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Comparison of locus of control and WISC-R profiles of delinquent and pre-delinquent adolescent males

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COMPARISON OF LOCUS OF CONTROL AND WISC-R PROFILES OF DELINQUENT AND PRE-DELINQUENT ADOLESCENT MALES

An Abstract of a Thesis

Submitted

In Partial Fulfillment

of the Requirements for the Degree

Specialist in Education

Barbara Lynn Brainard-Patterson

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Abstract

Locus of control refers to the degree to which individuals believe they are responsible for the outcomes of their behavior. Internally controlled people believe that they have some control over their successes or failures, whereas externally controlled people believe that their success or failure is a result of fate, luck, or circumstance. It is suggested that children with an internal locus of control are more aware of their environment, and the relationship between their behavior and achievement. Integral to Wechsler's definition of intelligence is the capacity to understand and cope with one's environment. The purpose of this study was to determine whether a relationship exists between locus of control and intelligence. The subjects included 57 adolescent males who were court-ordered to undergo a 30-day evaluation at the State Training School for boys in Eldora, Iowa. Locus of control as measured by a modified form of the Nowicki-Strickland Locus of Control Scale and Wechsler Intelligence Scale for Children-Revised (WISC-R) profile scores were obtained from the students' files. Pearson Product-Moment Correlation Coefficient revealed correlations consistently in the same direction with higher WISC-R scores associated with a lower locus of control. Although the results do not reveal strong correlations between locus of control and intelligence, the consistent inverse correlations suggest that there is a relationship between the two variables.

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CHAPTER I

INTRODUCTION

Various studies have demonstrated that delinquency is associated with environmental as well as genetic and organic factors (Nelson, 1987; Palmer, 1983). Research shows that many youth characterized as juvenile delinquents come from disturbed and unstable families. Frequent offenders often are from homes with little or no parental guidance, where the sole method of discipline is punishment.

Among the environmental factors, research has suggested that delinquency is associated with academic failure, although the relationship is not clearly established. In 1977, a congressional report stated that one-fourth of institutionalized delinquents participating in a survey were diagnosed as having a learning disability (Health, Education and Welfare Congressional Report, March 1977). Factors that contribute to delinquency such as impulsiveness, seeking immediate gratification, or an external locus of control may also contribute to poor school performance.

Within the environmental framework, locus of control can be viewed along a continuum according to the degree to which individuals believe that they are responsible for the outcomes of their actions. Internally controlled people believe that they have some control over their successes or failures, whereas externally controlled people believe that their success or failure is a result of fate, luck or circumstance.

From an educational point of view, locus of control is significant in several ways. Students with an internal locus of

control interpret success as an indication that they have ability, and failure as evidence that they did not try hard enough. Students with an external locus of control, in contrast, view success or failure as a result of luck or chance, the teacher's mood or other factors beyond their control (Bryant, 1986; Reimanis, 1973).

Integral to locus of control theory is the assumption that a positive correlation exists between internal locus of control and intelligence. According to Wechsler (1958), intelligence is the overall capacity of an individual to understand and cope with his/her environment. Stephans (1971) suggests that an internal locus of control may facilitate intellectual development. The child with an external locus of control is less likely to perceive any relationship between his/her behavior and achievement. The educational process then becomes an obstacle that deprives him/her of more immediate gratification.

Statement of Problem

The purpose of this study is to determine whether there is a positive relationship between an internal locus of control as measured by the modified version of the Nowicki-Strickland Locus of Control Scale (NSLOCS) (see Appendix A) and intelligence as measured by the Wechsler Intelligence Scale for Children-Revised (WISC-R).

Questions to be Answered

This study will attempt to answer the following questions:

1. Which of the WISC-R subtests are correlated with an internal locus of control?

2. Is an internal locus of control more closely correlated with the WISC-R Verbal or the Performance Scale?

Importance of the Study

The relationship between locus of control and intelligence has not been extensively researched and the limited research findings have produced mixed results. Crandall, Katkovsky and Preston (1962) and Martin and Coley (1984) have found a positive relationship between internal locus of control and intelligence. Stephans (1971) reports a low, but significant relationship between internality and intelligence. Two studies (Hersch & Scheibe, 1967; Nowicki & Roundtree, 1971) reported finding no relationship between locus of control and level of intelligence. This lack of consistency warrants further study.

Additionally, the relationship between locus of control and intelligence has applicability or can contribute to the ways in which the school psychologist assesses the various components of the WISC-R profile. Further, the concepts of locus of control and intelligence can be useful to those working with adolescents identified as juvenile delinquent, both in educational and clinical settings.

Limitations of the Study

The subjects in the sample population are adolescent males who have either been adjudicated delinquent or have delinquency charges pending through juvenile court, and have been court-ordered to undergo a 30-day evaluation at the State Training School (STS) for boys in Eldora, Iowa. As a result, conclusions are limited to the subjects included in the study. Other factors that may affect the results of

this study involve the use of only one measure of locus of control and the fact that this researcher did not administer or score the instruments. Further, because of the nature of correlational studies, cause and effect between locus of control and intelligence cannot be established.

Definition of Terms

1. Locus of Control--According to Julian B. Rotter (1966), locus of control is a generalized expectancy of the amount of influence an individual perceives to have over the environment. A person with an internal locus of control believes that he/she generally controls the events in his/her life while a person with an external locus of control believes that events are generally out of his/her control. Locus of control was measured by a modified form of the Nowicki-Strickland Locus of Control Scale (NSLOCS) (see Appendix A).

2. Juvenile Delinquent--According to the Code of Iowa (General Assembly of Iowa, 1989), a juvenile delinquent is a person under the age of 18 years old who is in violation of any state law or local ordinance which would constitute a public offense, and has been adjudicated delinquent through juvenile court proceedings.

3. Pre-delinquent--is a juvenile who has been charged with a law violation, but has not been adjudicated delinquent by juvenile court. A pre-delinquent may have a delinquency petition pending.

4. Wechsler Intelligence Scale for Children-Revised (WISC-R)--is a well-standardized intelligence test for children from 6.0 to 16.11 years of age.

CHAPTER II

THEORY

Social learning theory proposed by Julian B. Rotter (1966) suggested that the likelihood of a given behavior will occur is determined by expectancy, reinforcement value, and the psychological situation. Rewarding a behavior will increase the expectancy that the behavior will be rewarded in the future especially if the reward, or reinforcer, is of value to the person. The likelihood of a given behavior occurring in a particular situation and of a reward being perceived as of value is also dependent on personality factors within the individual.

Rotter (1966), assumes that people develop generalized expectancies that their actions will either lead to rewards or punishments, or that they have little effect on the rewards and punishments they receive. How the individual perceives the relationship between his/her behavior and the reward will determine the effectiveness of the reinforcement. If a person does not believe that success is related to his or her behavior, there will be minimal incentive to struggle with difficult tasks. The person with an internal locus of control is more likely to perceive a relationship between his or her behavior and the resulting consequences. An individual with an external locus of control does not perceive a relationship between his/her behavior and the consequences of that behavior. Therefore, if a person does not believe that success is related to his or her behavior, there will be minimal struggle with difficult tasks. Research suggests that a locus of control

orientation becomes increasingly internal with age and becomes fairly stable (Crandall, Katkovsky, & Crandall, 1965; Nowicki & Strickland, 1973).

Hochreich (1974) has proposed that there are two kinds of externals. The "defensive" externals and "true" externals differ in their attribution of responsibility. The defensive external is more likely to view success as a result of internal attributes and failure as a result of luck, fate, or other external attributes. Individuals with a true external locus of control tend to view both their successes and failures as a result of external forces.

Early studies by Cialdini and Mirels (1976) hypothesize that a person with an internal locus of control elicits a more favorable outcome from the environment. Hill (1978) suggested that internals are more confident, have higher levels of self-esteem, are less prone to both depression and suicide, are less anxious, are more assertive, and have been able to overcome learned helplessness more successfully.

Various studies have linked locus of control and academic achievement. Duke and Nowicki (1974) report a positive correlation between internal locus of control and school achievement. Other studies have also found that students with internal locus of control show greater gains on academic achievement (Messer, 1972; Nunn, Montgomery, & Nunn, 1986; Perna, Dunlap, & Dillard, 1983). Weiner (1974) found that locus of control influences the amount of energy that a student will put forth toward academic tasks, how responsive a student is to methods of instruction, and the importance a student places on grading and report cards. Other research has indicated that

students with an internal locus of control use time more productively and are more likely to forget failure experiences (Bryant, 1986; Rothbaum, Wolfer, & Visintainer, 1979).

Nunn, Montgomery, and Nunn (1986) investigated the criterion-related validity between locus of control using the NSLOCS and academic achievement. They hypothesized that the relationship between locus of control and academic behavior patterns is determined by the value children place on learning. Low achievers may view learning as unimportant and feel a sense of helplessness, which may lead to decreased commitment to achievement. High achievers, on the other hand, may hold a sense of positive internal control and naturally seek out successful learning activities.

In the study by Nunn, Montgomery, and Nunn (1986), a moderately inverse relationship was found between a student's external locus of control and his or her academic achievement. Children who do not perceive that they are in control of their learning outcomes are more likely to experience academic failure. Significant Pearson product-moment correlations were found between the level of external control and the degree of academic achievement. Composite achievement scores for the Iowa Test of Basic Skills were negatively correlated with the NSLOCS for both males ($r = -.37$, $p < .0001$) and females ($r = -.41$, $p < .0001$).

Nunn (1987) provides evidence for concurrent validity between the NSLOCS and a measure of perceptions of home, school, and peers. Pearson product-moment correlations reveal significant relationships ($p < .0001$) for males and females. This study indicates that

knowledge of home, school, and peer perceptions reveal a child's perceived level of locus of control.

Research on the relationship between locus of control and emotional and behavior problems have reported conflicting results. Students with emotional and behavioral problems have been described as more externally controlled than their peers in a study by Kauffman (1985). In a recent study, Nowicki and DiGirolamo (1989) found that emotionally disturbed children were more externally controlled and were less accurate in their perceptions of nonverbal affective behavior. Two studies found no differences in locus of control perception between emotionally disturbed (ED), behaviorally disturbed (BD), and normal students (Kendall, Deardorff, Finch, & Graham, 1976; Unruh, Cronin, & Gilliam, 1987). However, Morgan (1986) found differences in the locus of control between students classified as learning disabled (LD), BD, and LD/BD, with the LD/BD group more externally controlled than the others.

Students with an internal locus of control tend to use cognitive skills that indicate a higher level of "functional" intelligence (Hill, 1978). Individuals with an internal locus of control are more likely to seek out information (Davis & Phares, 1967) and are more sensitive to cues from the environment (Lefcourt, 1967; Seeman, 1967).

Studies have shown that externally controlled students perform best in a highly structured environment while internally controlled students should learn better in a low-structure situation (Bendell, Tollefson, & Fine, 1980; Rotter, 1966). Lawrence and Winschel (1975)

suggest a less structured environment where children are encouraged to accept responsibility for both their successes and failures.

Research has supported evidence that locus of control can be shifted from external to internal (Omizzo, Cubberly, & Omizzo, 1985; Stanton, 1982). According to Lawrence and Winschel (1975), the development of an internal locus of control suggests responsibility and self-reliance which is a major goal in the education of handicapped children.

The concept of locus of control is derived from social learning theory and refers to the extent of control an individual perceives between his/her behavior and the consequences of that behavior. Research on locus of control suggests that internality is associated with social, personal, and academic achievement, although discrepancies exist among the various studies. However, an internal locus of control is generally considered to be more desirable than an external locus of control.

CHAPTER III

METHODOLOGY

Subjects

The subjects in this study included 57 adolescent males (45 White, 8 Black, 4 Hispanic) between the ages of 12.9 and 16.9 years of age ($X = 15.6$; $SD = 1.194$), who had been either adjudicated delinquent or had delinquency charges pending. Complete data were available for all 57 subjects. They were court-ordered through the juvenile court system to undergo a 30-day evaluation at the State Training School for boys in Eldora, Iowa. The average length of placement for the evaluation was 25 - 30 days. The evaluation consisted of a medical evaluation, substance abuse assessment, psychiatric assessment, psychometric assessment which included the administration of the Minnesota Multiphasic Personality Inventory (MMPI), a modified version of the Nowicki-Strickland Locus of Control Scale (NSLOCS), and a career interest assessment. The school psychologist administered either the WISC-R or the Wechsler Adult Intelligence Scale-Revised (WAIS-R) and the Woodcock-Johnson Psychoeducational Battery Part 2. Anecdotal daily logs were maintained by the youth service workers. At the end of the evaluation period, a placement recommendation was made which included placement at the Training School, group home placement, in-patient substance abuse treatment, home with probation, or home with charges dismissed.

Methods

Locus of control scores and WISC-R profile scores were obtained from the files of the adolescents who underwent a 30-day evaluation at the State Training School in 1989.

Instruments

The instruments used in this study included a modified version of the NSLOCS to measure locus of control, and the WISC-R to measure intelligence.

Nowicki-Strickland Locus of Control Scale

The NSLOCS is a paper and pencil questionnaire consisting of 40 items answered either yes or no by marking over the answer beside the question. This scale, which was originally based on Rotter's (1966) definition of internal-external dimensions of control of reinforcement, includes items about affiliation, achievement, and dependence. School teachers assisted as consultants in the construction of items. A modified version of the Nowicki-Strickland Locus of Control Scale was used at the Training School. Consistent with the NSLOCS, the modified form contains 40 questions or statements that were reworded to allow for easier readability. As an example, the NSLOCS asks "Do you believe that most problems will solve themselves if you just don't fool with them?" This was modified at STS to read "Most problems will solve themselves if you just don't fool with them." The youths responded to each question or statement by circling yes or no.

Research suggests that locus of control is multidimensional. Factor analysis has resulted in a general factor as well as three

specific factors (Nowicki, 1976). The general factor found was consistent across all ages, and accounted for variance levels of 36% for elementary ages, 38% for junior high, and 41% for high school ages.

Factor 1 concerns include a "general feeling of helplessness and failure to control or direct things occurring around the person" (Nowicki, 1976). Factors 2 and 3 only accounted for 8% to 19% of the variance suggesting that they are age-specific and reveal developmental tasks at each age level.

Factor 2 includes items pertaining to achievement and strength for elementary students. For the junior high student, however, factor 2 includes items that not only focus on achievement but also with the persistence, work, and planning that is needed to acquire things. Factor 2 reveals a difference in the item loading for males and females at the high school level. For males, items relate to the persistence to overcome powerful others or luck. Items for females relate to an acceptance that chance, fate, and powerful others will control things.

Factor 3 showed both a general factor as well as age-specific items. The general factor related to luck. At the elementary level, items additionally related to a deference to parents for males, and the ability to manipulate others for females. Items relating to persistence and success in social areas, and luck were found at the junior high level. At the high school level, in addition to the general component of luck, the items related to using fantasy as a defense mechanism for feelings of powerlessness.

A study of the NSLOCS (Nowicki & Strickland, 1973) yielded the following estimates of internal consistency using the split-half method (Spearman-Brown formula): r = .63 (grades 3, 4, 5); r = .68 (grades 6, 7, 8); r = .74 (grades 9, 10, 11); and r = .81 (grade 12). According to Nowicki and Strickland (1973) because the test is additive and the items are not arranged according to difficulty or are comparable, the split-half reliability underestimates the true internal consistency of the scale.

Wechsler Intelligence Scale for Children-Revised

The WISC-R was developed as a test of general intelligence. It is a well-standardized test with excellent reliability and adequate concurrent validity (Sattler, 1988). The Verbal Scale, which consists of five subtests (Information, Similarities, Arithmetic, Vocabulary, and Comprehension) and one supplementary subtest (Digit Span), is dependent on a child's accumulated experience and is an index of verbal ability. The Performance Scale also has five subtests (Picture Completion, Picture Arrangement, Block Design, Object Assembly, and Coding) and one supplementary subtest (Mazes), and is more dependent on the child's immediate visual-spatial problem-solving ability; it is considered an index of nonverbal ability. Assessment of the WISC-R profile has identified specific and distinctive functions of the subtest that can provide clues about the individual's ability to learn and the ways in which he/she processes information (Cooper, 1982; Glasser & Zimmerman, 1967; Kaufman, 1979; Sattler, 1988).

The Information subtest involves verbal comprehension, acquired knowledge and long-term memory, and is influenced by cultural and

social opportunities, school learning, and alertness to the environment (Cooper, 1982; Glasser & Zimmerman, 1967; Kaufman, 1979; Sattler, 1988). Information assesses the extent of the child's general factual knowledge and the ability to retrieve this data on demand. High scores indicate awareness of the environment and the ability to learn specific facts. Low scores suggest difficulty in retaining or retrieving specific facts, limitations in general cognitive functioning or lack of curiosity or awareness of the environment. The child with low scores may be action-oriented rather than language-oriented.

Similarities involves verbal comprehension, verbal conceptualization, remote memory, capacity for associative thinking and the ability to distinguish essential from nonessential details (Glasser & Zimmerman, 1967; Kaufman, 1979; Sattler, 1988). According to Cooper (1982), Similarities assess the individual's innate capacity for intelligent reasoning. High scores reflect the ability to perceive relationships among objects or events. Low scores suggest general intellectual limitations and difficulty with abstract thinking.

Arithmetic measures the ability to translate verbally presented information into arithmetic problems and involves freedom from distractibility, verbal comprehension, ability for sequencing tasks, and knowledge of numerical operations (Cooper, 1982; Glasser & Zimmerman, 1967; Kaufman, 1979; Sattler, 1988). Arithmetic is influenced by the child's ability to attend and concentrate. High scores indicate good concentration skills and the ability to retrieve

and apply mathematical strategies. Low scores suggest that the individual is easily distracted, is unable to concentrate, has poor short-term memory recall abilities, or does not have adequate knowledge of math facts or operations.

The Vocabulary subtest measures knowledge of word meanings and involves verbal comprehension, verbal conceptualization, abstract thinking, and verbal learning ability (Cooper, 1982; Glasser & Zimmerman, 1967; Kaufman, 1979; Sattler, 1988). It is influenced by education, cultural opportunities and exposure to language. High scores indicate that the individual has been exposed to an environment rich in language, and is effective in verbally communicating information to others. Low scores suggest limited exposure to a verbal environment.

Comprehension assesses the child's ability to use practical judgment in solving everyday problems and involves verbal comprehension, verbal conceptualization, social judgment, verbal reasoning (Cooper, 1982; Glasser & Zimmerman, 1967; Kaufman, 1979; Sattler, 1988). This subtest is influenced by cultural opportunities and development of moral reasoning. High scores reveal that the child is aware of appropriate social behavior and is able to communicate the reasons for things that happen in the social world. Low scores suggest a lack of awareness of the rules or mores of the social world.

Picture Completion involves perceptual organization, verbal comprehension, long-term memory, visual organization, and the ability to distinguish essential from nonessential details (Cooper, 1982; Glasser & Zimmerman, 1967; Kaufman, 1979; Sattler, 1988). Attention

and concentration are also important factors of the Picture Completion subtest. High scores indicate that the child is visually alert to the environment while low scores suggest that the individual is unable to attend to or retain visually presented material.

The Picture Arrangement subtest involves perceptual organization, verbal comprehension, sequencing and planning abilities, and social judgment (Cooper, 1982; Glasser & Zimmerman, 1967; Kaufman, 1979; Sattler, 1988). This subtest is influenced by social and cultural opportunities and working under time pressure. High scores indicate that the individual is aware of social events and how they are logically sequenced. The person with a high score also possesses good visual-motor skills. Low scores suggest a lack of visual attention, sequencing, or perception. The person may also be impulsive and have problems planning or organizing especially with social or interpersonal situations.

Block Design involves perceptual organization, visual-spatial conceptualization, and non-verbal reasoning skills (Cooper, 1982; Glasser & Zimmerman, 1967; Kaufman, 1979; Sattler, 1988). This subtest also involves cognitive factors, the ability to work under time pressure, and most importantly, analysis and synthesis. High scores indicate good nonverbal reasoning and problem-solving skills and visual-motor coordination. Low scores suggest difficulty accurately perceiving and/or reproducing the designs, or coordinating visual and motor activities.

The Object Assembly subtest involves perceptual organization, visual motor coordination, and spatial, cognitive and evaluative

factors (Cooper, 1982; Glasser & Zimmerman, 1967; Kaufman, 1979; Sattler, 1988). High scores indicate good visualization and integration abilities, and motor coordination. Low scores suggest that the individual may be disorganized in how objects are perceived or may lack visual motor coordination.

Coding involves short-term memory, visual-motor sequencing skills, and freedom from distractibility (Cooper, 1982; Glasser & Zimmerman, 1967; Kaufman, 1979; Sattler, 1988). Speed and accuracy are important factors of this subtest. High scores indicate good hand-eye coordination and short-term memory while low scores may indicate difficulties visually attending or lack of visual-motor coordination.

Analysis of Data

Locus of control scores were correlated with the subtest scores and the Verbal, Performance, and Full Scale Intelligent Quotient (IQ) scores on the WISC-R, using the Pearson Product-Moment Correlation Coefficient.

CHAPTER IV

RESULTS AND DISCUSSION

The research findings were compiled for the measures of locus of control and intelligence. The mean and standard deviation were computed for the overall locus of control score and is as follows: $X = 12.123$ and $SD = 4.785$. Table 1 summarizes the correlation coefficients between the WISC-R and locus of control scores. The mean and standard deviation are given for each WISC-R subtest, and the Verbal, Performance, and Full Scale IQ scores. Pearson Product-Moment Correlation Coefficients revealed correlations consistently in the same direction with higher WISC-R scores associated with lower locus of control. A low score on the locus of control scale indicates internality. Low to moderate negative correlations were found (see Table 1). The two highest WISC-R subtests revealing negative correlations with locus of control include Comprehension ($r = -.393$, $p < .01$) and Coding ($r = -414$, $p < .001$). Comprehension involves an awareness and understanding of the social world. According to the results of this study an individual with an internal locus of control is more likely to have greater awareness of social customs and mores. Coding, which is a short-term memory, paper and pencil task, requires individual effort and motivation to visually attend. The results of the Coding subtest suggest that an internal locus of control is associated with the motivation to persist with a timed activity. Subtests that were the least affected by locus of control included Information ($r = -.169$) and Arithmetic ($r = -.140$). While these subtests are most closely associated with formal learning, performance

in these areas seems to be irrespective of locus of control. The results also revealed higher correlations with the Performance and Full Scale IQ scores as opposed to the Verbal Scale IQ, although the differences are statistically small. Analyses of the WISC-R profile

Table 1

Coefficients of Correlation, Means, and Standard Deviations of Scaled Scores and IQ's on the WISC-R with the NSLOC, N = 57

WISC-R subtest	r(xy)	Mean	SD
Information	-.169	7.754	2.708
Similarities	-.336**	9.351	2.601
Arithmetic	-.140	9.281	3.649
Vocabulary	-.271*	7.351	2.158
Comprehension	-.393**	8.175	2.772
Picture Completion	-.296*	10.404	2.329
Picture Arrangement	-.207	10.456	1.983
Block Design	-.260*	10.246	2.694
Object Assembly	-.281*	10.614	3.739
Coding	-.414***	8.509	3.157
Verbal Scale IQ	-.275*	90.246	14.304
Performance Scale IQ	-.396**	100.719	14.220
Full Scale IQ	-.387**	94.860	13.324

Note: $p < .05$*, $p < .01$**, $p < .001$***

revealed that the subjects performed lower in the Information and Vocabulary subtests. Verbal IQ scores were also lower, suggesting the subjects' verbal skills are not as well developed.

Further research is needed in this area not only with a similar population but also with other groups to determine if the findings can be replicated. This study explored the relationship between locus of control and intelligence. Although the results do not reveal strong correlations between locus of control and intelligence, the consistent inverse correlations found suggest that higher WISC-R scores are associated with an internal locus of control.

Relatively little research has been conducted on the relationship between locus of control and intelligence. This study explored the relationship with adolescent males involved with juvenile court. Juvenile delinquents not only experience difficulties with the legal system, but also with the educational system as well. Kielly (1989) found that 61% of the training school residents were receiving special education services. Of the special education population, 71% were identified as having a behavior disability.

The present study suggests a relationship between locus of control and intelligence which indicates further research is needed in this area. There are implications for comparative studies on students who have been identified and placed on special education programs. If further research suggests a link between locus of control and intelligence, knowledge of a student's locus of control would not only benefit educators in developing appropriate teaching strategies and behavior management practices, but also has clinical usefulness for

the school psychologist in assessing children's difficulties in school. The goal of education should be to encourage an internal locus of control especially with students experiencing academic and behavior difficulties. When children can perceive a relationship between their behavior and achievement, the educational process becomes less of an obstacle and more of a vehicle for a clearer understanding of their environment.

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APPENDIX A

Modified Version of the Nowicki-Strickland Locus of Control Scale used by the State Training School

NAME _____ DATE _____

DIRECTIONS: Answer each item by marking either YES or NO (make a line through your choice). There are no right or wrong answers.

YES NO 1. Most problems will solve themselves if you just don't fool with them.

YES NO 2. You can stop yourself from catching a cold.

YES NO 3. Are some people just born lucky?

YES NO 4. Most of the time, getting good grades means a great deal to you.

YES NO 5. Are you often blamed for things that just aren't your fault?

YES NO 6. If somebody studies hard enough he or she can pass any subject.

YES NO 7. Most of the time it doesn't pay to try hard because things never turn out right anyway.

YES NO 8. If things start out well in the morning it's going to be a good day no matter what you do.

YES NO 9. Most of the time parents listen to what their children have to say.

YES NO 10. Wishing can make good things happen.

YES NO 11. When you get punished does it usually seem it's usually for no good reason at all?

YES NO 12. Most of the time do you find it hard to change a friend's (mind) opinion?

YES NO 13. Cheering more than luck helps a team to win.

YES NO 14. It's nearly impossible to change your parent's mind about anything.

YES NO 15. Your parents should allow you to make most of your own decisions.

YES NO 16. When you do something wrong there's very little you can do to make it right.

YES NO 17. Most people are just born good at sports.

YES NO 18. Are most of the other guys your age stronger than you are?

YES NO 19. One of the best ways to handle most problems is just not to think about them.

YES NO 20. You have alot of choice in deciding who your friends are.

YES NO 21. If you find a four-leaf clover do you believe that it might bring you good luck?

YES NO 22. Doing your homework has also to do with what kind of grades you get.

YES NO 23. Do you feel that when a guy your age decides to hit you, there's little you can do to stop him?

YES NO 24. Have you ever had a good luck charm?

YES NO 25. Whether or not people like you depends on how you act.

YES NO 26. Will your parents usually help you if you ask them?

YES NO 27. Have you felt that when people were mean to you it was usually for no reason at all?

YES NO 28. Most of the time, do you feel that you can change what might happen tomorrow by what you do today?

YES NO 29. When bad things are going to happen they just are going to happen no matter what you try to do to stop them.

YES NO 30. People can get their own way if they just keep trying.

YES NO 31. Most of the time do you find it useless to try to get your own way at home?

YES NO 32. When good things happen they happen because of hard work.

YES NO 33. When somebody your age wants to be your enemy there's little you can do to change matters.

YES NO 34. It's easy to get friends to do what you want them to do.

YES NO 35. You have little to say about what you get to eat at home.

YES NO 36. When someone doesn't like you there's little you can do about it.

YES NO 37. It's almost useless to try in school because most other guys your age are just plain smarter than you are.

YES NO 38. Are you the kind of person who believes that planning ahead makes things turn out better?

YES NO 39. You have little to say about what your family decides to do.

YES NO 40. It's better to be smart than to be lucky.