constructs for the parent and two for the child after each enactment.
(A total of 6 new constructs have now been added to each test in this session and the experimental grids are now 12x12.)
4. The experimenter plays back parts of the enactments for analysis as in the training session, getting two more constructs per grid per enactment.

S's not doing analysis listen to 3 tapes of others' enactments and generate 6 constructs per grid from these for Step 4.
(The experimental grids have now been expanded to 12x18) The second session takes about 2-2½ hours.

Third Session
1. S's meet individually with the E and repeat the pre-test, first using the 9 original figures for each test but making up constructs and contrasts on different triads of the figures.
2. S's re-read the prescriptions, construe them on the 9 constructs just generated, make up new constructs for the prescriptions and extend them to the other figures, giving a 12x12 grid. They extend their Child tests and grids in the same manner.
3. S's are given the constructs they made up on the pre-test, with the paper folded in such a way that they cannot see how they sorted the figures the first time. They sort the figures on these original constructs again.
4. Subjects are interviewed by E for their impressions of the experiment.
The third session takes about 1-1½ hours.
Final Interview Questions

1. What did you think of the experiment?

2. Which character (prescription) did you prefer? Why?

3. Which character did you least prefer? Why?

4. What parts of the experiment did you find hardest? Easiest?

5. Was it easy or hard to role play?

6. Did role playing make any difference in the way you felt about the characters?

7. Was it easier to role play with the experimenter or with another student?

8. What were your experiences during the follow-up to the enactment?

9. Was it easy or hard to make up the constructs?

10. Did the experiment give you any different ideas about children or about parenthood?

11. What did you think was the purpose of the experiment?
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10. Did the experiment give you any different ideas about children or about parenthood?

11. What did you think was the purpose of the experiment?
APPENDIX B

SAMPLE SUBJECT OUTPUTS

Filled-in Rep Tests ......................................................... 178
Filled-in Analysis Form .............................................. 182
Sample Protocol and Discussion ................................. 183
<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>CONTRAST</th>
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<tbody>
<tr>
<td>More discipline</td>
<td>Less discipline</td>
</tr>
<tr>
<td>Participation with child's activities</td>
<td>Less participation</td>
</tr>
<tr>
<td>Enthusiasm for child's school work</td>
<td>Nonenthusiasm for child's school work</td>
</tr>
<tr>
<td>Less social emphasis for child</td>
<td>Social status important</td>
</tr>
<tr>
<td>Not so child doing right thing</td>
<td>Waiting hand a foot on child</td>
</tr>
<tr>
<td>Teaching child correct manners</td>
<td>Etiquette nil</td>
</tr>
<tr>
<td>Not permitting child to do work</td>
<td>Permitting child to talk back in room</td>
</tr>
<tr>
<td>Trust in child's ability to do work</td>
<td>Trust in child's ability to do work</td>
</tr>
<tr>
<td>Boy/young man does not OE injury to child</td>
<td>Boy/young man does not OE injury to child</td>
</tr>
<tr>
<td>Concern with will of young child</td>
<td>Concern with will of young child</td>
</tr>
<tr>
<td>Teaches child to face defects</td>
<td>Sympathy with child's defect</td>
</tr>
<tr>
<td>Complete trust in child's decision</td>
<td>Less faith in child's decision</td>
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<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>CONTRAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason with child instead of yelling</td>
<td>More emotional correction</td>
</tr>
<tr>
<td>Supports child but doesn't impress her viewpoint</td>
<td>Mother's way is best</td>
</tr>
<tr>
<td>Child's child expression doesn't allow child to have success or failure plan or try, insist</td>
<td>Ability to see child's success or failure plan or try, insist</td>
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<tr>
<td>Accepts criticism for what they've done, doesn't over demand</td>
<td>Not completely attentive to child's preference</td>
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<tr>
<td>Genuine interest in child's problems</td>
<td>Sympathetic child immediately requests</td>
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<tr>
<td>Conservative to child's wishes, but reasonable</td>
<td>Doesn't discount other things of child</td>
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<tr>
<td>Conscious of child's wishes, in other words wants to see child's viewpoint</td>
<td>One-sided prejudice</td>
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<tr>
<td>Doesn't come to a fast decision if delayed and qualified solution to problem is desired or not</td>
<td>More wariness of concern (excess)</td>
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<tr>
<td>Reason chalant</td>
<td>Narrow-minded, restricting</td>
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<tr>
<td>Broad-minded</td>
<td>Narrow-minded, restricting</td>
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<tr>
<td>Uncertain-torn between knowledge what's right &amp; child's desire</td>
<td>Contrast at bottom, firm in</td>
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<td>Can be saved</td>
<td>Unyielding right to decision</td>
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<td>Child's reticence</td>
<td>Right from wrong, firm</td>
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<td>Refuses to just a child's situation</td>
<td>Can't recognize when they are wrong</td>
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<tr>
<td>Definite pride in child's actions</td>
<td>Cannot recognize nature substitution when offered</td>
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<tr>
<td>Unquestioning motives, if good, wrong, then can understand why</td>
<td>Unquestioning motives, if good, wrong, then can understand why</td>
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**Parent Construct Rep Test**

Group No. 111

Grid No. 1 & 3

Subj. No. 29

Date

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<td>Complete trust in child's decision</td>
<td>Less faith in child's decision</td>
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**Parent Construct Rep Test**

Group No. 111

Grid No. 1 & 3

Subj. No. 29

Date
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<th>Chris</th>
<th>Sharon (friend)</th>
<th>John</th>
<th>Penny</th>
<th>George</th>
<th>Site</th>
<th>Annie</th>
<th>Henry</th>
<th>Sally</th>
<th>Jeff</th>
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<p>| <strong>CONSTRUCT</strong>     |       |                 |      |       |        |      |       |       |       |      | <strong>CONSTRUCT</strong> | CONTRAST |
| 1.              |         |                 |      |       |        |      |       |       |       |      | Willing to let others play by rules | More uncooperative |
| 2.              |         |                 |      |       |        |      |       |       |       |      | Good winner or loser | More disappointing in defeat |
| 3.              |         |                 |      |       |        |      |       |       |       |      | Shows other than being best scores in major events | Loses sight of everything |
| 4.              |         |                 |      |       |        |      |       |       |       |      | Kids that parent expects of her | Not clear how to what parent expects her to be what she can be |
| 5.              |         |                 |      |       |        |      |       |       |       |      | Honest, straightforward | Don't know what parent expects of her |
| 6.              |         |                 |      |       |        |      |       |       |       |      | Trust a seek parent advice | More individual, to oneself |
| 7.              |         |                 |      |       |        |      |       |       |       |      | Logical, reasons | Hedge-podge explanations |
| 8.              |         |                 |      |       |        |      |       |       |       |      | Inpatient | Patient, knows parent may change plans |
| 9.              |         |                 |      |       |        |      |       |       |       |      | Sociable &amp; open | Less concerned with |
| 10.             |         |                 |      |       |        |      |       |       |       |      | Acceptance of parent | Not so adventurous or independent |
| 11.             |         |                 |      |       |        |      |       |       |       |      | Independent | Rationalizes for ideal good in reality |
| 12.             |         |                 |      |       |        |      |       |       |       |      | Honest | Feel parents have complete faith in | Feel parents have complete faith in |
| 13.             |         |                 |      |       |        |      |       |       |       |      | Feel mistreated | Every thing anything in an event is good |
| 14.             |         |                 |      |       |        |      |       |       |       |      | Optimistic, hopeful | Fully victory &amp; parents give praise |
| 15.             |         |                 |      |       |        |      |       |       |       |      | Risk of mistakes | Instinction of her desires by parents |
| 16.             |         |                 |      |       |        |      |       |       |       |      | Avoid poor goals | Lack faith &amp; assurance of help |
| 17.             |         |                 |      |       |        |      |       |       |       |      | Tact in reasoning | Maturity in reasoning | Lack of nature suggestions |</p>
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**CONSTRUCT**

- Strict with children
- Give chil. great deal
- More conservative in giving
- More faith in child
- More satisfied with less
- Less stress on protocol
- Less worry over child
- Less trust of child
- Less stress on protocol
- More cautious in choosing
- More anxious about child
- More anxious about child
- More anxious about child
- More anxious about child

**CONTRAST**

- Too lenient
- More lenient
- More lenient
- More lenient
- More lenient
- More lenient
- More lenient
- More lenient
- More lenient
- More lenient
- More lenient
- More lenient
- More lenient

---

### Table Headers

- **Parent Construct Rep Test**
- **Group No.:** 111
- **Grid No.:** 5
- **Subj. No.:** 29

### Table Columns

- **Name**
- **Date**
- **Construct**
- **Contrast**

---

### Table Entries

- **Construct 1:** Strict with children
  - **Contrast 1:** Too lenient
- **Construct 2:** Give chil. great deal
  - **Contrast 2:** More lenient
- **Construct 3:** More conservative in giving
  - **Contrast 3:** More lenient
- **Construct 4:** More faith in child
  - **Contrast 4:** More lenient
- **Construct 5:** More satisfied with less
  - **Contrast 5:** More lenient
- **Construct 6:** Less stress on protocol
  - **Contrast 6:** More lenient
- **Construct 7:** Less worry over child
  - **Contrast 7:** More lenient
- **Construct 8:** Less trust of child
  - **Contrast 8:** More lenient
- **Construct 9:** Less stress on protocol
  - **Contrast 9:** More lenient
- **Construct 10:** More cautious in choosing
  - **Contrast 10:** More lenient
- **Construct 11:** More anxious about child
  - **Contrast 11:** More lenient
- **Construct 12:** Less anxious about child
  - **Contrast 12:** More lenient

---

### Additional Notes

- **Footnotes**
- **Comments**
- **Instructions**

---

### Table Rows

- **23**
- **24**
- **25**
- **26**
- **27**
- **28**
- **29**
- **30**
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- **33**
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### Table Columns

- **Construct**
- **Contrast**
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**Partner's Name:** Dolly
**Sketch:** Riley
**Role:** Child

**Sketch:** Riley
**Role:** Child

**Sketch:** Innis
**Role:** Parent

**Sketch:** Inen
**Role:** Child
SAMPLE PROTOCOL AND DISCUSSION

Following is one enactment, along with the written analyses made by the subjects as they listened back to the enactment, followed by the writer's comments upon some issues that seemed pertinent.

I.

Enactment

Mrs. Riley and her daughter Annie, enacted by two elementary psychology students

Child: A, Mom, I was wondering, a, there's this new club they're forming at school, and it's called the, a, Cheering Block. Actually, what it is, it's a group of girls that, you know, get together and, like they'll hold up cards at football games, and, and they also cheer along with the cheer leaders, and, I dunno, it sounds really cool.

Mother: And what do you want to do, do you want to join this group, or what?

C: I want to join it. I want to join it. It's, I dunno, well, I can name about umpteen of my friends that are definitely planning on it, but, a, there's a slight cost involved too.

M: A cost. How much?

C: Well, we all have to have sweaters and skirts alike, and, a, I-I think that's it, but, a, they've picked them out already and I don't really know how much they are.

M: A, Well, exactly who's in it and what's it all about, and who are going to be the advisers of it?

C: The adviser is the same lady that's a, adviser for the cheer leaders, and I think the football coach is also has something to do with it. I mean it's initially his idea, he thought maybe, you know, spur the team on, stuff like that. And, lessee, a, it's for both 7th and 8th graders, and, I've got a feeling that, a, you know, it's sort of sign up first, and it's, I know all the 6th grade girls are going to get in on it and a lot of the 7th grade girls want to too, and 8th graders'll have first choice, so, if I decide, I have to sign in a hurry 'cause I'm only in 7th grade.

M: Well, you know that being out there and, and to st--, in this cheering block will make you seem rather boisterous and loud to your friends. My goodness, you don't want to set forth an impression that you're a loud young lady.

C: No, no. No, it's-cool. It's a cool group. I mean, the kids, you know. The kids who are really cool are going to be in the cheering group.

M: I don't know, I think that I'll have to think about this thing a little bit more, because it just doesn't sound quite what I
think you should have.

C: But, I know, it seems, you know, this—look, they're going to be cheering the team on; that shows school spirit. Right? I mean, er, they know that I'm not just somebody that walks around the school and just—walking around the school. And (sigh)—oh (sigh) (softly) darn. (1)

M: (Laugh)

C: (Laugh)

M: Well, I don't know, I'll, we'll have to think about this thing some more. A, name some more girls who are going to be in it.

C: Okay. Sharon and Susie, you know both of them, from, I think, grade school—, don't you?

M: Yes, I remember them, I remember that episode you had with them also.

C: (Laugh) You're digging my skeletons, mother. (Laugh)

M: (Laugh) That's all right.

C: And, a lessee, I think Janie's definitely going to, and she's definitely the most popular girl in the entire school, she's so, you know, she goes to all the dances and everything, and all the kids like her, and I don't think she's, you know, a com—plete failure or anything, she also does well in her grades and everything else, and, oh, I don't know, just everybody.

M: Well, how much have you thought about joining this group?

C: Today (laugh).

M: Today. Oh, great. When did the idea come up at school?

C: Well, they, a, announced it yesterday at the very last period of the day. It came over the loudspeaker. And there'd been talk about it for a long time though because the cheer leaders wanted to get something going, where a lot more girls could participate, because, you know, it's ideal to be a cheer leader, and lots of girls, you know, would like to be cheer leaders, and can't, and they thought this way more girls could get in on everything and help cheer the team on and, you know, feel like they were—had a little part in it or something.

M: Mmm, it sounds—

C: I bet I'm going to be sitting on the football stands all by myself if I'm not in the cheering block. (2)

M: Well, you don't have to—appeal to my emotions that way. (3)

C: (Laugh)

M: I'll have to see. Did they give you any type of material to bring home to your parents to explain this?

C: Yes, I've got a sheet here that, an, you know, explains that it's well supervised and that you know, we're not going to be running all over the countryside without chaperones on the bus,

---Numbers in parentheses indicate a place where the tape was stopped when played back for analysis. The corresponding number appears after the enactment protocol to indicate the subjects' analysis of the statement.
going off with the team and everything. It's sort of like, you know, paper insurance to our parents (laugh).

M: Paper insurance. Well, I'll read over this and see what I can come up with. And, the way it sounds, it sounds pretty good. Well, as I said, I'll talk it over with your father and then later on this evening, over dinner, you can tell him what it's all about, and you can probably join, but I wouldn't guarantee it. (h)

C: Okay. Okay, I'll wait till dinner.

M: Okay.

Analysis

(1) "Oh, darn" - statement made by Child, see above protocol
C prediction of M as written on the analysis form:
Understanding, sympathy, yield. Compassion, feels daughter's
- disappointment and importance of this, perhaps see if any merit
in group and if daughter's motives good enough consider letting
her.

M written statement of own feelings:
Uncertain. It might not be the best for Annie. The validity
of the importance of the cheering section is questionable.
Uneasy. It might hurt people's perception of Annie as a young lady.

(2) "if I'm not in the cheering block" - statement made by Child
C prediction of M:
Reflective, hesitant. See urgency to request—perhaps she is
- rushing into it for this reason and had better seriously look
over her pros and cons.

M statement of own feelings:
Upset with herself. She has apparently caused the child to lose
some faith and confidence in her.

(3) "you don't have to appeal to my emotions that way." - statement
made by Mother
M prediction of C feelings:
Worried, disturbed, frustrated, hopeful. So many questions. She
- probably felt pretty disgusted. Then when the mother says, "You
don't have to appeal to my emotions like that" she probably felt
a little optimistic.

C statement of own feelings:
Mistrusted or misunderstood, defensive. Lack of faith in mother—
thinking I'm using underhanded methods. Mother not on same wave
length, this is important and she thinks I'm kidding.
(4) "no guarantee" - statement made by Mother

M prediction of C feelings:

Hopeful. There is still the possibility that she might win.

C statement of own feelings:

Hopeful, optimistic, fair. She's being fair, swing dad's vote
and I'm home free, but don't become overly confident.

Discussion

The taped protocol was played back to the participants and stopped after the child-subject's remark, "Oh, darn." The subject enacting the child part (Subject C) was asked to write down how she thought the mother felt at this point and her reason for feeling this way. The subject enacting the mother part (Subject M) was asked to write down the way she felt at this point, and the reason she felt this way.

The child-subject wrote down "understanding, sympathy, yield" for the way the mother felt, because "Compassion, feels daughter's disappointment and importance of this, perhaps see if any merit in group and if daughter's motives good enough consider letting her." The experimenter had the feeling that Subject C had at this point in the enactment been genuinely discouraged and that the statement implying her giving up the argument, "Oh, darn," had not been a histrionic maneuver. In listening back to the tape, however, Subject C evidently recognized the tactical quality about it when she was asked to predict someone else's reaction to it, as the above quote suggests.

Subject M, however, was not this directly susceptible. She wrote down that she felt "Uncertain" because "It might not be the best for Annie. The validity of the importance of the cheering section is questionable," and "Uneasy" because "It might hurt people's perception of Annie as a young lady." She marked Subject C's paper wrong for her prediction of her.

The experimenter would have agreed with Subject C's anticipation, that is, if the experimenter had been the mother in such a situation, she would have been touched by Subject C's unhappiness. As the analysis proceeded, however, it seemed that Subject C's manner here was not without its long-range effect on Subject M.

The ensuing conversation of the enactment revealed that the mother-subject was not adamant about the matter but was still exploring the possibilities and seemed almost to want the daughter to convince her that it would be a good activity. In spite of the weakness of each defense which she asked the child to make (the "episode" with the girl friends whom she named, and further on, the admission that she had only thought "today" about joining the group), Subject M continued to postpone a decision against the daughter's joining.
Parenthetically, this behavior of Subject M's was probably not a very good portrayal of the prescription she was supposed to be enacting, Mrs. Riley, who might have, by this time, made up her mind what was best for her child and would have taken a stand for or against the action. The experimenter did not attempt to hold subjects too tightly to the prescriptions, however, in the interest of spontaneity.

The next appeal Subject C made which had some similarity to the "Oh, darn" statement, in that it implied a giving up on the issue, was "I bet I'm going to be sitting on the football stands all by myself if I'm not in the cheering block." This time, however, it seemed to the experimenter to be a direct and more calculated bid for sympathy. Subject C was less confident that it would work this time, however, for in contrast to the terms "understanding, sympathy, yield," which she used the first time, she now thought this would make the mother feel "reflective, hesitant," because "(mother) sees urgency to request--perhaps she (the daughter) is rushing into it for this reason and had better seriously look over her pros and cons." This more cautious prediction was probably based on Subject M's declared reaction to the "Oh, darn" statement, and if Subject C had not had this knowledge she might have made a more optimistic prediction here also.

This kind of situation arose fairly frequently with other subjects during the course of the experiment. A subject would make a prediction of the other subject's reaction and would be told he was wrong, that the reaction had been of a different nature. Then the next time a similar situation arose, the first subject altered his prediction to be more in line with the second subject's previous reaction, only to find that the second subject had now reacted as the first subject had expected him to the first time. It illustrated how much the subjects did have an effect on one another - they adjusted their next actions according to how the previous ones turned out.

In this case too, Subject C was marked wrong by Subject M, who said she felt "Upset with herself" because "She has apparently caused the child to lose some faith and confidence in her." This statement suggested guilt, and was probably a step closer to the "understanding, sympathy, yield" prediction made the previous time.

Subject M's reply in the enactment was "Well, you don't have to--appeal to my emotions that way," and Subject C laughed heartily. It turned out that this was meant as a signal by Subject M with the connotation that "You have appealed to my emotions, and it has worked--I am about ready to grant your request." Her prediction of the child-subject's feeling was "Worried, disturbed, frustrated, hopeful" because "So many questions. She probably felt pretty disgusted. Then when the mother says, 'You don't have to appeal to my emotions
like that,' she probably felt a little optimistic."

Subject C, however, missed the signal completely, for she wrote down her feelings as "mistrusted or misunderstood, defensive" because "lack of faith in mother (that is, the mother lacks faith in the daughter)—thinking I'm using underhanded methods. Mother not on same wavelength, this is important (joining the club) and she thinks I'm kidding." This latter type of feeling-tone, that is, misunderstood and defensive, was not at all apparent during the enactment itself, for the child-subject gave a hearty laugh after the mother's statement. If both the laugh and Subject C's analysis are taken at face value, the incident demonstrated how the subject's overt behavior was in contradiction to her covert action.

On the final statement which was analyzed, "you can probably join, but I wouldn't guarantee it," the subjects agreed, for Subject M thought Subject C would be "Hopeful" because "There is still the possibility that she might win," and Subject C wrote down that she was "hopeful, optimistic, fair" because "She's being fair, swing Dad's vote and I'm home free, but don't become overly confident."
APPENDIX C

ADDITIONAL INFORMATION

Orientation Ratings ................................................................. 190
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Slang words rated as child-oriented

dodge  cocky  tattle
brag    snotty  bragger
bully   tattler  stingy
smart-aleck  bossy  spunky
snob    goof    tomboy
sloppy  paddle  sneaky
holler  homework  T.V.
sloppy  phonny  sassy
smarty  snobby  brat
snobbish

The word out-going was rated parent-oriented, although technically it would be considered familiar (Dale, Feb. 17, 1948).
Criteria for Empathy Rating Scale

A phrase is rated subjective (empathic) if it gives the impression of looking at the world from the point of view of the person being described, or of getting "inside the skin" of the person.

Examples:

Likely to be used by a person to describe himself, as, provoked, nervous, relieved, happy, satisfied, wonders of teaching is lost on child, feels he has neglected something, didn't care.

Infers an internal state, process, or activity, as, secure, non-judging, able to accept critical suggestions, open-minded, wouldn't always expect perfection, knows what he wants, makes own decisions, admire and look up to parents, likes baseball, tries hard, sympathetic.

A phrase is rated objective (non-empathic) if it gives the impression of describing the outward appearance of the person being described, or the way this person looks to others.

Examples:

Used by professional people in a diagnostic or explanatory manner, as, well-adjusted, introverted, integrated personality, developed insight, rigid, perceptive.

Most often used as description of overt behavior, as, serious, outgoing, friendly.

Gives overtones of cultural approval or disapproval, based on mores of the culture, or judgmental, as, respects parents, wishy-washy, lazy, inflexible, humble, conceited, self controlled, happy attitude, more responsible, meek.

Uses extreme modifiers, suggesting exterior evaluations, as, very patient, too helpful, high temper.

More extensive criteria are given in Carpenter, 1966.
# Characteristics of Subjects

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