

## Loyola University Chicago Loyola eCommons

**Dissertations** 

Theses and Dissertations

1981

# The Effect of a Social Skills Training Program on the Level of Self-Awareness in Early Adolescence

Dennis J. Simon Loyola University Chicago

Follow this and additional works at: https://ecommons.luc.edu/luc\_diss



Part of the Psychology Commons

### **Recommended Citation**

Simon, Dennis J., "The Effect of a Social Skills Training Program on the Level of Self-Awareness in Early Adolescence" (1981). Dissertations. 2023.

https://ecommons.luc.edu/luc\_diss/2023

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.



This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License. Copyright © 1981 Dennis J. Simon

THE EFFECT OF A SOCIAL SKILLS TRAINING PROGRAM
ON THE LEVEL OF SELF-AWARENESS IN EARLY ADOLESCENCE

bу

Dennis J. Simon

A Dissertation Submitted to the Faculty of the Graduate School of Loyola University of Chicago in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

February

1981

#### ACKNOWLEDGMENTS

I am indebted to many people for the successful completion of this study. I am most appreciative of the support and guidance of my faculty committee, Drs. John Shack, Al DeWolfe, and Patricia Rupert. They were always available, insightful, and encouraging. John Shack has been a continuous source of creative input and personal support.

This project received generous cooperation and time from the teachers and students of the participating schools. I am grateful for them and in particular for the administrative support of Sister Rosemary Brennan, Sister Mary Julita, Sister Honora McNicholas, Sister Lynn Welsh, Ms. Judy Grein, and Ms. Roberta Lennon.

I am grateful for the work performed by the leaders of the Social Skills Training Program for this study:

Joan Callahan, Roberta Caram, Paul Flaherty, Lisa Hazlewood, Geri Pelz, and Charity Sterling.

I thank my parents, family, and friends who supported me throughout this endeavor. Most of all, I am grateful to my wife, Kathy. As well as being my supportive partner in life, she has been a constantly encouraging partner in research and study.

#### VITA

Dennis John Simon was born December 13, 1948, in Chicago, Illinois to Paul and Josephine Simon. He is married to Kathy Kapp-Simon.

His elementary and secondary school education was in the parochial school system of Chicago. He attended Niles College of Loyola University receiving a Bachelor of Arts degree in June, 1970. In May of 1974, he received a Master of Divinity degree from St. Mary of the Lake Seminary in Mundelien, Illinois. In February of 1975, he received the degree of Master of Arts in counseling Psychology from Loyola University of Chicago.

From 1974 to 1978, he worked as an associate pastor at St. Clement Church in Chicago. In 1978 he entered the doctoral program in clinical psychology at Loyola University. He performed his clinical internship at Westside Veterans Administration Medical Center and the Institute for Juvenile Research.

## TABLE OF CONTENTS

																Page
ACKNOWI	LEDGMENTS			•	•	•	•	•	•. •		•	•	•	•		ii
VITA .	• • • • •			•	•	•		•	•		•		•	•		iii
LIST OF	F TABLES .			•	•	•		•	•				•	•		vi
CONTENT	r of appeni	DICE	s.	•	•			•	•			•	•	•		viii
Chapter	<u>.</u>															
I.	INTRODUCT	ION		•		•	•	•	•				•	•		1
II.	LITERATURI	E RE	VIEW	T .	•.	•	•	•	•		•	•	•	•	•	. 7
	A Defir	sur	emen	t	of	Se	elf	-A	wai	en	es	s		•		17 18
	Program Tead Researd	ch S	elf-	Awa	are	ene	SS			np t	•	٠	•	•	•	22 34
III.	METHOD .			•	•	•		•	•				•	•		37
	Subject Selecti Measure Treatme Leaders Data Co	ion es . ent	• •	•	•	•	•			•	•	•	•	•	•	37 38 39 47 50 51
IV.	RESULTS .			•			•	•		•	•	•	•	•	•	53
	Self-Av Self-Co Persona	nce	pt .	•					• •	•	•	•	•	•	•	53 57 79
٧.	DISCUSSION	1.		•	•	•			•	•	•				•	86
	Self-Av Self-Co	nce	pt .		•	•		•	• •	•	•	•	•	•	•	86 89 94

## TABLE OF CONTENTS. -- Continued

																		Page
REFERENCE NOTES	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	•	•	98
REFERENCES	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	99
APPENDIX A	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		106
APPENDIX B																		110

## LIST OF TABLES

[able		Page
1.	Summary of Treatment and Non-Treatment Subjects by Sex, Grade, and School	40
2.	Analysis of Variance: Self-Awareness by Sex, Treatment, and School	54
3.	Analysis of Variance: Self-Awareness by Leader	55
4.	Leader Group Means and Newman-Keuls Procedure	56
5.	Analysis of Variance: Self-Concept by Sex, Treatment, and School	58
6.	Analysis of Variance: Self-Concept by School	59
7.	Self-Concept School Means and Newman-Keuls Procedure	60
8.	Means and Standard Deviations for Global Self-Concept Scores by Sex and School	61
9.	Self-Concept Scores of Females in School 1 by Race	63
10.	Analysis of Variance Self-Concept by	
	Race and Sex	64
11.	Analysis of Variance: Self-Concept by Race	65
12.	Self-Concept Race Means and Newman-Keuls Procedure	66
13.	Means for Global Self-Concept Scores by Race and School	68
14.	Analysis of Variance: Behavior by Sex, Treatment, and School	69

## LIST OF TABLES. -- Continued

Table		Page
15.	Analysis of Variance: Intellectual and School Status by Sex, Treatment, and School	70
16.	Analysis of Variance: Physical Appearance and Attributes by Sex, Treatment, and School	71
17.	Analysis of Variance: Anxiety by Sex, Treatment, and School	72
18.	Analysis of Variance: Popularity by Sex, Treatment, and School	73
19.	Analysis of Variance: Happiness and Satisfaction by Sex, Treatment, and School	74
20.	Means and Standard Deviations for Cluster Scores by School	76
21.	Means and Standard Deviations for Behavior and Physical Appearance and Attributes Scores by Sex and School	77
22.	Means and Standard Deviations for Physical Appearance and Attributes Scores by Sex and Treatment	78
23.	Correlations of Personality Variables with Self-Awareness for Total Sample	80
24.	Correlations of Personality Variables with Self-Awareness for Treatment Group	82
25.	Correlations of Personality Variables with Self-Awareness for High Self-Awareness Treatment Group	83
26.	Correlations of Personality Variables with Self-Awareness for Low Self-Awareness Treatment Group	84
		<b>–</b> 1

## CONTENTS FOR APPENDICES

																					Page
APPENDIX	A	•	•	•	•.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	106
APPENDIX	В					•			•									•	•		110

#### CHAPTER I

#### INTRODUCTION

# PSYCHOLOGICAL EDUCATION AND THE TEACHING OF SELF-AWARENESS

Contemporary education has as a stated goal the education of the total child. School curriculums fostering holistic development integrate educational approaches for teaching cognitive, social, affective, and physical competencies. Psychologists and guidance counselors serve as consultants for creating learning environments that enhance personal development. The need is being recognized for students to learn about and understand themselves as well as their environment, language, and the laws of nature and science. To meet this need for self-understanding, mental health practitioners have also become involved in developing and teaching specialized developmental guidance programs aimed at psychological and affective development.

Miller (1969) challenged psychologists to reconceptualize their role from a primary focus on remediating mental illness to an emphasis on promoting positive human growth. He writes:

Our responsibility is less to assume the role of

experts and try to apply psychology ourselves than to give it away to the people who really need it -- and that includes everyone. (p. 1071)

This understanding of the psychologist's role is in keeping with current interest across the health sciences in designing programs for prevention as well as for treatment. Making the practical and personally useful information of psychology available to students in a manner consonant with their capacity to make beneficial and appropriate use of it should be a part of a total educational package.

Concurrent with this developing attitude, sophisticated affective education programs were being implemented which were designed to become regular components of school curriculums. Bessel and Palomares (1973) and Dinkmeyer (1970) introduced popular programs designed to begin as early as pre-school. Mosher and Sprinthall (1970) were developing psychological education courses for high school students. Carkhuff (1971) was establishing models for adult systematic communication skills training through his human resource development programs. The impact of these various programs was extensive. ever, there was far less attention paid to the developmental period of early adolescence, 11 to 15 year olds. It was because of this need and as an outgrowth of the psychological education movement that the Social Skills

Training Program was developed (Kapp & Simon, Note 1).

It is this curriculum which will be used in this research study.

The age of 11 to 15, generally seventh and eighth grade, involves the transition from preadolescents to adolescence (Horrocks, 1969). Early adolescence is marked by the exciting but disruptive changes of puberty. It is a period of excitement, confusion, awkwardness, mystery, loneliness, and intense socialization. Erikson (1963) describes this period as the launching pad for intensive exploration of self-identity. New levels of cognitive capacity enable the early adolescent to begin to ponder questions such as "who am I" and "where am I going?" Rapid physical growth jars the youth's sense of self-consistency. Physical fluctuation leads to emotional fluctuation. The result is intense self-examination and frequent bewilderment. Exploration of personal identity begins the process of separation from family and thrusts the young adolescent into intense socialization with This socialization process heightens both the excitement and the pressures of new discovery. Friends serve as another mirror for the exploration of personal identity. They share similar experiences, provide interpersonal feedback, and challenge each other to experiment with new behaviors and attitudes.

As the intense self-examination and socialization provide a readiness for psychological education, the occasionally turbulent nature of beginning adolescence suggests a greater need for programs of prevention for this age group. As children move from latency to adolescence, they are particularly ripe to look at themselves and explore new levels of self-understanding. The presence of emotional and physical changes and the heightened exploration of personal identity particularly highlight the need for the studied and focused development of self-awareness. Achieving greater self-knowledge and self-understanding is the primary developmental task for the young adolescent and consequently a natural focus for psychological education programs for this age group.

Since at this age peers provide the best mirror for examining the self, a small group format would provide the ideal setting for guided self-exploration. Here comparisons to the experiences of peers could be safely explored, and self-acceptance of similarities and differences could be promoted. This developing self-awareness is accompanied by increased socialization and demands for new social competencies. Within this small group context, empathy and other developmentally appropriate communication skills could be taught in concert with self-awareness. Topical issues of relating to peers

and adults could be explored to expand interpersonal awareness, and increased self-understanding would contribute to more sophisticated levels of problem solving.

A small group psychological education program teaching self-awareness and related social skills should be conducted in a safe environment. A structured setting and skilled adult guidance would provide a focused but secure atmosphere for self and interpersonal exploration. Structured activities could help direct self-exploration while safeguarding self and group acceptance. As the principle structured learning environment for the young adolescent, the school is the natural setting for this kind of program. Guidance professionals could implement the program, and growing self-knowledge could be integrated with knowledge of language, science, nature, and the arts.

The Social Skills Training Program used for this study is a curriculum based psychological education program which teaches self-awareness at the junior high school level. It is a small group developmental guidance experience designed to provide a place in the curriculum where the student him or herself is subject. It also teaches other skills relevant to this transition period and related to self-awareness: empathy, self-disclosure,

direct communication, social initiation and assertion, and problem solving. In order to work with a larger and more representative sample, this study was conducted in collaboration with another investigation into other aspects of the Social Skills Training Program (Kapp-Simon, Note 3).

The purpose of this study was to evaluate the Social Skills Training Program's effectiveness as a method for teaching self-awareness. Self-awareness is difficult to define, operationalize, measure, and teach. This paper reported the history of the construct of self-awareness and proposed an integrated definition. It studied the measurement of self-awareness particularly as it applies to early adolescence. It then attempted to empirically evaluate one program's efforts to teach this skill.

#### CHAPTER II

#### LITERATURE REVIEW

Self-awareness is a concept which travels under many names in the psychology and sociology literature. It is variously called body-image, self-concept, the self, the body schema (Wylie, 1974). While these concepts overlap, each author moves in his or her own directions with his or her own conceptual formulations. Many theorists stress body image and physical experience, while others have focused on cognitive or affective aspects of self-awareness. An integration of these three elements appears necessary to comprehensively define the construct of self-awareness.

Although the origins of self theory has its roots in the early Greek literature, psychology looks to the experimentalists such as Wilhelm Wundt for its earliest formulations of self theory. For these experimentalists the idea of self referred primarily to the person's experience of his own body. That is, self-feeling or self-awareness was defined as an awareness of muscle tension or other internal states (Gergen, 1971).

At the turn of the century, James (1910) expanded on a definition of self. He included: 1) the

idea of the material me or the individual's possessions;

2) the idea of a social me or the individual's reputation or identity in the eyes of others; and 3) the idea of a spiritual me or the individual's awareness of his/her own mental processes -- thinking and feeling. It is this expanded definition which eventually grew into the construct of self-concept. Each of these ideas has been broken down even further so that self-concept theorists have been able to identify factors which can provide keys to understanding the multitude of puzzling behavioral events displayed by any single person.

Historically, sociologists pick up the self thread at this point and in the 1930's George Herbert Mead (1934) formulated his theory of the development of an awareness of self. In his famous work Mead postulates that self is best defined as an object of awareness rather than as a system of processes. Consequently a person becomes self-aware at that point in time when he is able to think of himself as an object and thus have attitudes and feelings toward himself. Mead maintains that selfhood cannot be constituted by a person's subjective or 'feeling' awareness of himself. To verify this Mead uses the example of a person running down the road. He claims this person can have a rudimentary awareness of his body but that this awareness

does not constitute a genuine self. If he is to ascend to true selfhood the individual must detach himself from internal awareness and assume a point of view from a perspective outside of self. This perspective is best formed by the perceptions and evaluations of the social other. Thus Mead postulates a socially formed self.

From a developmental point of view, self-awareness as defined by Mead appears to occur during latency or even later. Selman and Byrne (1974) found that none of their 6 year olds, 50% of their 8 year olds, and 60% of their 10 year olds had achieved a role taking ability which might be reflective of the development of self-awareness as defined by Mead. Selman and Byrne identified four levels of role taking ability. The third (level 2) was defined as the child's ability to reflect on the self's behavior and motivation as seen from outside the self, from the other's point of view; and it is this skill which is lacking in 40% of the children in their sample at age 10.

Piaget (1966) characterizes the child who is not self-aware with the term "absolutism." The distinctive features of such a child include the facts that: (1) the child has absolute belief in her own ideas; (2) the child believes that everyone else understands everything that she says; (3) the child is incapable of recognizing

self-contradictions; and (4) the child believes that everyone sees events from her point of view.

It is useful to note that Piaget postulates that the child's absolute belief in his or her own ideas and point of view occur because he or she cannot conceive of the existence of alternative viewpoints NOT because he or she is unable to affirm his or her ideas as correct. Self-awareness begins to develop according to Piaget when the child becomes aware that there are perceptions. thoughts, and behaviors which differ from his or her own. And this differentiation can only occur in the presence of a social other. Duval and Wicklund (1975) expand on Piaget by outlining three conditions which are necessary in this social contact if self-awareness is to develop: (1) an individual must have a viewpoint different from the child's; (2) the different viewpoint must concern the same object; and (3) the child must have a simultaneous awareness of the opposing opinions.

The above conditions are best met in a child's relationships with its parents. A toddler may find great enjoyment in removing all of the pots and pans from the kitchen cabinets. This enjoyment can then turn to glee as he or she sits on the floor and bangs the pots and pans in musical harmony. Mother, on the other hand, may find this type of behavior extremely objectionable and

may express this through both words and action when she enters the kitchen. This situation sets up a discrepancy for the child which begins to nudge him or her toward an idea that something he or she finds enjoyable may not be perceived in the same way by other people in the same environment. Many such experiences during the learning years bring the child to the point described by Selman and Byrne (1974) as the ability to reflect on one's own behavior as seen from the perspective of another. It will be many years before the toddler can think through the fact that mother may not be pleased with his or her music making ability to the same degree that he or she was.

Thus far we have considered self-awareness as a cognitive process. Self-awareness also involves an awareness of emotional reactions and an ability to identify the relationships among internal states, visceral experiences, and environmental experiences.

Wallen (1956) hypothesizes that a child's relationships are first experienced as tonic-emotional reactions. These sensations form the structure for affective schemata which would be analogous to the role of Piaget's sensori-motor schemata. Affective schemata are based on sensori-motor and sensori-visceral mechanisms. For the infant this involves relating pleasurable internal states (visceral) to specific external stimuli (sensorimotor). For example, the child feels comforted (visceral muscle relaxation) through the cuddling action of his or her mother. As the child matures these schemata develop into specific affective awarenesses.

An important aspect of the notion of affective self-awareness involves the development of a language to describe these experiences. Until the child possesses a means of articulating what these internal states are, they remain vague sensations which none-the-less have power to influence behavior. We need only consider the power of undefined anxiety as an inhibiting factor on an individual.

Wolman, Lewis, and King (1971, 1972a, 1972b) present a series of articles which investigate the development of the language of emotions. Their work involved 256 children between the ages of 5 and 13 and attempted to identify the conditions under which children report that emotional arousal takes place, what the emotion felt like, where the emotion was felt, and what action they wanted to take as a result of feeling the emotion.

For the purposes of their studies emotion was defined as an awareness of altered body states. The emotions they considered included hungry, thirsty, sleepy, sad, happy, angry, scared, and nervous. The first three were termed physiological while the latter five were

termed psychological emotions.

The conditions of emotional arousal were evaluated in terms of internal versus external sources of arousal. For example, "I feel hungry when food is on the table" would be an external arousal condition whereas "I feel hungry when my tummy is empty" would be considered an internal condition. As anticipated, there was a movement from external awareness to internal awareness with increasing age. Intelligence, socioeconomic class, birth order, and school performance had no systematic roles in the child's ability to free him or herself from reliance on external arousal cues. The authors did report a tendency for females to be more reliant on external They did not mention, however, whether cues than males. there were systematic differences between physiological and psychological emotions on this variable.

The second question aimed at determining whether the child felt an emotion on the exterior or interior of his or her body and if he or she were able to pinpoint specific sites of his or her body for different emotions.

The authors again found that as children develop there is an increase in the frequency with which they ascribe emotions to the interior of their bodies. In this case they found a marked difference between the physiological and the psychological emotions. Nearly 100% of the children who gave a bodily reference for thirsty and hungry gave an internal response. On the contrary, of the 65% of the children who gave a bodily reference response to sad only 50% gave an internal response. The pattern was similar for other psychological words. It was evident that the psychological words were far more difficult for even the older children to verbally describe.

The final major question concerned the child's desired response to the experienced emotion. This is addressed by Lewis, Wolman, and King (1972) and taps potential coping styles of the children. The physiological emotions evoked clear cut intentions even in the youngest of the children. When hungry they wanted to eat; when thirsty they wanted to drink. The responses to the psychological emotions varied by emotion although intentionality generally increased with age. Not surprisingly the older children wanted to prolong happiness. Both males and females wanted to fight back rather than flee when angry and both tended to avoid sadness rather than cope with it.

This series of studies provides initial data on the beginnings of emotional awareness in children.

These authors state that "the ability to verbalize

internal processes has been viewed as a crucial step toward socialization and the establishment of higher order mental processes" (Wolman, Lewis, & King, 1972b, p. 67). Thus the ability to verbalize internal processes can be considered a prerequisite for empathic behavior.

Most recently, Rosenberg (1979) extends this view of the relationship between empathic behavior and the communication of self-awareness. He stresses its importance at the developmental stage of adolescence:

We suggest that, in order to communicate, we must first be able to take the role of the other, put ourselves in the others' shoes. But it is precisely the process of communication that gives birth in adolescence to introspection — the tendency to survey, assess and reflect on the inner world of thought, feeling, and desire...we must first get outside of ourselves in order to be able to see inside ourselves. (p. 219)

Similar to Wolman, Lewis, and King, Rosenberg describes the ability to perceive the self in terms of a psychological interior that only develops with age. While primarily egocentric, the younger child is unable to think self-reflectively. It is in early adolescence, 12 to 14 years of age, that the ability to introspect, to reflect on an inner life of thought and feeling is generally first acquired. It is at this time that physical development in puberty and new cognitive competencies combine to provide a new awareness of internal states. Early adolescents show a higher level of self-

consciousness, greater instability of the self-concept and lower self-esteem (Simmons, Rosenberg, & Rosenberg, (1973).

Rosenberg's research goes on to describe the movement of the locus of self-knowledge from the views of parents and authority figures to those of peers and one's self as development progresses from childhood to adolescence. This held true for knowledge of the "exterior self," public characteristics such as behavior and attractiveness, and for the "interior self." inner thoughts, feelings, and aspirations. The conception of self in early years begins centered on physical characteristics, social identity elements, and specific habits or interests and grows in early adolescence to focus on a psychological interior centered on an awareness of the inner world of thought, feeling, and experience.

From a more psychoanalytically oriented view-point, Feshbach (1975) related self-knowledge to empathy. She stressed the stimulation and self-awareness of the subject concerning his or her own feelings as the major characteristic of empathy in children.

As we have seen in this historical overview of theories of self, conceptualizations have emphasized physical, cognitive, affective, and social aspects of self-awareness. Theoretical emphasis has shifted some-

what from body-image, to cognitive, and then to affective components. It is necessary to integrate these various parts into a singular construct to be able to validly measure self-awareness.

#### A Definition of Self-awareness

This paper proposes a definition of self-awareness as the ability to identify and discriminate feelings
and link them to external and visceral experience and
behavior. The ability to link these various aspects of
consciousness displays a high level of self-awareness.

If I sense my stomach churning, recognize my nervousness,
know that it is related to speaking in front of the class,
and consciously take a deep breath to calm myself, and
understand that these parts of me are intimately related,
then I am very sensitively aware of myself.

Wolman and his colleagues, and Rosenberg stressed the movement from external to internal, exterior to interior awareness. Defining the construct of self-awareness in the manner proposed emphasizes the ability to pull together the multitude of variables which in combination result in an awareness of an experienced state and feeling. But even with this departure in emphasis it is still possible to conceptualize various levels in the development of self-awareness that are

susceptible to measurement and show developmental differences.

A first level is the simple awareness of physical states such as hunger and thirst. The second level shows an awareness of affective states in general and then more specifically as a self-reference. At this level a child simply knows what feelings are and that he or she has them. A third level would display a knowledge of how and where I feel, e.g., I know I am nervous when my hand begins to shake and my voice quivers. The fourth level conveys the ability to link feelings, experience, behavior, and their physical reference points in the full manner described in the construct definition. It is at this level that a more integrated awareness of how my behavior affects others and how others affect me is possible. A fifth and even more complex awareness would be the intuitive ability to recognize patterns of my behavior and feelings, an integrated understanding of my personality traits and mood states that helps me to modify my experience constructively.

The Measurement of Self-awareness

Possessing a clear definition of the construct of self-awareness and an understanding of progressive levels of the development of self-awareness enables us

to design a measurement instrument. The already cited work of Wolman, Lewis, and King provides some direction but focused primarily on the language of emotions. ous authors have constructed scales for measuring selfconcept in terms of self-esteem for adolescents (Coopersmith, 1967; Fitts, 1965; Piers, 1969; Simmons, Rosenberg, & Rosenberg, 1973). Vondracek & Vondracek (1971) measured self-disclosure in preadolescents. The importance of understanding and evaluating self-awareness, selfconcept, and self-disclosure as related, but separate constructs will be delineated in a later summary of psychological education program outcome studies. attempt, however, has been made to measure self-awareness in early adolescence as it has been defined here. Similarly we lack any adult measure of this construct which may provide any guidelines for adaptation.

A companion study beginning this research project attempted to validate two separate measures of self-awareness (Simon, Note 2). The first was a semi-structured interview technique and its accompanying rating scale. Stimulus cues in open ended questions were presented from each of the aspects of self-awareness: feeling, external experience, behavior, and visceral experience. The rating scale scored for various levels of awareness similar to the progression outlined above

stressing an integration of the various components of self-knowledge. This straightforward technique provides a systematic, in-depth measurement of the complex variables which form self-awareness.

The second measure for self-awareness involved a non-verbal picture arrangement task. Its goal was to separate some of the verbal response factors which might be related to language level or communication skills from the measurement of self-awareness. Administration was simple and scoring rapid.

Comparisons of each of these instruments to a constellation of related variables was undertaken to assess construct validity. These included empathy, intelligence, and personality traits. Teacher rankings of their students' self-awareness capacities were used as a criterion measure to compare with test scores.

Study outcome supported the validity and reliability of the interview technique, the Self-Awareness Inventory (SAI). The non-verbal picture arrangement task was not found useful. Interrater reliability for the six category scales of the SAI ranged from .90 to .97. Of these six scales the first providing emotional stimuli and the fourth providing experiential stimuli contributed the most to the validity of the instrument and will be used for the present study.

In the validity study, these scales (hereafter SAI) correlated with empathy, r(39) = .63, p < .01. parison to Cattell's HSPQ factors, SAI most strongly correlated with Factor C, emotional sensitivity, r = -.24, p = .07; Factor D, excitability, r = .24, p = .07; and Factor F, surgency, r = .25, p = .06. For each of these correlations, df = 39. The HSPQ factors are bipolar. The directions of these correlations mean that the subject who was more self-aware tended to be more easily affected by feelings, more excitable and demonstrative, and more enthusiastic than his or her peers. These statistical trends do form a logical cluster of personality traits consistent with our understanding of selfawareness. These correlations are moderate, but extreme scores on the HPSQ are related to problems in personal adjustment. The analysis of the scores of subjects scoring in the directions correlating with self-awareness showed them to center within the normal range of personal adjustment. The correlation of SAI with IQ was .06 indicating that the instrument is measuring something beyond intelligence. Sociogram data suggested some positive relationship with popularity, r(39) = .23, p = .07. However, this inference was qualified by a lower correlation, r(39) = .15, p = .23, of self-awareness with the trait "likability" which was the summary of all sociogram data. This convergent and discriminant analysis generally supports the SAI as a valid measure of self-awareness.

Teacher rankings of students' self-awareness abilities was used as a criterion variable. At the school containing over 75% of the sample a significant positive correlation was found,  $\underline{r}(30) = .31$ ,  $\underline{p} < .04$ . Scale 1 had the greatest impact on this correlation,  $\underline{r}(30) = .47$ ,  $\underline{p} < .01$ . The second school did not show a significant correlation. However, a selection bias and the small number of students (9) restricted the range and variance among this partial sample on the variable of self-awareness.

The validity and reliability data on the new SAI instrument was judged to be sufficient to utilize it as a measure for self-awareness for the present program outcome study.

Program Evaluations

of Attempts to Teach Self-awareness

## Self-awareness, Self-disclosure, Self-concept

The development of self-awareness is a central goal in several developmental guidance and affective education programs in major use in our elementary and junior high schools. The Human Development Program (Bessel &

Palomares, 1973), <u>Developing Understanding of Self and Others</u> (Dinkmeyer, 1970), <u>Toward Affective Development</u> (Dupont, Gardner, & Brody, 1974), and <u>Innerchange</u> (Ball, 1977) are examples of widely utilized programs which describe some aspect of increased self-awareness as a major goal. These and other programs present sound theoretical rationales for emphasizing the importance of expanding a child's self-awareness to promote healthy development and prevent mental illness. However, few authors specifically define the concept of self-awareness. And even when more clearly described, self-awareness is not operationalized in a manner that is appropriate for direct measurement.

While being stressed as a major thrust in psychological education, progress in self-awareness is generally not tested in program evaluation studies. Related but distinct constructs like self-concept and self-disclosure are more typically measured. Self-awareness is assumed to be a means to these ends. And if outcome studies show significant gains on these variables, then increased self-awareness is assumed.

This approach has several limitations. Self-awareness, as it has been specified for this study and generally described by other programs, is different from self-concept and self-disclosure. Self-disclosure

and self-awareness are separate but interdependent functions. Self-awareness is partial content for disclosure, and verbal disclosure is the common means to knowing someone's level of self-awareness. However, each is measured separately and along different dimensions.

Self-disclosure has been measured along dimensions of frequency, depth, and contribution to interpersonal closeness (Cozby, 1973). Attempts to measure it in adolescence have involved counting types of disclosures in groups (Kraft & Vraa, 1975), written self-report inventories (West & Zingle, 1969), and structured interviews using rating scales (Vondracek & Vondracek, 1971). It is possible, however, for someone to be keenly self-aware and readily sensitive to their own feelings but be a reserved or highly selective self-discloser. A similar analogy is the difference between the quality of social cognition and the communication of empathy to another person.

The distinction between self-awareness and self-concept is clearer. However the assumption that one takes into account measurement of the other might confound program evaluation studies. While an accepting self-awareness is a step toward acquiring a healthy self-concept, there are times when healthy self-awareness may at least temporarily diminish self-esteem.

For example, if someone has overly defended him or herself from awareness of "negative" feelings or has not understood the detrimental impact of a bad habit on a friend, increased self-awareness may first lower self-estimation before being integrated into an improved self-concept. The process would be one of related growth on two dimensions but not necessarily on a smooth curve. This may be an explanation for how increased self-introspection and lowered self-concept both arrive at the time of early adolescence (Simmons, Rosenberg, & Rosenberg, 1973).

So much has been written on the relationship between self-concept and school achievement (Combs & Soper, 1963; Coopersmith, 1959; Davidson & Lang, 1960; Fink, 1962; Walsh, 1956; Wattenberg & Clifford, 1964) that programmers have used self-concept data to help justify the presence of affective education programs in the curriculum. It is possible that evaluating outcomes for training self-awareness may provide additional evidence for program efficacy.

## Program Evaluations

Long (1974) tested increased depth of self-perception in 185 sixth grade children involved in a teacher directed psychology course. The curriculum consisted of a series of games, simulations, and experiments designed

to demonstrate various aspects of human behavior. These activities were then group analyzed and discussed. Long developed the "Who am I" test as her self-perception index. Subjects were simply asked to "Make a list of yourself. Tell 'Who Am I?'" Number of responses was unlimited. A 4 level scoring system was developed and responses were rated on a continuum from superficialcognitive to internal-affective. A level 1 response might be a physical description, e.g., I am small, while a level 4 example would involve an emotional statement, e.g., I feel shy when... Five of six experimental classrooms showed significant changes in their attitudes toward themselves and greater emphasis upon descriptions of personality and feelings. Maintenance of gains on this instrument after 1 year was reported from a pilot study for this project involving 26 subjects.

In developing another kind of psychology course, Sprinthall (1974) used a practicum-seminar format to prepare high school students for peer counseling and crossage teaching. The major objective of his program was to affect the cognitive developmental level of the teenagers by challenging them to act as helpers. In contrast to Long, this author emphasized cognitive and moral rather than affective dimensions of self-development. Sprinthall used a pretest/posttest design but

without a control group. He used the Loevinger scales of ego development and the Kohlberg scales of moral maturity as dependent measures. He reports a significant change in ego development level translated as a shift from wary, self-protective to more trust and open communication and higher self-respect and complexity.

The more widely used affective education curriculums for elementary schools have been extensively field tested prior to formal publication. The theory manual for the <u>Human Development Program</u> (HDP), also known as "Magic Circle," outlines a process of development over several years and boasts of training educators in the tens of thousands (Bessel & Palomares, 1979).

Developing Understanding of Self and Others (DUSO) was field tested in 166 classrooms involving over 4,150 children. Participants were selected from varying economic, racial, and ethnic groups. A similar extensive field evaluation project was undertaken for <u>Toward Affective</u> Development.

These methods of program evaluation allow for maximum practical input from classroom teachers and guidance counselors. Since each of these programs is originally designed to be implemented by classroom teachers, it ensures the likelihood that they will feel interested and competent with program materials. The extensive

use of these programs testifies that teachers find them useful. Unfortunately, attempts to measure program effects through more rigorous experimental designs are not reported in their respective manuals. The following section will summarize principle findings in the experimental literature.

HDP was originally designed as a small group discussion program for pre-school children and has now expanded into an integrated series up to high school levels. Innerchange is the discussion program for junior high school students (Ball, 1977). Three principle themes are stressed: awareness, mastery, and social interaction. A sample awareness session (third grade) instructs the teacher to share an experience of feeling good and bad about the same thing. Each student is asked to do likewise and a discussion ensues. Reflective listening modeled by teachers is emphasized. The manual contains a "developmental profile" modeled after Champney's instrument for measuring parent behavior. The rating scale for self-awareness is a 10 point continuum ranging from very aware (always conscious of feelings, wishes, fears, and the meaning of behavior) to unconscious (full of denial, unable to recognize feelings, thoughts, or behavior). This profile is designed to be used by teachers for student evaluation. It is too subjective and

insufficiently operationalized to be used as a research tool.

Most of the published research on the HDP is with younger elementary school students. In an often quoted study, Jackson (1973) found significant differences between experimental and control groups of fourth graders on a measure of reading achievement, but no differences on a self-concept measure. Martin (1973) using the same sample found no differences in locus of control. Halpin, Halpin, and Hartly (1972) measured the effects of the HDP on the sociometric status of 95 second grade students. The sociogram questions centered on who a student would like and not like to sit next to. The groups of children receiving 10 sessions of "Magic Circle" significantly gained in status, and those receiving 5 sessions showed a positive trend compared to a control group.

Keelin and Keelin (1976) compared the interpersonal communication benefits of HDP with 4 year olds to a control group holding other topical discussions. They report significant gains in unspecified "on task" interpersonal behavior for both groups without significant differences attributable to HDP. Harris (1976) compared HDP to a Rational Emotive Education program developed for her study and to an attention-placebo and

a no treatment control group. Her fifth and sixth grade subjects met for a total of 15 sessions. Her principle findings centered around a leader effect and showed no significant differences between programs in locus of control, Lipsett's self-concept scale, and the scales of the HDP's Developmental Profile. Posttest data did show that the rational emotive groups successfully mastered REE content.

Edmondson (1979) studied the effects of HDP and a transactional analysis program (Freed, 1971) on the self-concept of 165 randomly selected fourth grade children. Treatment groups met 3 times weekly for 11 weeks, 30 minutes a session. Measures for the dependent variable of self-concept were the Piers-Harris Children's Self-Concept Scale (Piers, 1969) and the California Test of Personality (Thorpe, Clark, & Tiegs, 1953). No figures were presented, but the author reported positive trends for the enhancement of self-concept which were approximately equal for each treatment group as compared to the control group, but not statistically significant.

Hess, Peer, and Porter (1978) used a non-equivarlent control group design with 48 sixth graders to assess
the effects of HDP on the Piers-Harris Self-Concept
Scale. Experimental groups met for 8 sessions each of
30 minutes duration. Significant global improvement in

self-concept and on the subtest of popularity was noted for one experimental female group. On the subtest of happiness and satisfaction experimental males showed significant gains. The authors cautiously report this data as supportive of HDP while admitting complicating sex and treatment interaction effects. In a follow-up student questionaire 96% of the participants expressed interest in extending the program.

A major problem with many of the above studies was short treatment duration compared to the normal implementation of HDP. Gerler (1980) addresses this problem through a 3 year longitudinal study of HDP and Unfortunately, his dependent variable of school DUSO. attendance is totally different from the other studies and does not enable us to see effects of longer treatment on self-concept. Gerler and Pepperman (1976) had found both programs to have positive effects on children's attitude toward school. In this study 52 children were divided into HDP, DUSO, placebo play, and no treatment groups. Gerler found significant positive effects compared to the no treatment group on school attendance in kindergarten for both HDP and DUSO, in the first grade for DUSO only, and for neither in grade three. no year did either DUSO or HDP show significantly different school attendance effects than children in the

play group. This latter finding makes it difficult to conclude specific program effects on this dependent variable.

DUSO is one of the most popular developmental guidance programs currently in use. Two separate multimedia kits are intended for use with kindergarten to fifth grade students. Primarily Adlerian in orientation, its goals focus on self and other acceptance and understanding, understanding goals and purposes of behavior, and understanding choices and consequences. This classroom guidance program is multi-method in approach. It utilizes puppets, music, posters, story books, and role play exercises to stimulate small group discussion around themes related to program goals and common childhood problem situations.

Experimental research on the DUSO program has also centered on improvements in self-concept. Koval and Hales (1972) studied the effects of DUSO on the self-concepts of rural Appalachian primary-age children.

Their sample of 3123 children was randomly divided into experimental and control groups. Experimental groups met 30 minutes weekly for 10 weeks. Dependent variables were four subtests of the California Test of Personality measuring self-reliance, sense of personal worth, sense of personal freedom, and feeling of belonging. DUSO

participants scored higher in self-reliance and in feelings of belonging. First grade participants showed a greater sense of personal worth while other groups showed no difference. Eldridge, Barcikowski, and Witmer (1973) studied DUSO effects on self-concepts of second grade children. Control and experimental groups each had 49 subjects. DUSO groups met for 25 sessions of 30 minutes over a 5 week period. These researchers used multiple tests to measure self-concept: The Children's Self-Concept Index, four sections of the California Test of Personality, the Piers-Harris Children's Self-Concept Scale, and the DUSO Affectivity Device. The only significant treatment effect was found for the DUSO Affectivity Device. Obviously all of these self-concept tests are not measuring the same dimension. The Affectivity Device purports to measure a sense of selfidentity which is understanding and acceptance of self.

The above experimental program outcome studies leave many questions unanswered about the efficacy of specific programs. With the exception of Long's study of self-perception in sixth graders, few guidelines are presented which might be helpful in measuring advances in early adolescents taught self-awareness. Unfortunately the studies reviewed focused on either primary or high school level students. Research has simply not

focused on junior high school students. With the exception of Gerler's longitudinal study, length of experimental treatment was far shorter than the actual intended design of the major HDP and DUSO programs. The distinction between self-awareness and self-concept was delineated above. The problems with focusing on self-concept as the major dependent variable are brought into focus by this review. Evidence using different instruments has often been contradictory. Self-concept is difficult to measure and varying instruments appear to tap differing aspects of the global construct. Various of these authors state their regret for the lack of fine discrimination in these tools, but many further complicated the possibility of achieving positive results by their brief experimental instruction periods. Lengthening experimental programs and measuring additional dependent variables could more clearly ascertain the effectiveness of these psychological education programs which are so widespread in their implementation.

# Research Hypotheses

The principle purpose of this study is to evaluate the effectiveness of a training program for teaching self-awareness. While a still growing number of psychological education programs are being developed, in the

majority of schools their implementation is the exception rather than the rule. Unfortunately, most schools view the development of self-understanding and other goals of affective education to either be beyond the scope of the normal curriculum or assumed to be handled by the general classroom atmosphere. This is particularly true at the junior high school level where the primary question remains whether or not a special program is necessary rather than which program would best meet the goals of psychological education. It is still the exception for a junior high school curriculum to contain a course designed to promote the development of self-In this study the training groups were compared to control groups made up of classmates who received no special treatment. This comparison was judged to be the most realistic one for most school systems.

The major hypothesis for this research project was that students who experienced training in self-awareness would score higher on a post-treatment measure of self-awareness than students who did not. As outlined above, it was assumed that self-awareness and self-concept were related but distinct constructs and should be measured separately. So it was additionally hypothesized that there would be a positive difference in self-concept for

the training group as measured by the Piers-Harris Self-Concept Scale.

The relationship between self-awareness and selected personality variables was evaluated using a series of sociograms and the Jr.-Sr. High School Personality Questionnaire. The relationship of these personality variables and of intelligence to self-awareness was examined for the total sample population and for those experimental subjects who scored highest and lowest on the self-awareness measure.

### CHAPTER III

#### **METHOD**

## Subjects

The subjects for this project were 137 seventh  $\ell_{\nu_i^{jj}}$ and eighth grade students from 4 urban parochial schools. In all, there were 56 boys and 81 girls. The distribution for individual schools was: 12 boys and 14 girls for School 1, 20 boys and 23 girls for School 2, 10 boys and 25 girls for School 3, and 15 boys and 18 girls for School 4. While student ages ranged from 12.0 to 15.0, there were only 2 students who were 15.0. School 1 population comes from a predominantly lower to middle socioeconomic neighborhood. Schools 2 and 4 were geographically near each other. However, School 2's students were primarily from a lower to low middle socioeconomic background while School 4 draws primarily from a middle to upper middle socioeconomic population. School 3's population comes from a generally middle to upper middle socioeconomic area. All schools were racially diverse, but Schools 2 and 3 were primarily Black.

Students participated in the research voluntarily with parental permission. The relationship of subjects to the available pool of students is as follows: 26

of 29 students from School 1, 43 of 51 students from School 2, 35 of 59 students from School 3, and 33 of 52 students from School 4. Six original study participants were not able to complete all of the measures and were excluded. Four of the six were from School 2. The remaining two were from School 4.

School 1 has used the Social Skills Training Program (Kapp & Simon, Note 1) in its curriculum and participated in Schevers (1978) research project. However, none of the research subjects from this school had ever been exposed to the training program or related research. None of the other three schools nor their students had ever participated in this or related programs. Their involvement was initiated specifically for this research project.

In order to work with a larger and more representative sample, this study was conducted in collaboration with another investigation into other aspects of the Social Skills Training Program (Kapp-Simon, Note 3).

## Selection

At the beginning of the school year the directors of the training program gave a presentation on the program goals, format, and research protocol to all students in the grades invited to participate. They were provided with parental permission slips and informed that not

all of the project participants would receive the training program. 143 students elected to participate. Each was individually interviewed by a group leader. A gross assessment was made between students who were withdrawn, shy, or non-communicative and students who were more talkative, outgoing, and appearing more at ease in social situations. This information was used to insure that within random assignment there was a balance between verbal and quiet participants. With this balance in mind, students were randomly assigned to 23 groups containing 5 to 7 members each. Members of individual groups were of the same sex, grade, and school. From these 23 groups, 12 groups were randomly selected to be treatment groups. A summary of treatment and control group information by sex, grade, and school is presented in Table 1.

### Measures

Self-Awareness Interview. An extensive structured interview was developed for this study to measure the construct of self-awareness. Taking into account each aspect of the proposed operational definition of self-awareness, questions focused on emotional, behavioral, and experiential cues to self-knowledge as well as understanding of the effects of personal behavior on peers and parents. The interview consisted of 38 open ended questions. They were straightforward in presentation

Table 1
Summary of Treatment and Non-Treatment
Subjects by Sex, Grade, and School

			Grade Girls		Grade rls <u>N</u>	7 t	th Grade Boys <u>N</u>	e	8th Grade Boys N
Α.	Treat	ment	Group:	68 Sub	jects	(40	Girls,	28	Boys)
Sch	nool 1		6		0		6		0
Sch	1001 2		5		6		6		5
Sch	1001 3		0	1	_2		0		5
Sch	1001 4		5		6		0		6
	al eatmen ojects		16	2	24		12		16
В.	Non-	Treat	ment:	75 Subj	ects	(42 (	Girls,	33 E	Boys)
Sch	nool 1		8	`	0		6		0
Sch	1001 2		5		8		5		7
Sch	1001 3		0	1	.3		0		5
Sch	1001 4		3		5		7		3
	al ntrol ojects		16	2	26		18		15

Note. N for total sample = 143

and content, e.g., how do you know when you are happy, and were judged by expert consultants, three clinical psychologists, to possess face and content validity for the measurement of the construct of self-awareness as defined for this study. Six point scales (0 to 5) were developed for each of six separate categories of questions to obtain self-awareness ratings. Each response was scored and averages were computed for each category and for the total inventory.

A preliminary study investigated the reliability and validity of this measure (Simon, Note 2). The two category scales utilizing emotional and experiential cues proved to contribute most to validity data and will be used for this study (See Appendix A). Interrater reliability equalled .92 for Scale 1 and .96 for Scale 2. In a discriminant and convergent analysis described in Chapter II these scales (SAI) correlated positively with empathy (.63), emotional sensitivity (.24), excitability (.24), and enthusiasm (.25), while only marginally correlating with IQ (.06). Comparison of self-awareness scores to teacher ranking scores revealed a significant .47 correlation for Scale 1 and a significant .31 correlation for both scales combined.

In this study, average rating scores were calculated for each scale separately and then added together. Thus, self-awareness scores reported in this study are a summation of the average response rating of Scale 1 and Scale 2.

The Piers-Harris Children's Self-Concept Scale (The Way I Feel About Myself). The Piers-Harris Self-Concept test is an 80 question self-report inventory (Piers, 1969). Designed specifically for use in child development research, it is meant for grades 3 to 12. The test items are presented in the form of simple declarative statements to which respondents are asked to reply "yes" or "no" depending upon whether the statement was true for them or not. Sample statements are: am smart' or "I cry easily." Through a factor analytic study, six cluster area scores were determined and can be used in addition to the global self-concept score. They are behavior, intellectual and school status, physical appearance and attributes, anxiety, popularity, and happiness/satisfaction.

The initial standardization study reported testretest reliability coefficients over a 4 month period
averaging .72 and split-half reliability coefficients
of .90 and .87. Using this data Piers (1969) recommends
that individual changes in total test score should equal
10 points before being considered significant.

Content validity was attempted by using qualities

previous literature had reported children liking or disliking in themselves. Concurrent validity is claimed from studies reporting positive correlations with the Lipsett Children's Self-Concept Scale (.68) and teacher and peer ratings of socially effective behavior (.43 and .31) and superego strength (.40 and .42). Negative correlations of -.48 and -.64 were found with inventories reporting children's problems.

Using a normative sample of 1138 children from one Pennsylvania school district, Piers reports a mean of 51.84, a standard deviation of 13.87, and a median of 53.43. Raw scores can be converted into percentile and stanine scores. The specificity of the normative population suggests that comparisons to that population be done cautiously. Other studies reported in the test manual generally provide higher means.

Sociograms. Three separate sociograms were developed for this study to see how peer perceptions on important social variables related to self-awareness and to other factors. Sociogram A (Popularity) asked subjects to rate participating classmates on the likelihood of inclusion in an after school play group. Sociogram B (Attractiveness) called for a similar rating on attributes of personal attractiveness. Sociogram C (Peer Helpfulness) instructed subjects to specify the relative

probability of their approaching each classmate in the study to talk over a serious personal problem.

Each sociogram was structured as a "rate sociometric scale" (Reese, 1961). Each subject was provided with a list of his or her own classmates participating in the study. In response to each sociogram separately, they rated everyone on a 1 to 5 scale. A rating of 1 meant a very definite choice; 2 was a most likely choice; 3 meant indifference; 4 was "don't know well enough to say"; and 5 was "none of the above."

The appendix (B) contains the complete sociogram instructions, stimuli, and response scales. Each subject achieved a score for each scale which was the mean of ratings by his or her own classmates.

Jr.-Sr. High School Personality Questionnaire -Form A (HSPQ). The HSPQ (Cattell & Cattell, 1975) is a
142 item personality inventory designed for use with
adolescents in grades 7 through 12. Developed through
a factor analytic method, it measures 14 personality
factors or traits on independent continuums. The underlying assupmtion is that each factor has "functional
unity," meaning that it measures a "source trait" of
personality which is independent of the variables measured by the 13 other factors and combines with them to
predict "surface"behaviors.

Each factor is scored on a bipolar continuum using Standard Ten Scores. Factors with prior alphabetical order are believed to contribute more to total variance of personality. The following traits are measured: (A) emotional expressiveness, (B) general mental capacity, (C) emotional sensitivity, (D) excitability, (E) dominance, (F) surgency, (G) superego strength, (H) adventuresomeness, (I) tender-mindedness, (J) reflective individualism, (O) apprehensiveness, (Q2) self-sufficiency, (Q3) self-control, and (Q4) tension level.

Through various weighted combinations of these 14 traits four second stratum factors are formed. These factors are: (1) extraversion, (2) anxiety, (3) cortical alertness, and (4) independence.

Form A was used in this study. It takes about an hour to administer. The subjects respond to printed questions on a 3 point continuum such as (1) yes, (2) sometimes, (3) no or (1) like, (2) not sure, (3) dislike. They are urged to specify numbers 1 or 3 whenever possible.

Reliability and validity data for the HSPQ summarize as follows (Cattell & Cattell, 1975). Test consistency is reported as a "dependability coefficient" measuring test-retest reliability over nearly immediate

time intervals. Coefficients for Form A range from a high of .90 on Factor I (tender-mindedness) to a low of .74 for Factor G (superego strength). A second index of reliability is labeled a "stability coefficient." It measures the stability of the personality trait rather than the dependability of the test since some traits are known to fluctuate substantially over time. Retesting after 6 months, Form A stability coefficients for the 14 factors range from .53 to .69.

Construct validity is reported as "direct validity coefficients" defined as the correlation of the scale with the pure factor it is supposed to measure. The overall coefficient for Form A equals .70. Best validities are claimed for factors O (apprehensiveness), .77; Q4 (tension level), .74; H (adventuresomeness), .72; C (emotional sensitivity), .71; and I (self-reliance), .70. The weakest validity coefficients were for scales Q3 (self-control), .57 and J (reflective individualism), .58.

Otis-Lennon Mental Ability Test -- Form J (MAT). The MAT (Otis & Lennon, 1969) is the most recent edition of the Otis series which has a history of over 50 years use. It is designed to measure verbal, numerical, and abstract reasoning abilities to report a single score for general intellectual ability. Form J is an 80

question timed test of 40 minutes intended for use in grades 7 to 9 and can be group administered. Deviation IQ scores are derived from a single raw score and the subject's chronological age rounded to the nearest 3 month interval. The MAT also provides tables for stanine and percentile scores normed separately for age and for grade.

This test including two forms for adjacent grade levels was standardized on a population of approximately 200,000 pupils in 117 school systems drawn from all 50 states. These school systems were selected to yield a stratified random-cluster sampling of students enrolled in grades K through 12. The result is an instrument designed to be used across various socioeconomic levels.

The authors report a series of measures of internal consistency yielding coefficients of .90 or above. Stability coefficients based on a 1 year retest range from .80 to .94. Extensive reporting of criterion related and construct validity coefficients range from .60 to .80.

## Treatment

The 12 treatment groups met weekly for a total of 26 weeks during the regular school hours. Individual sessions were 45 to 55 minutes in duration. Treatment

groups participated in Kapp and Simon's (Note 1) Social Skills Training Program.

A variety of training modalities, including discussion, art, role playing, and systematic teaching and practicing of communication skills, are utilized by group leaders. Early program units examine the world of feelings and focus on the development of self-awareness. Sensory awareness, past experiences, and family and peer relationships are explored through structured exercises followed by group discussion. A typical progression involves brief cognitive input from the leader, modeling of the activity, group participation and discussion. Activities may be verbal, such as describing the last time someone was excited, or non-verbal followed by discussion, such as drawing a life history or movement exercises to enhance bodily awareness. Following selfawareness units, other social skills taught in the small group setting include empathy, direct communication, and problem solving. Discussion content in later units when these skills are a primary focus centers around adolescent developmental issues and continues to build selfawareness, e.g., getting along with peers. Control groups did not participate in any special small group experience.

The following is an outline of the Social Skills Training Program units.

- I. Getting Started (The Me I Already Know).

  Through a sharing of non-threatening self-descriptions, students are oriented to the group process. Activities focus on establishing a comfortable atmosphere and on introducing students to descriptive social vocabulary.
- II. The World of Feelings. Students are taught to distinguish between thoughts, behaviors, and feelings within various social situations. They build an expanded vocabulary of feeling words and learn to identify verbal and nonverbal expressions of feeling.
- III. Knowing Me. The focus of this unit is the development of self-awareness. Areas explored are sensory awareness, past experiences, and family and peer relationships.
- IV. Talking About Me. Students are taught to use the skills of "concreteness" and "direct communication" through group sharing. Discussion builds off of self-awareness developed in Unit III.
- V. Expressing Understanding. Through a series of structured interactions, students are taught the skill of empathy. The skill is presented in three stages:

  (1) repetition of what is heard, (2) identification with the feelings expressed by the other, and (3) the skill of empathy.
  - VI. Getting Along with Friends. This unit fo-

cuses on the building of healthy mutual friendships.

Students identify qualities they bring to a friendship and qualities they looked for in others. Skills taught include: taking and responding to initiative in relationships, dealing with "immediacy" issues, and constructive handling of anger. Role playing, discussion, and intragroup relationships are used as resources.

VII. Getting Along with Adults. Application of social skills to relationships with adults (parents and others in authority) is explored. Students are encouraged to identify patterns in their relationships to significant adults. Particular attention is paid to the handling of anger.

VIII. Bringing Things to an End. Personal experiences of loss through death, divorce, or separation are discussed by students. The group closes with an opportunity for each member to summarize the impact of his/her group experience and to say an adequate good-bye.

# Leaders

With one exception, group leaders were psychology students, three at the graduate level and two at the senior undergraduate level. One leader was a paraprofessional and a former communication arts teacher at the high school level. Only one leader had ever led a

similar adolescent group, although several leaders had been trainers in an adult human relations group. All leaders received 9 hours of training prior to the program and regular supervision thoughout the duration of the program by the program directors.

Five leaders were female, one was male. With the exception of School 1, where the male leader led a boys' group and the female leader a girls' group, all leaders led both boys' and girls' groups.

### Data Collection

The MAT, HSPQ, and Piers-Harris Self-Concept
Test were each administered in groups. They were given
at two separate testing periods on different days to
avoid fatigue effects. The MAT and the Piers-Harris
Self-Concept Test were administered in the first session,
the HSPQ in a second session. All other measures were
administered individually in the following order: Sociogram A, Self-Awareness Interview, Sociogram B, Active
Listening Analogue, and Sociogram C. All data collection
was performed within a 3 week period following the conclusion of the training program.

The Self-Awareness Interview was presented to

<sup>1.</sup> As part of the collaborative study using this same sample, an empathy measure was also administered to all subjects.

each subject in a standardized manner. There were two categories of questions. Examiners were allowed to provide minimal prompts, e.g., is there anything else you can add, after the first question in each category. No other help was permitted. The interviews were tape recorded so they could be scored by independent judges. Every item was independently scored by at least two of the three judges used in rating. Differences were then mediated through discussion and consensus was achieved to ensure the greatest accuracy in final data analysis. Interjudge reliability was .94, df = 208.

The three sociograms were each administered separately with time intervals and other testing procedures interspersed in-between. For each sociogram a new unmarked list of classmates was provided. To counter potential "halo" effects, subjects were reminded at the beginning of the second and third sociograms that stimulus questions were different and that they might rate classmates differently on this scale than on previous ones. Confidentiality was stressed. It was felt that this format with individual administration provided more valid ratings as well as protecting students from any potential teasing or peer pressure.

#### CHAPTER IV

### RESULTS

## Self-Awareness

A three-way analysis of variance was utilized to investigate the impact of the training program on self-awareness. Table 2 presents the results. A significant main effect was found for treatment,  $\underline{F}(1, 121) = 79.33$ ,  $\underline{p} < .001$ . The mean self-awareness score for the experimental group was 5.21 ( $\underline{SD} = .82$ ) and for the control group it was 4.43 ( $\underline{SD} = .80$ ). Treatment subjects earned higher self-awareness scores than control subjects. Neither the main effects for sex nor school nor their interactions were significant for this measure.

To determine if leader differences were present a one-way analysis of variance was performed with the control group designated as a single leaderless group. Table 3 presents the results of this analysis. A significant leader difference was found,  $\underline{F}(6, 130) = 6.88$ ,  $\underline{p} < .001$ . Each treatment group scored higher in self-awareness than the control or leaderless group. Post hoc analysis using the Newman-Keuls procedure (Table 4) showed that only groups run by leaders 2, 5, and 6 were significantly different from the control group. Thus, the groups led

Table 2

Analysis of Variance: Self-Awareness by Sex,

Treatment, and School

Source	df	MS	<u>F</u>
Main Effects			
Sex	1	1.20	1.89
Treatment	1	19.25	30.33*
School	3	1.21	1.90
2-Way Interactions			
Sex x Treatment	3	1.52	2.40
Sex x School	3	.27	.42
Treatment x School	3	.33	.52
3-Way Interactions			
Sex x Treatment x School	3	1.08	1.71
Error	121	.64	

<sup>\*</sup>p < .001

Table 3

Analysis of Variance: Self-Awareness by Leader

Source	<u>df</u>	MS	<u>F</u>
Between Groups	6	4.38	6.88*
Within Groups	130	.64	

<sup>\*</sup>p < .001

Table 4

Leader Group Means and Newman-Keuls Procedure

Α.	Means	and	Standard	Deviations	of	Self-Awareness
	Scores	for	Subjects	According	to	Group Leaders.

Group	<u>N</u>	<u>M</u>	SD
Leader 1	6	4.62	.56
Leader 2	6	5.67	1.00
Leader 3	8	5.07	.60
Leader 4	12	4.89	.86
Leader 5	17	5.35	.77
Leader 6	17	5.40	.87
No Leader 0	71	4.43	.80

B. Newman-Keuls Procedure for Testing the Significance of Mean Differences for Subjects According to Group Leaders. Homogenous Subsets: (Subsets of Groups, whose Highest and Lowest Means Do Not Differ by More Than the Shortest Significance Range for a Subset of That Size)

Subset 1						
Leader Mean	0 4.43	1 4.62	4 4.89	3 5 .07		
Subset 2						
Leader Mean	1 4.62	4 4.89	3 5.07	5 5.35	6 5.40	2 5.67

by these three leaders were the primary contributors to the main effect treatment difference.

# Self-Concept

Table 5 shows the results of a three-way analysis of variance of global self-concept scores by treatment, sex, and school. This analysis of variance revealed school to be the only significant main effect,  $\underline{F}(3, 121) = 6.33$ ,  $\underline{p} < .001$ . The mean for School 1 was 53.15; School 2, 62.35; School 3, 60.43; and School 4, 54.58. To locate the differences between schools, a one-way analysis of variance of global self-concept was performed. As expected a significant between school difference was found,  $\underline{F}(3, 133) = 5.81$ ,  $\underline{p} < .001$  (Table 6). Post hoc analysis using the Newman-Keuls procedure (Table 7) showed that students in Schools 2 and 3 had significantly higher global self-concept scores than students in Schools 1 and 4.

The analysis of variance in Table 5 also reveals a significant two-way interaction between sex and school,  $\underline{F}(3, 121) = 4.03$ ,  $\underline{p} < .001$ . Table 8 shows the means for the global self-concept score by sex and school. The females in School 1 scored nearly 12 points lower than the males while no other school showed a sex difference greater than 5. In Schools 3 and 4, females scored higher than males; in School 2 the males scored higher.

Table 5

Analysis of Variance: Self-Concept by

Sex, Treatment, and School

Source	df	<u>MS</u>	<u>F</u>
Main Effects			
Sex	1	192.44	1.76
Treatment	1	8.30	.08
School	3	693.34	6.33**
2-Way Interactions			
Sex x Treatment	1	85.58	.78
Sex x School	3	440.72	4.03*
Treatment x School	3	94.22	.86
3-Way Interactions			
Sex x Treatment x School	3	63.32	.58
Error	121	109.46	

Note. All self-concept data in this study is also reported in Kapp-Simon (Note 3).

<sup>\*</sup>p < .01

p < .001

Table 6

Analysis of Variance: Self-Concept by School

Source	df	MS	<u>F</u>
Between Groups	3	669.73	5.81*
Within Groups	133	115.32	

<sup>\*</sup>p < .001

Table 7
Self-Concept School Means and
Newman-Keuls Procedure

A. Means and Standard Deviations of Self-Concept Scores for Subjects According to School.

School	N	M	SD
1	26	53.15	12.31
2	43	62.35	8.47
3	35	60.43	10.42
4	33	54.58	12.31

B. Newman-Keuls Procedure for Testing the Significance of Mean Differences for Subjects According to Group Leaders. Homogeneous Subsets: (Subsets of Groups, Whose Highest and Lowest Means Do Not Differ by More Than the Shortest Significance Range for a Subset of That Size)

Subset 1			
School	1	4	
Mean	53.15	54.58	
Subset 2			
School	3	2	
Mean	60.43	62.35	

Table 8

Means and Standard Deviations for Global

Self-Concept Scores by Sex and School

	Male		Female		
	<u>M</u>	SD	<u>M</u>	SD	
School 1	59.58	12.53	47.64	9.35	
School 2	65.45	7.80	59.65	8.24	
School 3	57.56	13.83	61.42	9.09	
School 4	52.20	12.91	56.56	11.78	

To determine factors which could account for the lowered self-concept scores for females in School 1, scores were broken down by race (Table 9). Eight of the 14 females at this school were Latinos. The mean self-concept scores were: 45.63 for the Latino females, 59.50 for the Black females, 49.00 for the Oriental females, and 42.50 for the White females. These scores suggest that the non-Black females account for the lowered self-concept score for females in this school.

These findings raise a question about possible sex and race interactions in the entire population. A two-way analysis of variance of global self-concept scores by sex and race (Table 10) revealed a significant main effect for race, F(3, 129) = 8.56, p < .001, and sex, F(1, 129) = 4.06, p < .05. The sex by race interaction was not significant. Mean self-concept scores by race were: 53.00, Latino; 61.63, Black; 53.50, Oriental; and 52.50, White. These means suggest that the race difference was due primarily to the Black population. To confirm this a one-way analysis of variance with post hoc Newman-Keuls analysis was performed. As expected, a significant race difference existed, F(3, 133) = 7.47, p < .001 (Table 11). The post hoc analysis (Table 12) revealed that the score for Black students was significantly different from that of the White and Latino stu-

Table 9
Self-Concept Scores of Females
in School 1 by Race

	N	<u>M</u>	<u>SD</u>	
Latino	8	45.62	9.77	
Black	2	59.50	4.95	
Oriental	2	49.00	7.07	
White	2	42.50	4.95	
Total	14	47.64	9.35	

Table 10

Analysis of Variance: Self-Concept by Race and Sex

Source	<u>df</u>	MS	<u>F</u>
Main Effects			
Race	3	942.06	8.56**
Sex	1	447.01	4.06*
2-Way Interactions	-		
Race x Sex	3	66.32	.60
Error	129	110.08	

<sup>\*</sup>p < .05

<sup>\*\*</sup>p < .001

Table 11
Analysis of Variance: Self-Concept by Race

Source	df	<u>MS</u>	<u>F</u>
Between Groups	3	833.66	7.47*
Within Groups	133	111.62	

<sup>\*</sup>p < .0001

Table 12
Self-Concept Race Means and Newman-Keuls Procedure

A. Means and Standard Deviations of Self-Concept Scores for Subjects According to Race.

	<del></del>		
Race	N	<u>M</u>	<u>SD</u>
Latino 1	27	53.00	12.24
Black 2	84	61.63	9.17
Oriental 3	6	53.50	15.32
White 4	20	52.50	12.13

B. Newman-Keuls Procedure for Testing the Significance of Mean Differences for Subjects According to Group Leaders. Homogeneous Subsets: (Subsets of Groups, Whose Highest and Lowest Means Do Not Differ by More Than the Shortest Significance Range for a Subset of That Size)

Subset	1			
Race Mean		4 52.50	1 53.00	3 53.50
Subset	2			
Race Mean		3 53.50	2 61.63	

dents. It was not, however, significantly different from the mean of the Oriental students. The sex difference noted was due to a slightly higher mean for the male subjects.

The majority of the Black students were concentrated in Schools 2 and 3. This raises the question of whether school differences were really race differences. The self-concept scores by race and school are presented This table reveals that Black students in Table 13. regardless of school scored above the mean, 58.24, of the study population. Latino students, regardless of school, scored below the mean. With the exception of four students in School 2, the White students also scored below the mean. The Oriental students had the smallest n, 6, and show the widest variation. The three in School 1 scored below the mean and the three in the remaining schools scored above it. Because of the small n in a number of cells, this data could not be statistically analyzed.

Each of the cluster scores of the Piers-Harris was analyzed by a three-way analysis of variance of cluster score by treatment, sex, and school. Tables 14 through 19 summarize the analysis of variance for the six cluster scores. A main significant effect for school was present for five of the six cluster scores:

Table 13

Means and Standard Deviations for Global Self-Concept Scores

by Race and School

	School 1 School 2		School 3				School 4						
	N	<u>M</u>	<u>SD</u>	N	<u>M</u>	SD	_	<u>N</u>	<u>M</u>	SD	N	<u>M</u>	<u>SD</u>
Latino	15	52.20	11.16	3	55.33	9.24		***			9	53.56	15.13
Black	4	65.25	7.63	35	62.40	7.95		34	60.62	10.52	11	61.00	9.01
Oriental	3	42.67	12.06	1	75.00						2	59.00	2.83
White	4	52.50	14.66	4	64.00	9.83		1	54.00		11	48.18	10.61
Total	26	53.154	12.31	43	62.35	8.47		35	60.43	10.42	33	54.58	12.31

Table 14

Analysis of Variance: Behavior by Sex,

Treatment, and School

Source	df	MS	<u>F</u>
Main Effects			
Sex	1	8.59	1.09
Treatment	1	2.08	.26
School	3	32.44	4.10**
2-Way Interactions			
Sex x Treatment	1	8.02	1.01
Sex x School	3	23.13	2.93*
Treatment x School	3	1.41	.18
3-Way Interactions			
Sex x School x Treatment	3	6.82	.86
Error	121	7.91	

<sup>\*</sup>p < .05

<sup>\*\*</sup>p < .01

Table 15

Analysis of Variance: Intellectual and School Status

by Sex, Treatment, and School

Source	<u>df</u>	MS	<u>F</u>
Main Effects			
Sex	1	16.24	1.77
Treatment	1	2.58	.28
School	3	44.54	4.85*
2-Way Interactions			
Sex x Treatment	1	5.19	.57
Sex x School	3	5.40	.59
Treatment x School	3	15.62	1.70
3-Way Interaction			
Sex x Treatment x School	3	18.84	2.05
Error	120	9.19	

<sup>\*</sup>p < .01

Table 16

Analysis of Variance: Physical Appearance and Attributes by Sex, Treatment, and School

Source	df	MS	<u>F</u>
Main Effects			
Sex	1	2.21	.37
Treatment	1	5.48	.91
School	3	43.46	7.21**
2-Way Interactions			
Sex x Treatment	1	24.17	4.01*
Sex x School	3	17.10	2.84*
Treatment x School	3	5.87	.97
3-Way Interactions			
Treatment x Sex x School	3	1.71	.28
Error	120	6.03	

p < .05

 $<sup>^{**}</sup>p < .001$ 

Table 17
Analysis of Variance: Anxiety by Sex,
Treatment, and School

Source	df	MS	<u>F</u>
Main Effects			
Sex	1	11.30	1.61
Treatment	1	.89	.13
School School	3	26.89	3.82*
2-Way Interactions			
Sex x Treatment	1	1.06	.15
Sex x School	3	13.26	1.89
Treatment x School	3	7.28	1.04
3-Way Interactions			
Sex x Treatment x School	3	4.49	.64
Error	120	7.03	1.58

<sup>\*</sup>p < .05

Table 18

Analysis of Variance: Popularity by

Treatment, Sex, and School

Source	df	MS	<u>F</u>
Main Effects			
Sex	1	1.07	.16
Treatment	1	3.07	.45
School	3	9.74	1.42
2-Way Interactions			
Sex x Treatment	1	.15	.02
Sex x School	3	18.01	2.62
Treatment x School	3	7.32	1.06
3-Way Interactions			
Sex x Treatment x School	3	4.71	.69
Error	120	6.88	

Table 19

Analysis of Variance: Happiness and Satisfaction by

Sex, Treatment, and School

Source	<u>df</u>	MS	<u>F</u>
Main Effects			
Sex	1	1.38	.40
Treatment	1	1.30	.37
School	3	13.35	3.83*
2-Way Interactions			
Sex x Treatment	1	6.89	1.97
Sex x School	3	7.30	2.09
Treatment x School	3	3.13	.90
3-Way Interactions			
Sex x Treatment x School	3	5.85	1.68
Error	120	3.49	

<sup>\*</sup>p < .05

behavior,  $\underline{F}(3, 121) = 4.10$ ,  $\underline{p} < .01$ ; intellectual and school status,  $\underline{F}(2, 120) = 4.85$ ,  $\underline{p} < .01$ ; physical appearance and attributes (PAA),  $\underline{F}(3, 120) = 7.21$ ,  $\underline{p} < .001$ ; anxiety,  $\underline{F}(3, 120) = 3.82$ ,  $\underline{p} < .01$ ; and happiness and satisfaction (HS),  $\underline{F}(3, 120) = 3.83$ ,  $\underline{p} < .01$ . There was no main effect for the popularity cluster scores. Table 20 shows the means for each of the cluster scores by school. As with the global score, Schools 1 and 4 have the lowest scores in all categories and Schools 2 and 3 have the highest.

A significant interaction effect of sex by school was found for cluster scores, behavior,  $\underline{F}(3, 121) = 2.92$ ,  $\underline{p} < .05$  (Table 14) and PAA,  $\underline{F}(3, 120) = 2.84$ ,  $\underline{p} < .05$  (Table 16). Table 21 presents the means for behavior and PAA scores according to sex and school. As with the global self-concept score, in some schools girls obtained higher scores, while in other schools boys obtained higher scores.

Table 16 also reveals a significant sex by treatment interaction,  $\underline{F}(3, 120) = 4.01$ ,  $\underline{p} < .05$ . The PAA means by sex and treatment are in Table 22. Males in treatment scored higher on PAA than males in the control group, while females in treatment scored slightly lower than females in the control group, thus accounting for the significant interaction.

Table 20
Means and Standard Deviations for Cluster
Scores by School

	Scho	o1 1	Scho	ol 2	School 3			School 4	
	M	SD	<u>M</u>	SD	<u>M</u>	SD	_	<u>M</u>	<u>SD</u>
Behavior	13.54	3.71	15.47	2.33	15.14	2.78	]	13.79	2.71
ISS <sup>a</sup>	11.62	3.53	14.33	2.32	13.71	3.27	1	12.36	3.39
$PAA^b$	6.39	3.15	8.86	1.77	8.89	2.27		7.49	2.94
Anxiety	6.40	2.89	8.16	2.35	8.46	2.49		7.33	3.02
Popularity	7.89	2.49	8.77	2.28	8.77	2.37		7.76	3.35
HS <sup>c</sup>	6.46	2.23	7.58	1.43	7.34	1.83		6.42	2.21

<sup>&</sup>lt;sup>a</sup>Intellectual and School Status

<sup>&</sup>lt;sup>b</sup>Physical Appearance and Attributes

<sup>&</sup>lt;sup>C</sup>Happiness and Satisfaction

Table 21

Means and Standard Deviations for Behavior and Physical Appearance and Attributes

Scores by Sex and School

Behavior					
	Male		Fer	Female	
	M	SD	<u>M</u>	SD	
School 1	15.17	2.44	12.14	4.11	
School 2	15.95	2.21	15.04	2.42	
School 3	14.22	3.11	15.46	2.64	
School 4	13.47	2.75	14.06	2.73	
Physical App	earance	and Attrib	ıtes		
School 1	7.75	3.22	5.21	2.67	
School 2	`8.75	1.48	8.96	2.01	
School 3	9.11	2.62	8.81	2.19	
School 4	6.87	3.02	8.00	2.85	

Table 22

Means and Standard Deviations for Physical

Appearance and Attributes by Sex and Treatment

	Male		Female	
	<u>M</u>	SD	<u>M</u>	SD
Treatment	8.84	0.95	7.96	1.63
Control	7.72	1.38	8.27	1.51

### Personality Data

The relationship between self-awareness and personality was evaluated through a correlational analy-Correlations between self-awareness and personality were generated for the total sample and for high and low self-awareness groups within the treatment population. The high and low self-awareness groups were identified by dividing the total sample into approximate thirds by subject self-awareness scores. The lower third was comprised of those students scoring less than or equal to 4.44 on the SAI. The upper third were those students scoring greater than or equal to 5.14. The range of scores for the entire sample was 2.33 to 7.71. Of 49 subjects in the high self-awareness group, 33 were from the experimental group. Twelve of the 51 subjects in the low self-awareness group were from the experimental group.

Table 23 reveals the correlations between self-awareness and selected personality variables for the total sample. The strongest correlations suggested that the more self-aware individual is more intelligent, is rated as more attractive, helpful, and generally more likeable by his/her peers, and is likely to be sensitive, zestful, and excitable. There was also a trend which suggests that self-awareness is associated with anxiety and extra-

Table 23

Correlations of Personality Variables

with Self-Awareness for Total Sample

Personality Variable	<u>r</u>	P
Dull- Bright	.30	.001
IQ	.26	.001
Attractiveness (Sociogram)	.23	.01
Helpfulness (Sociogram)	.23	.01
Likeability (All Sociograms)	.21	.01
Self-Reliant - Sensitive	.17	.05
Zestful - Circumspect Individualism	15	.05
Tenderminded Emotionality - Cortical Alertness	13	.10
Introversion - Extraversion	.13	.10
Anxiety	.11	.10

Note. For all correlations, df = 135.

Self Awareness Mean = 4.81

version.

The correlations between self-awareness and personality for those students in the treatment group are found in Table 24. For students who participated in a training group, self-awareness was shown to correlate significantly with intelligence, submissiveness, sensitivity, tenderminded emotionality, and dependence. As in the total population, the more self-aware person after training was also viewed as more attractive, helpful, and likeable by his/her peers. A trend existed which suggested that self-awareness was related to zestfulness.

Table 25 reveals that there were only two correlations of note for high self-aware subjects. A significant correlation was present between self-awareness and the helpfulness sociogram and a trend existed which suggested that for subjects high in self-awareness, self-awareness may be associated with submissiveness.

For subjects low in self-awareness, significant correlations existed between self-awareness and Factor C, affected by feelings; the second order factor of anxiety; Factor F, enthusiastic; and Factor G, weaker superego strength (See Table 26). Table 26 also reveals that for trainees low in self-awareness, the correlations between self-awareness and the sociograms were in the opposite direction from all other reported correlations. That is,

Table 24

Correlations of Personality Variables
with Self-Awareness for Treatment Group

Personality Variables	<u>r</u>	<u>P</u>
Dull - Bright	.37	.001
Attractiveness (Sociogram)	.24	.05
Submissiveness - Dominance	22	.05
Self-Reliant - Sensitive	.22	.05
Independence	21	.05
Helpfulness (Sociogram)	.20	.052
Tenderminded Emotionality - Cortical Alertness	20	.053
Likeability (All Sociograms)	.20	.056
Zestful - Circumspect Individualism	15	.10

<u>Note.</u> For all correlations,  $\underline{df} = 64$ .

Self-Awareness Mean = 5.21

Table 25

Correlations of Personality Variables

with Self-Awareness for High

Self-Awareness Treatment Group

Personality Variables	<u>r</u>	<u>P</u>
Helpfulness (Sociogram)	.35	.05
Submissiveness - Dominance	26	.10

Note. For all correlations,  $\underline{df} = 32$ .

Self-Awareness Mean = 5.86

Table 26

Correlations of Personality Variables

with Self-Awareness for Low

Self-Awareness Treatment Group

Personality Variable	<u>r</u>	P
Anxiety	.71	.01
Affected by Feelings - Emotionally Stable	70	.01
Popularity (Friendship Sociogram)	69	.01
Likeability (All Sociograms)	65	.05
Helpfulness (Sociogram)	62	.05
Attractiveness (Sociogram)		.05
Sober - Enthusiastic		.05
Weaker Superego - Stronger Superego		.05
Shy - Adventurous		.10
Self-Assured - Apprehensive		.10

Note. For all correlations, df = 10. Self-Awareness Mean = 4.15 these low self-awareness trainees were seen as less likeable, popular, attractive, or helpful. A trend existed which suggested that these subjects were shy and apprehensive.

To examine personality differences between trainees scoring high and low on the self-awareness measure, a binomial analysis was used. No patterns of significant differences were found.

#### CHAPTER V

#### DISCUSSION

### Self-Awareness

The principle finding of this study is that the Social Skills Training Program (SSTP) proved effective in raising participants' levels of self-awareness when it is defined as the ability to identify and discriminate feelings and link them to external and visceral experience. With the exception of some leader differences, there were no other significant main effects nor significant interactions with treatment. All treatment groups performed better on the SAI than control groups, but groups led by three of the six leaders contributed most to the significant treatment effect. This underscores the importance of skilled leadership while supporting program efficacy.

The statistically significant difference of .78 between the means of the experimental and control groups has practical meaning. The range of scores on the SAI is small, 5.83 for this sample; but the variance within each group is also small, leading to clear differences between trainees and controls.

The training program employed is multifaceted in

approach. It teaches a variety of related personal and interpersonal growth skills such as empathy, direct communication, relational problem solving. Self-awareness was taught in a small group setting which provided focused interaction with peers who were trained to be attentive and empathic. The positive findings of this study suggest that the best way to teach self-awareness might be in the context of a developmental program that integrates other age appropriate life skills into the curriculum.

On the other hand, since all trainees received multifaceted input as part of SSTP, it is not possible to separate the specific impact of self-awareness components from the rest of the total program. It is unlikely that treatment impact was contaminated by Hawthorne effects since self-awareness was specifically taught. Since there is no comparable data on the effects group experiences may have on self-awareness as defined here, it would be fruitful in future studies to maintain placebo groups and to isolate the effects of the specific self-awareness units of the SSTP. This could be accomplished by taking measurements immediately following the self-awareness unit of the training program since this unit is presented very early in the program.

The SAI was sensitive to the impact of training on the experimental group. This provided increased support

for the validity of this instrument for measuring differences in self-awareness.

Previous research has reported a strong relationship between self-awareness and empathy (Simon, Note 2). Experience working with junior high school students during the development of SSTP suggests that the development of sufficient self-awareness is a necessary prelude to subsequent response skill development. It seems that self-understanding sharpens the ability to understand others so that increased self-awareness benefits the acquisition of empathy, collaborative problem solving, and other responding skills.

The fact that the acquisition of self-awareness seems to precede the development of other skills emphasizes the importance of validating an effective approach for teaching self-awareness at this age level. Teaching self-awareness addresses important developmental tasks on several levels. It can help the young adolescent begin to understand and cope with the experience of complex physical and emotional changes that are part of this transition period. The focus on enhancing self-understanding is in step with the youth's naturally heightened introspection. Providing programs and adult guidance at this age can hopefully assist in promoting the establishment of a healthy self-identity which is a

major task of the adolescent years. If self-awareness enhances other relational skills, effective programming can help to prepare the young adolescent for establishing supportive peer relationships and successfully individuating from family. It will be necessary to evaluate the long term effects of training programs at this age level particularly when they are followed in high school years by developmentally appropriate psychological education programs.

## Self Concept

No significant treatment effect was found for global self-concept as measured by the Piers-Harris test. Focused self-introspection and increased personal awareness did not lead to enhancement in measurable self-esteem. This finding confirmed the separation of the constructs of self-awareness and self-concept.

In reviewing other programmatic attempts to increase self-esteem, several authors have questioned the sensitivity of current measures in assessing small positive increments in self-concept (Edmondson, 1979; Hess, Peer, & Porter, 1978; Schevers, 1979). This task may be especially difficult during early adolescence when a decrease in self-esteem may be part of the normal developmental process.

There was, however, a significant school differ-

ence in global self-concept with students in Schools 2 and 3 scoring higher. This finding cannot be explained away by socioeconomic data. It is possible that there are some overall factors in school atmosphere (e.g., curriculum, discipline techniques, teacher-student relations, etc.) which may account for this finding. But this would be difficult to determine. If such a factor is present, one would expect that it would have greater impact than a one hour weekly program.

A significant interaction between sex and school was also found. While in School 1 females scored lower than males and especially low in general, females in Schools 3 and 4 scored higher than males. Breaking female scores down by race revealed that non-Black girls possessed the lower scores. Ensuing analysis with the Newman-Keuls procedure showed Blacks to score significantly higher than Orientals. The small number of Oriental subjects probably inhibited statistical significance. No sex by race interaction was found. Black students averaged over 8 points higher in global self-concept than the other racial groups. Although the majority of Black students were in Schools 2 and 3, Black students scored above the total sample mean in all four schools. race differences my account for school differences. Latino students, regardless of school, and White students,

with the exception of four in School 2, averaged below the sample mean.

The meaning of this finding is difficult to pinpoint. Early research on ethnic identification showed both Black and White children demonstrating a preference for white experimental stimuli, e.g., dolls, pictures (Asher & Allen, 1969; Clark & Clark, 1965; Porter, 1971). This data had been interpreted as an indication of Black self-rejection and low self-esteem. More recent reviews have criticized this literature on a variety of grounds such as failure to control for degree of school segregation and skin color of the examiner (Banks, 1976; Brand, Ruiz, & Padilla, 1974).

Studies utilizing more direct measures of selfesteem such as written self-report indices have shown
contradictory results, some showing Blacks with lower
self-esteem than Whites (e.g., Deutsch, 1960), some
showing Blacks with higher self-esteem (e.g., McDonald
& Gynther, 1965) and still others showing no racial differences (e.g., Edwards, 1974).

The findings of the present study are consistent with a series of more recent large independent studies which have also used junior high school subjects in urban settings. Powell and Fuller (1973), Rosenberg and Simmons (1972), and Simmons, Brown, Bush, and Blyth (1978) all

found Black children to report higher self-esteem than Whites. One hypothesis proposed to account for this phenomenon was a positive or "social desirability" response bias for Black children. However, in the only study attempting to control such a factor, Simmons et al. (1978) found this bias existing but unable in itself to account for higher Black self-esteem. Simmons and her associates also found Blacks in segregated schools scoring higher in self-esteem than those in desegregated schools. However, the present study's data contradicts this finding.

Another possible reason for higher Black scores, particularly in the last decade, could be the impact of the civil rights and Black awareness movements. In one of the few studies also including Latino subjects, Stephan and Rosenfield (1979), controlling for paternal education level and achievement level of student found no selfesteem differences between Whites, Blacks, and Mexican-Americans. However, they did find a positive relationship between ethnocentrism and self-esteem for Blacks but not for other groups. More ethnocentric Blacks reported higher self-esteem while less ethnocentric Blacks reported lower self-esteem.

The literature on racial differences in self-concept provides a confusing picture. The findings of the

current study are consistent with more recent large scale investigations of urban adolescents which report higher self-esteem in Blacks. Future research should further investigate the relationship of self-concept to ethnocentric pride while making more stringent attempts to control for potential positive response bias. It may prove helpful to utilize indirect and direct methods for self-concept assessment with the same sample. Wide scale investigations could include both Black and White samples from suburban, rural, and urban populations to ensure that general conclusions are not being based on particular geographical and socioeconomic subgroups.

Study findings for the Piers-Harris cluster scores paralleled those described for the global score. With the exception of the "popularity" cluster score, similar significant main effects were found for school. There were no significant treatment effects. A significant sex by school interaction was found for cluster scores (1) behavior and (3) physical appearance and attributes. For each cluster some schools showed males scoring higher but others showed females higher. Differences in means were generally small.

A significant interaction was also found between sex and treatment for Cluster 3, physical appearance and attributes (PAA). Males in treatment scored over a full

point higher than controls on PAA while females scored marginally lower than controls. To at least a small degree, boys in training may have begun to view themselves as less physically different than peers with the result of increased self-esteem in this area.

## Personality Data

The correlations between self-awareness and the personality factors which were found for the entire study sample suggest that students high in self-awareness are more intelligent, are rated as more attractive, help-ful, and more likeable by their peers, and are likely to be sensitive, zestful, and excitable. These characteristics are generally viewed as desirable traits for the young adolescent.

With the exception of the two correlations suggestive of a more dependent, submissive trait, and the correlation with tender-minded emotionality, the associations between self-awareness and personality correlates for the treatment group are similar to those for the total sample. The correlation between tender-minded emotionality and self-awareness is quite sensible. A person who scores high on this factor is generally someone who is more prone to feeling reactions. In the extreme this person may be inclined to depression; however, within limits this individual is generally more

sensitive to affect and thus probably more capable of developing self-awareness.

No additional information is gained from the correlations in the high self-awareness group of train-For the low self-awareness group, however, most correlations run opposite to expectation and opposite to those of the high self-awareness group. Of particular note was the strong correlation betwen anxiety and self-awareness. This correlation suggested that for students low in self-awareness, even the little awareness they have is strongly associated with anxiety. In addition, for the low self-awareness subjects, self-awareness is associated with lack of success in social relation-The negative correlations on sociogram data suggest that minimal self-awareness may be worse than no self-awareness at all. It is possible that students at a minimal level of self-awareness are more self-conscious and anxious and therefore appear as less attractive individuals in their peer group. If their incomplete self-appraisal is largely negative, the result might be a defensive posture in interpersonal relations.

On the other hand, those subjects at the very lowest end of the scale with even less than minimal self-awareness may either through extensive denial or delayed maturity remain in the preadolescent stage of development.

This may mitigate anxiety relative to their minimally self-aware counterparts described above who are already beginning the turbulent adolescent transition. The lower anxiety level may enable them to continue to present themselves as attractive to peers.

Keeping in mind that the number of low scoring experimental subjects is small (12) and significant personality differences were not found between high and low scoring trainees, conclusions from this data need to be tentative and replicated in future studies. It may be fruitful to investigate the relationship of self-awareness to anxiety or various neurotic indices. There may be some point at which degree of anxiety may block rather than facilitate self-awareness. In this case, a training program may first need to provide techniques for handling anxiety. Likewise, during the adolescent transition period when joining with peers is an important developmental task, too much individualism might be maladaptive.

A future study should use different tests providing information on other personality dimensions. In addition to other neurotic indices, information on coping
styles, stress management strategy, capacity for imagery,
and other personality characteristics may prove fruitful
in understanding who can benefit most from social skills
training.

# Further Recommendations for Future Study

Future research might investigate the comparative impact of various programs aimed at increasing selfawareness at this age level. Similarly, research could examine the effects of a training program on self-awareness if adapted to other than school settings. such training be beneficial in therapeutic settings, and with what kinds of problems, and for which patients? What would its effect be when combined with other clinical techniques? Although the context of a multifaceted curriculum such as the SSTP would appear optimal for teaching self-awareness in a school setting, it would also be worthwhile to examine the effects of various segments of the program, i.e., units where self-awareness is the specific primary goal, for their applicability to shorter training periods in clinical and other settings.

Finally it would be useful to explore the developmental differences in self-awareness at various age levels by using the SAI. Attempts to teach aspects of self-awareness at different ages might lead to a progressively clearer understanding of the developmental steps and tasks for increasing self-awareness as the child matures. This might form an empirical basis for the construction of new curriculums designed to enhance self-awareness at various age levels.

#### REFERENCE NOTES

- 1. Kapp, K., & Simon, D. <u>Social skills training: A</u>
  manual for affective education in a junior high
  school curriculum. Unpublished manuscript,
  Loyola University of Chicago, 1977.
- 2. Simon, D. The assessment of self-awareness in early adolescents. Unpublished master's thesis, Loyola University of Chicago, 1980.
- 3. Kapp-Simon, K. The effects of self-awareness training within the context of a social skills program on the level of empathy in early adolescence. Unpublished doctoral dissertation, Loyola University of Chicago, 1981.

### REFERENCES

- Asher, S., & Allen, V. Racial preference and social comparison processes. <u>Journal of Social Issues</u>, 1969, 25, 157.
- Ball, G. <u>Innerchange</u>. San Diego: Human Development Training Institute, 1977.
- Banks, W. C. White preference in Blacks: A paradigm in in search of a phenomenon. <u>Psychological Bulletin</u>, 1976, 83, 1179-1186.
- Bessel, H., & Palomares, U. <u>Methods in human development</u>. La Mesa, Calif.: Human Development Training Institute, 1973.
- Bessel, H., & Palomares, U. <u>Methods in human development:</u>
  <u>A theory manual.</u> San Diego: Human Development
  Training Institute, 1976.
- Brand, E. S., Ruiz, R. A., & Padilla, A. M. Ethnic identification and preference: A review.

  <u>Psychological Bulletin</u>, 1974, <u>81</u>, 860-890.
- Carkhuff, R. R. The development of human resources.

  New York: Holt, Rinehart, & Winston, 1971.
- Cattell, R. B., & Cattell, M. D. <u>Handbook for the jr.-sr. high school personality questionnaire.</u>
  Champaign, Il.: Institute for Personality and Ability Testing, 1975.
- Clark, K. B., & Clark, M. P. Racial identification and preference in Negro children. In H. Proshansky & B. Seidenberg (Eds.). Basic studies in Social Psychology. New York: Holt, Rinehart, & Winston, 1965.
- Combs, A., & Soper, D. The relationship of child's perceptions to achievement and behavior in early school years. Cooperative Research Project, Office of Education, U. S. Department of Health, Education, and Welfare, 1963.
- Coopersmith, S. A method of determining types of selfesteem. <u>Journal of Abnormal Social Psychology</u>, 1959, <u>59</u>, 87-94.

- Coopersmith, S. The antecedents of self-esteem. San Franciso: W. H. Freeman & Co., 1967.
- Cozby, P. C. Self-disclosure: A literature review.

  <u>Psychological Bulletin</u>, 1973, <u>79</u>, 73-91.
- Davidson, H., & Lang, G. Children's perceptions of their teachers' feelings toward them related to self perception, school achievement, and behavior.

  Journal of Experimental Education, 1960, 29, 107-118.
- Deutsch, M. Minority group and class status as related to social and personality factors in scholastic achievement (Monograph No. 2). Society for Applied Anthropology, 1960.
- Dinkmeyer, D. <u>Developing understanding of self and others</u>. Circle Pines, Minn.: American Guidance Services, 1970.
- Dupont, H., Gardner, O. S., & Brody, D. S. <u>Toward Affective development</u>. Circle Pines, Minn.:

  American Guidance Services, 1974.
- Duval, S., & Wicklund, R. A theory of objective self awareness. New York: Academic Press, 1972.
- Edmondson, R. Utilization of HDP and TA program to enhance self-esteem, Elementary School Guidance and Counseling, 1979, 13, 299-301.
- Edwards, E. W. Blacks versus Whites: When is race a relevant variable? <u>Journal of Personality and Social Psychology</u>, 1974, 29, 49-59.
- Eldridge, M. S., Barcikowski, R. S., & Witmer, J. M. Effects of DUSO on the self-concepts of second grade students. Elementary School Guidance and Counseling, 1973, 7, 257-260.
- Erikson, E. H. Childhood and society. New York: Norton, 1963.
- Feshbach, N. D. Empathy in children: Some theoretical considerations. <u>Counseling Psychologist</u>, 1975, 5, 25-30.

- Fink, M. B. Self concept as it relates to academic underachievement. <u>California Journal of Educational Research</u>, 1962, <u>13</u>, 57-62.
- Fitts, W. H. <u>Tennessee self concept scale: Manual.</u>
  Nashville: Counselor Recordings and Tests, 1965.
- Freed, A. <u>TA for kids</u>. Sacramento, Calif.: Jalmar Press, 1971.
- Gergen, K. The concept of self. New York: Holt, Rine-hart, & Winston, 1971.
- Gerler, E. R. A longitudinal study of multimodal approaches to small group psychological education. The School Counselor, 1980, 27, 184-190.
- Gerler, E. R., & Pepperman, C. W. Children's reactions to small group psychological education. <u>Together:</u>
  Journal of the Association for Specialists in <u>Group Work</u>, 1976, 1, 40-47.
- Halpin, W. G., Halpin, G. M., & Hartley, D. L. The effects of classroom guidance programs on sociometric status of second grade pupils. Elementary School Guidance and Counseling, 1972, 6, 227-232.
- Harris, S. R. Rational-emotive education and the Human Development Program: A guidance study. Elementary Guidance and Counseling, 1976, 11, 113-122.
- Hess, R. J., Peer, G. C., & Porter, M. A. The Human Development Program and pupil self-concept. The Humanist Educator, 1978, 17, 15-22.
- Horrocks, J. E. The Psychology of adolescence. Boston: Houghton Mifflin Co., 1969.
- Jackson, W. A study of the relationship of a small group discussion activity, the self-concept and reading achievement of selected 4th-grade boys and girls (Doctoral dissertation, Oregan State University, 1973). Dissertation Abstracts International, 1973, 7658A. (University Microfilms No. 73-25, 354, 84)

- James, W. Principles of psychology. New York: Holt, 1910.
- Keelin, P. W., & Keelin, M. S. The effects of magic circles on the interpersonal communication of four-year-old children. Elementary School Guidance and Counseling, 1976, 11, 138-140.
- Koval, C., & Hales, L. The effects of the DUSO guidance program on the self-concepts of primary children. Child Study Journal, 1972, 2, 57-61
- Kraft, L. W., & Vraa, C. W. Sex composition of group and pattern of self-disclosure by high school females. <u>Psychological Reports</u>, 1975, <u>37</u>, 733-734.
- Lewis, W., Wolman, R., & King, M. The development of the language of emotions. II. Intentionality in the experience of affect. The Journal of Genetic Psychology, 1972, 120, 303-316.
- Long, B. E. Increasing depth of self perception in children through a course in psychology: A feasibility study of a teacher training program. <u>Counseling</u> and Values, 1974, 18, 117-122.
- Martin, C. The relationship between the Human Development Program and the locus of control as measured by the intellectual achievement responsibility questionnaire using selected 4th-grade students (Doctoral dissertation, Oregon State University, 1973). Dissertation Abstracts International, 1974, 34, 3584A. (University Microfilms No. 73-25, 363, 71)
- McDonald, R. L., & Gynther, M. D. Relationship of self and ideal-self descriptions with sex, race, and class in southern adolescents. <u>Journal of Personality and Social Psychology</u>, 1965, 1, 85-88.
- Mead, G. H. Mind, self, and society. Chicago: University of Chicago Press, 1934.
- Miller, G. A. Psychology as a means of promoting human welfare. American Psychologist, 1969, 24, 1063-1075.

- Mosher, R. L., & Sprinthall, N. A. Psychological education in secondary schools: A program to promote individual and human development. American Psychologist, 1970, 25, 911-924.
- Otis, A. S., & Lennon, R. T. Otis-Lennon mental ability test. Technical handbook and manual for administration. New York: Harcourt, Brace, & World, Inc., 1969.
- Piaget, J. Judgement and reasoning in the child. Totwa, New Jersey: Littlefield and Adams, 1966.
- Piers, E. V. Manual for the Piers-Harris children's self-concept scale. Nashville: Counselor Recordings and Tests, 1969.
- Porter, J. Black child, White child: The development of racial attitudes. Cambridge: Harvard University Press, 1971.
- Powell, G. J., & Fuller, M. <u>Black monday's children:</u>
  A study of the effect of school desegregation
  on self-concepts of southern children. New York:
  Appleton-Century-Crofts, 1973.
- Reese, H. W. Relationship between self-acceptance and sociometric choices. <u>Journal of Abnormal and Social Psychology</u>, 1961, 62, 472-474.
- Rosenberg, M. Conceiving the self. New York: Basic Books, Inc., 1979.
- Rosenberg, M., & Simmons, R. G. <u>Black and White self-esteem: The urban school child.</u> Washington, D. C.: American Sociological Association, 1972.
- Schevers, T. The effect of interpersonal skills training on the levels of accurate empathy and self-esteem in preadolescents (Doctoral dissertation, Loyola University of Chicago, 1978). Dissertation Abstracts International, 1979, 39, 5584B. University Microfilms No. 7910348, 63)
- Selman, R. L., & Byrne, D. F. A structural-developmental analysis of levels of role-taking in middle child-hood. <u>Child Development</u>, 1974, <u>45</u>, 803-806.

- Simmons, R. G., Brown, L., Bush, D. M., & Blyth, D. A. Self-esteem and achievement of Black and White adolescents. Social Problems, 1978, 26, 86-96.
- Simmons, R. G., Rosenberg, F., & Rosenberg, M. Disturbance in the self-image at adolescence. <u>American Sociological Review</u>, 1973, 38, 553-568.
- Sprinthall, N. A. A cognitive developmental curriculum: The adolescent as a psychologist. <u>Counseling</u> and Values, 1974, 18, 94-101.
- Stephan, W. G., & Rosenfield, D. Black self-rejection: Another look. Journal of <u>Educational Psychology</u>, 1979, 71, 708-716.
- Thorpe, L. P., Clark, W. W., & Tiegs, E. W. <u>Manual:</u>
  <u>California Test of Personality</u>. Monterey,
  <u>Calif.</u>: Test <u>Bureau/McGraw Hill</u>, 1953.
- Vondracek, S. I., & Vondracek, F. W. The manipulation and measurement of self-disclosure in preadoles-cents. Merrill-Palmer Quarterly, 1971, 17, 51-58.
- Wallen, R. W. Clinical psychology. New York: McGraw-Hill Book Co., 1956.
- Walsh, A. Self-concepts of bright boys with learning difficulties. New York: Bureau of Publications, Teachers College, Columbia University, 1956.
- Wattenberg, W., & Clifford, C. Relationships of selfconcepts to beginning achievement in reading. Child Development, 1964, 35, 461-467.
- West, L. L., & Zingle, H. W. A self-disclosure inventory for adolescents. <u>Psychological Reports</u>, 1969, <u>24</u>, 439-445.
- Wolman, R., Lewis, W., & King, M. The development of the language of emotions. Conditions of emotional arousal. Child Development, 1971, 42, 1288-1293.
- Wolman, R., Lewis, W., & King, M. The development of the language of emotions: I. Theoretical and methodological introduction. The Journal of Genetic Psychology, 1972, 120, 167-176. (a)

- Wolman, R., Lewis, W., & King, M. The development of the language of emotions: IV. Bodily referents and the experience of affect. The Journal of Genetic Psychology, 1972, 121, 65-81. (b)
- Wylie, R. The self-concept. Lincoln: University of Nebraska Press, 1974.

APPENDIX A

#### APPENDIX A

### SELF-AWARENESS INTERVIEW

1. How do you tell when you're

a. happy

b. angry

c. nervous

d. excited

(What tells you that you're happy?)

e. sad f. scared

g. relieved

# 2. What happens to you when:

- a. you win a game
- b. you get picked on by other kids
- c. your friends are planning to go to a movie but don't ask you
- d. you are preparing for a special event
- e. you are with a (boy or girl depending on sex of student)
- f. a friend of yours moves
- g. your parents argue

## Scale 1

- O. Denial or don't know
- 1. (a) Description of a situation
  - (b) Feelings which are synonomous
  - (c) I just know
- 2. Know feelings because of behavior, e.g., I show it, I laugh, I joke around with other people.
- 3. Vague reference to internal experience without specific visceral reference, e.g., I get a feeling inside that lets me know.
- 4. Definite visceral reference but only vague tying together of feeling, experience, and behavior, e.g., my stomach starts turning and I feel shaky all inside and I can't think straight or anything like that.
- 5. Definite visceral experience with organized development of feelings, behavior, and experience, e.g., when I was taking the constitution test I was nervous and my head started to--like a big ball here--it started hurting and I had a hard time writing the answers.

## Appendix A, continued

## Scale 2

- 0. Silence or denial.
- 1. Vague description without clear reference to feelings or behavior.
- 2. Specific description of behavior, acknowledging its impact.
- 3. Specific description of feelings.
- 4. Specific linking of feelings, behavior, and experience with no or only vague allusions to bodily reference points.
- 5. Tying feelings, behavior, and experience together with specific mention of visceral experience.

APPENDIX B

#### APPENDIX B

#### SOCIOGRAMS

- A. You and your friends are forming a group who will spend time together after school hours.
  - 1. I would very much want this person in the group
  - 2. I would want this person in the group.
  - 3. It would not make any difference to me if this person were in the group or not.
  - 4. I do not know this person well enough to decide.
  - 5. None of the above.

Place the number of your response next to each name on the list. Move through the list as quickly as you can. Skip your own name.

- B. Someone from your school is going to represent your school at the competition for King or Queen of Chicago-fest. Personal attractiveness is a most important quality to consider.
  - 1. Would be a very good choice.
  - 2. Would be a good choice.
  - 3. Would be OK.
  - 4. Don't know well enough to say
  - 5. None of the above

Place the number of your response next to each name on the list. Move through the list as quickly as you can. Skip your own name.

- C. If you had a serious problem you wanted to talk over with a classmate, who would you choose?
  - 1. Would definitely choose.
  - 2. Would most likely choose.
  - 3. Would think about choosing.
  - 4. Don't know well enough to say.
  - 5. None of the above.

Place the number of your response next to each name on the list. Move through the list as quickly as you can. Skip your own name.

### APPROVAL SHEET

The dissertation submitted by Dennis J. Simon has been read and approved by the following committee:

Dr. John Shack, Director Associate Professor, Psychology, Loyola

Dr. Alan DeWolfe Professor, Psychology, Loyola

Dr. Patricia Rupert Assistant Professor, Psychology, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of doctor of philosophy.

2/17/8/ Date

Director's Signature