

DEVELOPMENT OF A LOCUS OF
CONTROL SCALE FOR SCHOOL
TEACHERS

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DEVELOPMENT OF A LOCUS OF CONTROL
SCALE FOR SCHOOL TEACHERS

An Abstract
Presented to
the Graduate Council of
Austin Peay State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Reuben Clay Taylor
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ABSTRACT

A study was conducted to develop a locus of control scale for school teachers. This Locus of Control Scale for Teachers (LCST) includes only items specifically related to the teachers' role. One hundred thirteen school teachers participated in this study. The reliability of this scale was established by an alpha coefficient of .85 and an average item-total correlation of .41.

The convergent validity of the LCST scale was determined by correlating the LCST with the Rotter I-E scale. Discriminant validity was found by comparing the LCST's ability to predict pupil control ideology (PCI) with the Rotter I-E's ability to predict PCI scores. Both attempted validity studies were successful.

The finding that internals tend to have a less custodial outlook toward students is discussed in some detail. Further research ideas involving the LCST are suggested.

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To the Graduate Council:

I am submitting herewith a Thesis written by Reuben Clay Taylor entitled "Development of A Locus of Control Scale for School Teachers." I recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts, with a major in psychology.

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Major Professor

We have read this thesis and
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CHAPTER 1

INTRODUCTION

The principal thrust of this investigation involves the development of a locus of control (LC) scale which is specific to the teaching role. This instrument is designed to establish a continuum for measuring teachers' feelings regarding their effectiveness as change agents in the school environment. Several authors have documented the value of going beyond generalized measures of LC in order to make clearer estimates of expected behaviors (Reid & Ware, 1973; Rotter, 1975; and Russell, Gowaty, Harland, & Martin, 1979). By developing a specific scale, therefore, more accurate predictions concerning the behaviors of teachers can be made.

Of major importance in designing, implementing, and interpreting LC research is a thorough knowledge of the LC model. This can be organized in a three-tiered fashion. The first tier involves establishing the origin of the LC construct, the second consists of defining LC, and the third incorporates examining implications of LC research.

The LC model has its roots in Rotter's social learning theory (SLT) and attempts to predict human responses to various intricate social situations as organisms who associate reinforcements with their actions, and who thereby develop schemata for attaining the reinforcers they desire. Through life experiences, people learn to expect certain events to

occur or not to occur on the basis of their own actions. Phares puts it more succinctly when he states, "To determine which behavior has the strongest potential, one must consider expectancy, reinforcement value, and the psychological situation" (Phares, 1976, p.14).

The LC construct describes the relationship between perceived control and the formation of contingencies. Rotter further explains the LC model by saying, "When reinforcement is seen as not contingent upon the subject's behavior . . . its occurrence will not increase an expectancy as much as when it is seen as contingent" (Rotter, 1966, p. 2). This statement by Rotter clearly establishes a continuum of causal perception which ranges from an internal interpretation of connections between one's efforts and the following outcomes to an external interpretation of the same sequence. Internals perceive direct correlations between their efforts and subsequent events, while externals attribute the events in their lives to forces outside themselves. The LC construct, with its potential for measuring generalized contingency patterns, is a logical tool to use in further definition and elaboration of the functionality of some interactions implied by SLT.

Since LC's inception, LC research has amassed a rather large number of correlates of internality and externality (I-E) which are remarkably consistent. Initially, many of the studies in LC were in clinical psychology (Phares, 1976), but research has steadily burgeoned into many other areas,

such as social psychology and educational psychology. Frequently cited findings state that internals are generally more interested in gaining and using pertinent information (Seeman, 1963; Seeman & Evans, 1962; DuCette & Wolk, 1973), likely to try to improve environmental conditions (Phares, 1965; Straits & Sechrest, 1963; MacDonald, 1970; Lundy, 1972), adaptable (Butterfield, 1964; Brissett & Nowicki, 1973), often rated effective on the job (Hersch & Scheibe, 1967; Tseng, 1970), likely to have a sense of humor even under pressure (Sordoni, 1975; Lefcourt, Antrobus, & Hogg, 1974), and more likely to resist subtle attempts to influence (Gore, 1962) than externals.

A warning from Rotter (1975) is pivotal. He warns that externals should not be viewed as entirely bad nor should internals be viewed as exclusively good. A major reason for this admonition is that no person views all events as internally or externally caused. Therefore, a person might perform as an external in one situation and as an internal in another situation.

This dilemma indicates a glaring weakness in LC research, the lack of specificity of the Rotter (1966) I-E scale. In other words, small relationships can be found between Rotter's I-E scale and diverse human characteristics, but this scale does not seem to strongly predict any specific behaviors. Rotter suggested (1975) that this problem can be remedied by using his scale along with other instruments to make finer discriminations. Some researchers advocate

factor analysis of the Rotter I-E scale (Gurin, Gurin, Lao, & Beatie, 1969; Cherlin & Bourque, 1974; Mirels, 1970; Sanger & Alker, 1972). They contend they have identified two or more independent factors by this method. Other researchers have attempted to identify LC categories and then design items forming subscales for each area (Levenson, 1972; Reid & Ware, 1973; Schlegel & Crawford, 1976). The argument over the dimensionality, or lack thereof, continues to thrive among active researchers in the LC field.

A similar line of research has been directed toward increasing the utility of the LC construct by transferring the I-E concept to a restricted population and using only items directly related to the environment of that group. There are several studies which have been conducted with this intent. For instance, Wallston, Gordon, and Maides (1976) developed a health locus of control scale. Similarly, Reid and Zeigler (as cited by Rose & Medway, Note 1) devised a perception of control instrument for the elderly.

A study by Rose and Medway (Note 1) is directly pertinent to the present investigation. These researchers developed the Teacher Locus of Control (TLC) scale to measure the perceptions of control of elementary school teachers. They used a forced-choice format modeled after the Intellectual Achievement Responsibility (IAR) questionnaire for students. On 14 items teachers report whether or not they feel responsible for the success of the students and on 14 items the teachers indicate their perceived responsibility

for students' failures. Moderate correlations were found between this scale and the Rotter I-E measure.

The TLC is suggested to have greater predictability of teacher behavior than the Rotter I-E. Observations were correlated with TLC and I-E scores. High internals on the TLC were found to use fewer disciplinary commands, selected more nonvolunteers to answer questions, and had more students involved in self-directed activity than did externals. Those who took more responsibility for student failures were found to have fewer students engaged in inappropriate behavior than did external teachers. None of these relationships were identified by the Rotter I-E scale.

Another attempt to develop a LC measure for teachers was undertaken by Guskey (Note 2). His Responsibility for Achievement Scale (RAS) is also patterned after the IAR, but respondents indicate the extent to which they agree with both the internal and external options for each item. Although no validation information was provided, some interesting demographic correlates were found. Female teachers reported greater responsibility for students' learning outcomes than did their male counterparts. However, RAS scores were not related to teachers' experience or grade level taught.

The present study differs from the Rose and Medway and Guskey studies in two ways. First, the LC measure devised uses a Likert-type rather than a forced-choice format. Second, this investigation attempts to develop

a unidimensional scale which is closer to the LC concept than these aforementioned scales. That is, the selected items for the final version of the scale under development will link the teachers' perceptions of their efforts to student outcomes rather than focus on their beliefs about being or not being responsible for the outcomes.

Construct validity for the Locus of Control Scale for Teachers (LCST) takes various forms. Convergent validity is hypothesized as being reflected in a significant correlation between the Rotter I-E and the LCST scores, since both measure LC beliefs. Discriminant validity is to be determined by correlating the Rotter I-E and LCST scores with scores from the Pupil Control Ideology (PCI) Form (Willower, Eidell, & Hoy, 1973). Specifically, since research on I-E indicates externals are more dogmatic than internals (Clauser & Hjelle, 1970), it is expected that on both measures internals will report more humanistic beliefs and externals will report more custodial beliefs. However, since the LCST is a more specific measure than the I-E scale, PCI scores should relate more strongly to LCST than to I-E scores.

CHAPTER II

METHOD

Overview

In this study the goal was to develop a locus of control instrument specific to a teaching context (LCST). Its reliability was established by conducting logical and factor analyses on the original pool of items. This procedure was followed by an analysis of the obtained factors and factor loadings to identify separate domains of items. Items from two factors were combined to form one unidimensional scale, the LCST. Scores from this scale were then correlated with the Rotter I-E and then the PCI to establish its validity.

Sample

The subjects were 113 teachers from four different school systems in middle Tennessee. One of the systems was on a military base. The other three were public school systems. The ages of the teachers ranged from 23 to 80, $\underline{M}=38$, $\underline{SD}=14.2$. There were 89 (79%) females and 24 (21%) males. Ten subjects (9%) were black and 103 (91%) were white. Twenty-five subjects (2.7%) were single and 88 (78%) were married. Three subjects (2.7%) had obtained only a high school diploma, 49 (43.4%) had received a bachelor degree, 60 (53%) had a master degree, and one (.9%) had a doctorate. The number of years the teachers had held their current job ranged from one to 32, $\underline{M}=7.5$ and $\underline{SD}=7.4$. Years

of experience ranged from one to 40, $\underline{M}=10.8$, $\underline{SD}=9.3$. Sixty-one (54%) were elementary teachers and fifty-two (46%) were secondary teachers. Ten of the subjects included in the factor analysis were not included in the validity assessment because they did not complete all the scales. Thus, for the validity sample $\underline{N}=103$.

Procedure

Scale administration. All three scales (LCST, Rotter I-E, and PCI) were given to each subject in one booklet. In some cases they were given to groups and in some cases they were given to individuals. The subjects usually took about 90 minutes to complete the questionnaires. In one case the individuals were asked to complete the items in one sitting. In all other cases subjects were allowed to complete them at their leisure (ranging from one day to one week). The answer sheets were completed by 113 of the 200 teachers, for a return rate of 56.5%. Demographic data were collected in eight areas: age, sex, race, marital status, highest degree obtained, years of teaching experience, years in current position, and grade level taught. An advised consent form was signed by each participant. The final LCST questions, the PCI, the Rotter I-E, and the consent form are included in Appendixes A, B, C, and D.

Scale construction. A pool of 100 Likert-type items was developed for the LCST. After the questionnaires were returned, the original 100 items were read thoroughly to assess whether or not they fit the LC construct. This

resulted in deleting 29 items. The remaining 71 items included 36 items worded internally and 35 externally worded items. It was decided, following James' I-E scale, that the items would be scored in the internal direction (the higher the score, the more internal the respondent).

Development of final scale. The correlation matrix for the 71 items was analyzed for principal components and then the six factors were extracted. Items which loaded highest on each factor were kept. The total score of each factor group was then computed and correlated with the score of each item to determine the internal consistencies of the factors. Two highly reliable factors emerged whose items were logically related and whose total scores were highly correlated. These items were combined to form the final 26-item LCST.

Other Instruments

Rotter I-E. This scale consists of 23 forced-choice pairs of statements scored in the external direction. Six filler items are also included. The Rotter I-E was designed to establish the general causal perception contingency of adults. The individual items correlated from .11 to .48 with the total score (Rotter, 1966). Internal consistency, estimated by the Kuder-Richardson formula, was .70 (Rotter, 1966). Test-retest reliabilities over one- and two-month intervals are reported to range between .49 and .85.

Pupil Control Ideology Form. The PCI was developed by Willower, Eidell, and Hoy (1973). This instrument

consists of 20 items on five-point, Likert-type scales. Ratings range from strongly agree to strongly disagree. On the humanistic-custodial continuum, higher scores reflect a more custodial outlook toward pupil control and lower scores reflect a humanistic view. Items were selected from the original 57 items by accepting only biserial correlations above .325. Split-half reliability corrected by the Spearman-Brown formula was .95. The PCI claims its validity by being able to discriminate both school's and individual's differences on the humanistic-custodial divide. This was shown by the instrument's ability to agree with ratings made by principals.

CHAPTER III

RESULTS

Final Scale Development

The correlation matrix of the original 71 LCST items was developed. The correlations ranged from .001 to .48.

In order to determine if a pattern existed among the items, a principal components analysis was initiated. The eigen values were so spread that it was once again obvious that the master group of items tapped many different domains. The first 26 eigen values were above one and accounted for 75% of the total variance. It was decided to concentrate on the first six factors, which accounted for 25% of the variance. These factors were subjected to a varimax rotation in order to obtain the highest possible item loading for each factor.

Factors 1, 2, 3, 4, 5, and 6 had the highest loadings and consisted of 11, 9, 10, 17, and 9 items, respectively. For factors 1 through 6 the alpha coefficients were .80, .74, .31, .58, .80, and .32, respectively. Factors 3, 4, and 6 were subsequently dropped because of their low reliabilities. The items were once again read thoroughly to ascertain a logical basis by which to interpret the three remaining factors. Factor 1 seemed to consist mostly of items concerning teachers' statements about the relationship between their efforts and students' performance. Four items which were not related to this conceptual category

and one item which correlated negatively with the total factor score were deleted. Factor 2 was comprised of items having no logical nexus. The prospective utility of such a varied array did not seem promising, so this group of items was removed from consideration. Factor 5 consisted of items primarily concerned with whether or not direct intervention can affect change. Fourteen of the items fit this category.

Since the remaining items on factors 1 and 5 were logically related, these 26 items were combined to form the final version of the LCST.

Reliability of the LCST

Means, standard deviations, and item-total correlations for the 26 items appear in Table 1. Using the standard deviations reported in Table 1, a coefficient alpha of .85 was obtained. The uncorrected average total correlation was $\bar{r} = .41$.

Validity of the LCST

To determine the construct validity of the LCST as a measure, it must correlate with another LC measure. As can be seen in Table 2, the LCST was significantly correlated with the I-E in the appropriate direction, $r(101) = -.256$, $p < .05$.

The discriminant validity of the LCST was determined by its comparative ability over the I-E scale to correlate with the PCI scores. Both the I-E and the LCST correlated significantly with the PCI, $r(101) = .245$, $p < .05$, and $\bar{r} = -.324$, $p < .01$, respectively. A summary of the regression of LCST

Table 1
Means, Standard Deviations, and Item-Total
Correlations for the LCST

| Item | <u>M</u> | <u>SD</u> | <u>r</u> |
|------|----------|-----------|----------|
| 1 | 2.867 | 1.340 | .315* |
| 2 | 3.611 | .972 | .498* |
| 3 | 4.407 | .771 | .328* |
| 4 | 3.929 | .761 | .553* |
| 5 | 3.965 | .703 | .380* |
| 6 | 3.558 | .809 | .451* |
| 7 | 4.150 | .822 | .282* |
| 8 | 3.362 | 1.175 | .327* |
| 9 | 3.460 | 1.047 | .299* |
| 10 | 3.752 | .836 | .163 |
| 11 | 4.159 | .672 | .451* |
| 12 | 2.752 | .973 | .402* |
| 13 | 3.487 | .997 | .175 |
| 14 | 3.814 | .946 | .430* |
| 15 | 3.354 | 1.047 | .416* |
| 16 | 4.053 | .762 | .350* |
| 17 | 3.770 | .872 | .440* |
| 18 | 2.912 | 1.018 | .414* |
| 19 | 3.823 | .743 | .327* |
| 20 | 3.867 | .777 | .522* |
| 21 | 3.442 | .931 | .485* |
| 22 | 4.327 | .684 | .186 |
| 23 | 2.690 | 1.081 | .360* |
| 24 | 4.035 | .623 | .418* |
| 25 | 4.248 | .847 | .398* |
| 26 | 3.637 | .788 | .300* |
| 27 | 95.442 | 8.512 | 1.000 |

Note. N=113.

* $p < .01$.

Table 2
Means, Standard Deviations, and Correlations
Between the LCST, I-E, and PCI

| Variable | 2 | 3 | <u>M</u> | <u>SD</u> |
|----------|--------|---------|----------|-----------|
| 1. LCST | -.256* | -.324** | 95.442 | 8.512 |
| 2. I-E | -- | .245* | 9.398 | 4.137 |
| 3. PCI | | -- | 55.437 | 9.632 |

Note. N=103.

*p < .05.

**p < .01.

and I-E on PCI scores is presented in Table 3. It can be seen that the LCST variable explained approximately twice as much of the PCI variance as did the I-E variable. Thus, the discriminant validity of the LCST received support. That is, internals on both measures reported having less of a custodial orientation toward pupil control than did externals, but the LCST was the stronger of the two indicators of this relationship.

Demographic Correlates of LCST

Correlations between the demographic variables and LCST scores are presented in Table 4. No significant correlations were obtained.

Table 3
Summary of Regression of LCST
and I-E on PCI Scores

| Variable | Beta | Explained Variance | $F(1, 100)$ |
|----------|-------|-----------------------|-------------|
| LCST | -.279 | .090 | 10.381** |
| I-E | .173 | .042 | 4.844* |

Note. $N=103$. $R^2=.133$, $F(2, 100)=7.659$, $p < .001$.

* $p < .05$.

** $p < .01$.

Table 4
Correlations between Relevant Demographic
Variables and LCST Scale

| Demographic Variable | Correlation with LCST |
|---------------------------|-----------------------|
| Age | .132 |
| Sex | -.135 |
| Race | -.142 |
| Marital Status | -.017 |
| Degree Obtained | -.167 |
| Years Experience | -.011 |
| Years in Current Position | .037 |
| Grade Level Taught | .076 |

Note. N=103.

CHAPTER IV

DISCUSSION

The purpose of this study was to develop a locus of control instrument specific to the teaching context which was both reliable and valid. A factor analysis was the precursor of an eventual logical combination of relevant items. The high reliability of the final group of LCST items was evidenced by an alpha coefficient of .85. Therefore, substantial confidence can be placed in the final LCST's reliability and unidimensionality.

Determining the validity of the LCST scale involved three steps. These steps were: (1) obtaining a significant correlation with the Rotter I-E; (2) finding a significant correlation with the PCI; and (3) establishing the LCST as a better predictor of the PCI than is the Rotter I-E. The first step established the convergent validity of the LCST as planned. The second step yielded a significant correlation in the direction of that predicted at the onset of this research. The third step provided the necessary evidence of the discriminant validity of the LCST.

The LCST identification of internals as less custodial is consistent with the results of a study by Barfield and Burlingame (1974). These authors developed a Teacher Efficacy Scale modeled after the Political Efficacy Scale (Campbell, Gurin, & Miller, 1954). Teachers who were high

on efficacy were less custodial on the PCI than teachers who were low on efficacy. Since efficacy and locus of control are highly similar constructs, the Barfield and Burlingame study adds to the construct validity of the LCST. Moreover, since Murray and Staebler (Note 3) have demonstrated that teachers' locus of control orientations (as measured with the Rotter I-E scale) are related to student achievement, it seems likely that LCST scores could be used to discriminate more and less effective teachers.

However, before accepting the idea that internal teachers are more effective than externals because they allow greater student self-direction, some seemingly contradictory evidence must be considered. In a study by Jansen, Beeken, and Hritzuk (1973), eighty teachers in psychology courses were given the Rotter I-E and five parts of the Dimensions of Teacher Beliefs (Wehling & Charters, 1969). One significant correlation between the five dimensions and the Rotter I-E scale was found. The teachers identified as external were most likely to endorse student autonomy. In a follow-up essay, Jansen and Beeken (1973) cite their previous findings as evidence that external teachers are more able to relate to the needs and feelings of their students than are internal teachers.

As the results of the Jansen et al. study seemingly are in conflict with those of Barfield and Burlingame and the present study, it is apparent that more needs to

be known about the relationship between locus of control and teaching style. For example, in describing an origin classroom, a climate which promotes achievement, DeCharms (1976) says, "The origin enhancing teacher is not afraid to be firm and directive when she (sic) is pursuing the improvement of children . . . External control is often necessary, but the goal is to convert to internal control" (p. 168). These statements seem to describe the effective teacher as one who realizes that children have often not formed strong contingencies and might need direct connection between their actions and subsequent events clearly established for them. However, when children have formed appropriate contingencies, the internal teacher might be more willing to provide a less directive classroom environment. Thus, it might be the case that internal teachers would be more sensitive to the situational demands required to foster student achievement.

Further validation of the LCST is, of course, necessary. The sample size in the present study was not nearly as large as desired. There also should be some consideration of the effect of social desirability on this instrument. Assuming these hurdles are cleared, there are many ways in which the LCST could be utilized for further research. Some of these might include predicting teachers' adaptation to organizational structure, predicting students' achievement, and matching LCST scores with classroom observations.

A last warning against regarding an overemphasis of extremely low PCI scores as facilitative of student achievement seems in order. The contradictory evidence implies that further effort should be directed toward clarifying both the theoretical and empirical underpinnings of this variable.

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APPENDIXES

APPENDIX A

LCST

1. If I consistently practice appropriate techniques, even the most difficult behavior problems can be managed.
2. I believe I can help each student in my classes to experience success and self worth in some area.
3. A child's behavior problem can be adequately modified, providing the teachers finds the correct solution.
4. When I can spend extra time with a slow learner, I soon see positive results.
5. It is impossible to raise the current academic standards of public education.
6. If the majority of my class does poorly on a test, the poor grades are generally because I did not teach the related concepts well.
7. Many students who seem overly passive undergo drastic personality changes when a teacher designs an activity which challenges them.
8. A teacher with a strong character can greatly influence behavior for the better.
9. If I could teach the way I would like to, I could help more students.
10. If a teacher is dedicated and conscientious, he/she will be rewarded for his/her efforts.
11. I can best help a student by realizing that he is a unique individual with unique needs.
12. A teacher has a great amount of influence on the personality and attitudes of students.
13. If a student comes to me in time, I can help with almost any problem.
14. With all the Federal Guidelines a teacher must follow, it is very difficult for one's own creativity to surface in the classroom.
15. Realistically, a teacher can invest time in a particular student to a point of diminishing returns, at which time further instruction is not productive.

16. I often see a child who is a pawn and there is nothing I can do to help.
17. Once a child gets headed the wrong direction, it is not up to me to straighten him or her out.
18. I don't feel there is much a teacher can do to influence the standardized test scores which are dropping each year.
19. Some personalities just naturally clash and there is no way a particular student and teacher can get along.
20. If a child is being teased a lot, I can often think of something to do to get the teasing to cease.
21. On days when my class is calm, I know the calmness has nothing to do with my influence.
22. My chances of becoming successful in my career have much to do with being in the right place at the right time.
23. It seems as if absolutely nothing can be done about having to use physical punishment on students.
24. There will always be classroom fights among students regardless of how hard teachers try to prevent them.
25. I feel like I cannot accomplish anything in the teaching profession.
26. If I study the situation hard enough, there are few classroom problems I cannot solve.

Pupil Control Ideology (PCI) Form

1. It is desirable to require pupils to sit in assigned seats during assemblies.
2. Pupils are usually not capable of solving their problems through logical reasoning.
3. Directing sarcastic remarks toward a defiant pupil is a good disciplinary technique.
4. Beginning teachers are not likely to maintain strict enough control over their pupils.
5. Teachers should consider revision of their teaching methods if these are criticized by their pupils.
6. The best principals give unquestioning support to teachers in disciplining pupils.
7. Pupils should not be permitted to contradict the statements of a teacher in class.
8. It is justifiable to have pupils learn many facts about a subject even if they have no immediate application.
9. Too much pupil time is spent on guidance and activities and too little on academic preparation.
10. Being friendly with pupils often leads them to become too familiar.
11. It is more important for pupils to learn to obey rules than that they make their own decisions.
12. Student governments are a good "safety valve" but should not have much influence on school policy.
13. Pupils can be trusted to work together without supervision.
14. If a pupil uses obscene or profane language in school, it must be considered a moral offense.
15. If pupils are allowed to use the lavatory without getting permission, this privilege will be abused.
16. A few pupils are just young hoodlums and should be treated accordingly.
17. It is often necessary to remind pupils that their status in school differs from that of teachers.

18. A pupil who destroys school material or property should be severely punished.
19. Pupils cannot perceive the difference between democracy and anarchy in the classroom.
20. Pupils often misbehave in order to make the teacher look bad.

APPENDIX C

Rotter I-E

1. a. Children get into trouble because their parents punish them too much.
b. The trouble with most children nowadays is that their parents are too easy with them.
2. a. Many of the unhappy things in people's lives are partly due to bad luck.
b. People's misfortunes result from the mistakes they make.
3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.
b. There will always be wars, no matter how hard people try to prevent them.
4. a. In the long run, people get the respect they deserve in this world.
b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. a. The idea that teachers are unfair to students is nonsense.
b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. a. Without the right breaks, one cannot be an effective leader.
b. Capable people who fail to become leaders have not taken advantage of their opportunities.
7. a. No matter how hard you try, some people just don't like you.
b. People who can't get others to like them don't understand how to get along with others.
8. a. Heredity plays the major role in determining one's personality.
b. It is one's experiences in life which determine what they're like.
9. a. I have often found that what is going to happen will happen.
b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. a. In the case of the well-prepared student, there is rarely if ever such a thing as an unfair test.
b. Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. a. Becoming a success is a matter of hard work; luck has little or nothing to do with it.
b. Getting a good job depends mainly on being in the right place at the right time.
12. a. The average citizen can have an influence in government decisions.
b. The world is run by the few people in power, and there is not much the little guy can do about it.
13. a. When I make plans, I am almost certain that I can make them work.
b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune.
14. a. There are certain people who are just no good.
b. There is some good in everybody.
15. a. In my case, getting what I want has little or nothing to do with luck.
b. Many times we might just as well decide what to do by flipping a coin.
16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
b. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.
17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand nor control.
b. By taking an active part in political and social affairs, the people can control world events.
18. a. Most people can't realize the extent to which their lives are controlled by accidental happenings.
b. There really is no such thing as "luck."
19. a. One should always be willing to admit his mistakes.
b. It is usually best to cover up one's mistakes.
20. a. It is hard to know whether or not a person really likes you.
b. How many friends you have depends upon how nice a person you are.
21. a. In the long run, the bad things that happen to us are balanced by the good ones.
b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22. a. With enough effort we can wipe out political corruption.
b. It is difficult for people to have much control over the things politicians do in office.
23. a. Sometimes I can't understand how teachers arrive at the grades I get.
b. There is a direct connection between how hard I study and the grades I get.
24. a. A good leader expects people to decide for themselves what they should do.
b. A good leader makes it clear to everybody what their jobs are.
25. a. Many times I feel that I have little influence over the things that happen to me.
b. It is impossible for me to believe that chance or luck plays an important role in my life.
26. a. People are lonely because they don't try to be friendly.
b. There's not much use in trying too hard to please people; if they like you they like you.
27. a. There is too much emphasis on athletics in high school.
b. Team sports are an excellent way to build character.
28. a. What happens to me is my own doing.
b. Sometimes I feel that I don't have enough control over the direction my life is taking.
29. a. Most of the time I can't understand why politicians behave the way they do.
b. In the long run, the people are responsible for bad government on a national as well as on a local level.

APPENDIX D

Advised Consent Form

IET PROJECT

DEPARTMENT OF PSYCHOLOGY

AUSTIN PEAY STATE UNIVERSITY

INFORMED CONSENT STATEMENT

The purpose of this investigation is to develop an instrument for assessing teachers' attitudes. Your responses are confidential. At no time will you be identified nor will any one other than the investigators have access to your responses. The demographic information collected will be used only for purposes of analysis. Your participation is completely voluntary, and you are free to terminate your participation at any time without any penalty.

The scope of the project will be explained fully upon your completing the questionnaire.

Thank you for your cooperation.

I agree to participate in the present study being conducted under the supervision of a faculty member of the Department of Psychology at Austin Peay State University. I have been informed, either orally or in writing or both, about the procedures to be followed and about any discomforts or risks which may be involved. The investigator has offered to answer any further inquiries as I may have regarding the procedures. I understand that I am free to terminate my participation at any time without penalty or prejudice and to have all data obtained from me withdrawn from the study and destroyed. I have also been told of any benefits that may result from my participation.

Name (please print)

Signature

Date