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THE DEVELOPMENT AND VALIDATION OF A LIFE-CHANGE CHECKLIST
FOR JUVENILE DELINQUENTS

by

Paul G. Kulcsar

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1976

ACKNOWLEDGMENTS

The author wishes to express appreciation to the many persons who assisted in the completion of this study.

Special thanks to the author's doctoral committee chairman, Dr. Keith Checketts, for his guidance and encouragement, and to the other committee members, Dr. Michael Bertoch, Dr. Elwin Nielsen, Dr. David Stone, and Dr. Marvin Fiefield; their suggestions and friendly support were very helpful.

Thanks are extended to the personnel of the State of Utah Juvenile Court's Administrative Office and its First and Second Districts, the Utah State Industrial School, the Salt Lake County and the Morgan-Weber-Davis Counties' Detention Centers, and the Weber and Morgan Counties School Districts, for their cooperation and assistance in the many details of the research project.

Further appreciation is expressed to the writer's friends and colleagues, Mr. Mike Berger in particular, whose assistance came in many forms.

A special expression of love and gratitude is given to the author's wife, Lisa, for being very understanding and supportive throughout the years of doctoral studies, in so many ways at needed times.

Paul G. Kulcsar

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ABSTRACT

The Development and Validation of a Life-Change
Checklist for Juvenile Delinquents

by

Paul G. Kulcsar

Doctor of Philosophy

Utah State University, 1976

Major Professor: Dr. Keith Checketts
Department: Psychology

A method generated by psychophysics has been used to develop a Checklist consisting of 58 life-events that require varying degrees of readjustment on the part of adolescents experiencing them.

A very high degree of concordance was found to exist among psychologists, social workers and probation officers with regard to the relative value of life-change required by those events.

Information about the occurrence of the amount of life-change was subsequently gathered from a sample of 334 juvenile delinquents and 104 nondelinquents by administering the Checklist. A measure of the degree of severity of delinquency was also obtained for each delinquent subject.

The magnitude of life-change experienced by the delinquent sample was found to be highly significantly related to the severity of delinquency and to types of delinquency. The greater the magnitude of life-change, the greater the severity of delinquency, and the more severe the type of delinquency, the greater the amount of experienced life-change.

Partially specific relationships were also found with regard to life-events and categories of events. Forty-six of the 58 life-events were found to have discriminatory value for at least one of the four major types of delinquency. Additionally, status-offenders were found to be more similar to nondelinquents than to delinquents with respect to the kinds of life-events which affect them.

Other types of delinquents were not significantly differentiated by categories of life-events.

(85 pages)

CHAPTER I

Introduction

Overview

Certain life-events such as the death of a parent, divorce of parents, suspension from school, being held in detention, or similar incidents, can be very traumatic and considerably disruptive of an adolescent's normal functioning. Traumatic events have long been felt to be of etiologic importance in behavior disorders.

An early major contribution to systematic research on the effects of life-events was made by Adolf Meyer (1951) through his development of the "life chart." Some of the situations he considered important were: ". . . the changes of habitat, of school entrance, or failures; . . . births and deaths in the family, and other fundamentally important environmental incidents" (1951, p. 53). Meyer emphasized that life-events need not be catastrophic to be pathogenic.

More recently, Harold Wolff's experiments (1950) added a powerful link between "stressful" life-events and psychophysiological reactions. The hypotheses derived from early investigations of physiological variables, as indicators of stress, have been central to subsequent psychological research on the effects of unusual environmental influences on the adaptive or maladaptive reactions of the individual.

As theorized by many workers in the area of personality and abnormal psychology, Hebb (1958) in particular, maladaptive behavior occurs either at levels of very low or very high arousal (change). This suggests that while a certain optimal level of change is necessary for adaptive,

efficient behavior, extreme occurrences have disabling effects. These effects can be manifested in a variety of coping reactions designed to alleviate the offending conditions and anticipated harm. The individual may attempt to avoid the situation, overcome it by attack on the harmful agent, or simply defy the reality involved.

Research on change-inducing, stressful environmental influences has been plagued over the last 10 years with the problem of how to conceptualize and measure stressful life-events. The divergent interests of researchers from different disciplines have produced many research paradigms based on their conceptualizations of stress. Thus, the use of the term "stress" is somewhat hazardous because of the lack of consensus that prevails in stress research in general.

In theoretical accordance with Hebb and other behavioral scientists, this study focuses on the conception of "stressful" life-events as events which require adaptive changes on the individual. The emphasis is on significant changes from the existing state, and breaks in established patterns, regardless of their social desirability, and not on psychological meaning. For example, a move to a new home may be good or bad for a child, but in either case requires some readjustment.

Two classes of incidents or situations are considered; one to which everyone is exposed to a greater or lesser extent, and one to which juvenile delinquents are uniquely exposed as a result of their involvement with the judicial system. These situations, referred to as "life-events," include experiences such as the birth or death of a sibling, expulsion from school, being held in detention, and commitment to the State Industrial School. The reactions to these situations will depend on the nature of the coping process that is activated.

One coping process in particular, which manifests itself in various deviant and delinquent forms, has received much theoretical consideration from behavioral scientists since it has recently reached alarming proportions in our juvenile population.

A major attempt to explain the social origins of aggressive behavior as a coping process was the frustration-aggression theory of Dollard and Miller (1939). Their research seems to leave little doubt that under certain frustrating conditions the most likely coping response is aggression.

Halleck (1970) views deviant, antisocial behavior as a reaction to life's stresses. Delinquency is a very complex behavior and the role of stress or environmental adjustive demands has not yet been delineated.

Despite the influences of Hebb's and Dollard and Miller's theories on many areas of human behavior, the effects of adjustive demands prescribed by stressful life-events on juvenile delinquent behaviors have received little research attention.

The problem has theoretical as well as practical importance inasmuch as it would be useful to be able to predict which adolescents will be adversely affected by stressful situations.

It is only by a consideration of the environment in which a juvenile offender has existed, or is existing, and its possible relationship to his present condition that any information can be obtained about what may be an important aspect of the coping process involved.

A prerequisite for addressing this basic issue is greater specification of those events which are unique in the lives of juvenile delinquents (i.e.; being placed on probation), the occurrence of which is practically nonexistent in the lives of nondelinquents.

The aim of this research was to analyze certain well-known stressful social situations which occur in the lives of juvenile delinquents and the relationship to the exhibited severity of delinquent behavior. It was hoped that such an analysis could contribute to a knowledge of the background in which delinquent behaviors frequently occur.

Statement of the Problem

No clear-cut data exist relative to the degree of relationship between life-change and juvenile criminal behavior. This is in part due to the lack of a standardized, economical procedure to measure the occurrence of change in the lives of juvenile delinquents.

Purpose of the Study

The purpose of the study is to develop and validate an instrument to predict the category and severity of juvenile delinquency by assessing the type and intensity of life-change.

Definitions¹

Life-events. A critical incident in the life of an individual, whose occurrence is either indicative of or requires a significant change in the ongoing life pattern of the individual.

Life-change. The amount of readjustment necessitated by life-events impinging on an individual's immediate environment.

Juvenile delinquent. A person under 18 years of age who, having violated the Utah Criminal Code, is under the jurisdiction of the Juvenile Court.

¹Source for definitions of types of delinquents: Utah State Juvenile Court Annual Report 1975.

Nondelinquent. A person under 18 years of age who has never been under the jurisdiction of the Juvenile Court.

Status offenses. Offenses in which the primary result is a condition which is not in the best interest of the juvenile. Acts which are illegal for juveniles only, such as runaway or truancy.

Acts against public orders. Offenses in which the primary result is disruption of the routine or security of a community or family.

Acts against property. Offenses in which the primary result is damage to private or public property.

Acts against persons. Offenses in which the primary result is injury or harm to another.

Summary

In this chapter an overview of the theoretical framework on which this study was based has been presented along with a statement of the problem arising from a lack of clear-cut data relative to the degree of relationship between life-change and juvenile delinquency. The purpose of the study was then expressed to be the development and validation of an instrument to measure the occurrence of life-change in a juvenile delinquent population and to investigate the above-mentioned relationship. Definitions of special terms were also presented.

CHAPTER II

A Review of Literature

A considerable amount of research has accumulated over the past 30 years pointing to the role of life-stress in the occurrence of maladaptive behavior both physiological and psychological. While the majority of these studies have dealt with the role of stress in psychosomatic disorders such as hypertension (Finnerty, 1971) and peptic ulcers (Birely, 1972), the systematic study of the effects of life-stress on human behavior is a relatively new and emerging frontier.

The major thrust of this chapter is to review only that literature which bears a direct relationship of life-stress to maladaptive, deviant behavior and to point to emerging methodological trends.

Clinical Studies

The clinical approach to eliciting life-event data is restrospective and most of the following studies used this approach.

In a study designed to investigate the predictive value of number of stresses versus any particular stress in the mental health status of midtown Manhattan subjects, Langner and Michael (1963) found the number of stresses to be more significantly related to general emotional impairment than the specific nature of the stressful events.

Berkman replicated the above study in 1971 and arrived at the same conclusions, emphasizing the importance of multiplicity as an incapacitating factor.

In general systems theory this state, called "overloading," tends to tax the individual's adaptive capabilities and to predispose him for the proverbial "last straw."

Aponte and Miller (1972) investigated the relationship between stress-related social events and psychological impairment by administering a modified form of the Schedule of Recent Experiences (SRE) to 50 adult patients of a state mental hospital. A correlational analysis of their data revealed strong relationship between number of events experienced and a general measure of severity of psychopathology as reflected by number of previous hospitalizations. A more specific analysis of the data according to diagnostic classifications revealed patients with personality disorders to have experienced more stress than neurotic and psychotic groups. The authors concluded that there is only a partial general relationship between stress-related events and psychological impairment, and that no relationship exists between stressful life-events and the patients' severity of symptoms.

Other researchers, Beisser and Glasser (1968), on the other hand, had previously concluded on the existence of a positive qualitative as well as quantitative relationship between stressful social events and psychiatric impairment. These investigators found marital, economic and occupational stress to account for more than two-thirds of admissions to mental hospitals. These findings are in agreement with Gurin, Veroff and Feld's (1960) who found the two major types of stress-producing situations to be economic and occupational.

In contrast to research findings pointing to the significance of the number of events as opposed to the amount of related stress as a determining factor in psychological impairment, Frazer, Leslie and

Phelps (1943) found that the precise nature and degree of stress was the important determining factor. During World War II the authors interviewed individuals who had survived a bomb explosion, none of whom had been physically injured. The subjects were subsequently divided into those who developed neurotic symptoms and those who did not. The finding revealed the neurotic group to have endured far more severe experiences, such as loss of a close friend or relative, than the others.

Archibald and Tuddenham's follow-up studies (1965) have supported the belief that the degree of stress experienced in a disaster is positively correlated with the subsequent development of emotional disturbances.

In a prospectively oriented study, Hudgens (1974) investigated the association between personal catastrophe and serious depression in hospitalized adolescent subjects. Each subject received an interview which generated extensive information about their background histories. The subjects were divided according to various diagnostic categories, including a nonpsychiatric group and then were compared with each other with respect to a large number of demographic items and past histories. The two factors that markedly distinguished the depressed adolescents from the rest were a significantly higher (34 percent versus 11 percent, $p < .05$) incidence of psychiatric disorders in the histories of their parents and significantly more (77 percent versus 54 percent, $p < .05$) severe nonpsychiatric illnesses preceding the onset of their depressions. The two factors considered together strongly predicted depression in the sample of teenagers. Hudgens' findings suggest that there might have been a cause-effect relationship between stress and subsequent depression in adolescents hospitalized for nonpsychiatric disorders.

Similar findings with respect to the role of stress in depression have been made by Paykel, Myers, Dienelt, Klerman, Lindenthal and Pepper (1969) who found depressed patients to report three times as many stressful events during a six-month period prior to the onset of depression as compared with a matched control group. For eight events in particular, the differences reached statistical significance. These events were increased arguments with spouse, marital separation, starting or changing work, serious illness of family member, death of a family member, departure of family member from home, serious personal illness, and a major change in work conditions.

The authors also addressed themselves to the question of generality versus specificity of stress. To examine this issue they analyzed the frequencies of reported events according to several categories: employment, health, family, marital and legal. Depressed patients reported at least twice as many events in all categories compared to controls. This finding seems to favor the generality of stress preceding depression.

Findings of the above studies have been largely supported by other research on young depressed patients in which school difficulties and love relationships were related to the onset of depression (King and Pittman, 1970).

Closely related to depression is the problem of suicide. The findings made on the studies of depression have been extended to diagnostic groups of suicide attempters.

In one such study, Paykel, Pruskoff and Myers (unpublished) sought to study the relationship of life-events to the suicide attempts. Life-event information was obtained for the six months prior to the attempt. When compared to general population controls the suicide attempters

reported four times as many events. In addition, suicide attempters showed an excess of undesirable events over both general population and depressives. These findings are consistent with those reported by Brown, Sklair, Harris and Birley (1973). Additional research evidence from Bunch's investigation of suicide (1972) points to the role of bereavement and interpersonal crises.

Jacobs (1974) has recently gathered life-events information on 62 first admission schizophrenics for the year before onset. In comparing that group to a matched control of depressives, Jacobs found the schizophrenics to report about one-third fewer events than did the controls. Marked reductions in event rates were observed for schizophrenics in the areas of health and finance. Comparisons to the general population revealed a higher overall event rate and a higher rate of undesirable events for schizophrenics, suggesting the relationship of life-events to the onset of schizophrenia. However, this relationship is weaker than that for depression.

Brown and Birley (1968) report a significant increase in life-change events just prior to onset of schizophrenia. In a later study Brown (1972) refined his approach and analyzed the relationship between the degree of severity of life-events and the onset of schizophrenic symptomatology. He found 42 percent of schizophrenic sample had experienced at least one traumatic event in the nine months prior to onset compared with 9 percent in the control sample. His findings further revealed that the severity of stress increased during a 10-week period before onset of acute schizophrenia.

A sample of 213 psychiatric patients exhibiting mostly neurotic disorders were examined by Ulenhuth and Paykel (1973). Life-events

information was obtained by a self-report questionnaire for a one-year period immediately preceding psychiatric hospitalization. A multivariate covariance analysis revealed no relationship between symptomatology and intensity of previous stress, as well as between types of events and symptom patterns. When symptomatology was considered according to severity and related to severity of preceding stress, however, a positive correlation was found.

Hocking (1970), in his selected review of studies on extreme environmental stress, leads to the conclusion that such experiences may result in the development of neurotic symptoms and permanent psychological disability in virtually every person exposed to them.

From the above summaries of relevant findings from a series of studies on different psychiatric populations, it is clear that stressful life-events tend to occur to a greater extent in various psychiatric samples during a period of one year immediately preceding onset of symptomatology.

The greatest levels of significant differences are found when stress is examined according to amount of reported events as opposed to its severity. The most events are reported by suicide attempters, followed by depressives and schizophrenics. A positive relationship was found between amount of stress and severity of neurotic symptoms.

These findings suggest the existence of some relationship between stressful life-events and mental disorders.

From another perspective one could examine the role of stress in delinquent and criminal behavior. This area of concern has received supprisingly little research attention.

Cutler, Masuda and Holmes in unpublished research on stress (Dohrenwend and Dohrenwend, 1974) found a relationship between increasing amounts of life-changes and time of incarceration in a Federal prison.

Gersten, Langner, Eisenberg and Orzeck, in a study presented in Dohrenwend and Dohrenwend (1974), investigated the relationship of the stressfulness of life-events to a number of different types of impairment, including delinquency in children and young adults from the age of 11 to 23.

Using Coddington's (1972) adaptation of Holmes and Rahe's (1967) Social Readjustment Rating Scale for junior and senior high school students, the authors measured the amount of desirable versus undesirable life-changes experienced by their subjects. A significant correlation was found between the disparity of desirable versus undesirable events and delinquency. Further substantiative evidence of the relationship between stress and serious criminal offenses was reported by Szyrynski (1968).

The scarcity of research on the role of life-events in patterns of delinquent behavior points out the necessity to investigate the relationship in greater detail.

In reviewing the nature of stress and its relation to maladaptive behavior, one is concerned with the practical problem of measuring the amount and severity of life-changes.

The most widely used instrument in research studies dealing with the effects of stress on the occurrence of medical and psychological disorders is the Social Readjustment Rating Questionnaire (SRRQ) developed by Holmes and Rahe (1967). The Questionnaire consists of 43 items of

life-events designed to give an indication of the amount of stress in the subject's life over a given period of time, usually of one year immediately preceding its administration. Both the number and magnitude of these events is yielded through self-reporting, and the total readjustment required on the part of the individual is quantified in terms of Life-Change Units (L.C.U.s).

Following is a documentation of the development and research applications of the Questionnaire.

During the developmental phase of their research, Rahe, Meyers, Smith, Kjaer and Holmes (1964) combined the interview technique with clinical experience to derive a list of two basic categories of items: those indicative of the life style of the individual and those indicative of occurrences involving the individual.

The specific nature of the events is reflective of the "American way of life." These include marriage, occupation, residence, education, health, etc. One key factor which is common to all of these events is that the occurrence of each is associated with some adaptive or coping behavior on the part of the individual experiencing them, regardless of their social desirability. The emphasis is on change and not on psychological meaning (Holmes and Rahe, 1967).

The method for scaling the events under study was derived from psychophysics (Stevens, 1966). The authors administered the Questionnaire to a "sample of convenience" which was asked to rate the events as to the amount of necessary readjustment required, relative to a "module" item used as an anchor. This procedure generated a ratio-scale of the subjective magnitude estimations of social readjustment.

To derive a value for each item, the geometric mean (computed as the mean log of the scores) was used as the best measure of central tendency in view of the logarithmic distribution of the subjective magnitude estimation scores. The geometric mean, explain the authors, has the advantage of discounting the extreme scores, while taking into account the distribution of scores.

In the analysis of their results, Holmes and Rahe found a high consensus among raters concerning the relative order and magnitude of the means of the items. Kendall's coefficient of concordance (W) for all raters was .477, significant at $p < .005$.

Ruch and Holmes (1971) replicated the above scaling method, using a college population sample, and found a very high coefficient of correlation with Holmes and Rahe's original sample.

Pasley (1969), using seventh-, ninth- and eleventh-grade students and college freshmen, reports very high intercorrelations among the young raters suggesting that consensus about life-change events is well established by adolescence.

In another methodological manipulation Bramwell (1971) attempted to develop a Social and Athletic Readjustment Rating Scale to be used to investigate the relationship between life-changes and injuries in college athletes. In his revision Bramwell changed the module item from marriage to entering college, deleted some items from the original instrument, and administered the new version to 80 college athletes. Using the Spearman's rank-order correlation coefficient to analyze the data, he again found a high correlation among raters.

Casey, Masuda and Holmes (1967) administered the Social Readjustment Scale to a group of 55 resident physicians on two occasions, nine months apart, to investigate the stability of the questionnaire and the validity of recall. Significant coefficients of stability were obtained, indicating that the passage of time had no effect on the consistency of scores. The one-year period immediately preceding administration was shown to be the most stable. Beyond one year, recall decrements were observed.

The methodology described above, used for quantifying the significance of various life-events with adult populations, was applied to the field of child psychiatry by Coddington (1972a). Using Holmes and Rahe's basic methodology modified to children, Coddington developed essentially a new instrument with adaptations (forms) for four different age levels, each containing items specifically related to childhood life style. Coddington's raters, composed of teachers, pediatricians and mental health workers, reflected a high degree of agreement (Spearman's rank-order correlation of .90). Following Holmes and Rahe's theoretical reasoning, the value of each item was determined by computing the geometric mean.

The author, additionally, examined the actual value (raw scores) assigned to each item by the three groups of raters with the Kruskal-Wallis One-Way Analysis of Variance and rejected those items which indicated the presence of a significant different (disagreement) from any one of the raters' groups.

Subsequently, Coddington (1972b) administered his revised instrument to 3,500 children and constructed age-related norms for social readjustment scores. In this application of his previous research,

Coddington also investigated the influence of various demographic variables on the normative values and sought to answer the question of how much psychosocial readjustment does the average child undergo in the course of one year? The results failed to reveal any differences with respect to the variables under consideration; however, the amount of required normative readjustment increased with age suggesting that as a child's social sphere expands he risks the occurrence of more life-events.

As evident in the above studies, the SRRS was developed on mostly middle class American samples. An investigation of two subculture groups -- Negroes and Mexican-Americans--by Komaroff, Masuda and Holmes (1968), found that while the two groups ranked the life-change items in a significantly concordant manner, their rankings differed significantly from a previously examined white American middle-income group.

Masuda and Holmes (1967) on the other hand, in a cross-cultural study, found two Japanese samples to be homogeneous in their rankings of the items and also to be in essential concordance with a selected American sample. Other cross-cultural studies (Celdran, 1970; Woon, 1971; Seppa, 1972) found the consensus high, with Spearman's rank correlation coefficients ranging from .629 to .943.

Discussion

It is hoped that the preceding review has sufficed to elucidate the important role stress often plays in the etiology of maladaptive behaviors. Some researchers found stress to precipitate maladaptive patterns as in schizophrenia or suicide, while others found stress to be a causal agent in depressive and neurotic disorders. The amount of preceding stress was found to be correlated with severity of symptoms among neurotics.

While most of the findings reported seem to suggest at least partly specific relationships between life-events and kinds of maladaptive reactions, such links are far from being well established. As is usually the case in any area of research, controversies appear to revolve around how to conceptualize and measure stressful life-events. These controversies have generated many divergent methodologies of procedure. However, as Dohrenwend and Dohrenwend (1974) emphasized in their book, if the investigator's objective is to develop an instrument for predictive purposes without necessarily explaining the specific relationship involved, Holmes and Rahe's procedures for sampling life-events are optimal. Furthermore, the more relevant and salient the sample of events is to a particular population and behavior under investigation, the more effective it will be.

It seems, therefore, that "the appropriate procedure for sampling life-events as well as the domain from which they are sampled depends on the purpose of the study." (Dohrenwend, 1974)

CHAPTER III

Methodology

As stated in Chapter I, the purpose of this study was to develop and validate an instrument to predict the category and severity of juvenile delinquency by assessing the type and intensity of life-changes.

This task was accomplished in two basic phases. Phase one consisted of the development of the instrument per se, while phase two involved the administration of the newly developed instrument to five criterion groups of juvenile delinquents and nondelinquent controls, in order to obtain data for the purpose of validation.

In this chapter the explanation of materials, samples and procedures used will be presented separately for each of the two phases. The hypotheses tested and the statistical methods used in the analysis of the data will also be presented.

Instrument Development

Development of item pool. To collect a set of functional items (item-pool), an empirical procedure based on the critical incident technique (Flanagan, 1954) was used. The case histories of 100 court adjudicated juvenile delinquents were analyzed and a summary of their content with respect to those critical incidents (life-events) which were considered sufficiently important to have been recorded in the juvenile's social and judicial file.

Additionally, the interview technique was used with a sample of 10 professional workers employed in correctional settings (i.e.; Juvenile Court, detention facilities) in order to gather a list of additional life-events to supplement and expand the list derived from the examination of the delinquent's files as described above.

The professional workers were given an example of a critical incident and then asked to draw on their experience to generate additional incidents.

After the elimination of redundant incidents, 69 items were constructed to contain those life-events the occurrence of which is indicative of, or requires a significant readjustment in the ongoing life pattern of the juvenile. The emphasis, as mentioned earlier, is on change from the existing state.

A questionnaire including those 69 items was developed and subsequently administered to a sample of judges to gather data relevant to the weighting of those items. The questionnaire is presented in Appendix A.

Sample of judges. A sample of 30 professional workers known personally to the author and representing a cross-section of various professions in social service agencies which deal with youth, completed the questionnaire. The sample included 10 psychologists, 10 social workers and 10 probation officers.

Gathering of data for weighting of items. To obtain an index of the magnitude of life-change required by each event and to provide a quantitative basis for the second phase of this study, the method described by Holmes and Rahe (1967) and Masuda and Holmes (1967) was

used. This method consists of gathering subjective magnitude estimations of the "value" of each item from each professional using the following procedure.

The judges were instructed to rate the amount of change or readjustment that would follow each of the events listed by comparing each to a module item "Birth of a brother or sister."

An arbitrary value of 50 had previously been assigned by the author to the module item to serve as an "anchor" around which the relative values of the rest of the items would be determined on a scale of 1-100 with 100 standing for maximum disruption of the ongoing life pattern. This procedure resulted in the judges making ratio estimations which follow logarithmic functions according to Ekman's Law, from the field of psychophysics. That law simply states that judgmental variability is proportional in a linear fashion to the magnitude estimation. Research support for the validity of subjective magnitude estimations is presented in Stevens' comprehensive review (1966).

For the wording of the written instructions which accompanied the list of items to be rated, see Appendix A.

Treatment of data. Because the obtained scores were not true interval scores, it was decided to use nonparametric statistical methods. Each of the 69 items was first subjected to the Kruskal-Wallis one-way analysis of variance (Siegel, 1956). This statistic examines all of the actual values (raw scores) recorded by the three groups of raters, and it indicates significant differences in the ratings on a given item which result when any one of the three groups disagree. When a significant divergence ($p < .05$) was found to exist among the responses of the raters, the item in question was discarded.

To further examine the degree of consensus among raters on the retained items, relative rank ordering was analyzed using Kendall's coefficient of concordance W (Siegel, 1956). This analysis was performed for all 30 raters combined, as well as for each of the three subgroups to assess within group agreement.

To obtain the magnitude of life-change necessitated by each event, the geometric mean (computed as the antilog of the mean log of the scores) was used (Senders, 1958) as the best measure of central tendency for human judgment of a social consensus (Stevens, 1966).

The final step in the refinement of the Checklist consisted of editing the wording of the items. The items as originally worded contained some language which was not easily understood by the population for whom the items were intended. Therefore, the author, after consultation with a high school English teacher, simplified the wording of certain items, e.g. "unwed pregnancy of child" was reworded, "you have had a pregnancy outside of marriage." Appendix B shows the final version of the Checklist as administered to the subjects.

Validation of Instrument

Questions. The specific questions which this study attempted to answer by analysis of the data are:

1. Is there a relationship between the amount of experienced life-change and severity of delinquency (from nondelinquents to most severe delinquents)?

2. Is there a relationship between the amount of experienced life-change and types of delinquency?

As sampled by the Checklist:

3. Which specific events significantly differentiate between the delinquent sample group and the nondelinquent sample group?

4. Which specific events significantly differentiate among types of delinquency?

The first two questions relate to the general relationship between the variables of life-change and delinquency and concern the process of validation of the Checklist as a whole. The last two questions relate to the specificity of that relationship and concern the process of item-analysis.

Hypotheses.

1. There is no relationship between the amount of experienced life-change and severity of delinquency.

2. There is no relationship between the amount of experienced life-change and the degree of severity of each type of delinquency.

3. There are no differences among types of delinquents in the amounts of experienced life-change.

4. There is no difference between delinquents and nondelinquents in the total amount of experienced life-change.

5. There are no differences between the responses of each type of delinquent to the specific life-events.

6. There are no differences between the responses of the delinquents and the nondelinquents to specific life-events.

Sample of delinquent and non-delinquent subjects. A sample of 334 juvenile delinquents between the ages of 13 and 18 was obtained from Utah's First and Second District Juvenile Courts; Utah's State Industrial School; the Salt Lake, Weber, Davis and Morgan County detention facilities; and the Youth Service Center of the Office of Youth Development. This included all of the students in the State Industrial School.

A sample of 104 control subjects between the ages of 13 and 18, representing the population of nondelinquents, was derived from the Weber and Morgan School Districts. District research personnel randomly selected the junior and senior high schools within their districts from which the subjects were drawn.

All of the subjects completed the Checklist during the month of May, 1976. The composition of the group is shown in Table 1.

Data. The following data were gathered from each delinquent participant in the study:

1. Age and sex.
2. Life-change score.
3. Classification of types of offenses.
4. Severity of delinquency score.

(See Gathering of Data section for details on data listed under numbers 3 and 4 above.)

The following data were gathered from each nondelinquent subject:

1. Age and sex.
2. Life-change score.

Gathering of data. Data listed under Number 1 gathered at the time the subjects completed the Checklist.

Data listed under Number 2 were gathered from all subjects by administering the Checklist and subsequently scoring it. The Checklists were administered by the author and probation officers. Subjects were first given information about why the Checklist was being administered and about the overall purpose of the research. They were then given specific verbal instructions about completing the Checklist.

Table 1

Age and Sex Composition of Delinquent Groups and Nondelinquents
for the Original, Cross-Validation and Total Samples

Subgroups	Ages						Sex	
	13	14	15	16	17	18	Males	Females
Original Sample								
Status offenders	5	10	14	6	4	1	21	19
Acts against public order	3	7	8	7	9	0	22	12
Acts against property	2	16	15	9	15	1	57	1
Acts against persons	1	2	6	12	13	1	31	4
Nondelinquents	6	15	9	12	10	0	25	27
Totals	17	50	52	46	51	3	156	63
Cross-Validation Sample								
Status offenders	8	10	12	4	5	1	20	20
Acts against public order	3	7	6	11	7	0	23	11
Acts against property	3	8	20	15	9	3	52	6
Acts against persons	1	1	9	9	15	0	30	5
Nondelinquents	2	15	5	18	11	1	22	30
Totals	17	41	52	57	47	5	147	72
Total Sample								
Status offenders	13	20	26	10	9	2	41	39
Acts against public order	6	14	14	18	16	0	45	23
Acts against property	5	24	35	24	24	4	109	7
Acts against persons	2	3	15	21	28	1	61	9
Nondelinquents	8	30	14	30	21	1	47	57
Totals	34	91	104	73	98	8	303	135

The verbal instructions were essentially a rephrasing of the standardized written version which accompanied the Checklist.¹ (See Appendix B)

A few subjects in the delinquent sample who had known reading difficulties required a reader to help them complete the task.

Upon completion each Checklist was briefly examined for accuracy of information and gross falsifications. In the case of the nondelinquent sample, item 46 was examined to assess whether they had had any Juvenile Court involvement. If, in reviewing the completed Checklist, it was discovered that a subject from the nondelinquent sample had checked item 46 (indicating that he had been placed under court supervision), he was excluded from the nondelinquent sample.

The completed Checklists were then scored by summing the values of all the items checked to obtain the subject's total life-change score for the preceding year.

Data listed under Numbers 3 and 4 were obtained from examination of the delinquent subjects' official record of offenses for the year immediately preceding the completion of the Checklist (May, 1975 to May, 1976).

More specifically, each delinquent subject was classified into one of four major categories of offenses (status offenders, acts against public order, acts against property, and acts against persons) used by the Juvenile Court in the compilation of their annual statistical reports. (See Appendix C for a list of offenses in each category.)

¹Due to a typographical error, the word year was left out of the instructions immediately following the word past. In order to compensate for this error the instructions were also given verbally with the emphasis on the one-year time period.

This method classifies juvenile delinquents into one of the four categories according to the majority of offenses committed by a juvenile which fall in that particular category. For example, a juvenile whose record shows him to have committed three acts against persons, two acts against property, and two status offenses would be classified in Category IV (Acts against persons).

Additionally, severity of delinquency scores were computed for each delinquent subject by using a modified version of the Utah Juvenile Court's Severity Code Calculation Guide (See Appendix C).

With this method an objective severity score can be obtained for every offense committed by multiplying preassigned weights in each of two categories of factors related to the offense: I--Result of Offense and II--Type of Victimization.

Treatment of data. The first step in the data analysis was to combine all the 438 subjects and group them according to five criterion groups: four subgroups of delinquents (Group I--Status Offenders; Group II--Acts against public order; Group III--Acts against property; and Group IV--Acts against persons) and one subgroup of nondelinquents (Group V).

Subsequently, each of the five criterion groups was randomly split into two subsamples (original and cross-validation). The randomization was accomplished by thoroughly mixing the completed Checklists and dividing each group evenly.

To determine whether the above random split procedure was effective, a chi-square "goodness of fit" analysis was used (Wert, Neidt and Ahmann, 1954) to inspect the differences of the actual and expected frequencies of the variables of age and sex.

The results of this procedure are presented in Table 2. The chi-square values for the random distributions of the variables of sex and age between the two subsamples show that no significant differences exist between the observed and expected frequencies at the .05 level of significance. These results help confirm the random nature of the split.

The purpose of the above split was to derive two subsamples, an original sample to be used for one observation of the data and a cross-validation sample to cross-validate the findings from the original sample.

After this method of concurrent cross-validation was completed to establish internal validity, the two subsamples were united and the same analysis of the data run on the total sample. The findings obtained from this last process thus had the benefit of internal validity and added degree of legitimacy.

Correlational analyses (Pearson product-moment) were run on the data to investigate the various hypothesized relationships between the amount of experienced life-change and severity of delinquency.

To analyze the differences in the amounts of experienced life-change among the various types of delinquents, an analysis of variance was run on the means. A Sheffé Test of Multiple Comparisons (Glass and Stanley, 1970) was then used to assess the significance of those differences contributing to the total variance.

To analyze the difference in the amount of experienced life-change between the delinquent sample and the nondelinquent sample, a t test was run on the two sample means.

Table 2
Chi-Square Values for Distribution of Sex and Ages Within Each Type of
Offense, Between Original Sample and Cross-Validation Sample

Type of offense	Variable	df	X ²	Significance at .05 level
I Status offenders	Sex	1	0.000	N.S.
	Ages	5	1.357	N.S.
II Acts against public order	Sex	1	0.000	N.S.
	Ages	5	1.424	N.S.
III Acts against property	Sex	1	2.432	N.S.
	Ages	5	7.580	N.S.
IV Acts against persons	Sex	1	0.000	N.S.
	Ages	5	2.504	N.S.
V Nondelinquents	Sex	1	0.155	N.S.
	Ages	5	5.390	N.S.

Item analysis. To examine the value of the Checklist items as potential discriminators between delinquents and nondelinquents and among types of delinquents, the responses of the types of delinquents from the original sample were first analyzed as follows:

1. The percentages of subjects in each of the subgroups of delinquents and of the nondelinquents were computed.

2. The differences between the percentages were obtained.

3. The statistical significance of those differences were determined by the critical ratio CR = $\frac{P_1 - P_2}{\hat{\sigma}_{P_1 - P_2}}$ (Sanders, Murph and Eng,

$$\hat{\sigma}_{P_1 - P_2}$$

1976, p. 233).

Those items whose differences of percentages showed critical ratios exceeding ± 1.96 (significant at the .05 level) were considered to be discriminating. Each such item was assigned a plus or minus value, depending on the direction of the difference. A plus value was given to those items answered more frequently by the various subgroups of delinquents and nondelinquents, while a minus value was given to those items answered more frequently by the rest of the delinquents.

The above analysis was repeated with the cross-validation sample and the responses from this sample ("observed") were compared to the responses from the original sample ("expected") by using chi-square corrected for continuity (Friedman, 1972).

During the course of the above analysis the author noticed that the Checklist items could readily be categorized into three main areas. This observation led to the following inquiry: Which categories of events differentiate among the various types of delinquents, as well as between delinquents and nondelinquents?

Items were then grouped according to the area of life-events they involved. Three basic categories were derived from this process: Category I consisting of items related to home and family life-events, Category II consisting of items reflective of personal life-events, and Category III consisting of items which relate to involvement with the legal system. The list of the items grouped according to these three categories is presented in Appendix C.

Post-hoc hypotheses 7 and 8 were subsequently formulated.

7. There are no differences between the responses of the delinquents and the nondelinquents to the categories of life-events.

8. There are no differences among the responses of the types of delinquents to the categories of life-events.

The same procedure used in analyzing the responses of the subjects in the original and cross-validation samples to the life-events was duplicated for the responses of the subjects in the total sample to categories of items.

Summary

In this chapter the samples used, the methods of procedure, the hypotheses to be tested and the statistical procedures to be used in analyzing the data were presented.

CHAPTER IV

Results and Discussion

In this chapter each hypothesis will be considered in the order in which it appeared in Chapter III, and the results of the study will be presented.

Instrument Development

The results of the Kruskal-Wallis One-way Analysis of Variance for each of the original 69 items are presented in Table 3.

For the majority of the items, the differences among the raters were not significant. For 11 of the 69 items the differences among the raters were significant beyond the .05 level, and therefore those 11 items were eliminated.

The results of the Kendall's Coefficient of Concordance W are shown in Table 4.

All of the 30 raters considered together ranked the items in a highly concordant manner ($W = .5586$, $p < .001$). The concordance among the three subgroups of professionals was extremely high ($W = .7704$, $p < .001$).

When the degree of concordance is examined within each group, the psychologists were shown to have ranked the items in a more highly concordant manner than the other two groups of professionals, and the probation officers in a more highly concordant manner than the social workers.

Table 3
 Kruskal-Wallis One-Way Analysis of Variance for Each of the
 Items on the Original Questionnaire

Item	Life-event	Value of H	Significance
1.	Birth of a brother or sister.	--	--
2.	Mother beginning to work.	.41	N.S.
3.	Parent losing job.	1.34	N.S.
4.	Brother or sister leaving home.	1.25	N.S.
5.	Death of a parent.	.19	N.S.
6.	Death of brother or sister.	.09	N.S.
7.	Death of close friend.	1.93	N.S.
8.	Separation of parents.	3.04	N.S.
9.	Divorce of parents.	1.61	N.S.
10.	Marriage of parent to step-parent.	2.42	N.S.
11.	Major increase in arguments with parents.	1.92	N.S.
12.	Discovery of being an adopted child.	2.11	N.S.
13.	Move to a new home.	1.17	N.S.
14.	Prolonged illness of parent.	3.29	N.S.
15.	Required hospitalization of parent.	.56	N.S.
16.	Prolonged illness of brother or sister.	.16	N.S.
17.	Required hospitalization of brother or sister.	2.58	N.S.
18.	Father and/or mother started drinking.	1.32	N.S.
19.	Parent serving a jail sentence.	3.87	N.S.
20.	Being "kicked out" of the house.	5.25	N.S.
21.	Beginning junior or senior high school.	6.35	<.05
22.	Move to a new school.	11.23	<.01
23.	Failure of subject(s) in school.	5.70	N.S.
24.	Placement in special education program.	5.08	N.S.
25.	Outstanding school achievement (school team, cheerleader, class president).	6.37	<.05
26.	Not making an extracurricular activity at school.	4.22	N.S.
27.	Being dropped out of school.	4.44	N.S.
28.	Suspension from school.	4.44	N.S.
29.	Major change in relationship or standing with peer group.	3.35	N.S.
30.	Being the victim of a crime.	5.99	<.05
31.	Parent being the victim of a crime.	2.16	N.S.
32.	Surviving a natural disaster (i.e. fire).	2.05	N.S.
33.	Major change in family's economic status.	.15	N.S.
34.	Quit attending church.	5.69	
35.	Becoming a full-fledged church member.	1.82	N.S.
36.	Breaking up with boyfriend or girlfriend.	2.74	N.S.
37.	Beginning to date.	2.63	N.S.
38.	Fathering an unwed pregnancy.	2.79	N.S.
39.	Unwed pregnancy of child.	3.89	N.S.

Table 3. Continued

Item	Life-event	Value of H	Significance
40.	Becoming involved with drugs or alcohol.	.08	N.S.
41.	Prolonged illness of self.	2.43	N.S.
42.	Required hospitalization of self.	1.24	N.S.
43.	Acquiring a visible deformity.	1.53	N.S.
44.	Acquiring driver's license.	1.71	N.S.
45.	Acquiring a job.	14.40	<.001
46.	Losing a job.	3.83	N.S.
47.	Pregnancy in unwed teenage sister.	.63	N.S.
48.	Receiving individual or family counseling.	14.39	<.001
49.	Undergoing a psychological/psychiatric evaluation.	9.57	<.01
50.	Being arrested by police.	4.45	N.S.
51.	Being held in detention.	.56	N.S.
52.	Appearing in court (hearing or arraignment).	1.88	N.S.
53.	Placement under court supervision.	.18	N.S.
54.	Placement in shelter home.	.08	N.S.
55.	Placement in foster home.	8.74	<.02
56.	Placement with a relative.	1.25	N.S.
57.	Placement in group home or "ranch."	.91	N.S.
58.	Returning to own home from outside placement.	2.78	N.S.
59.	Owing restitution.	13.72	<.01
60.	Assignment of a work-order (25 to 50 hours).	4.18	N.S.
61.	Assignment of a work-order (50 to 100 hours).	5.74	N.S.
62.	Placement on juvenile court probation.	1.99	N.S.
63.	Release from juvenile court probation.	1.96	N.S.
64.	Commitment to State Industrial School.	1.01	N.S.
65.	Commitment to State Hospital Youth Ward.	.18	N.S.
66.	Release from State School or State Hospital.	6.04	<.05
67.	Commitment to SIS for observation only.	2.25	N.S.
68.	Suspended commitment to State Industrial School.	2.63	N.S.
69.	Parent abandoning the family.	2.48	N.S.

The mean weightings obtained from the three groups of professionals for each event are presented in Table 5.

As can be observed, the events are listed in rank order on the amount of life-change required by each, from most to least. The values of the 58 life-events range from 93.5 to 37.9, with 48 events ranking above the module item and nine events ranking below it.

Table 4

Kendall Coefficients of Concordance W Within Group of Raters,
For Raters Combined and Among Group of Raters

Raters	N	Value of W	Significance
Psychologists	10	.6853	<.001
Social workers	10	.5399	<.001
Probation officers	10	.5504	<.001

All raters combined	30	.5586	<.001

Among group of raters	3	.7704	<.001

Table 5

Ranking of Items on Geometric Mean Values

Rank	Life-event	Item number	Geometric mean
1.	One of your parents has died.	21	93.5
2.	You have received a physical defect.	28	88.2
3.	Your brother or sister has died.	20	85.2
4.	One of your parents has left the family.	14	83.9
5.	You are on a commitment to the State Industrial School.	57	83.6
6.	Your parents were divorced.	7	83.2
7.	You have been committed to the State Hospital Youth Ward.	58	82.4
8.	You have had a pregnancy outside of marriage.	37	82.3
9.	You have been placed in a group home or ranch.	49	77.7
10.	Your parents were separated.	6	77.5
11.	You have been kicked out of the house.	34	76.4
12.	You have been placed in a shelter home.	47	75.6
13.	You have had a long illness.	26	75.3
14.	One of your parents married your step-parent.	8	75.0
15.	You are on a commitment to SIS for observation only.	56	74.2
16.	You have fathered a child outside of marriage.	38	73.8
17.	You have been held in detention.	44	72.1
18.	You have been in the hospital.	27	72.0
19.	You have discovered that you are an adopted child.	35	71.4

Table 5. Continued

Rank	Life-event	Item number	Geometric mean
20.	One of your close friends has died.	33	71.2
21.	You noticed a big change in your relationship with your friends.	31	70.3
22.	One of your parents has been in jail.	19	69.4
23.	You have returned home from an outside placement.	50	68.4
24.	You have become involved with drugs or alcohol.	36	68.0
25.	You have been placed with a relative.	48	67.6
26.	You have appeared in court.	45	67.4
27.	You have been placed under court supervision.	46	66.9
28.	You have been arrested by the police.	43	65.6
29.	You have been arguing more with your parents.	5	65.3
30.	You have been dropped out of school.	42	64.4
31.	There has been a big change in your family's economic status.	16	63.1
32.	Your parent has had a long illness.	11	62.5
33.	You have survived a natural disaster (such as fire or flood).	32	61.9
34.	You have been placed in a special education program.	40	60.6
35.	One of your parents started drinking.	18	59.6
36.	Your parent has gone to the hospital.	12	59.5
37.	Your teenage sister has had a pregnancy outside of marriage.	15	58.8
38.	You have been placed on Juvenile Court probation.	53	58.5
39.	You have broken up with your boyfriend or girlfriend.	25	57.5
40.	One of your parents has lost his or her job.	4	56.6
41.	You have lost a job.	30	56.2
42.	You are on a suspended commitment to the State Industrial School.	55	56.0
43.	Your brother or sister has had a long illness.	9	54.3
44.	Your brother or sister has gone to the hospital.	10	52.9
45.	Your parent has been the victim of a crime.	17	51.6
46.	You have failed subjects in school.	39	51.2
47.	You have moved to a new home.	1	51.0
48.	You have obtained a driver's license.	29	50.3
49.	A brother or sister was born.	2	50.0
50.	You have begun to date.	24	49.5
51.	Your mother began to work.	3	45.9
52.	You have been assigned a work-order (50 to 100 hours).	52	43.9
53.	You did not make an extra-curricular activity (school team or club).	41	43.8
54.	You have been released from probation.	54	43.7

Table 5. Continued

Rank	Life-event	Item number	Geometric mean
55.	You have become a full-fledged church member.	23	42.2
56.	You have quit attending church.	22	40.0
57.	You have been assigned a work-order (25 to 50 hours).	51	39.2
58.	Your brother or sister has left home.	13	37.9

Validation of Checklist

Mean severity scores and mean life-change scores for the original, cross-validation and total samples are presented in Table 6. It may be noted that severity scores show a consistent positive relationship with life-change scores.

Hypothesis 1. There is no relationship between the amount of experienced life-change and severity of delinquency.

The product-moment correlations between the experienced life-change scores and degree of severity of delinquency scores are presented in Table 7.

As can be seen in Table 7, the correlation coefficients between amount of life-change and severity of delinquency for each subsample and for the total sample show the two variables to be highly positively related. All correlation coefficients for that relationship exceed the .05 level of significance, with most of them significant at the .001 level.

Hypothesis 1 is therefore rejected in its null form: the correlation between the amount of experienced life-change and severity of delinquency is highly positive and significant.

Table 6
 Mean Severity and Mean Life-Change Scores by Subgroups for Original,
 Cross-Validation and Total Samples

Subgroups	N	Original sample		Cross-validation sample		N	Total sample	
		Mean severity	Mean life-change	Mean severity	Mean life-change		Mean severity	Mean life-change
I--Status offenders	40	8.93	704.72	9.23	610.72	80	9.08	657.72
II--Acts against public order	34	25.97	865.23	20.82	928.52	68	23.40	896.88
III--Acts against property	58	57.76	1146.79	61.07	1172.70	116	59.41	1159.75
IV--Acts against persons	35	76.37	1383.11	79.74	1248.97	70	78.06	1316.04
V--Nondelinquents	52	--	331.65	--	354.57	104	--	342.61
Total delinquent sample	167	43.49	1033.11	44.37	1004.37	334	43.93	1018.74

Table 7

Correlations Between Severity Scores and Life-Change
Scores Within Delinquent Subgroups

Subgroup	N	Original sample		Cross-validation sample		N	Total sample	
		r	Significance	r	Significance		r	Significance
I--Status offenders	40	.7479	.001	.7140	.001	80	.7033	.001
II--Acts against public order	34	.7036	.001	.4227	.006	68	.5101	.001
III--Acts against property	58	.7232	.001	.5665	.001	116	.5957	.001
IV--Acts against persons	35	.6725	.001	.7256	.001	70	.6481	.001
Total subsample	167	.7786	.001	.7460	.001	334	.7602	.001

Hypothesis 2. There is no relationship between the amount of experienced life-change and the degree of severity of each type of delinquency.

Further inspection of the data presented in Table 7, according to types of delinquency reveals that status offenders generally reflect the strongest relationship between the two variables ($r = .7479$, $p < .001$) and the least amount of "shrinkage" in the cross-validation. On the other hand subgroup II ("Acts against public order") shows the most amount of "shrinkage" from $r = .7036$ to $r = .4227$.

The relationship between the mean degree of severity of delinquency and the mean amount of experienced life-change for each of the types of delinquents in the total sample is presented graphically in Figure 1.

As can be clearly seen in Figure 1, the higher the amount of experienced life-change, the higher the severity of delinquency as reflected by types of delinquents.

Hypothesis 2 is rejected in its null form: a strong positive relationship exists between the degree of severity of each type of delinquency and the amount of experienced life-change.

Hypothesis 3. There are no differences among types of delinquents in the amounts of experienced life-change.

The results of the analysis of variance of the mean life-change scores are summarized in Table 8 for the original sample and in Table 9 for the cross-validation sample, and show that there are significant overall differences among the mean life-change scores of the types of delinquents in both the original sample ($F = 46.19$, $p < .001$) and in the cross-validation sample ($F = 41.69$, $p < .001$).

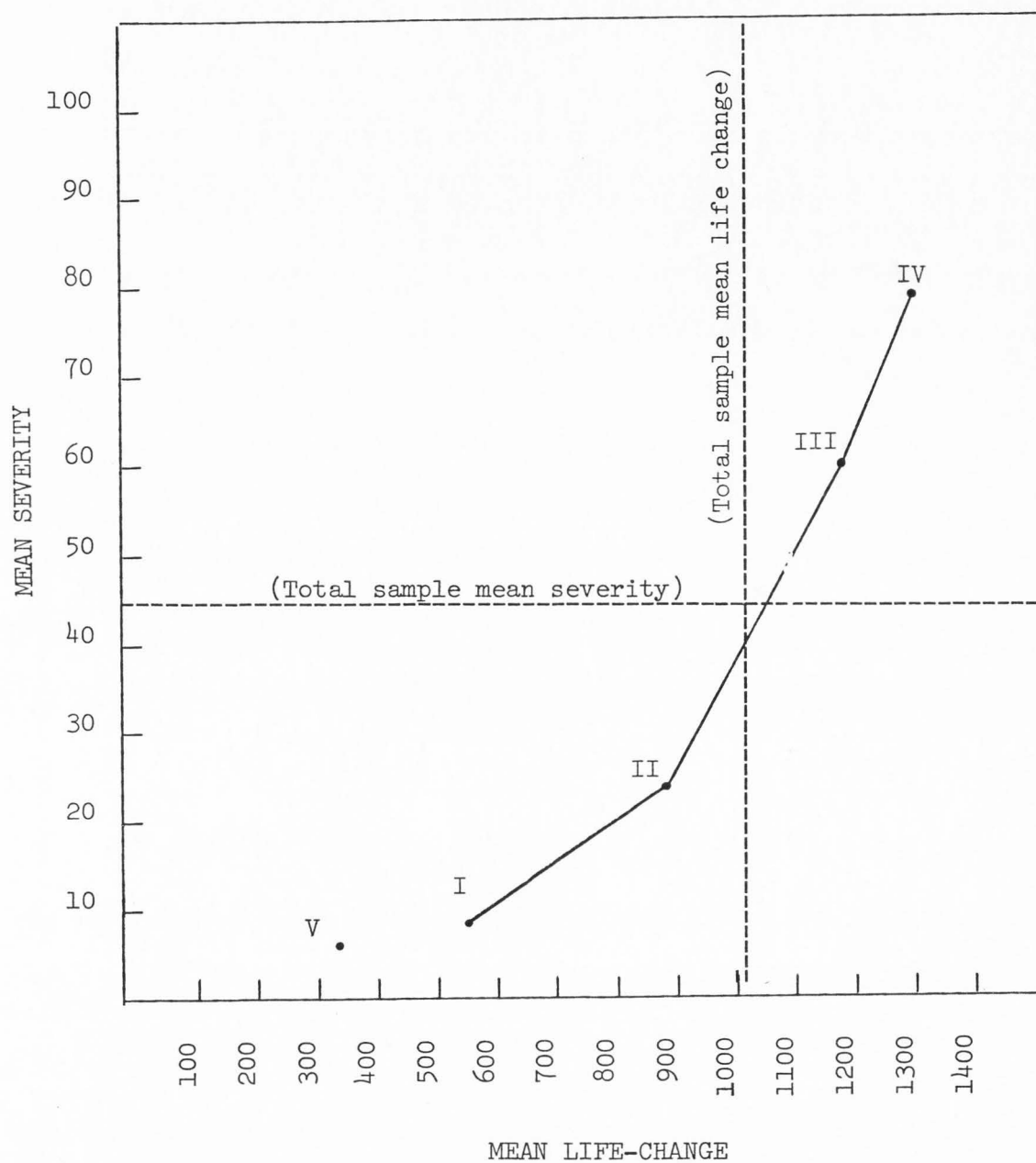


Figure 1. Relationship between mean severity of delinquency scores and mean life-change scores for each type of delinquent in the total sample.

NOTE: I--Status-offenders
 II--Acts against public order
 III--Acts against property
 IV--Acts against persons
 V--Nondelinquents

Table 8
 Analysis of Variance for Mean Life-Change
 Scores of the Original Sample

Source of variation	Degrees of freedom	Mean squares	F	p
Types of delinquents	3	82,959.22	46.19	<.001
Error	163	1,795.66		

Table 9
 Analysis of Variance for Mean Life-Change
 Scores of the Cross-Validation Sample

Source of variation	Degrees of freedom	Mean squares	F	p
Types of delinquents	3	90,482.27	41.69	<.001
Error	163	2,170.02		

The Sheffé Test of Multiple Comparisons revealed significant differences ($p < .01$) between mean life-change scores for all comparisons of types of delinquents in both the original and the cross-validation samples. The ratios of the estimates of the contrasts ($\hat{\psi}$) to the variances of the contrasts ($\hat{\sigma}_{\psi}$) were found to be greater than the $F_{3,166}$ standard of 3.42 at the .01 level.

Hypothesis 3 is therefore rejected in its null form: significant differences exist among types of delinquents in the amount of experienced life-change.

Hypothesis 4. There is no difference between delinquents and non-delinquents in the total amount of experienced life-change.

Table 10 shows the results of the t test for the comparison of the delinquents' and nondelinquents' mean life-change scores. The t test revealed a significant difference between the two means ($t = 21.51$, $p < .001$).

Hypothesis 4 is rejected: there is a significant difference between delinquents and nondelinquents in the amount of experienced life-change.

Hypothesis 5. There are no differences among the responses of each type of delinquent to the specific life-events.

The list of life-events which discriminate each of the types of delinquents and the nondelinquents from the rest of the delinquents in the original sample is presented in Table 11.

Table 10
Results of t Test for Comparison of Mean Life-Change
Scores for Delinquents and Nondelinquents

N	Group	Means	t	Significance
334	Delinquents	1018.74	21.51	p < .001
104	Nondelinquents	342.61		

Table 11

Lists of Items Which Discriminate Each Subgroup of Delinquents
and Nondelinquents from the Rest of the Delinquents

Scale I status- offenders	Scale II acts against public order	Scale III acts against property	Scale IV acts against persons	Scale V non- delinquents
3-	1-	3+	4+	3-
4-	10-	8-	10+	6-
6-	16-	16+	19+	8-
7-	17-	37-	29+	13-
8+	19-	45+	31-	14-
10-	32-	51+	33+	15-
13-	33-	53+	38+	18-
14-	34-		39+	19-
17-	38-		40+	21-
19-	42-		42+	22-
21-	47-		43+	30-
25-	50-		44+	31-
29-	51-		45+	34-
30-			46+	36-
32-			49+	37-
33-			50+	38-
36-			53+	39-
38-			55+	40-
39-			56+	42-
40-			57+	43-
41-			58+	44-
42-				45-
45-				46-
46-				47-
48-				48-
49-				49-
50-				50-
52-				51-
53-				52-
54-				53-
55-				54-
56-				55-
57-				56-
58-				57-
				58-

(+) Items which discriminate in favor of the particular subgroups.

(-) Items which discriminate in favor of the rest of the delinquents.

When the derived scales for each of the types of delinquency and for the nondelinquents are examined, it is found that Scale I consists of 34 events (out of the total Checklist) which discriminate between status-offenders and the rest of the delinquents' sample. Thirty-three of them, with the exception of event number 8, discriminate in favor of the rest of the delinquent sample as indicated by the minus signs. That is, significantly fewer status-offenders experienced those life-events than all of the other delinquents. In contrast, significantly more status-offenders experienced life-event number 8, "One of your parents married your step-parent."

Scale II shows that all of the 13 events of which it is comprised discriminate those delinquents who commit "acts against public order" from the rest of the delinquents, in favor of the latter.

Scales III and IV are shown to be the only scales whose majority of items discriminate in favor of their respective types of delinquency.

Scale III consists of 7 events, two of which (8 and 37) discriminate in favor of the rest of the delinquents and 5 in favor of the type of delinquents who commit "acts against property."

Scale IV is comprised of 21 events, only one of which (number 31) discriminates in favor of the rest of the delinquents and 20 in favor of the type of delinquents who commit "acts against persons."

Further examination of all the scales reveals that 46 of the 58 Checklist items were found to have discriminatory value for at least one of the five subgroups, while 12 did not discriminate for any of the groups. Those 12 items are: 2, 5, 9, 11, 12, 20, 23, 24, 26, 27, 28 and 35. (See Appendix B for the corresponding life-events.)

Hypothesis 6. There are no differences between the responses of the delinquents and the nondelinquents to specific life-events.

Scale V shows that all of its 36 events discriminate the nondelinquents from all of the delinquents in favor of the latter. Thus, significantly fewer normals experience those life-events listed under Scale V than do the delinquent subjects.

Table 12 shows the results of chi-square for the five Scales derived from the original sample versus the cross-validation sample. As can be seen, only one Scale did not "hold" in the cross-validation. The expected frequencies for each item in Scale II from the original sample were significantly different from the observed frequencies for those items in the cross-validation sample ($p < .05$).

For all the other Scales considered individually, and for the total instrument (scales considered together, including Scale II), Table 12 shows no significant differences at the .05 level of confidence.

Hypotheses 5 and 6 are rejected for each of the items shown in Table 11, while they are not rejected for each of the items not shown under any of the Scales.

Supplementary Results

Table 13 shows the results of a post-hoc t test for the specific comparison between nondelinquents and status-offenders. As can be seen, when nondelinquents are compared to the least severe type of delinquents, a significant difference ($t = 11.74$, $p < .001$) is found between their mean amounts of experienced life-change.

Table 12
Results of χ^2_c on the Derived Scales for Original Sample
Versus Cross-Validation Sample

Scale	df	χ^2_c	Significance $\alpha = .05$
I--Status-offenders	1	.62	N.S.
II--Acts against public order	1	5.5	<.05
III--Acts against property	1	1.1	N.S.
IV--Acts against persons	1	.86	N.S.
V--Nondelinquents	1	.34	N.S.
Scales considered together (total checklist) 4		5.80	N.S.

Table 13
Results of t Test for Comparison of Mean Life-Change Scores
for Status-Offenders and Nondelinquents

N	Group	Means	t	Significance
80	Status-offenders	657.72	11.74	.001
104	Nondelinquents	342.51		

Hypothesis 7. There are no differences between the responses of the delinquents and the nondelinquents to the categories of life-events.

Hypothesis 8. There are no differences among the responses of the types of delinquents to the categories of life-events.

Tables 14, 15 and 16 show the results of the comparison of responses of the types of delinquents and of the nondelinquents in the total sample to life-events categories I, II and III respectively. As can be seen from these tables, all three categories of life-events discriminate between delinquents and nondelinquents. For Category I (Table 14), 14 percent of the nondelinquent sample responded to events in the Home and Family category versus 23 percent of the delinquent sample ($CR = 2.41, p < .05$). For Category II (Table 15), 14 percent of the nondelinquent sample responded to events in the Personal category versus 27 percent of the delinquent sample ($CR = -3.05, p < .05$). For Category III (Table 16), none of the subjects in the nondelinquent sample responded to events in the Judicial category versus 37 percent of the subjects in the delinquent sample ($CR = -13.28, p < .05$).

Hypothesis 7 is therefore rejected: significant differences exist between the responses of the delinquents and the nondelinquents to all three categories of life-events.

The results presented in Table 14, when examined for each of the types of delinquents, reveal that significantly fewer status-offenders responded to life-events in Category I than did the rest of the delinquents (15 percent versus 26 percent; $CR = -2.15, p < .05$).

Table 14

Critical Ratios for Comparisons of Subgroups in Total Sample for
Life-Events Category I (Home and Family)

Subgroup		I	II	III	IV	V	II+III+IV	I+III+IV	I+II+IV	I+II+III	I+II+ III+IV
		N = 80	N = 68	N = 116	N = 70	N = 104	N = 254	N = 266	N = 218	N = 264	N = 334
	%	.15	.20	.28	.29	.14	.26	.24	.21	.22	.23
I--Status-offenders	.15	—	-.76	-2.09*	-1.98*	.35	-2.15*				
II--Acts against public order	.20		—	-1.14	-1.17	1.12		-.72			
III--Acts against property	.28			—	-.19	2.61*			1.27		
IV--Acts against persons	.29				—	2.38*				1.14	
V--Nondelinquents	.14					—					-2.41*

*Significant at .05

Table 15

Critical Ratios for Comparisons of Subgroups in Total Sample for
Life-Events Category II (Personal)

Subgroup	I	II	III	IV	V	II+III+IV	I+III+IV	I+II+IV	I+II+III	I+II+
	N = 80	N = 68	N = 116	N = 70	N = 104	N = 254	N = 266	N = 218	N = 264	III+IV N = 334
	%	.18	.25	.31	.33	.14	.30	.27	.25	.25
I--Status-offenders	.18	—	-.97	-1.98*	-1.98*	.77	-2.15*			
II--Acts against public order	.25	—	-.80	-.96	1.74		-.39			
III--Acts against property	.31		—	-.28	2.98*			1.06		
IV--Acts against persons	.33			—	2.79*				1.13	
V--Nondelinquents	.14				—					-3.05*

*Significant at .05

Table 16

Critical Ratios for Comparisons of Subgroups in Total Sample for Life-Events

Category III (Judicial/Juvenile Court)

Subgroup	%	I	II	III	IV	V	II+III+IV	I+III+IV	I+II+IV	I+II+III	I+II+III+IV
		N = 80	N = 68	N = 116	N = 70	N = 104	N = 254	N = 266	N = 218	N = 264	N = 334
		.22	.32	.42	.50	.00	.41	.38	.34	.33	.37
I--Status offenders	.22	—	-1.30	-3.03*	-3.61*	4.57*	-3.43*				
II--Acts against public order	.32		—	-1.40	-2.17*	5.44*		-.98			
III--Acts against property	.42			—	-1.01	8.90*			1.43		
IV--Acts against persons	.50				—	8.10*				2.44*	
V--Nondelinquents	.00					—					-13.28*

*Significant at .05

When the results of the comparisons for the Personal category illustrated in Table 15 are examined for each of the types of delinquents, the findings reveal a pattern similar to that found for Category I. The only significant difference is between status-offenders and the rest of the delinquent types combined (18 percent versus 30 percent; $CR = 2.15, p < .05$).

Table 16 shows the results of the comparisons for Category III (Judicial/Juvenile Court).

As can be seen, significant critical ratios were obtained for the comparisons between status-offenders and the rest of the delinquent sample (22 percent versus 41 percent; $CR = -3.43, p < .05$), and between the type of delinquents who commit "acts against persons" and the rest of the delinquent sample (50 percent versus 33 percent; $CR = 2.44, p < .05$). It is on the basis of the partial relationships disclosed by the above results that hypothesis 8 is rejected for status-offenders with regard to all three categories and for delinquents who commit "acts against persons" for Category III, while it cannot be rejected for those delinquents who commit "acts against the public order, against property and against persons" with regard to Categories I and II, and for those delinquents who commit "acts against the public order and against property" for Category III.

Discussion of Results

In the development phase of this study, the employment of Flanagan's "critical incident" technique revealed that juvenile delinquents are faced with many life-events that nondelinquents do not have to face.

An item-pool consisting of 69 items was developed to include those events, and it was subsequently presented to a group of raters to derive item weights.

The investigation of the actual values given to each item by the raters (Kruskal-Wallis one-way analysis of variance) indicated that only 11 of the 69 events reflected significant discordance from a statistical point of view. That variability, however, was accounted for by differences in the raters' estimates of the amount of life-change necessitated by those 11 life-events, not necessarily by differences of opinion regarding the relative importance of each event. Fifty-eight items were thus retained.

There was very high concordance in the manner in which psychologists, social workers and probation officers established a relative order of magnitude for those 58 life-events.

This high degree of consensus indicated agreement among professionals who deal with youth from different theoretical postures about the significance of the life-events under investigation in this study.

One might have expected more divergence between the probation officers' attitudes towards those events reflective of judicial involvement and the rest of the professionals.

During the course of the investigation of the relationship between the severity of delinquency and the amount of experienced life-change, analysis of the data found a highly pronounced positive relationship between these two variables for the one year prior to the study.

Correlations were highly significant for all types of delinquents; however, the most striking relationship found was that which strongly suggests that the greater the amount of experienced life-change the more severe the degree of exhibited delinquency (See Figure 1).

More specifically, the results of the t test indicate that nondelinquents, as a group, experienced significantly less life-change than delinquents. When these results were examined further for the specific comparison between nondelinquents and the least severe of the delinquent groups (status-offenders), a significant difference was observed between those two groups suggesting that even the least severe type of delinquents experience more stress than nondelinquents.

The analysis of variance combined with Sheffé's Test revealed that the mean amount of experienced life-change significantly differentiates the types of delinquents from each other. Those distinctions are also observed for the degree of severity of delinquency exhibited by each of the types of delinquents. Status-offenders were found to experience the least amount of life-change with a concomitantly low degree of severity of delinquency. Following in increasing succession were those delinquents who commit "acts against public order," "acts against property," and "acts against persons."

Therefore, when these two variables, which separately distinguish the types of delinquents from each other, are considered together, their relationship is effective in separating types of delinquents.

In examining the derived Scales, it is interesting to note that Scale I (status-offenders) and Scale V (nondelinquents) have 75 percent of the items in common. Since all of the items on those two scales (except for item 8, Scale I) differentiate in favor of the rest of the delinquents, this suggests that status-offenders as a group are more closely related to nondelinquents than they are to the rest of the delinquents with regard to the kind of life-events they experience.

Significantly fewer status offenders and nondelinquents both experience those life-events which comprise their respective scales than all other delinquents.

In the cross-validation of the scales, the items which in the original sample were found to differentiate those delinquents who commit "acts against the public order" (Scale II) from the rest of the delinquents did not hold as expected, while the items comprising the other three scales held as expected. One possible explanation for this finding is that those types of delinquents do not consistently experience any one particular pattern of life-events, but rather the amount of life-change they experience is derived from varied, nonspecific sources.

Another interesting notation concerns the specific nature of the 12 items which were not found to have any discriminatory value for any of the types of delinquents, nor for the normals. A closer inspection of those items reveals half of them to deal with illness and hospitalization events. Inasmuch as those six items comprise most of the totality of health related events included in the Checklist, it seems that family and personal records of illness and/or hospitalization are irrelevant sources of life-change in attempting to differentiate types of delinquency as well as delinquents from nondelinquents.

Examination of Tables 14, 15 and 16 shows that significantly fewer status-offenders and nondelinquents experience life-events related to each of the three categories. Again this suggests that status-offenders as a group are more closely related to nondelinquents than they are to the rest of the delinquents with respect to the environmental influences which impinge upon them.

On closer inspection it can be seen very clearly that only the two most severe types of delinquents (those who commit "acts against property" and those who commit "acts against persons") contribute to the differentiations for the status-offenders and for the nondelinquents. At least twice as many of the more severe delinquents are affected by environmental influences stemming from all three environmental spheres than status-offenders and nondelinquents.

Moreover, home and family as well as personal events appear to contribute little to the differentiation of the more severe types of delinquents from each other. This finding suggests that it is the way in which those events are experienced by those types of delinquents that is differentially important and not the events per se.

The Judicial/Juvenile Court category very clearly shows that the greater the degree of severity of delinquency the greater the percentage of delinquents experiencing events related to judicial involvement with the law. This is somewhat of an obvious finding inasmuch as nondelinquents, by definition, have not been exposed to those situations arising from involvement with the law, and that with increasing severity of delinquency follows increasing penetration into the Juvenile Court system, and therefore greater exposure to more life-events in this category.

Summary

In this chapter the findings of the analysis of the data were presented as they related to each hypothesis, followed by a discussion of the results.

CHAPTER V

Conclusions, Limitations and RecommendationsConclusions

The primary purpose of this study was to develop and validate an instrument to predict the category and severity of juvenile delinquency by assessing the type and intensity of life-change.

The following general conclusions were derived from analysis of the data:

1. The amount of life-change required by a number of empirically derived life-events can successfully be quantified by three groups of professionals working in agencies dealing with youth problems (psychologists, social workers and probation officers). The three groups are homogeneous in terms of relative order of ranking of the life-events and the magnitude of the life-change they require.
2. A strong positive correlation was found to exist between the amount of experienced life-change and severity of juvenile delinquency, as well as types of delinquency.
3. Juvenile delinquent subjects experience significantly more amount of life-change than nondelinquents.
4. Certain specific life-events can significantly differentiate between juvenile delinquent subjects and nondelinquent subjects, as well as among types of delinquents.
5. Life-events grouped according to three major categories (Home and Family, Personal, and Judicial/Juvenile Court) have only limited

partial value in discriminating among the various types of delinquents. While the status offenders and nondelinquents were found to experience significantly fewer life-events in each of the three categories than the rest of the delinquents, no significant differences were found among the various types of delinquents in the reported amount of experienced events in all three categories.

Based on the findings of this research, the concept of life-change appears to have relevance to the severity of delinquency and to contribute to the understanding of specific types of delinquents.

It is clear from this study that certain life-events tend to occur to an extent greater than chance expectations among juvenile delinquents, and that their occurrence is strongly related to the degree of severity of delinquency being exhibited. Even though further information is needed to specify the relationships more precisely, the concept of the deleterious effects of accumulated stress on the lowering of one's adaptive capabilities may help to explain the observed relationship. This relationship for the delinquent sample seems analogous to similar relationships found by Holmes and Rahe and their coworkers, between physical illness and life-stress. Their interpretation of that relationship is founded on the concept that the greater the life-change the greater the lowering of resistance to disease. The parallels between disease and delinquency (a "social ill") appear legitimate. This, in turn, suggests the need for early therapeutic intervention in a supportive effort to help those juveniles who come to the attention of the judicial system.

Early therapeutic intervention appears to be even more important in the case of status-offenders, and special efforts should be made to implement the current judicial trend to divert status-offenders from further penetration into the system and to prescribe therapeutic interventions which parallel those used with nondelinquents. Indeed to channel status-offenders into the judicial system would only expose them to more experiences or situations in common with a more delinquent population, and in turn viciously contribute to their delinquency.

This study makes no claims to have found causal relationships; however, the patterns found strongly suggest at least partly specific relationships between life-events and types of delinquency. These patterns further indicate that the qualities as well as quantities of life-events play some role in determining the severity of delinquency.

While the same life-event or category of events may be associated with a particular type of delinquency, this does not necessarily infer a causal relationship. Any causal relationship is always complex and the delineation of a pathogenic contribution long after the events is an extremely difficult task. The relationship derived from the data obtained from the investigation, therefore, needs to be interpreted with caution. Several structural limits of this study restrict its conclusions and limit their generality.

Limitations

The findings of this study apply directly only to the selected subjects for this study. Any generalizations beyond this point should be accompanied by further research.

Although standardized instructions were given to each subject before completing the Checklist, there were by necessity many different administrators. Therefore, there is no assurance that every subject had the same orientation to the task.

Although the subjects were urged to complete the Checklist as carefully and as honestly as possible, there was no way to insure the best efforts of the subjects. Some defensiveness on the part of some subjects might have been mobilized by the intimate nature of some of the items and related feelings of anticipated negative consequences.

Recommendations for Further Research

Further research appears necessary to validate or challenge the findings of the present study. A desirable aspect of future investigations in this area is that the weightings for the life-events should be derived from the juvenile population itself so as to reflect the juveniles' own perception of the severity of the events, rather than from "outsiders," professionals, or informants such as parents.

Even more specifically, there should be a quantification of the importance of each type of event for each subject, since what is stressful to one person may be of little consequence to another.

Furthermore, work is required to identify how many times each event occurred. While some events could obviously only happen once ("death of a parent"), others such as "being held in detention" could occur frequently.

It is additionally recommended that prospective, longitudinal research be done to attempt to establish more definitive causal relationships between life-change and delinquency.

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APPENDIXES

APPENDIX A

Social Readjustment Rating Questionnaire

I would like your help in determining the importance of certain life-events that affect the social readjustment of adolescents. Social readjustment includes the amount and duration of change in the youth's accustomed pattern of life, regardless of the desirability of the event.

You are asked to rate a list of life-events as to the relative degree of readjustment necessary for adolescents. In scoring, use all of your experience with youths in arriving at your answer, striving to give your opinion of the average degree of readjustment necessary for each event, rather than the extreme.

The mechanics of rating are these:

Using a scale of 1-100, with 100 representing maximum disruption, event number 1 has already been assigned an arbitrary value of 50. This value has been assigned simply as a point of reference and does not necessarily reflect the relative standing of that item.

As you complete each of the remaining events think to yourself, "will this event require more or less readjustment on the part of an adolescent than event number 1?" "Would the readjustment take longer or shorter to accomplish?" If you decide the readjustment is more intense and longer, then choose a proportionately larger number (51-100) and place it in the blank directly opposite the event in the column marked VALUES. If you decide the event represents less and shorter readjustment than number 1, then indicate how much less by placing a proportionately smaller number (49-1) in the blank.

"CRITICAL INCIDENTS" OR EVENTS IN THE LIFE OF ADOLESCENTS WHICH REQUIRE
SOCIAL READJUSTMENT ON THEIR PART AND/OR ARE STRESS PRODUCING

Event	Values
1. Birth of a brother or sister.	_____
2. Mother beginning to work.	_____
3. Parent losing job.	_____
4. Brother or sister leaving home.	_____
5. Death of a parent.	_____
6. Death of brother or sister	_____
7. Death of close friend.	_____
8. Separation of parents.	_____
9. Divorce of parents.	_____
10. Marriage of parent to step-parent.	_____
11. Major increase in arguments with parents.	_____
12. Discovery of being an adopted child.	_____
13. Move to a new home.	_____
14. Prolonged illness of parent.	_____
15. Required hospitalization of parent.	_____
16. Prolonged illness of brother or sister.	_____
17. Required hospitalization of brother or sister.	_____
18. Father and/or mother started drinking.	_____
19. Parent serving a jail sentence.	_____
20. Being "kicked out" of the house.	_____
21. Beginning junior or senior high school.	_____
22. Move to a new school.	_____
23. Failure of subject(s) in school.	_____
24. Placement in special education program.	_____

Event	Values
25. Outstanding school achievement (school team, cheerleader, etc).	_____
26. Not making an extracurricular activity at school.	_____
27. Being dropped out of school.	_____
28. Suspension from school.	_____
29. Major change in relationship or standing with peer group.	_____
30. Being the victim of a crime.	_____
31. Parent been the victim of a crime.	_____
32. Surviving a natural disaster (i.e. fire, etc.).	_____
33. Major change in family's economic status.	_____
34. Quit attending church.	_____
35. Becoming a full-fledged church member.	_____
36. Breaking up with boyfriend or girlfriend.	_____
37. Beginning to date.	_____
38. Fathering an unwed pregnancy.	_____
39. Unwed pregnancy of child.	_____
40. Becoming involved with drugs or alcohol.	_____
41. Prolonged illness of self.	_____
42. Required hospitalization of self.	_____
43. Acquiring a visible deformity.	_____
44. Acquiring driver's license.	_____
45. Acquiring a job.	_____
46. Losing a job.	_____
47. Pregnancy in unwed teenage sister.	_____
48. Receiving individual or family counseling.	_____
49. Undergoing a psychological/psychiatric evaluation.	_____
50. Being arrested by police.	_____

Event	Values
51. Being held in detention.	_____
52. Appearing in court (hearing or arraignment).	_____
53. Placement under court supervision.	_____
54. Placement in shelter home.	_____
55. Placement in foster home.	_____
56. Placement with a relative.	_____
57. Placement in group home or "ranch."	_____
58. Returning to own home from outside placement.	_____
59. Owing restitution.	_____
60. Assignment of work-order (25 to 50 hours).	_____
61. Assignment of work-order (50 to 100 hours).	_____
62. Placement on juvenile court probation.	_____
63. Release from juvenile court probation.	_____
64. Commitment to State Industrial School.	_____
65. Commitment to State Hospital Youth Ward.	_____
66. Release from State School or State Hospital.	_____
67. Commitment to SIS for observation only.	_____
68. Suspended commitment to State Industrial School.	_____
69. Parent abandoning the family.	_____

APPENDIX B

ADOLESCENT SOCIAL READJUSTMENT CHECKLIST

INSTRUCTIONS

THIS IS A LIST OF EVENTS THAT USUALLY HAPPEN IN THE LIVES OF YOUNG PEOPLE YOUR AGE. SOME OF THEM ARE PLEASANT, AND SOME UNPLEASANT.

PLEASE CHECK (V) ALL THOSE EVENTS OR SITUATIONS WHICH HAVE HAPPENED TO YOU IN THE PAST OR WHICH ARE HAPPENING TO YOU RIGHT NOW.

Please do not write in this space!	
AGE _____	CASE NO. _____
SEX _____	ASRC SCORE _____
GRADE _____	SEVERITY SCORE _____

Check	Event
___	1. YOU HAVE MOVED TO A NEW HOME.
___	2. A BROTHER OR SISTER WAS BORN.
___	3. MOTHER BEGAN TO WORK.
___	4. ONE OF YOUR PARENTS HAS LOST HIS OR HER JOB.
___	5. YOU HAVE BEEN ARGUING MORE WITH YOUR PARENTS.
___	6. YOUR PARENTS WERE SEPARATED.
___	7. YOUR PARENTS WERE DIVORCED.
___	8. ONE OF YOUR PARENTS MARRIED YOUR STEP-PARENT.
___	9. YOUR BROTHER OR SISTER HAS HAD A LONG ILLNESS.
___	10. YOUR BROTHER OR SISTER HAS GONE TO THE HOSPITAL.
___	11. YOUR PARENT HAS HAD A LONG ILLNESS.
___	12. YOUR PARENT HAS GONE TO THE HOSPITAL.
___	13. YOUR BROTHER OR SISTER HAS LEFT HOME.
___	14. ONE OF YOUR PARENTS HAS LEFT THE FAMILY.
___	15. YOUR TEENAGE SISTER HAS HAD A PREGNANCY OUTSIDE OF MARRIAGE.
___	16. THERE HAS BEEN A BIG CHANGE IN YOUR FAMILY'S ECONOMIC STATUS.
___	17. YOUR PARENT HAS BEEN THE VICTIM OF A CRIME.
___	18. ONE OF YOUR PARENTS STARTED DRINKING.
___	19. ONE OF YOUR PARENTS HAS BEEN IN JAIL.
___	20. YOUR BROTHER OR SISTER HAS DIED.
___	21. ONE OF YOUR PARENTS HAS DIED.
___	22. YOU HAVE QUIT ATTENDING CHURCH.
___	23. YOU HAVE BECOME A FULL-FLEDGED CHURCH MEMBER.
___	24. YOU HAVE BEGUN TO DATE.
___	25. YOU HAVE BROKEN UP WITH YOUR BOYFRIEND OR GIRLFRIEND.
___	26. YOU HAVE HAD A LONG ILLNESS.

Check	Event
___	27. YOU HAVE BEEN IN THE HOSPITAL.
___	28. YOU HAVE RECEIVED A PHYSICAL DEFECT.
___	29. YOU HAVE OBTAINED A DRIVER'S LICENSE.
___	30. YOU HAVE LOST A JOB.
___	31. YOU NOTICED A BIG CHANGE IN YOUR RELATIONSHIP WITH YOUR FRIENDS.
___	32. YOU HAVE SURVIVED A NATURAL DISASTER (SUCH AS FIRE OR FLOOD).
___	33. ONE OF YOUR CLOSE FRIENDS HAS DIED.
___	34. YOU HAVE BEEN KICKED OUT OF THE HOUSE.
___	35. YOU HAVE DISCOVERED THAT YOU ARE AN ADOPTED CHILD.
___	36. YOU HAVE BECOME INVOLVED WITH DRUGS OR ALCOHOL.
___	37. YOU HAVE HAD A PREGNANCY OUTSIDE OF MARRIAGE.
___	38. YOU HAVE FATHERED A CHILD OUTSIDE OF MARRIAGE.
___	39. YOU HAVE FAILED SUBJECTS IN SCHOOL.
___	40. YOU HAVE BEEN PLACED IN A SPECIAL EDUCATION PROGRAM.
___	41. YOU DID NOT MAKE AN EXTRACURRICULAR ACTIVITY (SCHOOL TEAM, CLUB).
___	42. YOU HAVE BEEN DROPPED OUT OF SCHOOL.
___	43. YOU HAVE BEEN ARRESTED BY THE POLICE.
___	44. YOU HAVE BEEN HELD IN DETENTION.
___	45. YOU HAVE APPEARED IN COURT.
___	46. YOU HAVE BEEN PLACED UNDER COURT SUPERVISION.
___	47. YOU HAVE BEEN PLACED IN A SHELTER HOME.
___	48. YOU HAVE BEEN PLACED WITH A RELATIVE.
___	49. YOU HAVE BEEN PLACED IN A GROUP HOME OR RANCH.
___	50. YOU HAVE RETURNED HOME FROM AN OUTSIDE PLACEMENT.
___	51. YOU HAVE BEEN ASSIGNED A WORK-ORDER (25 TO 50 HOURS).

CheckEvent

- ___ 52. YOU HAVE BEEN ASSIGNED A WORK-ORDER (50 TO 100 HOURS).
- ___ 53. YOU HAVE BEEN PLACED ON JUVENILE COURT PROBATION.
- ___ 54. YOU HAVE BEEN RELEASED FROM PROBATION.
- ___ 55. YOU ARE ON A SUSPENDED COMMITMENT TO THE STATE INDUSTRIAL SCHOOL.
- ___ 56. YOU ARE ON A COMMITMENT TO SIS FOR OBSERVATION ONLY.
- ___ 57. YOU ARE ON A COMMITMENT TO THE STATE INDUSTRIAL SCHOOL.
- ___ 58. YOU HAVE BEEN COMMITTED TO THE STATE HOSPITAL YOUTH WARD.

APPENDIX C

UTAH STATE JUVENILE COURT
SEVERITY CODE CALCULATION GUIDE

I. RESULT OF OFFENSE

<u>Weight</u>	<u>Description</u>
1	Disruption of Public Order
2	Intimidation of Public or Individual
3	Threatened Property Loss
4	Actual Property Loss Less Than \$50.00
5	Actual Property Loss More Than \$50.00
6	Threatened Bodily Injury
7	Bodily Injury
8	Death Threatened
9	Death of Victim

II. TYPE OF VICTIMIZATION

<u>Weight</u>	<u>Description</u>
1	No Victim Except Self
2	Mutual Victim (Both Agree to Illegal Act Involving Each Other)
3	Difuse Victim (Group)
4	Impersonal Victim (Not Known by Assailant)
5	Personal Victim

The severity score is derived by multiplying the weight of factor I by factor II. Thus an aggravated robbery of more than \$50 would be scored:

$$(I = 5) \times (II = 5) = 25$$

Similarly, destruction of property of less than \$50 would be scored:

$$(I = 4) \times (II = 3) = 12$$

And, selling of a narcotic drug would be scored:

$$(I = 1) \times (II = 2) = 2.$$

LIST OF OFFENSES

<u>Acts Against Persons</u>	<u>Category I</u>	<u>Category II</u>
<u>Homicide</u>		
Murder in the First Degree (Felony and Murder)	9	5
Murder in the Second Degree	9	5
Automobile Homicide influenced by drugs, alcohol, or negligent, reckless or wanton disregard for human life.	9	4
Voluntary manslaughter -- life taken in sudden quarrel or heat of passion.	9	4
Involuntary manslaughter -- life taken during commission of non-felonious act or without due caution.	9	4
Attempted murder by poison.	8	5
<u>Sex Offenses</u>		
Rape -- sexual intercourse with one under 13 or incapable of consent, or by fear or force, or drugged or unconscious or believing she is married.	6	5
Carnal knowledge of female between 13 and 18.	1	5
Taking indecent liberties with or on a child under 14.	2	5
<u>Robbery</u>		
Taking personal property from person by force or fear.	5	5
Obtaining property with consent induced by use of force or fear.	4	5
Unsuccessful attempt to extort by verbal threat.	3	5
<u>Batteries</u>		
Willful use of force or violence upon another.	7	5
Battery against a police officer preventing him to do his duty.	7	5

	<u>Category I</u>	<u>Category II</u>
Cutting off, disabling, cutting, or putting out a member of body of another or slitting the nose, ear or lip.	7	5

Assaults

Assault is an attempt with the ability to violent injury on another	6	5
Assault with intent to commit rape or mayhem.	6	5
Assault by throwing any caustic chemical to disfigure a person.	6	5
Assault with a deadly weapon with intent to do bodily harm.	6	5
Assault with narcotics or anaesthetics with intent to commit a felony.	6	5
Assault with intent to commit a felony not enumerated elsewhere in this section.	6	5
Assault with intent to murder	8	5
Assault with a deadly weapon with intent to commit robbery.	6	5

Acts Involving Property

Burglary

Burglary in the First Degree-- Forcible or non-forcible entry to commit larceny or any felony when fire arms or explosives are used.	5	3
Burglary in the Second Degree, same as First Degree except it does not require use of fire arms or explosives.	5	3
Possession of burglarious tools including keys with intent to break in or knowing they are to be used in committing a misdemeanor or felony.	3	3
Unlawful entry with intent to damage, injure or annoy.	2	3

Category I Category II

Arson--Fire Setting

Arson--the willful and malicious fire setting of any dwelling, house, or adjoining building.	5	4
Arson in Second Degree--Same as Arson except the fire setting was not parcel of a dwelling or house.		
Arson in Third Degree--same as Arson except the fire setting was to a field, car or other property not his own worth \$25 or more.	4	3
Attempted arson--an attempt at any of the arsons defined above.	3	3
Fire setting--negligent or willful but not malicious setting on fire of fields, grass, crops or livestock not his own.	1	3

Larceny

Grand Larceny--taking the personal property another exceeding \$50 in value or from his person/possession of recently stolen property without adequate explanation is prima facie evidence.	5	4
Grand larceny auto--same as grand larceny above.	5	4
Grand larceny gas--same as grand larceny above.	5	4
Grand larceny bike--same as grand larceny above.	5	4
Grand larceny shoplifting--same as grand larceny above.	5	3
Receiving stolen property of a value over \$50 knowing it was stolen.	5	1
Petty larceny--theft of property not defined in grand larceny.	4	4
Petty larceny auto--same as petty larceny above.	4	4
Petty larceny gas--same as petty larceny above.	4	4
Petty larceny bike--same as petty larceny above.	4	4

	<u>Category I</u>	<u>Category II</u>
Petty larceny shoplifting--same as petty larceny above.	4	3
Receiving stolen property of a value \$50 or less knowing it was stolen.	4	1
Finding lost property and not attempting to find owner before putting it to own use.	1	1
Driving a vehicle without owner's consent without intent to steal same.	1	4
Assisting or being an accessory or accomplice to driving a vehicle as described above.	1	4

Forgery/Fraud
Bad Checks

Forgery--falsely makes an instrument against an existing person or corporation with intent to defraud.	3	4
Issuing fraudulent paper--same as forgery except instrument is against non-existent person or corporation.	3	3
Counterfeiting--making; possession or possession of apparatus to make any of the species with intent to defraud any person.	3	3
Using, making, selling or giving away spurious coins for fraudulent operation of vending machines or other receptacles.	3	1
Obtaining money or property by false pretense with intent to cheat or defraud when value is over \$50.	5	4
Same as Fraud I except value is \$50 or less.	4	4
Defrauding hotels and boarding houses of food, entertainment, lodging, credit, etc.	4	3
Fraudulent use, theft or possession of credit card or device.	3	4
Passing a check against insufficient funds of not more than \$100.	4	1
Same as INFNDI except amount is more than \$100.	5	1

	<u>Category I</u>	<u>Category II</u>
<u>Destruction of property or Trespass</u>		
Bombing--the malicious damage or destruction of a building or car with any explosive substance when the life and safety of humans is endangered.	6	4
Bombing--same as above except humans not endangered.	5	1
Destruction of property--willful and malicious injury to the property of another.	4	3
Tampering with a vehicle--car strip-- willful injury, breaking or removing parts from a vehicle.		
Throwing or shooting objects at vehicles whether moving or standing.	3	1
Tampering with the railroad or receiving property described in 76-38-18.	3	1
Trespassing illegally on another's property.	1	1
Misuse of a Recreation Vehicle.	1	1
Maiming another's animal maliciously.	4	3
Killing another's animal maliciously.	5	3

Acts Against the Public Order

Harmful to Self or Others

Narcotic Drug selling, manufacturing, dispensing.	1	2
Narcotic Drug use or possession.	1	1
Narcotic Drug visiting--present where narcotics are knowingly being used.	1	1
Non-narcotic drug (depressants/stimulants) selling, manufacturing, dispensing.	1	2
Non-narcotic drug use or possession.	1	1
Non-narcotic drug visiting--present where a non-narcotic drug is knowingly being used.	1	1
Marijuana selling, growing or dispensing.	1	2
Marijuana possession or use.	1	1
Marijuana visiting--present where marijuana is being used knowingly.	1	1

	<u>Category I</u>	<u>Category II</u>
Purchase, possession, or use of psychotoxic chemical to become intoxicated.	1	1
Selling or supplying alcoholic beverages to a minor.		
Selling or offering to sell a psychotoxic chemical knowing the purchaser intends to become intoxicated.		

Illicit Sex Acts

Adultery--is committed when anyone other than unmarried females have intercourse with another married person.	1	2
Incest--marrying, cohabiting or having intercourse with a person known to be within the fourth degree of consanguinity.	1	2
Fornication	1	2
Sodomy--between consenting people.	1	2
Sodomy--when force, ignorance, deception or animals are used.	2	4
Prostitution--to engage, procure or solicit sex acts for hire.	1	2
Indecent, obscene or lewd acts including exposure, pornography or verbal obscenities.	1	4

Public Peace and Safety

Carrying concealed weapons such as slingshots, knife, revolver, etc. without written consent of a peace officer.	1	1
Possession of a deadly weapon with intent to assault another.	6	4
Threaten use of deadly weapon in any angry and threatening way.	6	4
Possession of a firearm by a person under 14 years.	1	1
Discharging a firearm from a vehicle or near any public highway.	1	1
Carrying a loaded firearm in a vehicle.	1	1
False Alarms (see local ordinances).	1	3

	<u>Category I</u>	<u>Category II</u>
Bomb threat--disturbing neighborhood quiet by threatening an explosion.	1	3
Riot or rout--use or attempted use of force or violence or advance to riot to disturb the public peace by two or more acting together.	2	3
Disturbing the peace by maliciously making loud noise, discharging firearms, offensive conduct, fighting, etc.	1	3
Refusing to disperse after warning or participating in a rout or unlawful assembly.	1	1
Foul and abusive language (see local ordinance).	1	3
Public intoxication--drinking liquor in a public place or being in an intoxicated condition in a public place.	1	1
Use, sale or possession of fireworks.	1	1
Littering--discarding substances which would or could mar or impair the scenic aspect of or beauty of UTAH.	1	4
Fish and Game.	1	1
Boating		
Telephone harassment includes all unidentified calls which disturb the peace of a person.	2	4
Conspiracy--when two or more conspire to commit a crime, convict, cheat or defraud another.	1	3
 <u>Interfering with a legal process</u>		
Perjury or subornation of perjury--giving or inducing another to give false testimony as to any material matter, action, or special proceeding civil, criminal, an inquiry involving the ends of public justice or under oath or affirmation.	1	1
Resisting arrest or interfering with an officer doing his duty.	1	1
Personating a public officer.	1	3
Contempt of court including failure to support a child, obey summons or other order of the court or violation of probation.	1	1

APPENDIX D

CATEGORIES OF LIFE EVENTS

Category I: Home and Family

<u>Item Number</u>	<u>Life Event</u>
1.	You have moved to a new home.
2.	A brother or sister was born.
3.	Mother began to work.
4.	One of your parents has lost his or her job.
5.	You have been arguing more with your parents.
6.	Your parents were separated.
7.	Your parents were divorced.
8.	One of your parents married your step-parent.
9.	Your brother or sister has had a long illness.
10.	Your brother or sister has gone to the hospital.
11.	Your parent has had a long illness.
12.	Your parent has gone to the hospital.
13.	Your brother or sister has left home.
14.	One of your parents has left the family.
15.	Your teenage sister has had a pregnancy outside of marriage.
16.	There has been a big change in your family's economic status.
17.	Your parent has been the victim of a crime.
18.	One of your parents started drinking.
19.	One of your parents has been in jail.
20.	Your brother or sister has died.
21.	One of your parents has died.

Category II: Personal

- | | |
|-----|---|
| 22. | You have quit attending church. |
| 23. | You have become a full-fledged church member. |
| 24. | You have begun to date. |
| 25. | You have broken up with your boyfriend or girlfriend. |

26. You have had a long illness.
27. You have been in the hospital.
28. You have received a physical defect.
29. You have obtained a driver's license.
30. You have lost a job.
31. You noticed a big change in your relationship with your friends.
32. You have survived a natural disaster (such as fire or flood).
33. One of your close friends has died.
34. You have been kicked out of the house.
35. You have discovered that you are an adopted child.
36. You have become involved with drugs or alcohol.
37. You have had a pregnancy outside of marriage.
38. You have fathered a child outside of marriage.
39. You have failed subjects in school.
40. You have been placed in a special education program.
41. You did not make an extra-curricular activity (school team or club).
42. You have been dropped out of school.

Category III: Judicial-Juvenile Court

43. You have been arrested by the police.
44. You have been held in detention.
45. You have appeared in court.
46. You have been placed under court supervision.
47. You have been placed in a shelter home.
48. You have been placed with a relative.
49. You have been placed in a group home or ranch.
50. You have returned home from an outside placement.
51. You have been assigned a work-order (25 to 50 hours).
52. You have been assigned a work-order (50 to 100 hours).
53. You have been placed on Juvenile Court probation.
54. You have been released from probation.
55. You are on a suspended commitment to the State Industrial School.
56. You are on a commitment to SIS for observation only.
57. You are on a commitment to the State Industrial School.
58. You have been committed to the State Hospital Youth Ward.

VITA

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