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Locus of control and attribution as predictors of learned helplessness in children

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Locus of Control and Attribution as Predictors of Learned Helplessness in Children

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Abstract

The present study investigated the predictive value of locus of control and internal-external attribution as they relate to learned helplessness in children. Forty four females and twenty seven males enrolled in the fifth and sixth grades of a private elementary school served as subjects. Subjects were group administered the Nowicki Strickland Locus of Control Scale for Children and the KASTAN Attribution Rating Scale. They were then exposed to a guessing task designed to induce helplessness, and subsequently tested on a persistence task. It was expected that subjects would differ in persistence time based upon their internal-external locus of control orientation, and their internal-external attributional style. It was also hypothesized that locus of control and attribution are orthogonal constructs. Finally, it was expected that locus of control and attribution would be equally valuable predictors of helplessness.

Contrary to the experimental hypothesis, the analysis of persistence time revealed no significant differences based upon locus of control orientation or attributional dimension. The research hypothesis of the investigated variables being orthogonal was also not supported, as a correlation procedure revealed a significant relationship. Locus of control was not found to be a predictor of persistence time, however the hypothesis that internal-external attributional style predicts helplessness was confirmed by a regression analysis.

Characteristics of the present subjects and task simplicity were offered as possible reasons for the failure to replicate previous

research findings; however, the finding of internal-external attribution as a predictor of helplessness lends support to the reformulated model of learned helplessness. Treatment implications for helpless children and future research directions were discussed.

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Introduction

Learned helplessness theory (Seligman, 1975) has provided an impetus for a great deal of research seeking to explain a wide variety of human behavioral disturbances. Ott (1978) has defined the term learned helplessness as an explanation for the disturbances in motivation, cognition, and emotion which result from experiences in which there is lack of correspondence between responding and outcome.

Early research investigating the parameters of the phenomenon used animals as subjects (see Maier & Seligman, 1976, for a review of the infrahuman literature). An early investigation of the learned helplessness phenomenon demonstrated that whereas naive dogs efficiently learn to escape shock by jumping over a barrier in a shuttle box, dogs that were first restrained and given inescapable shock show marked deficits in acquisition of a shuttle escape response (Seligman & Maier, 1967). Further investigations have reported the occurence of learned helplessness in cats (Thomas & Dewald, 1977), fish (Padilla, Padilla, Ketterer & Giacolon, 1970), and rats (Maier, Albin & Testa, 1973; Maier & Testa, 1975).

Past studies have also investigated the parameters of the learned helplessness phenomenon with human subjects (i.e. Thornton & Jacobs, 1971; Krantz, Glass & Snyder, 1974; Hiroto & Seligman, 1975; Klein & Seligman, 1976). These early studies demonstrated the applicability of the learned helplessness hypothesis when applied to a wide variety of human behaviors, including depression, child development, and voodoo deaths (Seligman, 1975).

An experiment by Thornton and Jacobs (1971) has been frequently

cited as the pioneer in applying the learned helplessness model to human subjects. Using college students as subjects, these investigators confirmed their prediction that subjects who received escapable variable shock would be superior in escaping subsequent shock when compared with subjects who received inescapable variable shock and subjects who received no pretreatment shock. Although the results of this study suggest successful application of the model to human subjects, the investigators failed to reproduce the findings of previous animal research, where the inescapable subjects consistently performed more poorly than escapable and control subjects (Maier & Seligman, 1976). The authors explain this contrasting result as representing the effect of differing instructional sets as well as the possible effect of mild but not traumatic shock (Thornton & Jacobs, 1971).

Hiroto's investigation (1974) provides a successful human analogue to the animal studies. College student subjects were assigned to one of three groups: the controllable noise group, in which subjects received a loud noise but could terminate it by pushing a button four times; the uncontrollable noise group, in which the noise was terminated independently of subjects' responding; and a no-pretreatment control group. All subjects were then tested with a human shuttlebox. In the shuttlebox condition, noise termination was controllable for all subjects by moving a lever from one side of the box to the other. The results of this investigation paralleled those found in the animal studies. The subjects in both the controllable noise group and the no pre-treatment control group learned to shuttle, but the typical subject in the uncontrollable noise group failed to escape and listened passively to the noise.

The learned helplessness hypothesis became widely accepted to account for the debilitating effects of experience with uncontrollability, and provided a unified theoretical framework integrating animal and human data (Abramson, Seligman, & Teasdale, 1978). As stated by Ott (1978), learning that outcomes are uncontrollable results in three deficits: motivational, cognitive, and emotional. The motivational deficit is hypothesized to be the result of the subject's expectation that outcomes are uncontrollable and consists of retarded initiation of voluntary responses. It was further hypothesized that learning that an outcome is uncontrollable results in a cognitive deficit, because such learning makes it difficult to later learn that responses produce that outcome. Depressed affect is the emotional deficit which the model claims as a further consequence of learning that outcomes are uncontrollable.

Learned Helplessness in Children

The learned helplessness phenomenon has been investigated in children by several researchers (i.e. Dweck & Repucci, 1973; Dweck, 1975; Ott, 1978; Butkowsky & Willows, 1980). In an early investigation Dweck and Repucci (1973) reported that following exposure to non-contingent failure with unsolvable block designs, children who showed the most performance deficits tended to attribute success or failure to ability. These "helpless" children appeared to view themselves as having little control over outcome. Conversely, children who showed the fewest deficits tended to attribute their performance to effort.

In a continuation of this research, Dweck (1975) developed a treatment program for "helpless" children which was designed to alter the child's perception of the relationship between responding and

unsuccessful outcome. Utilizing an attribution retraining approach, "helpless" children were taught to attribute failure to a lack of effort rather than to a lack of ability. Based upon ratings of the principal, school psychologist, and teachers, "helpless" children were identified and were divided into two groups: "reattribution training," in which children were taught to deal with failure; and "success-only training", in which no failure experiences occurred. Results demonstrated that children in the "reattribution training" group showed significant improvements in task persistence and less helplessness than did the "success-only" group, who showed no performance change from baseline.

Ott (1978) investigated the effects of helplessness induction upon situational versus generalized expectancy in school-children. Forty-five male children (mean age of 11 years, 1 month) were randomly assigned to one of three experimental groups: the response-dependent (RD) group, which received controllable noise trials designed to induce the expectancy of response - outcome dependence; the response independent (RI) group, which received uncontrollable noise trials to induce response - outcome independence; and a control group (C) which merely listened to trials of noise.

It was hypothesized that following the noise condition, subjects in the RI group would demonstrate lowered response initiation, performance decrements, and disruption of cognitive functioning on subsequent task performances (longer latencies, more errors, and greater number of trials to criterion on the Halstead Category Test and a modified human shuttlebox). Consistent with the study's predictions, the RI subjects showed significantly longer latencies than RD subjects on the initial shuttlebox trials. However no differences between groups were

demonstrated for shuttlebox errors and trials to criterion, or for Category Test latency, errors, and trials to criterion. Ott (1978) offers the difference between treatment groups on shuttlebox response initiation as partial support for the applicability of the learned helplessness model for children, while subject variables and task simplicity were offered as possible reasons for the failure to replicate all of the previous learned helplessness findings (Ott, 1978).

Butkowsky and Willows (1980) employed a cognitive-motivational analysis to investigate self-perceptions that might contribute to motivational and performance deficits observed in children with reading difficulties. These experimenters assessed children with relatively good, average, and poor reading ability on tasks in which success and failure were manipulated. It was found that poor readers evidenced characteristics of the learned helplessness phenomenon and low self-concepts of ability. Generally, results show that these children with poor reading ability had lower initial expectancies of success, gave up more quickly in the face of difficulty, attributed failures to more internal and stable causes, attributed successes to more external causes, and produced greater decrements in their subjective estimates of success following failure than children of relatively good or average reading ability. The authors state that their study assessed the presence of learned helplessness as it naturally occurred in a population of children with reading difficulties, and thus the results of the study lend some external validity to the learned helplessness hypothesis.

In a study designed to investigate the effectiveness of noncontingent reinforcement and response cost in inducing learned helplessness (Fleming, Cassel, Saylor, Penberthy, & Finch, 1981), 28 emotionally disturbed children served as subjects in a learned helplessness paradigm.

This study also sought to determine whether depressed subjects respond differently than nondepressed subjects following helplessness training. It was predicted that children who received either noncontingent reward or noncontingent punishment during a concept formation task would persist for less time at a persistence task than would children who received rewards contingent upon their performance. It was further hypothesized that depression would mediate either the helplessness induction or the performance on the persistence task. Children were administered the Children's Depression Inventory (CDI) (Kovacs & Beck, 1977) in order to distinguish between "depressed" and "nondepressed" subjects.

Results indicate that noncontingent reward, as well as noncontingent punishment would induce a state of learned helplessness relative to contingent reward. This result lends support to the learned helplessness hypothesis, which states that the critical factor in creating helplessness is a lack of contingency between behavior (active or passive) and consequences; the actual type of noncontingent consequence, e.g., positive or negative, should not be a relevant variable (Fleming et al., 1981). No significant differences were found however between depression level (depressed vs. nondepressed), and no significant interactions were found. One possibility for this is that the CDI and the study's experimental procedure may be tapping relatively orthogonal components which are subsumed under the term "depression". Because the CDI is still undergoing validation, the exact nature of the study's "depressed" and "nondepressed" groups remains unclear (Fleming et al., 1981).

Learned Helplessness Hypothesis: A Reformulation

In a critique and reformulation of the learned helplessness model, Abramson et al. (1978) cite two major problems with the original hypothesis when applied to humans: (a) The original hypothesis does not distinguish between cases in which outcomes are uncontrollable for all people and cases in which they are uncontrollable for only some people, and (b) it does not explain cases where helplessness is general and when specific, or when chronic and when acute. Abramson et al. therefore proposed a reformualtion of the original learned helplessness hypothesis which is based upon attribution theory. According to their reformulation:

> "once people perceive noncontingency, they attribute their helplessness to a cause. This cause can be stable or unstable, global or specific, and internal or external. The attribution chosen influences whether expectation of future helplessness will be chronic or acute, broad or narrow, and whether helplessness will lower self esteem or not (p. 49)."

Attribution for noncontingency determines the development of future noncontingency and thus strongly influences the development of the motivational, cognitive, and emotional deficits associated with the learned helplessness phenomenon (Ott, 1978).

This reformualtion then, hypothesizes that an individual's response to an uncontrollable event is determined by the attributions which that person makes about the event. Pasahow (1980) points out that attributions are to be understood along three orthogonal dimensions: stable-unstable, global-specific, and internal-external. Stable attributions pertain to factors that persist over time whereas unstable attributional factors are transient. Global attributions refer to factors that are prevalent across situations; specific attributions refer to factors unique to the particular uncontrollable event.

Abramson et al. (1978) point out a distinction between universal helplessness and personal helplessness in order to define the use of the attributional dimension of internality. Situations in which persons believe they cannot solve solvable problems are examples of personal helplessness. These people believe that they do not possess the skills necessary to produce an outcome in a given situation. Universal helplessness however, pertains to situations in which a person believes that neither they nor relevant others can solve a problem. In this situation the person expects that no response can produce the necessary outcome.

The self-other dichotomy is taken as the criterion of internality. Outcomes are attributed to internal factors when people believe that outcomes are more or less likely to happen to themselves than to relevant others. External attributions are made for outcomes that people believe are as likely to happen to themselves as to relevant others. A person can be either internally or externally helpless. According to Abramson et al. (1978) "universally helpless individuals make external attributions for failure, whereas personally helpless individuals make internal attributions (p.54)."

The distinction between universal and personal helplessness has led helplessness researchers to hypothesize the occurance of a fourth deficit - low self-esteem (Abramson et al., 1978). While cognitive, motivational, and emotional deficits occur in both personal and universal helplessness, Abramson (1977) has demonstrated that lowered self-esteem occurs only in personal helplessness. Results of the Abramson study suggest that individuals who believe they do not possess the skill necessary to produce a desired outcome but that relevant others do possess the necessary skills to obtain the outcome, will show lower self-

esteem than individuals who believe that neither themselves nor relevant others possess the necessary skills.

In summary then, the reformulation of the learned helplessness hypothesis proposes that (a) attributions to internal factors cause a greater loss of self-esteem than external attribution; (b) stable attributions produce deficits that are more long term than unstable attributions; and (c) attributions to global factors result in performance deficits that generalize further than specific attributions (Pasahow, 1980).

Research Investigating Learned Helplessness and Attributions

Several studies have investigated the role of the subject's attributions of task performance in the development of learned helplessness (Dweck & Repucci, 1973; Klein, Fencil-Morse, & Seligman, 1976; Tennen & Eller, 1977; Pasahow, 1980). In an early study, Dweck and Repucci (1973) reported that following exposure to noncontingent failure, those children who showed the most performance deficits tended to attribute success or failure to ability, whereas children who showed the fewest deficits tended to attribute their performance to effort.

Klein, Fencil-Morse, and Seligman (1976) directly manipulated attributions by informing subjects about the performance of other subjects. College student subjects were divided into depressed and nondepressed groups based upon their scores on the Beck Depression Inventory (BDI) (Beck, 1967). In the internal-attribution condition, subjects were told that 55% of previous subjects succeeded in all problems, whereas subjects in the external-attribution condition were told that 90% had failed on all problems. Following these instructions, subjects were exposed to random reinforcement in a discrimination task

followed by an anagram test task. Results show that the attribution instructions did not significantly affect the nondepressed subjects, but for the depressed subjects the external attribution instructions alleviated learned helplessness on the anagram task. Klein et al. suggest that helplessness and depression are due both to the experience with failure and to the attribution of that failure to personal incompetence.

Tennen and Eller (1977) exposed college student subjects to a double helplessness condition, in which attribution for task difficulty was manipulated by telling the subjects that each succeeding task was either easier or more difficult. Results indicate that the "easier" group showed learned helplessness effects. Presumably these subjects made attributions to ability whereas the "more difficult" group did not evidence learned helplessness, as their attributions were made to task difficulty. These results have been supported in further research suggesting that attribution of noncontingent failure to ability or personal incompetence leads to increased learned helplessness, whereas attribution of these outcomes to situational factors or task complexity does not produce learned helplessness (see Miller & Norman, 1979, for a review of the literature).

In a direct attempt to test the learned helplessness reformulation, Pasahow (1980) investigated the effects of manipulating subjects' global-specific attributions for an uncontrollable task and assessed the relationship of attribution to subsequent behavior. Prior to this study, the effects of any one attributional dimension had not been assessed. College student subjects were randomly assigned to one of four treatment conditions: the GA group, which was given instructions designed to elicit global attributions for failure on an uncontrollable

task; the SA group, which were given instructions designed to elicit specific attributions for failure on this task; the NA group, which was given the same uncontrollable task without any attribution-eliciting instructions; and the NT group, which were given a neutral task. In order to test for the effects of the treatment conditions, all subjects were subsequently tested on an anagram task. All subjects were further randomly assigned to one of two attribution rating conditions. Subjects made attribution ratings for their performance on the uncontrollable task either immediately before or after the anagram task.

To assess the effects of uncontrollability, a comparison between the anagram performances of the NA and NT subjects was conducted and revealed that NA subjects performed much worse than NT subjects. Pasahow gives this result as further evidence that exposure to an uncontrollable experience can interfere with subsequent performance. However, the major purpose of this study was to test Abramson et al.'s (1978) hypothesis that subjects' global-specific attributions for an uncontrollable event mediate subsequent performance deficits. Results of the Pasahow study support this hypothesis as it was found that subjects in the GA group, who were instructed to attribute their failure to global factors, performed much worse on the anagram task than the NT and SA subjects. The SA subjects performed much better than the NA subjects, thus suggesting that global attributions for an uncontrollable event produce subsequent helplessness and that such helplessness does not occur when subjects make specific attributions for the uncontrollable event. This study failed, however, to confirm the reformulation predictions that attributions mediate performance. An analysis of GA and SA subjects who made their attributions before the anagram task

demonstrated that these two groups did not differ on the global-specific dimension. When these ratings followed the anagram task, the predicted group differences were found, thereby suggesting that the differences in anagram performance might actually have mediated the differences in the subjects' global-specific attributions for failure on the uncontrollable task. It was suggested that further research employing different methodologies be used to examine the relation between attributions, helplessness characteristics, and depression in order to determine the validity of the reformulated model of learned helplessness (Pasahow, 1980).

Peterson (1980) administered the KASTAN Attribution Rating Scale and the Children's Depression Inventory (CDI) (Kovacs & Beck, 1977) to 96 school children (aged 9-13), in order to determine the relationship between depression (a deficit of helplessness) and attributional style. It was found that a style of attributing failure to internal, stable, and global causes, as measured by the KASTAN, correlated strongly with depressive symptoms identified by the CDI. This is consistent with the learned helplessness reformulation (Abramson et al., 1978). Success was attributed to external, unstable, and specific causes in the depressed.

Locus of Control and Learned Helplessness in Children

The early hypothesis of learned helplessness emphasized an apparent similarity between the helplessness concept of learning that outcomes are uncontrollable and Rotter's (1966) concept of external control (Abramson et al., 1978; Hiroto, 1974; Miller & Seligman, 1973). In Rotter's concept, people's beliefs about causality can be arrayed along the locus of control dimension, with "internals" tending to believe

outcomes are caused by their own responding and "externals" tending to believe outcomes are not caused by their own responding but by luck, fate, or chance. Support for this proposed conceptual similarity of externals and helpless individuals was provided by studies in which helpless subjects gave small expectancy changes, which suggests a belief in external control, whereas subjects not exposed to helplessness training gave large expectancy changes, which suggests a belief in internal control (Klein & Seligman, 1976; Miller & Seligman, 1975). These findings indicate that helpless subjects perceived tasks of skill as if they were tasks of chance. In Rotter's (1966) theoretical framework, locus of control is regarded as one kind of expectancy, the magnitude of which is considered to be determined by several factors: specific expectancies, expectancies generalized from previous reward conditions, and the amount of experience in the situation.

Several studies have investigated the locus of control dimension as it related to children (Nowicki & Strickland, 1973; Tesiny, Lefkowitz, & Gordon, 1980; Strickland, 1972). In the area of achievement and competence behaviors there are a number of studies that support the theoretical assumption that internality is associated with academic achievement as well as with those behaviors which are generally associated with academic achievement, such as persistence time (Nowicki, 1977). In a study investigating helplessness and locus of control orientation, Mount (1975) reported correlations ranging from -.35 to -.47 depending on the types of academic achievement measured ($n=50$, $p<.01$). Nowicki and Strickland (1973) reported significant correlations between internality and higher academic achievement for children in grades three through twelve.

Tesiny, Lefkowitz, and Gordon (1980) demonstrated that measures of achievement (standardized reading and math scores) were negatively related to external locus of control. These researchers conclude that adaptive, achievement-oriented behavior and externality are, to a degree incompatible. This study also demonstrated that depression and externality were positively correlated ($r=.19$, $p< .001$). This finding would lend support to the learned helplessness hypothesis, which, as previously stated, views depression as the emotional deficit associated with the phenomenon.

Finally, in terms of persistence, it has been shown that internals persist longer than externals (see Nowicki, 1977, for a review). Other research has provided support for assuming that internality is related to competence types of behaviors (Strickland, 1972).

The Present Study

Previous research has demonstrated that the reformulated model of learned helplessness can be applied to adult humans (Abramson, 1977; Pasahow, 1980); however, the model has not been systematically applied to children.

Ott (1978) states that it seems apparent that many children react to repeated failure by giving up, reporting feelings of low self-esteem, and demonstrating a diminished capacity for reacting positively to success experiences. Such behaviors parallel the learned helplessness phenomenon, and indeed the occurrence of the phenomenon has been demonstrated in children (i.e. Butkowsky & Willows, 1980; Fleming et al., 1981). However, it has yet to be determined whether the child's locus of control orientation, attributional style, or a combination of the two mediate the occurrence of helplessness. If the relation between

locus of control, attribution, and learned helplessness can be demonstrated, then the reformulated model may hold important treatment implications for naturally occurring helpless children. Preventive or intervention strategies for these children can be developed in accordance with the child's specific locus of control and/or attributional style. The present study, then, was designed to address the following questions:

1. Does the reformulated learned helplessness model apply to children?
2. Following the helplessness training, are there differences in children's persistence performance on an unsolvable task?
3. Are the differences in persistence time mediated by the child's locus of control orientation and/or attributional style?

In this study, school children were given instruments to measure their locus of control orientation and attributional style. They were then exposed to a situation designed to induce helplessness, and subsequently tested on a persistence task. This study specifically examined the internal-external locus of control dimension, and the internal-external attribution dimension. It was expected that subjects who hold an internal locus of control orientation would persist longer than externals, and those who hold an external attributional style would persist longer than those with an internal attributional style. It was further hypothesized, based upon a correlational analysis, that locus of control and attribution are orthogonal constructs and that locus of control and attribution are equally valuable predictors of learned helplessness.

Method

Subjects

Subjects were 72 children enrolled in grades 5 and 6 at a private elementary school in an upper-middle class neighborhood in Richmond, Virginia. The sample consisted of 44 females and 27 males, ranging in age from 10 years, 3 months to 13 years, 4 months, with a mean age of 11 years, 7 months. Intelligence quotients, obtained from school records, revealed a mean IQ of 112 for the sample. Although 72 children returned consent forms to participate in the study, 12 subjects were discarded from final analyses; eleven of these subjects completed the unsolvable puzzle task, and one subject was continually absent from school.

Apparatus

The task for the training phase of the experiment utilized a Kodak carousel projector (Model 650 H) and three black-and-white slides -- a circle, a triangle, and a slide with a cross. The latter slide served as a neutral slide to fill the screen in between trials. The experimenter manually controlled the projector to advance forward to show the circle, or backward to show the triangle. Slides were displayed on a screen approximately five feet from the subject.

Six blocks from the commercially available "Steiffel Tower" game were utilized in the test phase of the experiment. Each block consists of two blank sides and four sides marked with one of six symbols. The object of this task is to pile up the six blocks so that each of the column contains each symbol, with no symbol represented more than once on any side.

Experimenters

One male and one female undergraduate student served as experimenters for the training and test phases of the experiment. The male experimenter operated the slide projector for the training phase. Experimenter training consisted of role playing the instructions and operating the machine until a perfect performance was demonstrated for 6 consecutive trials. The female experimenter was assigned to the test phase of the experiment and was also trained through role playing to criterion of 6 consecutive trials of perfect performance. Each subject saw the same male and female experimenters throughout the experiment.

Procedure

A female graduate student first met with each fifth and sixth grade class to explain the research and ask for volunteers. The children were told that the experimenter was interested in finding out how children solve different types of problems. Those who were interested were given a parental consent form (see Appendix A).

The experiment involved three phases in which all subjects participated: a group phase, a training phase, and a test phase. During the group phase, all subjects were group adminsitered the Nowicki-Strickland Locus of Control Scale for Children and the KASTAN Attribution Rating Scale (see Appendix B). The same female graduate student administered these paper-and-pencil tests in the children's classrooms. All the children were given candy rewards following testing.

Subjects were escorted by the graduate student individually to a separate room at the school for the training phase. The experimenters were blind to the subject's locus of control and attributional style. The subject was seated in a chair facing a white screen, with the

projector and experimenter's notes blocked from the child's view by a wooden screen.

During the training phase each subject was told:

> This part of the experiment is to see how well children do at guessing. You are going to be seeing two slides - a circle or a triangle. Before each slide comes up I want you to guess whether it's going to be the circle or the triangle. I've put 30 chips in front of you. Every time you guess wrong, I'm going to take one away from you. For every five chips you're able to hold on to, you'll be able to pick out a piece of gum from this supply over here. You ready? Remember, you have to guess whether the next slide is going to be the circle or the triangle, and I'll take a chip away every time you guess wrong. At the end you'll be able to cash in the chips you have left for the gum.

The slide carousel was subsequently advanced or returned for 36 trials so that the children appeared to be failing on all but five of the trials (2, 4, 5, 8, 9). Success trials were designated in the procedure outlined by Fleming et al. (1981).

Immediately following the training phase, the subject was taken to another room for the test phase. The subject was seated across a table from the experimenter.

For the test phase, subjects were told the following:

> We are interested in seeing how children solve different types of problems. Here is a block problem called the "Steiffel Tower." You see these blocks? They each have two blank sides, and then four sides that have different symbols on them. What you have to do is pile these blocks up so that each symbol shows in each column, but you don't have the same symbol show twice in each column. OK? All the symbols have to appear in a column, but not more than once. OK ready? Begin work.

Once the task had been explained, children were given up to nine minutes to persist at solving the puzzle. The session ended when the subject refused to persist any longer, or when the 9 minutes had elapsed.

The experimenter recorded each child's persistence time and then gave the child a candy reward.

After all the subjects completed the experiment, the children were defriefed in their classroom and thanked for their participation. All children were then given an additional candy reward for participating.

Independent Variables

The Nowicki-Strickland Internal-External Control Scale for Children

The Children's Nowicki-Strickland Internal-External Control Scale (CNS-IE) is a paper and pencil measure of the locus of control dimension consisting of 40 questions that are answered by marking either the yes or no place next to the question. The 40 item scale was administered to a large number of children (N=1017) ranging from the third through the 12th grade to obtain the reliability estimates, demographic measures, and construct validity information (Nowicki, 1977). Data indicates that the variables of sex, social desirability, and intelligence have no confounding effect on children's locus of control scores. Nowicki and Strickland (1973) reported test-retest reliabilities sampled at three grade levels, six weeks apart: .63 for third graders (n=99), .66 for seventh graders (n=117), and .71 for tenth graders (n=125). Further research has supported the test-retest reliability of CNS-IE (see Nowicki, 1977, for a review).

The KASTAN Attribution Rating Scale for Children

The Kastan Scale (Kaslow, Tanenbaum, & Seligman, 1978) is a 48-item forced choice paper-and-pencil instrument which measures children's tendencies to explain events as due to internal (vs. external), global (vs. specific), and stable (vs. unstable) causes, separately for positive and negative events. Thus, three subscales yield positive events scores, and three yield negative events scores. Composite scores

for good and bad events are formed by adding the appropriate subscale scores. Kaslow et al. (1978) report that the correlation between the composite for good events and the composite for bad events is -.36 ($n=96$, $p< .001$), suggesting that it may be reasonable to propose a single consistent attributional style for both good and bad events in children.

Results

For the analyses of the present study, the Nowicki-Strickland Locus of Control Scale for Children (LOC) was scored by summing the number of external items answered. Therefore as scores increased, the subject tended to answer more towards the external dimension. Subjects' scores ranged from 6 to 27, with a mean of 15.819. The highest possible score on the LOC scale is 40.

The KASTAN scale yields scores for three separate attributional dimensions (Internal, Global, Stable); however, for the purposes of the present study, only the Internal dimension was added into the analyses. Subjects receive a possible score of 0 to 8 for attributing good events to internal factors (IG), and also a possible score of 0 to 8 for attributing bad events to internal factors (IB). The total score for internal attributional style (Intern) was derived by adding the score for IG to the score for IB. As a subject's Intern score increases, the tendency is to attribute events to internal causes. Subjects' scores ranged from 2 to 13, with a mean of 7.788. The highest possible Intern score is 16.

The KASTAN scale also yields a score indicative of depression. The KASTAN score is the sum of endorsed good events items (on the three attribution dimensions) minus the sum of endorsed bad events items (on the three attribution dimensions). The median KASTAN score is 0, with a negative score indicative of depressed ideation, and a positive score indicating non depressed ideation. Subjects' scores in the present study ranged from -8 to 16, with a mean score of 4.42, and thus are

not indicative of depression for the sample.

It was hypothesized that subjects who hold an internal locus of control orientation would persist longer than those with an external locus of control orientation, and those with an external attributional style would persist longer than those with an internal attributional style. A median split was performed to separate the groups for the analysis of variance procedure. Those subjects with an LOC score of 15 or less were grouped as internal; those with a score greater than 15 were grouped as external. For the attributional dimension, an Intern score less than or equal to 7 was an external; and those subjects with a score greater than 7 were internal.

Table 1 presents the summary table for the 2 x 2 analyses of variance (LOC x ATTRIBUTION) of persistence time. The analysis revealed no significant differences in persistence time for LOC ($\underline{F}$ (1,56)=.02, $\underline{p}$> .05), nor for attribution ($\underline{F}$(1,56)=2.94, $\underline{p}$> .05). The interaction term, LOC x Attribution was also nonsignificant, ($\underline{F}$(1,56)= $\underline{p}$> .05) and thus the hypothesis of differences in persistence time was not supported.

To determine whether there is a relationship between LOC and the Intern variable, a Pearson Product Moment Correlational Analysis was performed. The correlation matrix with variables of interest is presented in Table 2. Results show that LOC and Intern have a significant negative correlational relationship (r=-.32, df=71,$\underline{p}$< .01). This is contrary to the experimental hypothesis that these constructs would be orthogonal. Further examination of the correlational matrix reveals that the dependent measure persistence time does not correlate with LOC (r=-.17,df=60, $\underline{p}$> .05), but a relationship exists between Ptime and Intern (r=.28, df=60, $\underline{p}$< .05). The KASTAN depression score was found to have a significant negative relationship with LOC (r=-.25, df=71, $\underline{p}$< .05).

Table 1

Source Table Derived From Analysis of Variance

for Persistence Time for LOC and Intern

Source of Variation	df	SS	F
LOC	1	362.438	.02 NS
Intern	1	54354.313	2.94 NS
LOC x Intern	1	549.019	.03 NS
Error	56	1036894.666	

$p > .05$

Table 2

Correlation Coefficients Between Variables

	LOC	Intern	Kastan	Ptime
LOC	1.00			
Intern	-.32**	1.00		
Kastan	-.25*	-.13ns	1.00	
Ptime	-.17ns	.28*	.03ns	1.00

*$p < .05$

**$p < .01$

To assess whether LOC and Internal attribution predict subjects' persistence time, a stepwise Multiple Regression Analysis procedure was conducted. For the stepwise analysis, variables are selected in the order of their ability to contribute to the overall predictive power of the regression equation. The addition of a variable is based upon whether or not its contribution to predicted variance is statistically significant. In the present study, Intern was seen to significantly predict subjects' persistance time ($F(1,58)=5.08, p< .05$). The variable LOC did not meet the .15 significance level for entry into the model. The experimenter's hypothesis of prediction of learned helplessness was partially supported by these findings, which are summarized in Table 3.

Table 3

Summary Table for Stepwise Multiple Regression Analysis

Dependent Variable	Step	Variable Entered	F Ratio	R Square	B Value	Type II SS
PTime	1	Intern	5.08*	.08	17.525	89125.789

*$p < .05$

LOC did not meet the .15 significance level for entry into the model.

Discussion

While the results of the present research did not confirm all of the experimental hypotheses, the data are sufficient to lend support to the reformulated model of learned helplessness (Abramson et al. 1978) as it is applied to children. The main purpose of the present study was to evaluate the predictive value of locus of control and the internal attributional dimension in identifying helplessness deficits.

This study failed to replicate previous research findings in which children who held an internal locus of control persisted longer than externals (Nowicki, 1977). Also there were no significant differences obtained in persistence time between internal and external atrributional style. Several explanations can be offered to explain these results. Both the LOC scale and the Internal attribution dimension were dichotomized by a median split method. In this way "moderates" were included into the analyses; that is those subjects were included who fall near or at the mean on both scales. If the number of subjects in the present study were considerably increased, then the moderates may have been eliminated. In this way a true dichotomy of internal versus external subjects could have been utilized in the analyses. Further research should make the internal-external distinction by analyzing the upper and lower third of the population.

Failure to replicate previous persistence time results may also be explained in terms of the experimental manipulation. The training and test phase of the experiment were exact replications of the procedure utilized by Fleming et al (1981) with emotionally disturbed

children. The children in the Fleming study were 28 inpatients at a state psychiatric facility. These subjects carried several different psychiatric diagnoses and were at the time being exposed to various therapeutic interventions. While the experimental manipulation was successful in producing helplessness deficits in their sample, it is possible that the task was not sophisticated enough for the present sample.

Characteristics of the present subject population which may be considered when reviewing the results include a high average mean IQ, socioeconomic status, and the quality of Parochial education. It may be assumed that these children entered the experimental situation with a higher generalized expectancy for success. The mean LOC score for this sample was indicative of an internal orientation, and the KASTAN index revealed a non-depressed group. Rotter (1966) would predict that in this experiment, given the population, that helplessness deficits would not be produced from brief exposure to an uncontrollable guessing task. These children might require more intense experience with lack of controllability and failure in order to obtain an effect. The sample mean for attributional style suggests the population was an external group. Consistent with the reformulation then, these children would be more likely to attribute failure during the training phase to properties of the problem, rather than to a personal lack of ability. Therefore helplessness training would not carry over to the persistence task. In addition the "unsolvable" persistence task itself was solved by eleven of this study's subjects. Ott (1978) utilizing a similar sample in a helplessness paradigm, postulated that the reinforcement history of these children makes them resistent to the development of learned

helplessness characteristics, at least those produced in a "typical" helplessness paradigm. Pasahow (1980) points out the necessity of assessing whether helplessness deficits are actually produced. In this study a control group which did not receive helplessness training could have been utilized as a baseline group to compare with the performance of the helplessness trained group.

Results of the correlational analyses did not confirm the prediction that LOC and attribution would be orthogonal dimensions. Inspection of the locus of control literature reveals the internal-external distinction to be categorized based on a self-fate dichotomy (Rotter, 1966; Nowicki, 1977); whereas the attributional distinction of internal-external is defined by the self-other dichotomy (Abramson, 1978). The correlation of the two scales utilized in the present study should be interpreted with caution. While Nowicki (1977) presents factor analytic research and data to support the construct validity and reliabilaity of his scale, the KASTAN scale is still a relatively new instrument which is undergoing validation. Future research with these instruments should focus on both scales. Investigations of that nature will hold important implications with regard to the relationship of locus of control and the reformulated helplessness theory. The self-fate/self-other dichotomies may not be two distinct concepts but one continuous dimension. The correlation of these two scales also raises questions concerning the utilization of related instruments in assessing dimensions assumed to be totally different. Perhaps the focus of psychometry today should shift from the development of new rating scales to the validation and clinical application of existing measures. Research with existing measures could utilize test-retest paradigms, correlational analyses,

and factor analytic procedures to maximize the usefulness of these scales. In addition, existing scales need to be validated against various subject populations (i.e. clinical, minorities, normals) in order to establish appropriate norms for interpretation and generalizability.

The major purpose of this study was to test the predictive value of the LOC and attributional variables. Results appear to support the hypothesis that the Internal attributional dimension would be a valuable predictor of persistence time, and thus lend some external validity to the reformulation of the learned helplessness model. Contrary to the experimental hypothesis LOC was not found to add any predictive power to the regression analysis, and this would be consistent with the obtained correlation between the two predictor variables. What remains to be evaluated in future research is the amount of variance unaccounted for by the regression equation. Peterson (1980) mentions briefly the existence of achievement and affiliation items within the KASTAN scale, but due to the empirical similarity of those two dimensions, the KASTAN subscales were computed across that distinction. Given the characteristics of the present population, it seems logical that achievement and affiliation may be important factors in determining persistence time. This question was raised during the development of this study, however, the existence of reliable scales to measure those dimensions is unknown. Results of this study further demonstrate the need for validation and examination of the content of the new KASTAN scale, which may in fact be tapping the achievement/affiliation dimension in the present subjects.

This study sought to evaluate the applicability of the reformulated model of learned helplessness to children. Prior research has demonstrated the existence of helpless characteristics in various child

populations: emotionally disturbed (Fleming et al, 1981), poor readers (Butkowsky & Willows, 1980), slow learners (Dweck, 1975). The Internal-External attributional dimension was shown to predict persistance time in this study, and as this group was external in its orientation, support is given to the reformulation in that externals would persist following a helplessness task. Consistent with the Abramson et al. (1978) model is that attributions mediate performance. Results of the present study are contrary to those obtained by Pasahow (1980), who found the performance on a helplessness task to mediate attributions. Further research in this area is needed to investigate the induction of helplessness and the stability of attributions over time and situation.

The findings reported in this study have implications for the treatment of naturally occurring helplessness in children. Results suggest that the Internal-External attribution dimension as measured by the KASTAN scale, is a valuable predictor of persistance time. Therefore, using similar paradigms, comparative studies of attributions made by normals and treatment populations may reveal differences in the attribution patterns of such groups. Past research in this area has addressed the role of attribution training in alleviating helplessness in children (Fowler & Peterson, 1981; Rhodes, 1977; Dweck, 1975). These investigations all involved training subjects to attribute failure to lack of effort rather than ability, and employed partial reinforcement for increased effort. Results suggest that subjects who receive reattribution training persist longer and evidence fewer deficits than controls. The implication here is that reattribution training treatment packages may be developed specifically for helpless children.

Conclusions

The results reported in this study have implications for further research investigating the role of attributions in the development of and alleviation of learned helplessness in children. There are several noteworthy limitations to note of the study which are important for future research consideration. Most significant is the population utilized. These children cannot be viewed as representative of the average population, and this limits the generalization of the results. The fact that these children appeared highly motivated to achieve and persist does not take away from the significance of the results but points to the need for investigations with more "average" functioning children.

In further investigations utilizing helplessness paradigms, control groups to evaluate the induction of helplessness deficits are deemed necessary. Pasahow (1980) points out that this necessity provides a conservative test of the original learned helplessness hypothesis. Furthermore, it seems appropriate to suggest that pilot studies be conducted with the training tasks to evaluate task appropriateness in inducing helplessness. While the task utilized in this study was adequate to induce deficits in an emotionally disturbed group, pilot data with this population or a similar group may have indicated the need for a more complex and sophisticated task.

To some degree the two instruments utilized in the present study were found to be tapping a related dimension or factor in this population. While the Children's Locus of Control Scale has extensive research documentation, this study may also be viewed as an investigation into the utility of the new KASTAN scale. Further research is necessary to evaluate the factor structure of the KASTAN and investigations should

be concerned with identifying the common variance of C-LOC and KASTAN. Although not originally considered in the design of this study, ancillary analyses of the data may shed some light on the nature of the KASTAN achievement and affiliation items and their relationship to locus of control.

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APPENDIX A

Letter to Parents and Consent Forms

Anne Marie Albano
9140 Cloisters West
Richmond, Virginia 23229

Dear Parents,

I am writing to you to ask your permission for your child to participate in a study which I am conducting with fifth and sixth grade students at Saint Bridget's School. This study is being undertaken to partially satisfy requirements for the Master of Arts Degree in Psychology and is under the direct supervision of Bernard M. Chirico, Ph.D., visiting professor of Psychology at the University of Richmond. One other member of my thesis committee, Dr. Edith Ott, conducted her dissertation research at St. Bridget's several years ago.

Participation in the study will involve approximately 45 minutes of your child's time, and each child will only be out of the classroom on one occasion. Times will be scheduled at the convenience of the teacher and will not conflict with special classroom activities. The study will be conducted in a room at the school and also there will be one group questionnaire given in the classroom. No psychological or intelligence testing will be involved, and the tasks which the child will be asked to perform do not carry any risk.

Basically, the child will be asked to answer a questionnaire which assesses how children think about solving problems. This will be administered in the classroom. Then the children will be asked to individually solve two types of problems. One involves guessing whether a circle or triangle will be flashed onto a movie screen. The second problem involves putting a puzzle tower together.

Numbers will be assigned to each child so that the child's name will not appear anywhere in connection with the study. The purpose of this investigation is to learn more about how children in general think about performing tasks and not to gain information on the performance of specific children. If you decide to let your child participate, please discuss this with him/her and let the child decide for him (her) self whether to participate. At any time during this study your child may discontinue participation.

Please indicate whether your child has permission to participate by reading and signing the attached consent form. This form may be either mailed to me or returned to school by your child. If you have any questions or concerns which have not been addressed by this letter, please do not hesitate to call me at 270-4514 or 285-6453. Also, I will be glad to relate the results of the study after July 1981 if you will contact me at either of the above numbers.

Sincerely,

(Miss) Anne Marie Albano

Enclosure (Consent Form)
AMA/gms

CONSENT FORM

1. I have read the description of the study and have been informed as to the nature of tasks and procedures involved.

2. I have been given the opportunity to ask questions, and I have had my questions answered to my satisfaction.

3. I am aware that I have the right to withdraw consent and discontinue my child's participation at any time, without prejudice.

4. I have freely agreed to allow my child's participation in this study and have discussed this with him/her.

5. My signature below may be taken as affirmation of all of the above, prior to my child's participation.

_____
Signature of parent or guardian

_____
Child's name

_____
Witness-if available

_____
Date

If permission is denied, please sign here: _____

APPENDIX B

Independent Measures

Circle the appropriate answer as it applies to you.

Yes No 1. Do you believe that most problems will solve themselves if you just don't fool with them?

Yes No 2. Do you believe that you can stop yourself from catching a cold?

Yes No 3. Are some kids just born lucky?

Yes No 4. Most of the time do you feel that 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. Do you believe that if somebody studies hard enough he or she can pass any subject?

Yes No 7. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?

Yes No 8. Do you feel that if things start out well in the morning that it's going to be a good day no matter what you do?

Yes No 9. Do you feel that most of the time parents listen to what their children have to say?

Yes No 10. Do you believe that wishing can make things happen?

Yes No 11. When you get punished does it usually seem its 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. Do you think that cheering more than luck helps a time to win?

Yes No 14. Do you think that it's nearly impossible to change your parent's mind about anything?

Yes No 15. Do you believe that your parents should allow you to make most of your decisions?

Yes No 16. Do you feel that when you do something wrong there's very little you can do to make it right?

Yes No 17. Do you believe that most kids are just born good at sports?

Yes No 18. Are most of the other kids your age stronger than you are?

Yes No 19. Do you feel that one of the best ways to handle most problems is just not to think about them?

Yes No 20. Do you feel that you have a lot 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. Do you often feel that whether you do your homework has much to do with what kind of grades you get?

Yes No 23. Do you feel that when a kid your age decides to hit you, there's little you can do to stop him or her?

Yes No 24. Have you ever had a good luck charm?

Yes No 25. Do you believe that whether or not people like you depends on how you act?

Yes No 26. Will your parents usually help you if you ask them to?

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. Do you believe that when bad things are going to happen they are just going to happen no matter what you try to do to stop them?

Yes No 30. Do you think that kids 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 33. Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?

Yes No 34. Do you feel that it's easy to get friends to do what you want them to?

Yes No 35. Do you usually feel that you have little to say about what you get to eat at home?

Yes No 36. Do you feel that when someone doesn't like you there's little you can do about it?

Yes No 37. Do you usually feel that it's almost useless to try in school because most other children 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. Most of the time, do you feel that you have little to say about what your family decides to do?

Yes No 40. Do you think it's better to be smart than to be lucky?

KASTAN

1. YOU GET AN "A" ON A TEST.

   A. I AM SMART.
   B. I AM GOOD IN THE SUBJECT THAT THE TEST WAS IN.

2. YOU PLAY A GAME WITH SOME FRIENDS AND YOU WIN.

   A. NO ONE I KNOW PLAYS THAT GAME WELL.
   B. I PLAY THAT GAME WELL.

3. YOU SPEND A NIGHT AT A FRIEND'S HOUSE AND YOU HAVE A GOOD TIME.

   A. MY FRIEND WAS IN A FRIENDLY MOOD THAT NIGHT.
   B. EVERYONE IN MY FRIEND'S FAMILY WAS IN A FRIENDLY MOOD THAT NIGHT.

4. YOU GO ON A VACATION WITH A GROUP OF PEOPLE AND YOU HAVE FUN.

   A. I WAS IN A GOOD MOOD.
   B. THE PEOPLE I WAS WITH WERE IN GOOD MOODS.

5. ALL OF YOUR FRIENDS CATCH A COLD EXCEPT YOU.

   A. I HAVE BEEN HEALTHY LATELY.
   B. I AM A HEALTHY PERSON.

6. YOUR PET GETS RUN OVER BY A CAR.

   A. I DON'T TAKE GOOD CARE OF MY PETS.
   B. DRIVERS ARE NOT CAUTIOUS ENOUGH.

7. SOME KIDS THAT YOU KNOW SAY THAT THEY DO NOT LIKE YOU.

   A. ONCE IN A WHILE PEOPLE ARE MEAN TO ME.
   B. ONCE IN A WHILE I AM MEAN TO OTHER PEOPLE.

8. YOU GET VERY GOOD GRADES.

   A. SCHOOL WORK IS SIMPLE.
   B. I AM A HARD WORKER.

9. YOUR FRIEND TELLS YOU THAT YOU LOOK NICE.

   A. MY FRIEND LIKED THE WAY I LOOKED THAT DAY.
   B. MY FRIEND LIKES THE WAY I LOOK.

10. A GOOD FRIEND TELLS YOU THAT HE HATES YOU.

   A. MY FRIEND WAS IN A BAD MOOD THAT DAY.
   B. I WASN'T NICE TO MY FRIEND THAT DAY.

11 YOU TELL A JOKE AND NO ONE LAUGHS.

   A. I DO NOT TELL JOKES WELL.
   B. THE JOKE IS SO WELL KNOWN THAT IT IS NO LONGER FUNNY.

12. YOUR TEACHER GIVES A LESSON AND YOU DO NOT UNDERSTAND IT.

A. I DIDN'T PAY ATTENTION TO ANYTHING THAT DAY.
B. I DIDN'T PAY ATTENTION WHEN MY TEACHER WAS TALKING.

13. YOU FAIL A TEST.

A. TEACHERS MAKE HARD TESTS.
B. SOMETIMES TEACHERS MAKE HARD TESTS.

14. YOU GAIN A LOT OF WEIGHT AND START TO LOOK FAT.

A. THE FOOD THAT I HAVE TO EAT IS FATTENING.
B. I LIKE FATTENING FOODS.

15. A PERSON STEALS MONEY FROM YOU.

A. THAT PERSON IS DISHONEST.
B. PEOPLE ARE DISHONEST.

16. YOUR PARENTS PRAISE SOMETHING THAT YOU MAKE.

A. I AM GOOD AT MAKING SOME THINGS.
B. MY PARENTS LIKE SOME THINGS I MAKE.

17. YOU PLAY A GAME AND YOU WIN MONEY.

A. I AM A LUCKY PERSON.
B. I AM LUCKY WHEN I PLAY GAMES.

18. YOU BREAK A GLASS.

A. I AM NOT CAREFUL ENOUGH.
B. SOMETIMES I AM NOT CAREFUL ENOUGH.

19. YOU ARE INVITED TO A LOT OF PARTIES.

A. A LOT OF PEOPLE HAVE BEEN ACTING FRIENDLY TOWARD ME LATELY.
B. I HAVE BEEN ACTING FRIENDLY TOWARD A LOT OF PEOPLE LATELY.

20. A GROWNUP YELLS AT YOU.

A. THAT PERSON YELLED AT THE FIRST PERSON HE SAW.
B. THAT PERSON YELLED AT A LOT OF PEOPLE HE SAW THAT DAY.

21. YOU DO A PROJECT WITH A GROUP OF KIDS AND IT TURNS OUT BADLY.

A. I DON'T WORK WELL WITH THE PEOPLE IN THE GROUP.
B. I NEVER WORK WELL WITH A GROUP.

22. YOU MAKE A NEW FRIEND.

A. I AM A NICE PERSON.
B. THE PEOPLE THAT I MEET ARE NICE.

23. YOU HAVE BEEN GETTING ALONG WELL WITH YOUR FAMILY.

A. I AM EASY TO GET ALONG WITH WHEN I AM WITH MY FAMILY.
B. ONCE IN A WHILE I AM EASY TO GET ALONG WITH WHEN I AM WITH MY FAMILY.

24. YOU TRY TO SELL CANDY, BUT NO ONE WILL BUY ANY.

A. LATELY A LOT OF CHILDREN ARE SELLING THINGS, SO PEOPLE DON'T WANT TO BUY ANYTHING ELSE FROM CHILDREN.
B. PEOPLE DON'T LIKE TO BUY THINGS FROM CHILDREN.

25. YOU PUT A HARD PUZZLE TOGETHER.

A. SOMETIMES I AM GOOD AT PUTTING PUZZLES TOGETHER.
B. SOMETIMES I AM GOOD AT PUTTING THINGS TOGETHER.

26. YOU GET A BAD GRADE IN SCHOOL.

A. I AM STUPID.
B. TEACHERS ARE UNFAIR GRADERS.

27. YOU WALK INTO A DOOR AND YOU GET A BLOODY NOSE.

A. I WASN'T LOOKING WHERE I WAS GOING.
B. I HAVE BEEN CARELESS LATELY.

28. YOU HAVE A MESSY ROOM.

A. I DID NOT CLEAN MY ROOM THAT DAY.
B. I USUALLY DO NOT CLEAN MY ROOM.

29. YOU TWIST YOUR ANKLE IN GYM CLASS.

A. EVERYTHING AT THE BEACH WAS NICE THAT DAY.
B. THE WEATHER AT THE BEACH WAS NICE THAT DAY.

30. YOU TAKE A TRAIN WHICH ARRIVES SO LATE THAT YOU MISS A MOVIE.

A. THE PAST FEW DAYS THERE HAVE BEEN PROBLEMS WITH THE TRAIN BEING ON TIME.
B. THE TRAINS ARE ALMOST NEVER ON TIME.

31. YOUR PARENTS TAKE YOU TO THE BEACH AND YOU HAVE A GOOD TIME.

A. EVERYTHING AT THE BEACH WAS NICE THAT DAY.
B. THE WEATHER AT THE BEACH WAS NICE THAT DAY.

32. YOUR MOTHER MAKES YOU YOUR FAVORITE DINNER.

A. THERE ARE A FEW THINGS THAT MY MOTHER WILL DO TO PLEASE ME.
B. MY MOTHER LIKES TO PLEASE ME.

33. A TEAM THAT YOU ARE ON LOSES A GAME.

A. THE TEAM MEMBERS DON'T PLAY WELL TOGETHER.
B. THAT DAY THE TEAM MEMBERS DIDN'T PLAY WELL TOGETHER.

34. YOU FINISH YOUR HOMEWORK QUICKLY.

A. LATELY I HAVE BEEN DOING EVERYTHING QUICKLY.
B. LATELY I HAVE BEEN DOING SCHOOLWORK QUICKLY.

35. YOUR TEACHER ASKS YOU A QUESTION AND YOU GIVE THE WRONG ANSWER.

A. I GET NERVOUS WHEN I HAVE TO ANSWER QUESTIONS.
B. THAT DAY I GOT NERVOUS WHEN I HAD TO ANSWER QUESTIONS.

36. YOU DO NOT GET YOUR CHORES DONE AT HOME.

A. I WAS LAZY THAT DAY.
B. MANY DAYS I AM LAZY.

37. YOU GO TO AN AMUSEMENT PARK AND YOU HAVE A GOOD TIME.

A. I USUALLY ENJOY MYSELF AT AMUSEMENT PARKS.
B. I USUALLY ENJOY MYSELF.

38. YOU HAVE A FIGHT WITH A FRIEND.

A. I WAS IN A BAD MOOD THAT DAY.
B. MY FRIEND WAS IN A BAD MOOD THAT DAY.

39. YOU GET ALL THE TOYS YOU WANT ON YOUR BIRTHDAY.

A. PEOPLE ALWAYS GUESS WHAT TOYS TO BUY ME FOR MY BIRTHDAY.
B. THIS BIRTHDAY PEOPLE GUESSED RIGHT AS TO WHAT TOYS I WANTED.

40. YOU GO TO A FRIEND'S PARTY AND YOU HAVE FUN.

A. YOUR FRIEND GIVES GOOD PARTIES.
B. YOUR FRIEND GAVE A GOOD PARTY THAT DAY.

41. YOUR NEIGHBORS ASK YOU OVER FOR DINNER.

A. SOMETIMES PEOPLE ARE IN KIND MOODS.
B. SOME PEOPLE ARE KIND.

42. YOU HAVE A SUBSTITUTE TEACHER AND SHE LIKES YOU.

A. I WAS WELL BEHAVED DURING CLASS THAT DAY.
B. I AM ALMOST ALWAYS WELL BEHAVED DURING CLASS.

43. YOU MAKE YOUR FRIENDS HAPPY.

A. I AM A FUN PERSON TO BE WITH.
B. SOMETIMES I AM A FUN PERSON TO BE WITH.

. YOU GET A FREE ICE-CREAM CONE.

A. I WAS FRIENDLY TO THE ICE-CREAM MAN THAT DAY.
B. THE ICE-CREAM MAN WAS FEELING FRIENDLY THAT DAY.

45. AT YOUR FRIEND"S PARTY THE MAGICIAN ASKS YOU TO HELP HIM OUT.

A. IT WAS JUST LUCK THAT I GOT PICKED.
B. I LOOKED REALLY INTERESTED IN WHAT WAS GOING ON.

46. YOU TRY TO CONVINCE A KID TO GO TO THE MOVIES WITH YOU, BUT HE WON'T GO.

A. THAT DAY HE DID NOT FEEL LIKE DOING ANYTHING.
B. THAT DAY HE DID NOT FEEL LIKE GOING TO THE MOVIES.

47. YOUR PARENTS HAVE A BIG FIGHT.

A. IT IS HARD FOR PEOPLE TO GET ALONG WELL.
B. IT IS HARD FOR PEOPLE WHO ARE MARRIED TO GET ALONG WELL.

48. YOU HAVE BEEN TRYING TO GET INTO A CLUB AND YOU DO NOT GET IN.

A. THERE ARE A LOT OF THINGS THAT I AM NOT GOOD AT.
B. I AM NOT GOOD AT THE THINGS THAT PEOPLE IN THE CLUB DO.

Vita

Anne Marie Albano was born August 18, 1957, in Staten Island, New York. She was educated in a parochial grammer school, and moved with her family to Pompano Beach, Florida, in 1971. Miss Albano graduated in 1975 from Cardinal Gibbons High School, in Ft. Lauderdale; she holds an A.A. degree from Broward Community College, a B.S. in Psychology from the Florida State University, and has received a Master of Arts degree from the University of Richmond. Prior employment includes Substance Abuse Counselor at Human Resources, Inc. of Richmond, and Psychologist for the Psychological Assessment Center, Medical College of Virginia. Presently she is employed as a therapist for Adolescents in Distress, Inc., in Ft. Lauderdale, Florida. Future plans are to pursue the Ph.D. degree in Clinical Psychology.