Juvenile Status Offenders Perception of Life Change Events

by

Jeanette M. Broering

THESIS

Submitted in partial satisfaction of the requirements for the degree of

MASTER OF SCIENCE

in

Nursing

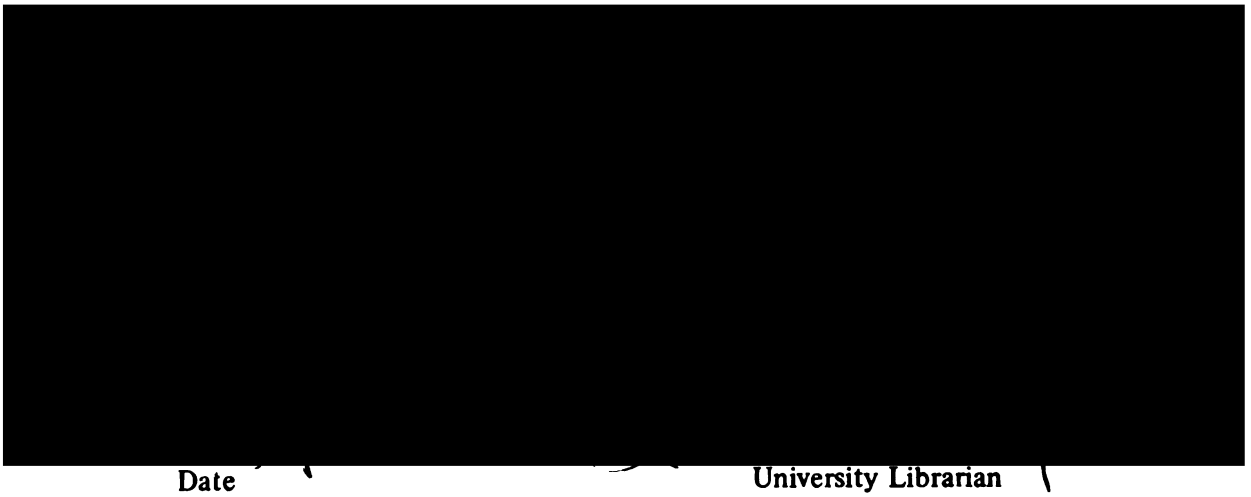
in the

GRADUATE DIVISION

of the

UNIVERSITY OF CALIFORNIA

San Francisco



Date University Librarian

Degree Conferred: MAR 31 1985

ABSTRACT

A 45 item modified adolescent life change event (LCE) questionnaire was used in this exploratory study to describe the desirability and occurrence of stressful life events within a population of juvenile status offenders (JSO). Peterson & Spiga's "adolescence and stress" model and the Johnson Behavioral Model (JBM) for nursing were utilized as the conceptual frameworks. Mean number of LCE were calculated for the past year and statistical significance was established between a comparison sample at $p < .01$ level. Analyses of data were done for LCE by the independent variables of age, sex, and ethnicity. For the purpose of discussion with the JBM analyses were done by the dependent variables of number of LCE and reasons for admission. Implication for nursing practice and future research were discussed.

ACKNOWLEDGEMENTS

This completed thesis reflects the concerted efforts of many persons who have supported me throughout my professional endeavors. To my parents, friends, and colleagues in St. Louis who encouraged me in the pursuit of my westward expansion. Particularly, Marion Baker, my professional mentor and dearest of friend for many years. Also to Alan Walker for his legal and professional counsel in actualizing those "once in a lifetime opportunities".

Thanks to my Committee, Lyn Savedra, Bonnie Holiday, and Ira Friedman for their enthusiasm, constructive criticisms, and encouragement to see this project to its completion. To Beatrice Benda, fellow graduate student and friend, for her hours spent brainstorming, editing, rewriting, and in general the encouragement during those times when this project appeared to be insurmountable. To Diane Wells, for her technical expertise and patience in producing a polished manuscript. Lastly, and most importantly, to David Alessi who tolerated me through all the vexations associated with this research project. He never complained and was always understanding of the inumerable hours I spent on this project.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

CHAPTER I

THE PROBLEM STUDY

Background

The primary aim of this proposed study was to describe the impact of Live Change Events (LCE) within a population of Juvenile Status Offenders (JSO). Within the context of an "adolescence and stress" model and the Johnson behavioral system model for nursing practice, the study examined the desirability (negative or positive) of particular life events and occurrence of these events over time. Measurements of life events were accomplished by utilizing the adolescent Life Change Events scale which has been adapted from previous researchers (Newcomb, Huba, & Bentler, 1981).

Previous research among adult populations has documented a correlation between the occurrence of LCE and the development of subsequent physical and mental illness (Holmes & Rahe, 1967; Coddington, 1971; Lloyd, Alexander, Rice, & Greenfield, 1980; Rahe, 1979; Isherwood, Adam & Hornblow, 1982; Passer & Seese, 1983; Coddington & Troxell, 1980).

Previous studies utilizing the LCE scale have been conducted within "normal" adolescent populations attending high school (Yeaworth, 1980; Palmer, 1981;

Treadwell & Johnson, 1980; Newcomb et al., 1981). Development of LCE scales for specific pediatric populations have resulted in an attempt to devise norms for the number of LCE occurring within these populations (Coddington, 1971 b). Specific subscales have been examined to illuminate potential problem areas pertinent to adolescent development such as family, peers, sexuality, and autonomy. The populations studied have been primarily white, middle class socioeconomic status (SES), and attending school. Implications for further research drawn from the initial studies have been aimed at utilization of LCE among "subpopulations" of adolescents, i.e. more diverse SES groups, different ethnicity, educational status, and additional items specific to the target population.

Assumption

Peterson and Spiga (1982) have developed a model for understanding stress at adolescence. It is their assumption that by the time person reaches adolescence he/she will have developed a definite response pattern to stress which can be clearly examined and may be predictive of his/her future pattern of dealing with stress. The "adolescence and stress" model contends

that many normative stressors occur sequentially at this time and that many unpredictable concurrent LCE may detract from the ability of an adolescent to cope and adapt positively (see Appendix I).

Statement of the Problem

Although there is no well defined theory of the influence of stress during adolescence, Coleman's focal theory (1978) hypothesizes that adolescents become more distressed when usual developmental changes occur concurrently instead of sequentially. Accumulation of life change events (LCE) could act as stressors which overload the adaptive capabilities of the system, thereby detracting from progression through the anticipated normal developmental tasks of adolescence. A profile describing the stressors experienced by JSO may be devised from such descriptive research. Intervention strategies which promote coping and normal progression through the adolescent years might best be accomplished after sound documentation of the quantity, desirability, and predictability (normal stressors versus unpredictable) of LCE has occurred. Therefore, the following research questions were formulated:

I. Do JSO experience a greater total number of LCE in the preceeding year than has been documented to

occur within normal populations of adolescents?

a) According to the "adolescence and stress" model are these LCE experienced by JSO normative developmental stressors or unpredictable life events?

b) How do JSO perceive the desirability (positive or negative) of LCE contained in this questionnaire?

c) Do any subscales emerge within the adolescent specific LCE scales which suggest a high occurrence of change in the past year, as experienced by the JSO?

Purpose

The purpose of this study was to explore and describe the desirability and occurrence of LCE as measured by an adolescent Life Change Event questionnaire within a population of JSO while in residence at Huckleberry House.

Significance

Traditionally the disposition of JSO has been managed by the court. The effective management has not been optimal. JSO have been housed in either adult criminal lock-up facilities or in separate children's detention facilities which were often more isolated

than the adult prisons (Children's Defense Fund, 1976). Rich (1982) reports that of 140 juvenile offenses, JSO offenses of running away, repeated truancy, and failure to obey parents ranked last in a public opinion survey.

Inherent in the overall needs of the JSO are the quality of health care. A 1971 survey by the American Academy of Pediatrics on health services within juvenile detention facilities found inadequate medical records, lack of routine health assessments, and no adequate sick call facilities. They also described this population to be at risk for suicide gestures and attempts as a result of their crisis situation and feelings of hopelessness and helplessness while detained (Litt, 1983).

Since the early 1970's there has been a movement toward the decriminalization of the JSO, thereby prohibiting retention in jails or lock-up facilities. The current trend has been toward placement in a variety of youth alternative programs. Many of these placements are short-term and do not address the long-term needs of the youth and their families. Brennan, Huizinga, & Elliott (1978) found that only 10 to 15 percent of runaways received any after care services upon returning home. Brennan et al. (1978)

have documented that many of these youths have significant school problems, emotional problems, dysfunctional family units, and many unmet health care needs. They recommended that the provision of services need to be long-term with appropriate problem assessment, intervention strategies, and periodic re-evaluation of effectiveness in order to provide flexibility of program planning.

The Office of Juvenile Justice and Delinquency has made recommendations in order to reduce the harmful effects of incarceration within the juvenile justice system. They are: "(a) the removal of all status offenders from lock-up facilities, (b) maximum utilization of community based alternatives to the court, and (c) the diversion, whenever possible to avoid adjudication and recidivism by providing alternate methods of handling (Rich, 1982, p. 150)."

A paucity of nursing literature exists regarding nursing within correctional facilities. Chaisson (1981) describes the delivery of health care within the criminal justice system as being the last frontier of the health care system.

In planning health care interventions which promote healthy adaptation, research inquiries should

be directed at documenting the existence and significance of LCE within the adolescent. Generation of research hypotheses which mediate the impact of stress among the JSO population may then be a logical outcome. Intervention strategies may be devised and tested.

Definition of Terms

Juvenile Status Offender has been legally defined by the state of California as a person within the jurisdiction of the court and is any person under the age of 18 years who persistently or habitually refuses to obey the reasonable and proper orders or directions of his/her parents, guardian, or custodian, or who is beyond the control of such person, or who is under the age of 18 years when he/she violated any ordinance of any city or county of this state establishing a curfew based solely on age is within the jurisdiction of the juvenile court which may adjudge such person to be a ward of the court. (Section 601 of the California Welfare and Institution Code, Effective March 4, 1975)

Runaway Youth is operationally defined by three criteria: (a) the age of the youth must be 17 years of age or younger, (b) absence of parental or guardian permission, and (c) criterion of time absent as over 24

hours or overnight. This has been the acceptable definition as outlined by the National Statistical Survey on Runaway Youth (Opinion Research Corporation, 1976).

Stress is the nonspecific response of the body to any demand made upon it (Selye, 1973).

Stressor is anything that places a demand upon the individual for change, adaptation, or readjustment (Sutterly, 1979).

CHAPTER II

CONCEPTUAL FRAMEWORK AND REVIEW OF RELEVANT LITERATURE

Introduction

The purpose of this study was to describe and quantitate the perceptions of JSO experiences of LCE within the past year and over time. Previous research has dealt with the occurrence of stressful LCE and its relationship to physical and mental health within adult populations. Development and utilization of LCE specific for other developmental age groups has resulted in a LCE inventory specific for adolescents. Although previous studies have used adolescent LCE questionnaires most of these studies have been within "normal adolescent" populations. A few studies have been done within subpopulations such as delinquents or hospitalized children. Therefore, the following areas were included in the review of the literature: (a) normal adolescent psychosocial development and normative stressors; (b) negative impact of runaway behavior; (c) evolution of stress research and its correlation with health and mental illness; and (d) previous research utilizing LCE scales within adolescence.

CONCEPTUAL FRAMEWORK

For the purposes of this study the "adolescence and stress" model devised by Peterson and Spiga (1982) paired with the Johnson Behavioral Model (JBM) for nursing practice were utilized. Both models were grounded in a systems approach. The JBM model was incorporated as an adjunct to describe the nursing implications of dealing with JSO.

Peterson and Spiga's assumption is that by adolescence a person has developed a definite pattern of response to stress which is observable and may be predictive of his/her future pattern of dealing with stress. Formulations of healthy coping mechanisms within adolescence may result in life long ability to deal with stress in a more constructive manner. Support for their model is derived from Coleman's (1978) focal theory which hypothesizes that distress occurs when developmental changes happen concurrently rather than sequentially.

The "adolescence and stress" paradigm lists normative stressors encompassing the parameters of puberty, cognition, peer group, school, parents, and society (see Appendix A). Normal stressors could cause temporary system imbalance. However, the future

outcome may be growth promoting. The synergistic effect of normal stressors compounded with unpredictable stressors may overload the adaptive capabilities of the person and detract from normal progression through the tasks of adolescence.

Using the "adolescence and stress" model as a conceptual approach for this study the research questions stated previously were formulated (see Chapter I). In addition, the Johnson Behavioral Model (JBM) for nursing practice was incorporated to provide a format for discussion regarding research on adolescence and stress and its relevance for nursing practice. The JBM focuses on behavioral system balance and stability for the individual (Fawcett, 1984, p. 55). Seven subscales have been identified which compromise the entire behavioral system of the person. They are (a) attachment or affiliative, (b) dependency, (c) ingestive, (d) eliminative, (e) sexual, (f) agressive/protective, and (g) achievment. Each of these systems have been operationally defined (see Appendix B).

The ability for the subsystem to fulfill their function depends upon certain basic requirements being met, such as protection from noxious influences,

nurturance from the environment and stimulation to promote growth. The ability for the system to perpetuate itself is based in providing a predictable environment with adequate resources for growth to occur. Malfunction within the subsystems may occur if these conditions are not met with the anticipated alteration in behavior which is disorganized, irratic, and dysfunctional. According to Johnson this may occur when there is illness or disruption in the internal or external enviornment. System instability results when stress exceeds an individual's ability to cope. The LCE questionnaire used in this study has been subdivided into ten subscales (see Table 1). Each subscale lists a heading describing the content of the items contained on the scale. Because the JBM was incorporated into the study, each subscale has additionally been assigned an appropriate corresponding JBM subsystem label.

During analysis, interventions for the health care provider may be derived after examination of data obtained in each of the subscales and equivalent JBM subsystems.

REVIEW OF RELEVANT LITERATURE

Normal Adolescent Development

All life can be considered transitional. However, the second decade of life has particular importance because of the rapidity and magnitude of change, both biological and psychosocial occurring simultaneously. It is a period characterized by accelerated physical growth, change in reproductive capabilities, and transformation in cognitive, behavioral, and social areas. Developmental psychologists such as Hall, Blos, and Freud (Peterson & Spiga, 1982, p. 515) theorized that rapid biologic changes result in a near psychotic state in response to pubertal development. No research to date has been able to substantiate the relationship between biologic change and the impact of puberty on psychological functioning. On the contrary, many adolescents make the transition through this period without a storm and stress reaction to this developmental stage.

The overall developmental tasks of adolescence are emancipation and separation from the family, establishing a self-identity based in reality, development of a personal internalized values system, development of a sexual identity and orientation, and

establishing future vocational goals (Brown, 1978; Nelms, 1981).

Jessor (1982) has expanded on the notion of adolescent development as being a period of major transition. He defines adolescence not only from a chronologic or biologic perspective but includes a complex psychosocial component. The adolescent encounters many changes in social and self definition. He/she may develop new patterns of interpersonal relationships, access to new personal and social roles, membership to different social groups and increased opportunities to pursue goals and gain rewards. Changes thereby occur not only on a personal level but within a social context.

Transition through adolescence occurs at different times and levels. These developmental shifts can occur as behavior defined statuses, i.e., moving from abstainer to drinker, virgin to non-virgin; as socially defined roles, i.e., moving from student to employee, first time parent; or as personally defined statuses, i.e., from feeling dependent to autonomous. The concept of transition is a very active process. It requires trying on new behaviors, exploring new roles and sampling new experiences (Jessor, 1982).

Normative Stressors of Adolescence

Several authors (Peterson & Spiga, 1982; Mechanic, 1983) have identified normative stressors of adolescence to be (a) pubertal and biologic changes, (b) cognitive development, (c) alterations in parental and peer group relationships, (d) school changes, and (e) alteration in societal roles. A brief explanation of these parameters may be be helpful to illuminate the normative developmental stressors experienced by adolescents.

The primary significance of pubertal development is the obvious resultant physical change to adult stature. Mechanic (1983) believes that symptom monitoring during adolescence occurs during rapid body changes. As a result, adolescents report more psychosomatic complaints. However, this may not be psychosomatic malingering, but rather reflective of an attempt to understand new body feelings and sensations. He believes that adolescents making the transition through puberty may experience discontinuities in biologic parameters such as precocious or delayed onset of puberty. This may place significant demands upon the adolescent such as the early maturer whose physical development may be incongruent with cognitive

development.

Piaget's (1958) theory of cognitive development refers to the adolescent period as a transition from concrete operations to formal operations whereby concrete thinking processes are replaced by propositional logic and abstract thinking. Cognitive stress research has utilized Piaget's developmental psychology to explain the underlying process by which man interacts with his environment and adapts. Piaget refers to this process as "assimilation-accomodation", whereby people assimilate their environments and accomodate their own structure to learn and survive. Mechanic (1983) believes that increasing cognitive skills may enhance coping abilities and may result in the adolescent's ability to amplify or reduce stress.

Social change occurs on various levels of peers, school, parents, and societal role expectations. The role of the peer group takes on a new significance for the adolescent. According to Festinger's (Peterson & Spiga, 1982, p. 519) theory of social comparison the youth uses conformity to the group as a basis for establishing appropriate behavior. He believes that ambiguity about one's changing body and social milieu during adolescence leads one to utilize the group as a

mechanism whereby appropriate behavior is defined. A need for peer group conformity results in pressure to try new experiences condoned by the group, i.e., sexual activity, alcohol, or drug experimentation.

Anticipated social change within the school system may be signaled by the transition from middle school to junior high school. Separation between nonpubertal and pubertal students is common. Concurrent with this change is the structural change from having a primary teacher within one classroom to multiple teachers and multiple classroom changes. The total impact of school changes has not been well documented.

Significant areas of change for parents are adaptation to adult stature of their offspring and sexual maturity. Alterations in the ways that parents demonstrate affection to their offspring may occur which may be distressing to the parent and adolescent. The dramatic change in physical appearance may have implications on parents acceptance of their own aging and impending separation of their child.

Outward changes in appearance signal change in social perception of the adolescent and demands transition to adult roles by society. Role expectations are that one performs in an adult manner

and that occupational or vocational opportunities are pursued and fulfilled.

Negative Impact of Runaway Behavior

The majority of research done to date with JSO has focused on runaway behavior. Heightened awareness of the increasing numbers of runaway youths during adolescence has brought recognition of this problem as a significant growing contemporary social issue. Survey studies using probablistic sampling techniques have projected that at least one out of every eight teenagers will runaway at least once before their eighteenth birthday (Nye & Edelbrock, 1980). The majority of these youths are under age sixteen with an approximate equal male/female distribution (Young, Godfrey, Matthews, and Adams, 1983).

In 1973 the Secretary of the U.S. Department of Health Education and Welfare established an Intra-Departmental Committee on Runaway Youth. This committee was formed in response to the escalating number of runaway youth, delinquency cases, and to establish alternative programs other than jail for status offenders (DHHS Region X Report, 1983).

In 1984 the Subcommittee on Homeless Youth submitted a report on homeless youths in San Francisco

to the Mayor's Criminal Justice Council (Zellers & Belyea, 1984). This report was a compilation of testimony from a panel of multidisciplinary persons (criminal justice, mental health, social service, and medicine) considered to be expert in their respective disciplines. It projected that on any given night there were 1,000 homeless teenagers on the streets in San Francisco. Currently, only 44 beds exist for shelter. Many of these youths have been pushed out by their families, usually as a result of ongoing physical or sexual abuse. This finding was particularly true for females. Males often reported family rejection because of being gay and expressed difficulties surrounding issues of sexual orientation. Lack of adequate shelter, nutrition, and drug use have contributed to serious physical and mental health problems. Many of these youths were hesitant to utilize social services. Therefore, they delayed seeking social, psychiatiric and medical services until they were in a state of crisis.

In the past 20 years much research has been conducted in an attempt to uncover reliable, consistent or coherent information regarding the explanation of runaway behavior. The causality is often complex and

multifactorial. Theoretical constructs, though, continue to remain at a descriptive level with minimal explanatory or predictive abilities. Three major explanatory perspective have been utilized. The first is the psychological perspective, in which the cause of the runaway episode is viewed as a direct result of the individual's disturbed psychological dynamics. The second perspective is that of the social environment whereby the cause is found in a cruel, violent, or rejecting social enviornment, especially the family. The third perspective is the social-psychological perspective whereby complex interactions between the youth, their social environments, and family impact on their living space (Brennan, et al., 1978).

The most inclusive study to date was the 1978 Colorado HEW study by Brennan et al. A large sample size of 2400 was utilized. Random assignment into two groups of runaways were made, those referred by the criminal justice system and those families who identified a runaway episode within the previous year but had no contact with the courts. A third, non runaway control group was utilized. Extensive, semi-structured interviews and the administration of a variety of measurement tools by trained interviewers

aided in the development of a complex taxonomy of runaways. Brennan identified three major influencing variables of the family, peers, and school. Stressful life events in any of these areas seem to precede a runaway episode, particularly fights with parents or recent change in family structure (divorce, major moves, remarriage of parents).

The negative impact of running away on academic progress has been examined. School attendence may be temporarily interrupted for first time runners and may be permanently halted for chronic repeaters. One longitudinal study has documented the long-term deleterious effects on employment and vocational opportunities (Olson, Liebow, Mannino, and Shore, 1980). Intensive semi-structured interviews were conducted with 16 of the original 96 runaways 12 years later. Parents and siblings were interviewed where possible for a total of 44 interviews. Major findings were that repeated runaways were at highest risk for difficulties of relating to others and had limited work skills, education, and training. Findings for one time runners were not as clearly delineated. However, they seemed to be at lower risk developing long-term consequences. Conclusions of the study were that

intervention strategies should occur after the first episode to prevent recurrence and increase favorable prognosis. Major limitations of the study were its small sample size and uneven demographic distribution of all white males.

A myriad of medical and psychosocial needs exist for these teenagers. Medically they are at risk for multiple problems such as sexually transmitted diseases, pregnancy, drug and alcohol abuse, and physical or sexual abuse. Stable living arrangements may not be available making compliance with simple medical regimens difficult. Psychologically they may be living in a perpetual state of crisis. They often suffer from low self-esteem, guilt, depression, self destructive behavior, and are at risk for suicidal behavior.

The majority of medical research with runaways and delinquents has come from the New York City Juvenile detention facility. Epidemiological data collected by chart review over 11 years revealed that of 47,288 adolescents examined, 46% had medical problems (Hein, Cohen, Litt, Schomberg, Meyers, Marks, and Sheehy, 1980).

The medical profession has identified specific

areas of health care needs. The inclusion of confidential, elaborate drug histories have led to the identification of changing trends of illicit drug use within this population (Litt & Cohen, 1970; Hein & Litt, 1979). The routine gynecologic screening of all sexually active teens within this population has demonstrated that they are at risk for sexually transmitted diseases and abnormal cervical cytology (Hein, Marks, & Cohen, 1977; Hein, Schreiber, & Cohen, 1977). Sexual history data collected during the medical history revealed a mean age of first intercourse to be age 12 within this population (Hein, Cohen, & Marks, 1978).

Although the sample size utilized in the medical literature is great in numbers, research among the medical profession remains at a descriptive level. The population utilized is a mixture of juvenile delinquents and status offenders and may not be truly representative of the health care needs of the JSO population. No attempts have been made at understanding the dynamics of health promotion.

Collins, Friedman, Brown, & Irwin (1984) completed a survey study of 40 homeless and runaway youths to establish their medical needs while in residence at

Hospitality House in San Francisco. They reported that these youths experienced the anticipated medical/adolescent problems of acne, dental disease, recurrent tonsillitis, refractive errors, pregnancy, and sexually transmitted diseases. Many of these diagnoses were of some duration and consequently untreated. Mental health issues were paramount, with a high number of youths reporting current depressive symptoms (25/40), a past history of at least one suicide attempt (22/40), and some youths reporting repeated attempts (7/22). There were no differences between sexual minority youths when compared to heterosexual youths for suicidal ideation or attempts. Substance abuse was commonly reported (19/40) with marijuana being the drug used most commonly.

The nursing literature on the negative consequences of runaway behavior on health status remains at a descriptive level. Implications are drawn from anecdotal experiences or from the exisiting medical literature (Manov & Lowther, 1983).

Stress Research and the Evolution of Life Change Events Questionnaires

The popularization of the phenomena of stress was done in large part by Hans Selye (1973). His

laboratory research revealed a relationship between stress on the individual and physiologic changes within organ systems. Selye described the phenomena known as General Adaptation Syndrome (GAS) or biologic stress syndrome. The GAS contained three components: (a) alarm reaction, (b) stage of resistance, and (c) the stage of exhaustion. Selye also documented a specific physiologic response to correspond with the stages of GAS. Failure to adapt would result in exhaustion and eventual death of the organism. Selye describes "diseases of adaption" to be those not directly attributal to a specific pathogen, but that may be related to faulty adaptive response to stress. Psychosomatic illnesses such as headaches, insommia, gastrointestinal upset or ulcers, asthma, and cardiovascular disease were described to have a stress related etiology.

Holmes and Rahe (1967) in their review of previous studies revealed that clustering of social events require ongoing adjustments which seem to be associated with the onset of illness. Clusters of significant events identified through chart review of 5000 medical charts by previous researchers were used to develop the Social Readjustment Rating Questionnaire (SRRQ),

containing 43 life change event items. The SRRQ attempted to measure the intensity and duration of time required to adjust to a life change irrespective of that event's desirability. Life events were placed in rank ordering to reflect the significance of occurrence from most to least stressful.

Assignment of numeric values for each event was established during preliminary research. Respondents assigned an arbitrary value reflective of the item's ability to evoke change. The weighting of each item has come to be known as a life change unit (LCU). Calculation of a LCU score within the last year can then be calculated and used to quantify the number of LCU experienced in the past year.

Coddington (1972a) utilized the research inventory concept developed by Holmes and Rahe to establish scales appropriate for different pediatric populations. He surveyed 243 professionals (teachers, pediatricians, and mental health workers) who were routinely involved in the care of children to compile a list of life events appropriate for specific pediatric age groups. Rank ordering and assignment of LCU were accomplished by obtaining agreement on items between professional groups. Correlation coefficients ranked between 0.84

to 0.96 on all rank ordering for items included on the questionnaire. Coddington (1972b) then utilized these scales on 3500 children in an order to examine the lives of healthy children to understand the amount of social readjustment required in a child's environment. Coddington hoped to develop normative curves of social readjustment for each age group. The implications for practice were to be that, plotting of social adjustment for each child could occur in longitudinal fashion. The concept was analogous to plotting physical growth parameters over time. Coddington observed several phenomena that as a child's social sphere expands so does the need for social readjustment. Two ages emerged as requiring increased readjustment, first at age six to seven with the onset of school (2.63 LCE/year) and secondly at the advent of adolescence, ages 12 - 14 years (4.11 LCE/year in junior high school). In senior high school 4.71 LCE/year were reported. Monitoring of social readjustment could be used as a monitor of adaptation to the internal and external environment and has implications for health promotion within pediatrics.

Adolescent Life Change Events Research

The utilization of LCE scales specific for

adolescents has been small in number and limited to use within normal adolescent populations (Yeaworth, York, Hussey, Ingle, & Goodman, 1980; Gad & Johnson, 1980; Newcomb et al., 1981).

Yeaworth et al. (1980) developed a LCE Scale appropriate for use with adolescents known as the Adolescent Life Change Event Scale (ALCES). It is a refinement from other researchers (Holmes & Rahe, 1967; Coddington, 1972a) instruments. Their working hypotheses were that LCE threaten the successful completion of adolescent developmental milestones of independence, career choice, and sexuality. LCE scales, therefore, need to be specific to address these issues.

Subjects were asked to respond to LCE on a dichotomous choice of occurrence versus nonoccurrence and rating of desirability on a one to five scale as to how upsetting an event might be. Analyses of data calculated the mean number of LCE for females to be 8.7 and 7.8 for males in the past year. Major limitations of the study was the utilization of a homogenous, exclusively white, middle class sample. Areas ranked as most stressful were: (a) events of death or separation (divorce, parental separation), (b) events

dealing with family problems particularly family member with a drinking problem, and (c) school failure.

Forman, Eidson, and Hagen (1983) repeated a cross validation study using a brief 24 item version of the Yeaworth Adolescent Life Change Event Scale (ALCES). They obtained a very high degree of correlation (0.90) in correspondence to the rank ordering of items by Yeaworth et al. Their results suggest that the use of the ALCES may be a valid tool for use in stress research with adolescents.

Gad and Johnson (1980) devised an adolescent LCE and administered it along with a 10 item scale measuring self perception of health status. This was administered to 167 Black and White youths, ages 12 to 14, within a club/organization setting (i.e. Y.M.C.A.). Their findings suggest that lower SES youth experience more negative LCE, irrespective of race. The study reported that more negative rated LCE were associated with decreased self perception of health status, drug use, and problems with adjustment.

The Newcomb, Huba, and Bentler (1981) study represents the use of large sample size of 1,018 participants representing a diverse ethnic background from within the Los Angeles County School System.

Major findings reported in their study were: (a) that previous stress was most predictive of current stress in specific areas of one's life, (b) escalation of stress from childhood to adolescence provide a pivotal point for developing effective coping styles and potential for autonomy in the future, and (c) standardization of weighting of LCE may provide a better basis for comparison between studies.

Summary

In summary, those disciplines involved in health promotion have come to realize that a relationship exists between the occurrence of stressful events, adaptation, and the onset of physical or mental illness. This has resulted in the development of age appropriate questionnaires which attempt to quantify the degree of social readjustment required by an individual. Sophistication and refinement of these instruments to measure the total impact of stress has yet to be formulated because of the many intervening variables. Conceptually, a model for stress in adolescence has evolved which hopes to predict sources of stress and provide a framework for research to mediate the negative effects and enhance healthy growth.

Much research to date has documented the multiple medical and psychosocial needs of the runaway or juvenile status offender. It is the intention of this research to provide preliminary data regarding the occurrence of LCE within this population of JSO.

CHAPTER III

METHODOLOGY

Research Design

The primary focus of this study was to explore and describe the desirability and occurrence of LCE among a population of JSO while in residence at Huckleberry House, the Central Receiving Facility of the Juvenile Court. Because of the preliminary exploratory design of the study descriptive statistics were utilized in the analyses of data. Statistical methods employed were the calculation of mean and frequencies for total number of LCE that occurred within the past year and over time. Correlation between mean number of LCE in the previous study by Newcomb et al. (1981) was done to draw some conclusion regarding the use of a LCE questionnaire within a sub-population of adolescents. Within subscales frequencies of occurrence on an item by item basis were done. Descriptive bivariate analyses were done to examine the frequencies of occurrence between LCE and the independent variables of age, sex, and ethnicity. Desirability was calculated to reflect the positive, neutral, or negative rating of each item using proportions. For the purpose of discussion with the JBM for nursing practice, additional analyses were

completed. Bivariate analyses using the two dependent variables of number of LCE and the major reasons for admission (running away versus beyond parental control) were included.

Description of Research Setting

Subjects were recruited from a population of JSO while they were in residence at Huckleberry House, the central receiving facility for all JSO in the San Francisco Juvenile Court system. Huckleberry House operates as a crisis intervention shelter with its primary focus on family reunification and diversion into appropriate community agencies for ongoing crisis resolution and therapy. Delivery of services to clients were provided by residential counselors, social workers, probation officers, and a half-time pediatric nurse practitioner. Youths in residence were sheltered for 48 judicial hours during which time problem assessment and discharge dispositioning occurred. While in residence each youth received social work evaluation, an indepth medical history, and physical exam, and an on site family session to evaluate family dynamics.

Sample

Approval for this proposed study was obtained from

the full committee (15 member review board) on human research at the University of California, San Francisco. On site approval was obtained from agencies involved in the operation of Huckleberry House. More specifically, approval was granted by the executive director of Youth Advocates and the Advisory Committee from Youth Guidance Center to the Central Receiving Facility.

Participation in the study was voluntary. Solicitation to participate occurred during the time the youth was in residence at Huckleberry House and after the appropriate consents were obtained. Written consent was obtained from the participant prior to completion of the research questionnaire. Parental consent was obtained whenever possible. This occurred by two mechanisms: (a) a verbal consent by phone, or (b) written consent by the parent at the time of the family session. For those minors who were from out of state and self supporting, consent was obtained only from the minor. Consents utilized in this study may be found in Appendix C and D.

No overt physical risks were anticipated from the completion of the questionnaire. Psychological pain may have been derived from recalling past painful

events. Topics which dealt with sensitive personal issues such as sexuality, drug or alcohol use, and child abuse were asked on the inventory. Participants were advised that they were not required to answer any items which made them uncomfortable if they so desired.

The questionnaire also included items which dealt with legally mandated reportable issues such as physical and sexual abuse. It was not the intention of the researcher to use the inventory for the purposes of legal reporting. During the time period of data collection the researcher also functioned in a clinical capacity at Huckleberry House. Indepth health histories and exams were performed for the purpose of identifying significant medical and psychosocial problems. All medical records were maintained as separate entities. Appropriate dispositioning of these problems (physical/sexual abuse) were based exclusively on information obtained during the clinical interview process and not during the research inventory.

Although no direct benefits would result by an individual's participation in the study, future benefits in helping other youths deal with stress might be an eventual outcome.

Sixty subjects were recruited to participate in

the study after completion of their medical exam. Data was collected over a two month period from October 26, 1984 to January 20, 1985. During that time 87 comprehensive medical exams were completed. A convenience sample of 60 subjects were recruited out of those 87 youths seen in the medical clinic. Time constraints imposed by the researcher's dual role as clinician in the facility did not always allow for equal opportunity of every youth seen to participate in the study. One youth refused to participate in the study because of the length of the questionnaire and self perceived inability to complete an inventory of such length.

Inclusion criteria for the study were: (a) meet the legal definition of a 601 Juvenile Status Offender as outlined in the 1983 California Institution and Welfare Code, (b) currently be in residence at Huckleberry House, (c) voluntary consent to participate, and (d) ability to read English and complete the questionnaire.

Techniques For Data Collection

The eligible adolescent was asked to complete a LCE questionnaire appropriate for adolescence which required fifteen to twenty minutes for completion. The

questionnaire was administered once with each subject. Numeric coding of the questionnaire was utilized to insure anonymity and confidentiality to the extent that was possible under law. Recruitment into the study and administration of the questionnaire was done only by the researcher. The researcher was available during completion of the questionnaire to answer any relevant questions regarding language or procedural issues of completing the scale.

A 45 item modified questionnaire containing life events specific for adolescents was devised from the research of Newcomb et al., (1981). A complete copy of the instrument as it was administered may be found in Appendix E.

In the original questionnaire used by Newcomb et al. (1981), 39 life events which could be experienced by an adolescent were used. These items were categorized into the following subscales: (a) parents and family, (b) accident and illness, (c) sexuality, (d) autonomy, (e) deviance, (f) relocation, and (g) distress. Two additional categories of specific life events appropriate for use within the JSO population were added accounting for the additional six items. The additional categories dealt with physical

or sexual abuse and substance (drug and alcohol) used by the adolescents themselves. These additional subscales were scored separately from the original seven subcategories. Questionnaire subcategories with items in each category and their rank ordering may be found on the suceeding page listed as table 1.

Subjects were asked to complete three tasks in regard to each item. First, they ranked each item according to desirability. This was accomplished by ranking each item on a five point happiness scale from "very unhappy" to "very happy" if the item were to happen. Because of the known occurrence of school problems within this population a visual mode to enhance ease of completion was adopted. Faces representing each point along the happiness continuum were utilized and subjects were asked to color in the face that best described their happiness rating on a particular item. Desirability was therefore divided into three categories: negative ("very unhappy" and "unhappy"), neutal, and positive ("very happy" and "happy"). Second, subjects were asked to rate the occurrence of LCE Scale twice to reflect the actual number of LCE within the immediate past year and all other previous years. Subjects were instructed to

Table 1

Adolescent LCE Questionnaire by Subscale

Subscales	Johnson Behavioral Model Subsystems
Family/Parents	Affiliative
1) Parents divorced	
25) Family had money problems	
28) Parents argued or fought	
40) Parent remarried	
45) Parent abused alcohol	
Accident/Illness	Aggressive/ Protective
2) Family accident/illness	
8) Given medication by physician	
11) Death in family	
43) Serious accident or illness	
Sexuality	Sexuality
9) Fell in love	
17) Got or made pregnant	
23) Got or gave venereal disease	
20) Started dating regularly	
35) Broke up with boy/girl friend	
41) Had a gay experience	
44) Started having sex	
Autonomy	Achievement
3) Found a new group of friends	
15) Began a time consuming hobby	
18) Decided about college	
21) Joined a club or group	
27) Got own TV or stereo	
32) Took vacation without parents	
33) Started driving	
37) Started making own money	

Deviance	Affiliative
5) Got in trouble with the law	
6) Stole something valuable	
22) Got in trouble at school	

Relocation	Restorative
14) Parent changed jobs	
20) Changed school	
36) Family moved	

Distress	Aggressive/ Protective
10) Face broke out with pimples	
13) Started seeing a therapist	
19) Thought about suicide	
29) Ran away from home	
31) Got poor grades in school	
42) Gained a lot of weight	

Other Items Added to Scale	Affiliative
12) Brother/sister moved out	
24) Met a teacher I liked alot	
39) Got religion	

Abuse	Aggressive/ Protective
7) Been beaten or physically abused	
26) Been forced to have sex	
34) Been yelled at a lot	

Substance Use	Dependency
4) Used alcohol	
16) Smoked marijuana or weed	
38) Used drugs	

check only those items that were affirmative. Items that had never occurred remained blank. This approach was done intentionally to enhance speed of completion and reduce error. Participants were also encouraged to write in additional items that they perceived as stressful if not included in the questionnaire.

Reliability of the original 39 item LCE questionnaire was reported by Newcomb et al. (1981, p. 405). The 39 items were subjected to monotonicity analyses to locate meaningful clusters of life events. Such subscales were devised, each containing three to eight mutually exclusive events. Kuder-Richarson internal consistencies were calculated and produced reliabilities scales that were not particularly high (0.36 to 0.58). Newcomb et al. (1981) reported that the low reliabilities reported may in fact reflect the independent nature of the items and to expect high intercorrelations might be unrealistic. Content validity of the instrument as reported by Newcomb et al. (1981) was based on the specific and concrete nature of each event and on expert agreement.

Because of the flexibility inherent in an exploratory, descriptive study an additional 6 items were added to the inventory by permission of the Thesis

Committee. Those items added dealt with issues of physical/emotional/sexual abuse and substance use. Because of the known incidence of these events documented in other research (surveys) and experience in clinical practice with this population, the researcher thought ommission of these items would be a significant limitation of the 39 item questionnaire.

The ability for researchers to accurately measure stress during adolescence has yet to attain a high degree of sophistication. Previous researchers have attempted to operationalize stress during adolescence by selecting those events which are most likely to occur (Coddington, 1972a, 1972b; Gad and Johnson, 1980; Palmer, 1980; Yeaworth, et al., 1980; and Newcomb, et al., 1981). The use of adolescent LCE questionnaires remains in transition. Therefore, a high degree of reliability and validity in using these instruments have yet to be documented.

CHAPTER 4

ANALYSIS OF DATA

Introduction

It was the purpose of this study to report the responses for the following research questions: (a) do JSO experience a significantly greater number of LCE within the past year than has been documented to occur among a normal population of adolescents; (b) how do JSO perceive the desirability of these life event items if they were to hypothetically occur now in their life; (c) using an "adolescence and stress" model as a guide, were the LCE experienced predictable developmental stressors or unpredictable LCE; and (d) in examining percentage of LCE within subscales, do any areas of excess or deprivation appear as compared to previous research.

For the purpose of analysis the following areas were examined: demographic data; mean number of LCE within the past year and over time; degree of statistical significance of LCE when compared to normal population utilizing parametric statistics (t-test); desirability rating for each item; the frequency of LCE in the past year by the independent variables of age groups, sex and ethnicity; and the frequency of

occurrence of predictable versus unpredictable LCE. Analysis using the two dependent variables, number of LCE and major reasons for admission, were included for the purpose of discussion with the JBM.

Demographic Data

Frequencies and proportions were calculated on all demographic data. A compilation of demographic descriptors may be found in Table 2, 3, and 4.

Three major independent variables of age, sex, and ethnicity were identifed. A description of the sample based on these independent variables may be found on the succeeding pages listed as Tables 2 and 3.

Age categories were collapsed to represent early (11-13 years), middle (14-16 years), and late (17 years) adolescence. Bivariate statistics, means and frequencies between the three age groups and occurrence of LCE within the past year were calculated (see Table 11).

Sex distribution revealed 62% female participants and 38% males of the 60 subjects. This female to male predominance has also been experienced in the overall population serviced by Huckleberry House and has not been unique to the medical clinic.

Ethnicity data collected were reflective of the

broad spectrum of ethnic groups naturally occurring in the San Francisco Bay Area. Seventeen percent of the sample were from mixed parentage.

The number of admissions for each youth to Huckleberry House was recorded. Seventy-five percent of the sample were in residence for their first episode. Twenty-five percent were housed for a second or more episodes, which may be reflective of ongoing unresolved family or personal stress.

Youths were asked to state their reason for admission to Huckleberry House. Categories for admission were formulated based on youth's responses. Seventy-two percent of youths in this study who came to Huckleberry House were admitted for two reasons, after a runaway episode or for being beyond parental control. A small number were runaways from out of state. However, the majority of youths served were from within San Francisco City/County. Their running away episodes were usually a result of intolerable domestic situations.

Thirty-five percent of youths were admitted for being beyond parental control. They usually were transported by police escort. Many parents call the police to have the youth removed from the home or at

school because of inability to manage their youth's acting out behavior.

Socioeconomic status (SES) was calculated for head of household using Hollingshead two-factor index of social position (Myers and Bean, 1968). Fifty-seven percent of the sample were contained within social class IV or lower middle class. Thirty-nine subjects, or 65%, had a female head of household. Twenty-one subjects, or 35%, had a male head of household.

Marital status of the biologic parents was recorded to describe the intact status of the original parent dyad. Forty-five percent of the sample stated that their parents were no longer living together because of divorce. Ten percent of parents were currently separated.

During the medical interview it became apparent that a number of youths had experienced the death of a biologic parent. Therefore, data were collected to reflect death of a biologic parent. Four youths, or 7%, stated their biologic mother was dead. Six youths, or 10%, stated their biologic father was dead. Only one youth reported that both biologic parents were deceased.

In regards to residence status, 7 youths, or 12%,

replied that they currently had no place of residence. There were no youths currently living in foster or group homes. Four youths, or 7%, replied that they were currently living with adopted parents other than family relatives. Two youths, or 3%, were transferred from Huckleberry House to Youth Guidance Center (the San Francisco Juvenile Detention facility) to be held in an unlocked ward pending court petitioning for out of home placement.

Table 2

Summary of Sample Characteristics by Independent Variables of Age, Sex and Ethnicity

AGE	n	%
11	2	3%
12	1	2%
13	11	18%
14	13	22%
15	14	23%
16	12	20%
17	7	12%

SEX	n	%
Male	24	38%
Female	36	62%

ETHNICITY[a]	n	%
White	19	32%
Black	18	30%
Hispanic	9	15%
Asian	4	7%
Other/mixed ethnicity	10	17%

[a] Indicates rounding error

Table 3

Breakdown of Mixed Ethnicity or Other

AGE	SEX	PARENTS ETHNICITY	CURRENT RESIDENTIAL STATUS
13	female	mo/white fa/hispanic	living with biologic mother
16	male	mo/white fa/fillipino/ chinese	living with biologic father
13	female	mo/white fa/black	living with both parents
11	female	mo/spanish fa/black	living with adopted parents who are both black
15	female	mo/guamanian fa/guamanian	living with adopted parents. Runaway from Seattle,WA
16	male	black/spanish	living with biologic mother, parents separated
15	female	mo/mexican fa/white	living with parents
13	female	mo/white fa/black	living with mother father deceased
14	male	mo/Korean fa/black	living with biologic father and stepmother
14	male	mo/black fa/black/ Puerto Rican	living with biologic mother and stepfather (also black)

Table 4

Characteristics for Admission of Juvenile Status Offenders

	Number of Admissions[a,b]			
	1st	2nd	3rd	4th
Frequency	45	11	2	2
Percent	75	18	3	3

Reason for Admission[a,b]	Frequency	Percent
Running away	22	37
Curfew	5	8
Beyond parental control	21	35
Homeless	1	2
Awaiting placement	2	3
Pushout	3	5
Truancy	1	2
After suicide attempt	1	2
Self-referred	4	7

[a] [b] N = 60 for each group
indicates rounding error

Table 4

Family Characteristics of Juvenile Status Offenders

	Hollingshead Two-factor Index of Social Position[a,b]				
	I	II	III	IV	V
Frequency	1	4	11	34	10
Percent	2	7	18	57	17

	Head of Household[a,b]	
	Female	Male
Frequency	39	21
Percent	65	35

	Marital Status of Biologic Parents[a]				
	Never Married	Married	Separated	Divorced	Widowed
Frequency	12	13	6	27	2
Percent	20	22	10	45	3

[a] N = 60 for each group
[b] indicates rounding error

Number of Life Change Events

A 45 item LCE questionniare specific for use with adolescents was adapted from Newcomb et al. (1981) as the research instrument in this study. Mean number of LCE and standard deviations were calculated for past years LCE and previous years (see Table 5). Scoring of the inventory was completed using three categories. First, the total 45 items, second, the 39 item questionnaire as used by Newcomb et al. (1981) and lastly scoring those six additional items added by the researcher.

Polit and Hungler (1983) state that in order to achieve measurable comparison between two independent samples that parametric statistical t-tests have frequently been used. This establishes the degree of statistical difference between two groups and insures against the probability of chance occurrence.

A comparison with a normal population was done using a one tailed, two sampled t-test. Comparison was based on data obtained from the Newcomb et al. (1981) study which reported a mean number of LCE as 8.95 with a standard deviation of 3.789 on a sample of 1,018 adolescents (M. D. Newcomb, personal communication, March 7, 1985).

Table 5

Mean Number of Life Change Events Experienced in Past Year

	$\bar{X}$	SD	N
45 item LCE questionnaire	14.10	6.949	60
39 item LCE questionnaire	12.03*	5.784	60
6 addiitonal item item LCE	2.07	1.494	60

* comparison to reference population, one tail t-test, $p < .01$ (see text)

Mean Number of Life Change Events Experienced in Previous Years

	$\bar{X}$	SD	N
45 item LCE questionnaire	12.55	8.003	60
39 item LCE questionnaire	10.75	6.521	60
6 additional items	1.78	1.814	60

Statistical significance between the Newcomb data and the investigator's data achieved a degree of significance at a level of $p < .01$. Therefore, it appears that the occurrence of LCE experienced by JSO in the past year have been greater in number than known to occur within a normal population of adolescents.

Desirability of Life Change Events

Subjects were asked to rate the desirability of each item contained within the questionnaire. Responses should reflect their perception of how positive, neutral, or negative an item would be interpreted by them if it were to occur now in their life Table 6 contains the desirability rating of each item calculated by frequency. Because of the preliminary descriptive nature of this research project only the frequency of desirability was reported. No additional analyses with the desirability data were computed at this time.

Areas of family/parents, accident, illness, deviance, distress, and abuse received a high proportion of negative desirability ratings. Within the sexuality subscales items of contracting a sexually transmitted disease, breaking up with boyfriend or girlfriend, and having a gay experience all were given

Table 6.

Desirability Rating of LCE Experienced in the Past Year by JSQ.

Subscales/Subsystems[a]	Desirability		
	% Negative	% Neutral	% Positive
FAMILY AND PARENTS			
AFFILIATIVE			
Parents divorced	58	30	12
Family had money problems	78	18	3
Parent argued or fought	73	28	3
Parent remarried	38	43	18
Parent abused alcohol	88	12	-
ACCIDENT ILLNESS			
AGGRESSIVE/PROTECTIVE			
Family accident or illness	78	17	5
Given medication by physician	23	53	23
Death in family	93	3	3
Serious accident or illness	92	5	3
SEXUALITY			
SEXUALITY			
Fell in love	8	14	78
Got or made pregnant	59	24	17
Got or gave venereal disease	93	5	2
Started dating regularly	2	34	64
Broke up with boy/girl friend	83	17	-
Had a gay experience	87	8	5
Started having sex	24	32	44
AUTONOMY			
ACHIEVEMENT			
Found a new group of friends	12	38	50
Began a time consuming hobby	10	32	58
Decided about college	8	46	54
Joined a club or group	7	51	43
Got own TV or stereo	5	17	78
Took vacation without parents	8	23	68
Started driving	5	12	83
Started making own money	2	15	83

[a] N = 60 for each subscale

Subscales/Subsystems[a]	Desirability		
	% Negative	% Neutral	% Positive
DEVIANCE			
AFFILIATIVE			
Got in trouble with the law	92	8	-
Stole something valuable	78	21	2
Got in trouble at school	69	27	3
RELOCATION			
RESTORATIVE			
Parent changed jobs	15	75	10
Changed school	25	42	32
Family moved	43	38	18
DISTRESS			
AGGRESSIVE/PROTECTIVE			
Face broke out with pimples	83	15	2
Started seeing a therapist	40	50	10
Thought about suicide	74	18	9
Ran away from home	59	24	17
Got poor grades in school	85	13	2
Gained a lot of weight	75	15	10
OTHER ITEMS ADDED TO SCALE			
AFFILIATIVE			
Brother/sister moved out	54	25	20
Met a teacher I liked a lot	5	27	68
Got religion	19	49	32
ABUSE			
AGRESSIVE/PROTECTIVE			
Been beaten or physically abused	97	3	-
Been forced to have sex	83	12	5
Been yelled at alot	78	20	2
SUBSTANCE USE			
DEPENDENCY			
Used alcohol	62	27	12
Smoked marijuana or weed	46	25	29
Used drugs	66	25	8

[a] N = 60 for each subscale

high negative desirabiltiy and seem of importance to note.

Frequency of Occurrence of Life Change Events in the Past Year

Frequency of occurrence of LCE for the total population was calculated and reported on an item by item table (see Table 7). Listing of the Newcomb data for frequency of occurrence on a "normal" population was included for visual comparison (see Table 7). No correlation statistics comparing samples were done between the two data sets.

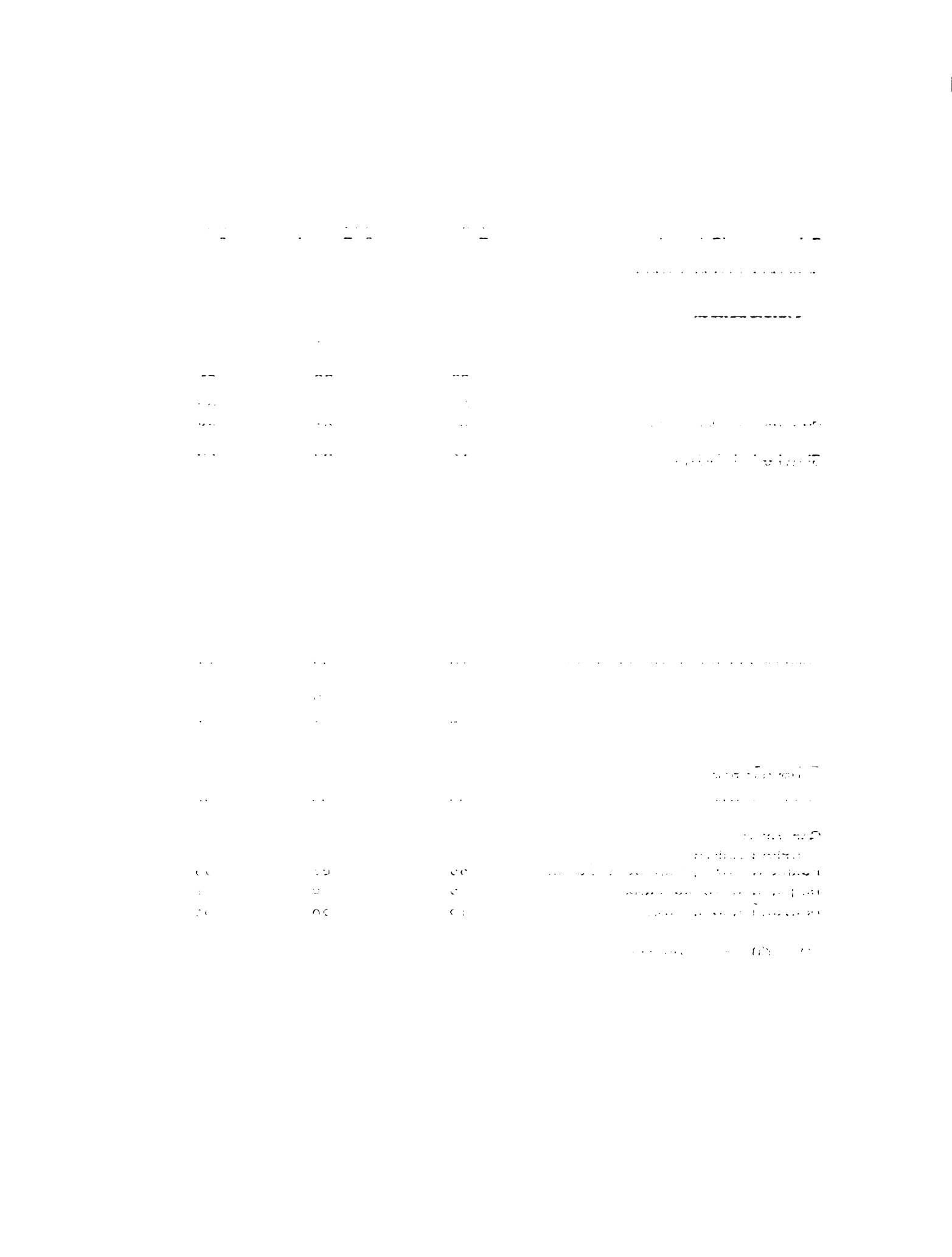
An arbitrary level of 50% occurrence of any LCE item within this sample was established as a criteria for highlighting that item with special comments. No correlation statistics within or between groups were calculated to establish levels of statistical significance, i.e., within a subgroup such as male versus female group differences.

Table 7

Number of LCE Experienced by JSO in the Past Year Compared with Newcomb Proportions

Subscales/Subsystems[a]	LCE		
	JSO Frequency	JSO Percent	Newcomb Percent
FAMILY AND PARENTS			
AFFILIATIVE			
Parents divorced	3	5	7
Family had money problems	16	27	15
Parent argued or fought	20	33	18
Parent remarried	5	8	3
Parent abused alcohol	9	15	6
ACCIDENT ILLNESS			
AGGRESSIVE/PROTECTIVE			
Family accident or illness	20	33	27
Given medication by physician	33	55	21
Death in family	12	20	21
Serious accident or illness	4	7	7
SEXUALITY			
SEXUALITY			
Fell in love	33	55	52
Got or made pregnant	8	13	5
Got or gave venereal disease	3	5	1
Started dating regularly	21	35	43
Broke up with boy/girl friend	33	55	38
Had a gay experience	3	5	1
Started having sex	18	30	22

[a] N = 60 for each subscale



Subscales/Subsystems [a]	LCE		
	JSO Frequency	JSO Percent	Newcomb Percent
AUTONOMY			
ACHIEVEMENT			
Found a new group of friends	40	67	38
Began a time consuming hobby	18	30	22
Decided about college	23	38	51
Joined a club or group	15	25	33
Got own TV or stereo	16	27	30
Took vacation without parents	21	35	36
Started driving	16	27	57
Started making own money	22	37	60
DEVIANCE			
AFFILIATIVE			
Got in trouble with the law	17	28	8
Stole something valuable	9	15	5
Got in trouble at school	34	57	17
RELOCATION			
RESTORATIVE			
Parent changed jobs	16	27	19
Changed school	29	48	11
Family moved	17	28	9
DISTRESS			
AGGRESSIVE/PROTECTIVE			
Face broke out with pimples	27	45	33
Started seeing a therapist	21	35	4
Thought about suicide	21	35	15
Ran away from home	33	55	5
Got poor grades in school	33	55	26
Gained a lot of weight	15	25	14
OTHER ITEMS ADDED TO SCALE			
AFFILIATIVE			
Brother/sister moved out	11	18	25
Met a teacher I liked a lot	21	35	64
Got religion	8	13	26

[a] N = 60 for each subscale

Subscales/Subsystems[a]	LCE JSO Frequency	LCE JSO Percent	LCE Newcomb Percent
ABUSE			
AGRESSIVE/PROTECTIVE			
Been beaten or physically abused	14	23	-
Been forced to have sex	4	7	-
Been yelled at alot	37	62	-
SUBSTANCE USE			
DEPENDENCY			
Used alcohol	26	43	-
Smoked marijuana or weed	27	45	-
Used drugs	16	27	-

[a] N = 60 for each subscale

Frequency of Occurrence of Life Change Events Using Bivariate Analyses

A breakdown of the frequencies of occurrence of LCE in the past year were done using bivariate analysis with the independent variables of sex, age, and ethnicity. Mean number of LCE were compared between groups. Frequencies of each event were shown in Tables 9 to 16.

Number of Life Change Events by Sex in the Past Year

The mean number of LCE experienced by sex for females were 14.50 LCE within the past year. The mean number of LCE experienced by males were lower, 13.56 LCE in the past year. Frequencies of LCE in the past year by sex may be found in Table 9 and 10.

Areas where differences or similarities appear when comparing by sex were parents arguing and parental alcohol use within the family/parents subscale. Within the sexuality subscale, only females reported having a gay experience. This may be a result of chance sampling and has not been the usually observed phenomena. More often a greater number of male adolescents housed at Huckleberry House have identified themselves as being from a sexual minority. Other subscales which deserve particular attention were the

deviance, distress, abuse, and substance use.

Number of Life Change Events in the Past Year by Age

The mean number of LCE was then calculated by age group. The 11-13 year old age group reported a mean number of 13.14 LCE within the past year. The 14-16 year old group reported a mean number of 13.97 LCE in the past year. Lastly, the 17 year old age group reported the highest number of LCE, 17 within the past year. The frequencies of each LCE experienced in the past year by age may be found in Table 11.

Within subscales, items that deserve closer examination were parents argued (family/parent subscale), started having sex (sexuality subscale), getting into trouble at school (deviance subscale), and changing school (relocation subscale). The entire subscales of distress, abuse, and substance use warrant comparison.

Number of Life Change Events Experienced in the Past Year by Ethnicity

The mean number of LCE were calculated by ethnic group. The following table reports the mean number of LCE experienced by each ethnic group.

Table 8

Mean Number of Life Change Events by Ethnicity

Ethnicity [a]	n	MEAN # LCE
White	19	18.21
Black	18	12.28
Hispanic	9	16.32
Asian	4	4.5
Others	10	11.6

[a] N = 60

The frequency of LCE experienced in the past year by ethnicity may be found in Tables 12 to 16.

For the White youths contained in this sample important subscales to examine were parent/family, deviance, distress, abuse, and substance use. For Whites within subscales, a high proportion reported changing school (relocation subscales). Black youths reported a high degree of change within the subscales of family/parents, distress, abuse, and substance use. This also deserves comparison with other ethnic groups. Blacks, also, continue to report a high incidence with the items trouble at school (deviance subscale), and changed school (relocation subscale). Most noteworthy for Asian youths were that among three subscales there were no responses (family/parents, others, and

substance use). Those subscales which generated the highest number of positive responses were autonomy, distress, and abuse (verbal). Youths of mixed ethnicity reported their highest occurrence of LCE withint the distress and abuse subscales. They also reported a high incidence of getting into trouble at school.

Table 9

Total Number of Life Change Events by Sex in the Past Year Only - Females

Subscales/Subsystems [a]	LCE by Female JSO Frequency	Percent
FAMILY AND PARENTS		
AFFILIATIVE		
Parents divorced	1	3
Family had money problems	11	30
Parent argued or fought	15	41
Parent remarried	4	11
Parent abused alcohol	7	19
ACCIDENT ILLNESS		
AGGRESSIVE/PROTECTIVE		
Family accident or illness	15	41
Given medication by physician	20	54
Death in family	10	27
Serious accident or illness	3	8
SEXUALITY		
SEXUALITY		
Fell in love	22	59
Got or made pregnant	6	16
Got or gave venereal disease	3	8
Started dating regularly	11	30
Broke up with boy/girl friend	19	51
Had a gay experience	3	8
Started having sex	14	38
AUTONOMY		
ACHIEVEMENT		
Found a new group of friends	22	59
Began a time consuming hobby	9	24
Decided about college	15	41
Joined a club or group	6	16
Got own TV or stereo	7	19
Took vacation without parents	13	35
Started driving	7	19
Started making own money	13	35

[a] n=37

Subscales/Subsystems[a]	LCE by Female JSO	
	Frequency	Percent
DEVIANCE		
AFFILIATIVE		
Got in trouble with the law	11	30
Stole something valuable	5	14
Got in trouble at school	21	57
RELOCATION		
RESTORATIVE		
Parent changed jobs	9	24
Changed school	18	49
Family moved	11	30
DISTRESS		
AGGRESSIVE/PROTECTIVE		
Face broke out with pimples	19	51
Started seeing a therapist	11	30
Thought about suicide	14	38
Ran away from home	21	57
Got poor grades in school	19	51
Gained a lot of weight	10	27
OTHER ITEMS ADDED TO SCALE		
AFFILIATIVE		
Brother/sister moved out	9	24
Met a teacher I liked a lot	16	43
Got religion	8	22
ABUSE		
AGRESSIVE/PROTECTIVE		
Been beaten or physically abused	11	30
Been forced to have sex	4	11
Been yelled at alot	22	60
SUBSTANCE USE		
DEPENDENCY		
Used alcohol	14	38
Smoked marijuana or weed	16	43
Used drugs	11	30

[a] n = 37 for all subscales

Table 10

Total Number of Life Change Events in Past Year Only - Males

Subscales/Subsystems[a]	LCE by Male JSO Frequency	Percent
FAMILY AND PARENTS		
AFFILIATIVE		
Parents divorced	2	9
Family had money problems	5	22
Parent argued or fought	5	22
Parent remarried	1	4
Parent abused alcohol	2	9
ACCIDENT ILLNESS		
AGGRESSIVE/PROTECTIVE		
Family accident or illness	5	22
Given medication by physician	13	57
Death in family	2	9
Serious accident or illness	1	4
SEXUALITY		
SEXUALITY		
Fell in love	11	48
Got or made pregnant	2	9
Got or gave venereal disease	-	-
Started dating regularly	10	43
Broke up with boy/girl friend	14	61
Had a gay experience	-	-
Started having sex	4	17
AUTONOMY		
ACHIEVEMENT		
Found a new group of friends	18	78
Began a time consuming hobby	9	39
Decided about college	8	35
Joined a club or group	9	39
Got own TV or stereo	9	39
Took vacation without parent	8	35
Started driving	9	39
Started making own money	9	39

[a] n = 23 for all subscales

Subscales/Subsystems [a]	LCE by Male JSO	
	Frequency	Percent
DEVIANCE		
AFFILIATIVE		
Got in trouble with the law	6	26
Stole something valuable	4	17
Got in trouble at school	13	56
RELOCATION		
RESTORATIVE		
Parent changed jobs	7	30
Changed school	11	48
Family moved	6	26
DISTRESS		
AGGRESSIVE/PROTECTIVE		
Face broke out with pimples	8	35
Started seeing a therapist	10	43
Thought about suicide	7	30
Ran away from home	12	52
Got poor grades in school	14	61
Gained a lot of weight	5	22
OTHER ITEMS ADDED TO SCALE		
AFFILIATIVE		
Brother/sister moved out	2	9
Met a teacher I liked a lot	5	22
Got religion	-	-
ABUSE		
AGRESSIVE/PROTECTIVE		
Been beaten or physically abused	3	13
Been forced to have sex	-	-
Been yelled at alot	15	65
SUBSTANCE USE		
DEPENDENCY		
Used alcohol	12	52
Smoked marijuana or weed	23	48
Used drugs	5	22

[a] n = 23 for all subscales

Table 11

Total Number of Life Change Events Experienced by Each Age Group of Juvenile Status Offenders

Subscales/Subsystems	Age Groups					
	11-13 Years[a]		14-16 Years[b]		17 years[c]	
	Freq.	%	Freq.	%	Freq.	%
FAMILY AND PARENTS						
AFFILIATIVE						
Parents divorced	1	7%	2	5%	-	-
Family had money problems	2	14%	13	33%	1	14%
Parent argued or fought	2	14%	14	36%	4	57%
Parent remarried	-	-	4	10%	1	14%
Parent abused alcohol	-	-	8	21%	1	14%
ACCIDENT ILLNESS						
AGGRESSIVE/PROTECTIVE						
Family accident or illness	9	64%	9	23%	2	29%
Given medication by physician	6	43%	24	62%	3	43%
Death in family	4	29%	7	18%	1	14%
Serious accident or illness	2	14%	-	-	2	29%
SEXUALITY						
SEXUALITY						
Fell in love	7	50%	22	56%	4	57%
Got or made pregnant	1	7%	5	13%	2	29%
Got or gave venereal disease	-	-	3	8%	-	-
Started dating regularly	3	21%	14	36%	4	57%
Broke up with boy/girl friend	9	64%	21	54%	3	43%
Had a gay experience	-	-	1	3%	2	29%
Started having sex	1	7%	15	38%	2	39%

[a] n = 14 for 11-13 year olds

[b] n = 39 for 14-16 year olds

[c] n = 7 for 17 year olds

Subscales/Subsystems	Age Groups					
	11-13 Years[a]		14-16 Years[b]		17 years[c]	
	Freq.	%	Freq.	%	Freq.	%
AUTONOMY						
ACHIEVEMENT						
Found a new group of friends	9	64%	24	62%	7	100%
Began a time consuming hobby	4	29%	12	31%	2	29%
Decided about college	4	29%	17	44%	2	29%
Joined a club or group	4	39%	8	21%	3	43%
Got own TV or stereo	5	36%	8	21%	3	43%
Took vacation without parents	6	43%	11	28%	4	57%
Started driving	3	21%	10	26%	3	42%
Started making own money	3	21%	15	38%	4	57%
DEVIANCE						
AFFILIATIVE						
Got in trouble with the law	4	29%	11	28%	2	29%
Stole something valuable	1	7%	6	15%	2	29%
Got in trouble at school	10	72%	22	56%	2	29%
RELOCATION						
RESTORATIVE						
Parent changed jobs	4	29%	11	28%	2	29%
Changed school	8	58%	18	46%	3	43%
Family moved	3	21%	11	28%	3	43%
DISTRESS						
AGGRESSIVE/PROTECTIVE						
Face broke out with pimples	5	36%	18	46%	4	57%
Started seeing a therapist	6	43%	12	31%	3	42%
Thought about suicide	4	29%	14	36%	3	43%
Ran away from home	8	57%	19	49%	6	85%
Got poor grades in school	7	50%	22	56%	4	57%
Gained a lot of weight	5	14%	8	21%	2	29%

[a] n = 14 for 11-13 year olds

[b] n = 39 for 14-16 year olds

[c] n = 7 for 17 year olds

Subscales/Subsystems	Age Groups					
	11-13 Years[a]		14-16 Years[b]		17 years[c]	
	Freq.	%	Freq.	%	Freq.	%
OTHER ITEMS ADDED TO SCALE						
AFFILIATIVE						
Brother/sister moved out	2	14%	8	21%	1	14%
Met a teacher I liked a lot	5	36%	13	33%	3	43%
Got religion	1	7%	4	10%	3	43%
ABUSE						
AGRESSIVE/PROTECTIVE						
Been beaten or physically abused	4	29%	9	23%	1	14%
Been forced to have sex	1	7%	3	8%	-	-
Been yelled at alot	9	64%	24	62%	4	57%
SUBSTANCE USE						
DEPENDENCY						
Used alcohol	5	36%	16	41%	5	71%
Smoked marijuana or weed	4	39%	20	51%	3	43%
Used drugs	2	14%	11	28%	3	43%

[a] n = 14 for 11-13 year olds

[b] n = 39 for 14-16 year olds

[c] n = 7 for 17 year olds

Table 12

Number of Life Change Events in Past Year Only - White

Subscales/Subsystems[a]	LCE by White JSO	
	Frequency	Percent
FAMILY AND PARENTS		
AFFILIATIVE		
Parents divorced	-	-
Family had money problems	8	42
Parent argued or fought	10	53
Parent remarried	2	11
Parent abused alcohol	6	32
ACCIDENT ILLNESS		
AGGRESSIVE/PROTECTIVE		
Family accident or illness	10	53
Given medication by physician	8	42
Death in family	3	16
Serious accident or illness	1	5
SEXUALITY		
SEXUALITY		
Fell in love	11	58
Got or made pregnant	4	21
Got or gave venereal disease	1	5
Started dating regularly	11	58
Broke up with boy/girl friend	13	68
Had a gay experience	1	5
Started having sex	6	32
AUTONOMY		
ACHIEVEMENT		
Found a new group of friends	15	79
Began a time consuming hobby	6	32
Decided about college	6	32
Joined a club or group	7	37
Got own TV or stereo	6	32
Took vacation without parents	10	53
Started driving	7	37
Started making own money	9	47

[a] n = 19 for each subscale

Subscales/Subsystems[a]	LCE by White JSO	
	Frequency	Percent
DEVIANCE		
AFFILIATIVE		
Got in trouble with the law	8	42
Stole something valuable	4	21
Got in trouble at school	14	74
RELOCATION		
RESTORATIVE		
Parent changed jobs	5	26
Changed school	11	58
Family moved	7	37
DISTRESS		
AGGRESSIVE/PROTECTIVE		
Face broke out with pimples	12	63
Started seeing a therapist	11	58
Thought about suicide	7	37
Ran away from home	13	68
Got poor grades in school	13	68
Gained a lot of weight	5	26
OTHER ITEMS ADDED TO SCALE		
AFFILIATIVE		
Brother/sister moved out	5	26
Met a teacher I liked a lot	9	47
Got religion	4	21
ABUSE		
AGRESSIVE/PROTECTIVE		
Been beaten or physically abused	6	32
Been forced to have sex	1	51
Been yelled at alot	12	63
SUBSTANCE USE		
DEPENDENCY		
Used alcohol	12	63
Smoked marijuana or weed	16	84
Used drugs	10	53

[a] n = 19 for each subscale

Table 13

Number of Life Change Events in Past Year Only - Black

Subscales/Subsystems[a]	LCE by Black JSO	
	Frequency	Percent
FAMILY AND PARENTS		
AFFILIATIVE		
Parents divorced	-	-
Family had money problems	5	28
Parent argued or fought	4	22
Parent remarried	-	-
Parent abused alcohol	3	17
ACCIDENT ILLNESS		
AGGRESSIVE/PROTECTIVE		
Family accident or illness	5	28
Given medication by physician	13	72
Death in family	4	22
Serious accident or illness	1	5
SEXUALITY		
SEXUALITY		
Fell in love	13	72
Got or made pregnant	2	11
Got or gave venereal disease	2	11
Started dating regularly	3	17
Broke up with boy/girl friend	11	61
Had a gay experience	-	-
Started having sex	7	39
AUTONOMY		
ACHIEVEMENT		
Found a new group of friends	11	61
Began a time consuming hobby	6	33
Decided about college	9	50
Joined a club or group	1	5
Got own TV or stereo	4	22
Took vacation without parents	5	28
Started driving	4	22
Started making own money	7	39

[a] n = 18 for each subscale

Subscales/Subsystems[a]	LCE by Black JSO	
	Frequency	Percent
DEVIANCE		
AFFILIATIVE		
Got in trouble with the law	4	22
Stole something valuable	-	-
Got in trouble at school	10	57
RELOCATION		
RESTORATIVE		
Parent changed jobs	5	28
Changed school	11	61
Family moved	3	17
DISTRESS		
AGGRESSIVE/PROTECTIVE		
Face broke out with pimples	7	39
Started seeing a therapist	3	17
Thought about suicide	3	17
Ran away from home	6	33
Got poor grades in school	11	61
Gained a lot of weight	3	17
OTHER ITEMS ADDED TO SCALE		
AFFILIATIVE		
Brother/sister moved out	2	11
Met a teacher I liked a lot	6	33
Got religion	-	-
ABUSE		
AGRESSIVE/PROTECTIVE		
Been beaten or physically abused	3	17
Been forced to have sex	1	5
Been yelled at alot	9	50
SUBSTANCE USE		
DEPENDENCY		
Used alcohol	5	28
Smoked marijuana or weed	7	39
Used drugs	2	11

[a] n = 18 for each subscale

Table 14

Number of Life Change Events in Past Year Only - Hispanic

Subscales/Subsystems [a]	LCE by Hispanic JSO	
	Frequency	Percent
FAMILY AND PARENTS		
AFFILIATIVE		
Parents divorced	3	33
Family had money problems	1	11
Parent argued or fought	4	44
Parent remarried	2	22
Parent abused alcohol	-	-
ACCIDENT ILLNESS		
AGGRESSIVE/PROTECTIVE		
Family accident or illness	2	22
Given medication by physician	5	56
Death in family	2	22
Serious accident or illness	1	11
SEXUALITY		
SEXUALITY		
Fell in love	4	44
Got or made pregnant	1	11
Got or gave venereal disease	-	-
Started dating regularly	6	67
Broke up with boy/girl friend	4	44
Had a gay experience	2	22
Started having sex	2	22
AUTONOMY		
ACHIEVEMENT		
Found a new group of friends	8	89
Began a time consuming hobby	3	33
Decided about college	3	33
Joined a club or group	4	44
Got own TV or stereo	2	22
Took vacation without parents	4	44
Started driving	4	44
Started making own money	2	22

[a] n = 9 for each subscale

Subscales/Subsystems [a]	LCE by Hispanic JSO	
	Frequency	Percent
DEVIANCE		
AFFILIATIVE		
Got in trouble with the law	4	44
Stole something valuable	4	44
Got in trouble at school	4	44
RELOCATION		
RESTORATIVE		
Parent changed jobs	4	44
Changed school	3	33
Family moved	5	56
DISTRESS		
AGGRESSIVE/PROTECTIVE		
Face broke out with pimples	5	56
Started seeing a therapist	4	44
Thought about suicide	6	67
Ran away from home	8	89
Got poor grades in school	4	44
Gained a lot of weight	3	33
OTHER ITEMS ADDED TO SCALE		
AFFILIATIVE		
Brother/sister moved out	2	22
Met a teacher I liked a lot	3	33
Got religion	2	22
ABUSE		
AGRESSIVE/PROTECTIVE		
Been beaten or physically abused	1	11
Been forced to have sex	1	11
Been yelled at alot	6	67
SUBSTANCE USE		
DEPENDENCY		
Used alcohol	5	56
Smoked marijuana or weed	2	22
Used drugs	2	22

[a] n = 9 for each subscale

Table 15

Number of Life Events by Race in Past Year Only - Asian

Subscales/Subsystems [a]	LCE by Asian JSO	
	Frequency	Percent
FAMILY AND PARENTS		
AFFILIATIVE		
Parents divorced	-	-
Family had money problems	-	-
Parent argued or fought	-	-
Parent remarried	-	-
Parent abused alcohol	-	-
ACCIDENT ILLNESS		
AGGRESSIVE/PROTECTIVE		
Family accident or illness	-	-
Given medication by physician	2	50
Death in family	-	-
Serious accident or illness	-	-
SEXUALITY		
SEXUALITY		
Fell in love	-	-
Got or made pregnant	-	-
Got or gave venereal disease	-	-
Started dating regularly	-	-
Broke up with boy/girl friend	1	25
Had a gay experience	-	-
Started having sex	1	25
AUTONOMY		
ACHIEVEMENT		
Found a new group of friends	1	25
Began a time consuming hobby	-	-
Decided about college	-	-
Joined a club or group	-	-
Got own TV or stereo	2	50
Took vacation without parents	1	25
Started driving	1	25
Started making own money	1	25

[a] n = 4 for each subscale

Subscales/Subsystems [a]	LCE by Asian JSO	
	Frequency	Percent
DEVIANCE		
AFFILIATIVE		
Got in trouble with the law	-	-
Stole something valuable	-	-
Got in trouble at school	1	25
RELOCATION		
RESTORATIVE		
Parent changed jobs	-	-
Changed school	-	-
Family moved	1	25
DISTRESS		
AGGRESSIVE/PROTECTIVE		
Face broke out with pimples	1	25
Started seeing a therapist	-	-
Thought about suicide	-	-
Ran away from home	-	-
Got poor grades in school	1	25
Gained a lot of weight	1	25
OTHER ITEMS ADDED TO SCALE		
AFFILIATIVE		
Brother/sister moved out	-	-
Met a teacher I liked a lot	-	-
Got religion	-	-
ABUSE		
AGRESSIVE/PROTECTIVE		
Been beaten or physically abused	-	-
Been forced to have sex	-	-
Been yelled at alot	3	75
SUBSTANCE USE		
DEPENDENCY		
Used alcohol	-	-
Smoked marijuana or weed	-	-
Used drugs	-	-

[a] n = 4 for each subscale

Table 16

Number of Life Change Events in Past Year Only - Other

Subscales/Subsystems[a]	LCE by Other JSO	
	Frequency	Percent
FAMILY AND PARENTS		
AFFILIATIVE		
Parents divorced	-	-
Family had money problems	2	20
Parent argued or fought	2	20
Parent remarried	1	10
Parent abused alcohol	-	-
ACCIDENT ILLNESS		
AGGRESSIVE/PROTECTIVE		
Family accident or illness	3	30
Given medication by physician	5	50
Death in family	3	30
Serious accident or illness	1	10
SEXUALITY		
SEXUALITY		
Fell in love	5	50
Got or made pregnant	1	10
Got or gave venereal disease	-	-
Started dating regularly	1	10
Broke up with boy/girl friend	4	40
Had a gay experience	-	-
Started having sex	2	20
AUTONOMY		
ACHIEVEMENT		
Found a new group of friends	5	50
Began a time consuming hobby	5	50
Decided about college	3	30
Joined a club or group	3	30
Got own TV or stereo	2	20
Took vacation without parents	1	10
Started driving	-	-
Started making own money	3	30

[a] n = 10 for each subscale

Subscales/Subsystems [a]	LCE by Other JSO	
	Frequency	Percent
DEVIANCE		
AFFILIATIVE		
Got in trouble with the law	1	10
Stole something valuable	1	10
Got in trouble at school	5	50
RELOCATION		
RESTORATIVE		
Parent changed jobs	2	20
Changed school	4	40
Family moved	1	10
DISTRESS		
AGGRESSIVE/PROTECTIVE		
Face broke out with pimples	2	20
Started seeing a therapist	3	30
Thought about suicide	5	50
Ran away from home	6	60
Got poor grades in school	4	40
Gained a lot of weight	3	30
OTHER ITEMS ADDED TO SCALE		
AFFILIATIVE		
Brother/sister moved out	2	20
Met a teacher I liked a lot	3	30
Got religion	2	20
ABUSE		
AGRESSIVE/PROTECTIVE		
Been beaten or physically abused	4	40
Been forced to have sex	1	10
Been yelled at alot	7	70
SUBSTANCE USE		
DEPENDENCY		
Used alcohol	4	40
Smoked marijuana or weed	2	20
Used drugs	2	20

[a] n = 10 for each subscale

Bivariate Comparison of Life Change Events in Past Year and Reasons for Admission using the Johnson Behavioral Model

Additional analyses of data were included for the purpose of identifying at risk groups of JSO contained in this study. The ability to describe differences between subgroups might have implications in planning for nursing interventions. Those categories being more closely examined were reason for admission and occurrance of LCE. Seventy-two percent of all subjects were categorized into two reasons for admission, running away and being beyond parental control.

Calculation of frequencies for each item within these two subgroups was done and the results compiled in Table 17. Important areas of subsystem similarities and descrepancy appear to occur in all the affiliative, restorative and dependency subsystems. Within the aggressive/protective subsystem the distress and abuse deserve particular attention. The mean number of LCE events were also computed. Those JSO admitted after a runaway episode reported experiencing a mean number of 15.00 LCE in the past year. The beyond parental control group experienced a lower mean number of LCE, 13.33 in the past year. Further discussion of the

Table 17

Total Number of Life Change Events by Reason for Admission

	LCE by Reason for Admission			
	Running Away[a]		Beyond Parental Control[b]	
Subscales/Subsystems	Frequency	Percent	Frequency	Percent
FAMILY AND PARENTS				
AFFILIATIVE				
Parents divorced	-	-	2	10
Family had money problems	3	14	6	29
Parent argued or fought	7	32	6	29
Parent remarried	2	9	2	10
Parent abused alcohol	4	18	1	5
ACCIDENT ILLNESS				
AGGRESSIVE/PROTECTIVE				
Family accident or illness	9	41	7	33
Given medication by physician	13	59	10	48
Death in family	5	23	4	20
Serious accident or illness	2	9	2	10
SEXUALITY				
SEXUALITY				
Fell in love	14	64	12	57
Got or made pregnant	4	18	2	10
Got or gave venereal disease	1	5	-	-
Started dating regularly	6	27	8	38
Broke up with boy/girl friend	12	55	11	52
Had a gay experience	1	5	2	10
Started having sex	8	37	6	29

[a] n = 22 for each subscale

[b] n = 21 for each subscale

	LCE by Reason for Admission			
	Running Away[a]		Beyond Parental Control[b]	
Subscales/Subsystems	Frequency	Percent	Frequency	Percent
AUTONOMY				
ACHIEVEMENT				
Found a new group of friends	15	68	11	52
Began a time consuming hobby	8	36	6	29
Decided about college	10	45	7	33
Joined a club or group	5	23	4	19
Got own TV or stereo	6	27	6	29
Took vacation without parents	9	41	8	38
Started driving	5	23	7	33
Started making own money	8	36	7	33
DEVIANCE				
AFFILIATIVE				
Got in trouble with the law	9	41	4	19
Stole something valuable	2	9	4	19
Got in trouble at school	11	50	14	67
RELOCATION				
RESTORATIVE				
Parent changed job	8	36	5	25
Changed school	11	50	11	52
Family moved	4	18	5	24
DISTRESS				
AGGRESSIVE/PROTECTIVE				
Face broke out with pimples	12	55	7	33
Started seeing a therapist	8	36	8	38
Thought about suicide	8	36	7	33
Ran away from home	18	82	7	33
Got poor grades in school	10	45	13	62
Gained a lot of weight	7	32	6	29

[a] n = 22 for each subscale

[b] n = 21 for each subscale

Subscales/Subsystems	LCE by Reason for Admission: Running Away [a] Frequency	Running Away [a] Percent	Beyond Parental Control [b] Frequency	Beyond Parental Control [b] Percent
OTHER ITEMS ADDED TO SCALE				
AFFILIATIVE				
Brother/sister moved out	2	9	5	24
Met a teacher I liked a lot	6	27	9	43
Got religion	5	23	2	10
ABUSE				
AGRESSIVE/PROTECTIVE				
Been beaten or physically abused	8	36	2	10
Been forced to have sex	3	14	-	-
Been yelled at alot	14	64	11	52
SUBSTANCE USE				
DEPENDENCY				
Used alcohol	11	50	8	38
Smoked marijuana or weed	8	36	10	48
Used drugs	8	36	5	24

[a] n = 22 for each subscale

[b] n = 21 for each subscale

subgroup differences and implications for nursing will be discussed in Chapter V.

Predictable and Unpredictable Life Change Events

The Peterson and Spiga (1982) model of "stress and adolescence" hypothesizes that during adolescence certain predictable events will occur. It is the concurrent happening of unpredictable LCE that may overload the adaptive capabilities of the individual. For this reason the adolescent LCE questionnaire was then categorized dichotomously into predictable or unpredictable LCE.

Division of the scale into these categories was accomplished by having three professionals considered expert in the area of adolescent development rate each item into either of the two categories. Those persons rating the questionnaire were the researcher, a clinical psychologist on faculty in the adolescent medicine unit at the University of California, San Francisco, and one of the doctorate nursing faculty who participated as a committee member in conjunction with this thesis. Each rater was instructed to use the conceptual paradigm of the "adolescent and stress" model (see Appendix A) as a basis for determining those normative or predictable areas of stress during

adolescence. Scoring of the inventories took place independently. Results were then tabulated to reflect the rating of each event into two categories. Assignment into a respective category occurred when two of three raters agreed upon an item's status.

The predictable scale contained 20 items. Twelve of 20 items were rated as predictable by all three raters. Reliability as a function of agreement was then calculated for the predictable LCE to be 0.43 agreement by all three raters (Polit and Hungler, 1983, p. 392). Disagreement by one of the observers occurred on the following items: found a new group of friends, began a time consuming hobby, decided about college, family had money problems, got own TV or stereo, used drugs, got religion, and took vacation without parents. For predictable events the raters also stated at what time adolescence (early, middle, or late) the event was most likely to occur. Agreement on this parameter was relatively consistent except for six items (reliability 0.54 for timing during adolescence). Those items where the raters did not always agree on the timing/onset of a predictable event were: (a) found a new group of friends, (b) started a time consuming hobby, (c) got religion, and (d) all three items included in the

substance use subscale.

The unpredictable LCE scale contained 25 items. Agreement by all three raters was achieved on 22 of 25 items listed as unpredictable. Reliability as a function of agreement was calculated to be 0.79 for all three raters in agreement. Unpredictable items where only one of three raters ranked an item as predictable were: brother or sister moved out, changed school, and been yelled at alot.

Tables 18 and 19 contain those items ranked as either predictable or unpredictable and their frequency of occurence for the entire sample (n = 60). For predictable LCE, out of a possible 20 items the mean number experienced in the past year was 7.50. For unpredictable items, out of possible 25 items the mean number of LCE experienced in the past year was calculated to be 6.60 within a population of JSO.

Table 18

Number of Predictable Life Change Events Experienced by All Juvenile Status Offenders in the Past Year

	LCE as Predictable[a]	
	Frequency	Percent
Found a new group of friends	40	67
Used alcohol	26	43
Given medication by a physician	33	55
Fell in love	33	55
Face broke out with pimples	27	45
Began a time consuming hobbie	18	30
Smoked marijuana	27	45
Decided about college	23	38
Joined a club or group	15	25
Met a teacher I liked a lot	21	35
Family had money problem	16	27
Got own TV or stereo	16	27
Started dating regularly	21	35
Took vacation without parents	21	35
Started driving	16	27
Broke up with boyfriend or girlfriend	33	55
Started making own money	22	37
Used drugs	16	27
Got religion	8	13
Started having sex	18	30
Mean $\bar{x}$	7.5	
SD	3.908	

[a] N = 60 for entire table

Table 19

Numbber of Unpredictable Life Change Events Experienced by All Juvenile Status Offenders in the Past Year

	LCE as Unpredictable[a]	
	Frequency	Percent
Parents divorced	3	59
Family accident or illness	20	33
Got in trouble with the law	17	28
Stole something valuable	9	15
Been beaten or physically abused	14	23
Death in family	12	20
Brother or sister moved out	11	18
Started seeing a therapist	21	35
Parent changed job	16	27
Got or made pregnant	8	13
Thought about suicide	21	35
Changed school	29	48
Got in trouble at school	34	57
Got or gave a venereal disease	21	35
Been forced to have sex	4	7
Parents argued or fought	20	33
Ran away from home	33	55
Got poor grades in school	33	55
Yelled at alot	37	62
Family moved	17	28
Parent remarried	5	8
Had a gay experience	3	5
Gained a lot of weight	15	25
Serious accident or illness	4	7
Parent abused alcohol	9	15

Unpredictable events in the past year:

Mean $\bar{x}$	6.60
SD	3.706

[a] N = 60 for entire table

Future Analyses

Data were collected from a convenience sample (N = 60) of JSO. The sex, age, and ethnic distribution appear to be fairly representative of those JSO seen within Huckleberry House.

The primary mode of statistical analysis utilized in this study was descriptive statistics. The impetus of this research project was to describe this population of JSO and provide preliminary assessment of needs. Because of the volume of data collected the potential for future analysis remains great. Generation of research questions or hypotheses to examine differences within subgroups with several variables may be generated and tested using more advanced parametric statistics. Further discussion on implications for future research will be discussed in Chapter V.

CHAPTER V

DISCUSSION

This preliminary study proposed to describe the amount of LCE experienced by a population of adolescent JSO within the past year and previous years. Perceived desirability of items contained on the LCE questionnaire were reported. Analysis of data examined the number of LCE in the past year in conjunction with the independent variables of sex, age, and ethnicity, and the dependent variable of reason for admission. Comparison between subgroups was made by calculating the mean number of LCE for each of the bivariate pairs and by examining differences and similarities between subscales/subsystems findings. LCE were also reported as they occurred within predictable or unpredictable categories for the entire sample.

Discussion of findings will focus on relevant social demographic descriptors and key variables outlined. Implications for future nursing research using the conceptual models of "adolescence and stress" and JBM will be addressed.

Demographic Data

The collection of demographic descriptors provided some illuminating information regarding the intact

status of the family unit for JSO. Fifty-five percent of the sample were from broken family units. Forty-five percent had experienced at least one divorce. Ten percent admitted to their parents currently being separated. Many of the never married parents were currently not living together. Remarriage by parents was not uncommon. Documentation of death of a biologic parent revealed a sizable proportion of the population had lost one biologic parent. Family demographic data for the JSO reveals a family unit with a history of change and loss.

Socioeconomic status was also calculated on each subject's biologic father and mother, irrespective of their current residence of affiliation with the youth (not reported in Table 4). Twenty-six youths (43%) were unable to provide enough information regarding their biologic father's level of education and occupation to calculate their SES. Thirteen youths (22%) were unable to provide adequate information to calculate SES for their biologic mother. The importance of this data has yet to be fully explained by this investigator or other researchers. However, it seems indirectly indicative of the degree of affiliation between biologic parents and their

offspring.

Eighteen percent of the participants responded that they were currently not attending school. Interruption of academic progress may have long range implications. Completion of the adolescent tasks of choosing one's vocational or education plan may be hindered.

Total Number of Life Change Events

Previous researchers have reported that LCE questionnaires specific for use within adolescent populations can be a reliable instrument to measure stress during adolescence (Yeaworth et al., 1980; Forman et al., 1983). An adolescent LCE adapted from Newcomb et al (1981) was used in this study. This allowed for comparison of findings between studies. Newcomb has stated that standarization of scoring systems within LCE research allows for more effective cross validation and replication of research findings. Comparison between Newcomb's mean LCE and the findings of this study revealed that JSO did experience a statistically significant greater number of LCE in the past year at a level of $p < .01$. It may be reasonable to state that use of a LCE questionnaire within a population of JSO provides an accurate global indicator

of stressors with some measurable degree of quantity within the past year. This finding supports that of previous researchers (Yeaworth, et al., 1980; Forman, et al., 1983; Newcomb, et al., 1981).

Desirability of Life Change Events

The frequency of desirability for each item on the questionnaire was calculated to reflect the negative, neutral, or positive ranking. No further analysis was done to examine the desirability of those LCE experienced. The implications for measuring the positive or negative valance of LCE remains unclear. Holmes and Rahe (1967) propose that the desirability of a LCE was not the most important consideration but rather the amount of change generated as a source of stress. Other researchers argue that differentiating desirability of stress has impact on the individual's perception of stress (Johnson & Sarason, 1979; Gad & Johnson, 1980). They have reported that negatively perceived changes were more closely related to problems of adjustment.

The advantage of desirability ratings observed by this researcher were several. First, it was the only portion of the questionnaire that generated personal comments about the subjects perception of stress.

Seven youths (12%) wrote comments regarding their perception of desirability on the questionnaire. Usually their statements reflected a qualifying statement regarding the item, i.e. for the item started having sex, "sometimes its a hassle"; for the item, got or made pregnant, "It depends upon who it was, how old I am, and whether or not I could support it". One youth responded by drawing a new face labeled "angry" to the items been beaten or physically abused, started seeing a therapist, been forced to have sex, and been yelled at alot. One youth experienced much difficulty with the desirability because of ambivalent feelings generated. Six youths labeled the faces using a continuum effect, coloring in half of the two faces and drawing a connecting line. This usually occurred between the neutral face and half of the adjacent happy/unhappy face.

Use of the desirability ratings gives some suggestions as to how important JSO value certain items. For example, 35% of the sample stated that they started seeing a therapist in the last year. In examining the desirability rating for that item the breakdown revealed 40% negative, 50% neutral, and only 10% viewed as positive. Many of these youths were

referred for either individual or family counseling. Future research questions might be to examine the etiology of the adolescent's perception regarding the value of counseling.

Frequency of Occurrence of Life Change Events in Past Year

JSO reported a greater number of LCE within the family parent subscale for parents arguing and parental alcohol abuse when compared to the Newcomb data. Those items which occurred the most within the JSO population were: (a) given medication by a physician (55%), (b) broke up with boyfriend or girlfriend (55%), (c) found a new group of friends (67%), (d) got in trouble at school (57%), (e) changed school (48%), (f) ran away from home (55%), (g) got poor grades at school (55%), and (h) been yelled at alot (62%).

Items relating to autonomy and the development of identity through identification with significant adult role models appeared lower when compared with the Newcomb data. They were: (a) decided about college (38% compared to 51%); (b) started driving (27% compared to 57%), (c) started making own money (37% compared to 60%), and (d) met a teacher they liked alot (35% compared to 64%).

A cursory comparison of the frequency of occurrence of LCE within subscales suggests a dimension of deprivation not anticipated by the researcher. The documentation of negative LCE within the subscales of family and parents, deviance, relocation, distress and abuse were anticipated. However, deprivation within the autonomy subscale deserves recognition. Deciding to attend college or at least realize some type of future vocational plans, starting to drive, and starting to make own money were all lower when compared for the total sample group and by age (17 year olds). While the full implications of this finding have yet to be realized, it identified another parameter of the tasks of adolescent development which the JSO were not able to achieve.

The personal use of alcohol and marijuana was not examined in then Newcomb study. A large proportion of youths in this sample admitted to using alcohol and marijuana in the past year (43% and 45% respectively). Jessor (1982) has stated that coming to terms with drugs, alcohol, and sexual activity has emerged as a new developmental task in contemporary adolescent society. Inclusion of the substance subscale gains relevance as three additional normative stressors that

every adolescent may encounter and deal with in their own life style.

Another supporting argument for the inclusion of a substance use subscale relates to problem behavior theory (Jessor, 1982). His findings suggest that problem behavior in adolescence constitute a syndrome of co-occurring behaviors rather than a collection of separate idiosyncratic activities. He has observed the substitution of conventional behaviors such as academic achievement or regular religious participation has been replaced with problem behaviors such as drug/alcohol use, and onset of sexual activity.

Data reported from the JSO study revealed that all groups experienced a high proportion of getting into trouble at school. Changing schools and obtaining poor grades. Only 13% of the total sample reported getting religion in the past year as compared to 26% in the Newcomb study. It appears that based on the incidence of school difficulties and lower reported religiosity that this population of JSO would be higher at risk for substance use and early onset into sexual activity. Irrespective of an adolescents motive for substance use (experimentation, peer conformity, or coping mechanism) omission of a substance use subscale could represent a

limitation with this inventory.

Number of Life Change Events in Past Year by Age Group

The early adolescent (11-13 year age group) reported the lowest mean number of LCE, 13.14, when compared to the two older age groups. Most noteworthy events for the early adolescent group were school related changes. Seventy-two percent of the subjects admitted to getting into trouble at school, 50% received poor grades in school, and 58% changed school. Typically, early adolescence has been described as a period of major transition in regards to structural changes at school. Transition from middle school to junior high school may also incorporate changes in geography to another facility and changes in classroom structure from one classroom, one teacher, to multiple classrooms and teachers. During completion of the questionnaire one of the subject's summarized, very succinctly, the problems inherent in school changes, "The problem with a new school is that it means new textbooks, new teachers, and new friends."

Early adolescents also reported higher scores in the area of distress and abuse. Fifty-seven percent replied that they ran away from home in the past year. Physical abuse occurred in 29% and verbal abuse in 64%

of the sample responses. This higher proportion of physical abuse has been consistent with the researchers clinical findings that younger teens frequently report current physical abuse than older teens. It appears that with increasing age youths either retaliate by using physical abuse against their parents or guardians or run away. These two mechanisms seem to diminish the report of current physical abuse in older age groups.

Middle adolescents (14-16 year age group) reported their highest scores on given medication by a physician, finding a new group of friends, and being yelled at alot (all 62%). The middle adolescent continued to experience difficulties in school as evidenced by getting in trouble at school and obtaining poor grades in school (each 56%) and changing schools (46%).

Regarding sexuality a number of youths initiated sexual activity during this period when compared with the early adolescent (38% versus 7%). Logically it would flow that with onset of adult sexual behavior comes the increased risks of pregnancy and sexually transmitted diseases. Health promotion services which emphasize education, screening for sexually transmitted diseases, and contraception become necessary.

The 17 year old group reported the highest mean number of LCE within the past year, 17 LCE. This finding may be consistent with Coddington's (1972b) observation that with increasing age a child's social sphere enlarges and so does the increased demands for social readjustment.

The 17 year olds appeared to experience increased LCE within predictable areas of autonomy when compared to younger age groups as one would expect. Although they reported less difficulty with troubles at school, they continued to report a high incidence of LCE within the distress subscale. Those most noteworthy were: started seeing a therapist (42%), suicide ideation (43%), experienced a runaway episode in the past year (85%), and obtained poor grades in school (57%).

The number of 17 year olds contained in this sample was small. However, future research may be warranted to substantiate the preliminary findings reported in this study. Examination of coping styles, experience and social support systems may help in understanding the implications of an increased LCE mean score when compared to younger age groups. Mediating factors which may negate the total impact of LCE remains to be documented.

Number of Life Change Events Experienced in Past Year by Sex

Females, as compared to males, reported a greater number of LCE within certain subscales. Those subscales were parents or family, accident or illness, and abuse. Males differed in their reporting of higher alcohol use (52%).

Within the area of autonomy, males appeared to report a higher proportion of LCE than females. This finding may be partially congruent with reports in the runaway literature (Brennan et al., 1978). Whereby, females often run away as a result of over protective environments. Males often reported the opposite finding of unrestrictive environments which lacked limit setting and a feelings of being wanted or cared about were absent.

Both females and males reported a high incidence of occurrence for the following items: (a) getting in trouble at school (57% and 56%, females to males, respectively), (b) changing school (49% and 48%), (c) running away from home (57% and 52%), (d) getting poor grades in school (51% and 61%), and (e) having been yelled at alot (60% and 65%).

Number of Life Change Events Experienced by Ethnicity

The mean number of LCE experienced by JSO in the past varied greatly by race with Whites and Hispanics reporting the highest number of LCE and Asians the lowest. Only one study to date has examined the relationship between race and the number of LCE (Gad & Johnson, 1983). They reported that Black youths experienced more LCE than Whites. However, when controlled for by SES this difference disappeared. For the purpose of this study no analyses were done with the number of LCE, SES and ethnicity. However, in this study of JSO, the SES distribution was heavily weighted with lower middle and low SES youths (74%). Therefore, limiting generalizability of results to youths of same ethnicity but higher SES difficult.

White youths reported the highest mean number of LCE in the past year. Within the subscales of family and parents, abuse and substance use they reported the highest incidence of occurrence when compared with all other ethnic groups. White youths also reported high proportions of occurrence on negative items of trouble at school (74%), changed school (58%), poor grades at school (68%), started seeing a therapist (58%), and running away from home (68%).

Black youths reported a high incidence of having been given medication by a physician (72%). This raises questions about types of illnesses they experienced in the past year and their health care needs. Blacks also reported difficulties with school in the past year (trouble at school 55%; changing schools and poor grades, both 61%).

Hispanic youths experienced most of their LCE within the distress scale. Started seeing a therapist (56%), thought about suicide (66%), ran away from home (89%), and receiving poor grades in school (44%). No information was collected on their previous history of immigration to this country nor to their language capabilities. From clinical observation many of these youths have immigrated to the U.S. from Central America. Language difficulties along with cultural transitions may be important variables to examine in future research with this group of JSO.

Asian youths reported the lowest mean number of LCE within the past year. Reason for admission to Huckleberry House dicates that there was some type of current personal or family crisis. Clinical data obtained revealed that family discord was usually the presenting reason for admission. This was not

reflected in the questionnaire. The question arose as to the reliability of using such a LCE scale within this ethnic group. Future research using a larger sample would be needed to document this hypothesis.

The mixed ethnicity group experienced the second lowest mean LCE score in the past year. They reported high incidence of school related changes, changing school (40%), getting into trouble at school (50%), and receiving poor grades at school (40%). They also reported high scores within the distress subscale of suicide (50%) and running away (60%). Little documentation has occurred about identity formation within this group of blended ethnicities.

Calculation of mean LCE within a heterogeneous ethnic population of JSO with a relatively homogeneous SES background reveals a large disparity in the occurrence of LCE. Implications for further research would be to examine the cultural influence of perception of LCE and stress. Intuitively, it would appear that learned coping behaviors may have a cultural bias. The Black male who has grown up in poverty, aware of the high unemployment statistics for black teens and his limited resources for upward mobility may deal with life stress differently than the

Hispanic male who has emmigrated from his native land to a new culture and language.

Predictable Versus Unpredictable Life Change Events

Examination of LCE were done by examining those LCE categorized dichotomously into predictable and unpredictable events. No previous research has examined the simultaneous occurrence of LCE in this format. It would appear that within the JSO population, these youths were dealing with a number of predictable and unpredictable LCE, concurrently. Because of the descriptive design of this research no inferences can be made regarding the impact of anticipated and unexpected events in a youth's life. Future research may be aimed at examining the longitudinal impact of predictable/unpredictable LCE. Documentation of factors that mediate the impact of concurrent stressors may provide insight for implementation of programs that mitigate the negative impact of stress.

Limitations

Limitations with the use of an adolescent LCE questionnaire were encountered. Although calculation of mean LCE provides a global indicator of stress experienced in the past year it lacks specificity to

quantitate the exact number of happenings for some items. For example, in regards to the item changed school, a positive response can report only one school change in the past year and not multiple changes. The item regarding suicide may measure only suicide ideation and cannot discriminate between the actual occurrence of suicide attempts or gestures. Affirmative answers to the items of alcohol, drug, and marijuana use does not allow for discrimination of the degree to which adolescents use alcohol or drugs. The youth experimenting with drugs cannot be delineated from the youth with problem behavior. Death in the family cannot provide information regarding which member died. A number of youths responded either verbally or in writing that it would depend upon which member died. The implications of these findings may be that the adolescent LCE questionnaire were useful in identifying global parameters of subscale excess or deprivation and identifying subgroups to be at higher risk. It may not be useful in clinical practice for precise problem identification.

Language problems with particular items contained in the questionnaire emerged on a frequent basis. Started seeing a therapist was the item most often not

understood. Many did not know what a therapist was. The meaning of the word "hobby" was frequently questioned. Change in the wording of joined a club or group to gang may have yielded a higher positive response rate because of the incidence of youth gangs in San Francisco.

Problems with spatial orientation to the questionnaire caused difficulty with completion. Initially, on the demographic data form the items were typed on the extreme left margin with the response column being placed on the right margin. Many youths within the first 20 subjects had difficulty following across the paper to check the appropriate line. The demographic sheets were redesigned to allow for a response space adjacent to the item on the extreme left margin. This alleviated the need for supervision during completion of the demographic data.

Some youths encountered difficulty with the desirability section in following across the line of faces. This problem was remedied by placing a paper of contrasting color directly underneath the item the youth was completing. The youth could then move the paper downward as each item was completed.

Other issues regarding the use of this

questionnaire within this population arose. The researcher was always present in the room while the youth completed the questionnaire. This allowed the youth to ask questions regarding logistics of the questionnaire. Because of the volume of questions an nature of problems encountered in the administration of this research tool raises the issue of diminished effectiveness if it were not given individually. The average time for completion of the inventory was 15-20 minutes. The longest time for completion was 30 minutes by one client. Some youths commented about the questionnaire being too long. Additional data collection requiring a written format may be excessive with this population. Other methods such as semi-structured interviews or audio/video recording could be used.

Implications For Nursing

Analysis of data examining the number of LCE by the dependent variable of reason for admission was done. Two almost numerically equivalent groups of reason for admission naturally occurred in this sample. Running away (n = 22) and being beyond parental control (BPC) (n = 21) constituted 72% of the reasons for admission to Huckleberry House within this research

sample. The two groups were compared using the JBM for nursing practice to assess differences within subsystems. Calculation of mean number of LCE within the past year was determined to be higher for the runaway group, 15.00 LCE/year. The beyond parental control group experienced 13.33 LCE/year.

Runaways experienced mostly increased negative behaviors within the affiliative, aggressive and protective, dependency and restorative subsystems. Runaways reported more parental use of alcohol (18% versus 5%), getting into trouble at school (50% versus 67%), and getting into trouble at school (50% versus 67%), and getting into trouble with the law (41% versus 19%). Although runaways reported a greater number finding new friends (68% versus 52%). They reported lower affiliative behaviors such as meeting a teacher they liked alot (29% versus 43%). Within the agressive protective subscales runaways reported a higher proportion of events for these items: (a) developed acne (55% versus 33%), (b) ran away (82% versus 33%), and (c) higher scores on all the abuse items.

The BPC group reported more occurrences of negative events within the affiliative subsystem by getting in trouble at school (67% versus 50%) and

within the agressive protective subsystem by receiving poor grades in school (62% versus 45%). The BPC group reported a lower proportion of LCE within the abuse-agressive/protective subscales.

Both groups reported a high percent of school changes in the past year (runaways 50%, BPC 52%). Both groups also reported behaviors within the substance use/dependency subscales. Runaways reported using alcohol (50%) and drugs (36%) more often. Beyond Parental Controls, however, reported a higher use of marijuana (48% versus 36%).

It appears that those items which discriminate the runaway youth were a higher number of mean LCE experienced in the past year, increased report of parental alcohol use, personal alcohol use, and abuse as measured by all three items. These findings were congruent with research done by Van Houten and Golembiewski (1978) on adolescent life stress as a predictor for alcohol abuse or runaway behavior. Their research found that the major predictors of adolescent runaway behavior were parental alcohol abuse, family breakdown, parental rejection, school failure and contact with the juvenile justice system.

The BPC group reported a higher percentage of

school difficulties. Clearly, this could be perceived as a negative life event. Data generated in this study with JSO reported that 85% of this sample perceived getting poor grades at school as a negative event. What was not known about this subgroup was how they dealt with this stressor of such high negative desirability. Academic achievement has been considered to be a conventional behavior that society has come to expect from youths. It has been a primary vehicle by which children and adolescence develop self esteem and self efficacy.

What discriminates this group of BPC, who were experiencing a high proportion of negative change, from the runaway subgroup? What was unique about their coping mechansisms, family system, or degree of social support? Why haven't they substituted more problem behavior as exemplified in running away or substance use? These areas deserve further exploration.

Implications for further nursing research using the JBM might be the examination of behavior set and choice within the affiliative, agressive/protective and dependency subsystems for both of these groups understanding of those problem solving approaches and coping mechanisms utilized by these two groups may be

an eventual outcome. Planning for nursing interventions which mediate stress might be a logical outcome of such interim research.

The implications for nursing practice may be that the LCE could be incorporated as an adjunct to the clinical interview. In its current format the inventory was readily accepted for use by the teens. Some previously stated limitations with administration were encountered, however, could be easily remedied.

For the nurse practitioner, quantifying recent life changes within the areas of school, family and peers are possible. The questionnaire can be hand scored to reflect the mean number of LCE in the past year. Although no normal range of anticipated life changes for this age have been published those youths scoring greater than 8-9 LCE in the past year may be more at risk for negative adjustment. More specifically, two other formats used in this study allow the practitioner to examine the quality of recent LCE, those of the subscale/subsystem breakdown and the predictable versus unpredictable categorization. Using subscales those youths experiencing more negatively perceived areas of change within the distress/deviance scale may be at more risk for negative adaptation.

Also quantifying LCE by predictable or unpredictable events may give insight to the clinician regarding the situations that these teens may be encountering. For example, a teen dealing with more predictable LCE consistent with the tasks of adolescence as compared to a number of unpredictable LCE in which the adolescent is more unlikely to have control over these issues. Examining the desirability rating of those items which occurred in the past year can also inform the practitioner of the youth's positive or negative perception of LCE in which they have been recently adjusting. Previous researchers (Johnson & Sarason, 1979; Gad & Johnson, 1980) have reported more difficulty with adjustment for those life events which are perceived as negative.

Future Research

This study attempted to describe and quantitate the number of LCE within a population of JSO. A sample of 60 subjects were recruited for this study. Potential for analysis with the current data exists. Formulation of future research questions and appropriate statistical analysis might be:

(1) Do stress ful LCE experienced in the past year and over time occur within specific

subscales or are they generizable across all area?

(2) How do JSO perceive the desirability of those LCE that occurred in the past year?

(3) Is there a relationship between the number of admissions to Huckleberry House and the number of LCE experienced in the past year.

(4) By examining the dependent variables of poor grades, trouble at school, and changed schools, do other clusters of events occur?

(5) Does a relationship exist between SES and number of LCE?

(6) Replication of this study to obtain larger sample within small subgroups such as late adolescents or Asian youths.

(7) What are the relevant variables between ethnicity and perception of stress.

(8) Use of the JBM for additional quantitative analyses to examine what are the important subscales to assess? What types of structural and/or functional problems that are evident in subsystems as a result of LCE?

REFERENCES

Brennan, T., Huizinga, D., & Elliot, D. (1978). The social psychology of runaways. Boston: D. C. Heath Co.

Brown, B. (1978). Assessing adolescent development. Pediatric Annals, 7(9), 588-595.

Chaisson, M. (1981). Health care beyond the barriers. American Journal of Nursing, 4, 737-738.

Children's Defense Fund of the Washington Research Project, Inc. (1976). Children in adult jails. Washington, D.C.

Coddington, R. (1972a). The significance of life events as etiologic factors in the disease of children, Part I). A survey of professional workers. Journal of Psychosomatic Research, 16, 7-18.

Coddington, R. (1972b). The significance of life events as etiologic factors in the disease of children (Part II): A Study of a Normal Population. Journal of Psychosomatic Research 16, 205-213.

Coddington, R., & Troxell, J. (1980). The effects of emotional factors on football injury rates - A pilot study. Journal of Human Stress, 6(4), 3-5.

Coleman, J. (1978). Current contradictions in adolescent theory. Journal of Youth and Adolescence, 7(1), 1-11.

Collins, N., Friedman, I., Brown, R., and Irwin, C. (1984). Runaway and homeless youth-a medical perspective. Unpublished manuscript, San Francisco General Hospital and the University of California, San Francisco, Department of Pediatrics, San Francisco.

Department of Health and Human Services. (1983). Runaway and homeless youth: National program inspection. (DHHS Publication Region X), Office of The Inspector General, Region X.

Fawcett, J. (1984). Analysis and evaluation of conceptual models of nursing. Philadelphia: F.A. Davis.

Forman, D., Edison, K., & Hagan, B. (1983). Perceived stress in adolescents: A cross validation. Adolescence, 18(71):573-576.

Gad, M., & Johnson, J. (1980). Correlates of adolescent life stresses as related to race, SES, and levels of percieved social support. Journal of Clinical Child Psychology, 2, 213-16.

Hein, K, Marks, A., & Cohen, I. (1977). Asymptomatic gonorrhea: Prevalance in a population of urban adolescents. Journal of Pediatrics, 90, 634-635.

Hein, K., Schreiber, K., & Cohen, M., (1977). Cervical cytology: The need for routine screening in the sexually active adolescent. Journal of Pediatrics, 91, 123-126.

Hein, K., Cohen, M., & Marks, A., (1978). Age at first intercourse among homeless adolescent females. Journal of Pediatrics, 93, 147-148.

Hein, K., & Litt, I. (1979). Illicit drug use among urban adolescents: A decade in retrospect. American Journal of Diseases in Children, 133, 38-40.

Hein, K., Cohen, M., Litt, I, Schomberg, K., Meyer, M., Marks, A., Sheehy, A. (1980). Juvenile detention: Another boundary issue for physicians. Pediatrics, 66(2), 239-245.

Holmes, T., & Rahe, R. (1967). The social readjustment rating scale. Journal of Psychosomatic Research, 11, 213.

Isherwood, J., Adam, K., & Hornslow, A. (1982). Life event stress, psychosocial factors, suicide attempts, and auto accident proclivity. Journal of Psychosomatic Research, 26(3), 371-383.

Jessor, R. (1982). Problem behavior and developmental transition in adolescence. The Journal of School Health, 5, 295-300.

Johnson, J., & Sarason, J. (1979). Recent development research on life stress. In V. Hamilton & M. Warkurton (Eds.), Human stress and cognition: An information processing approach (pp. 205-33). London: Wiley.

Litt, I. (1983). The physician and the imprisoned youth. The Pharos of Alpha Omega Alpha, 46(3), 15-19.

Litt, I., & Cohen, M. (1970). The drug using adolescent as a pediatric patient. Journal of Pediatrics, 77, 195-202.

Lloyd, C., Alexander, A., Rice, D., & Greenfield, N. (1980). Life events as predictors of academic performance. Journal of Human Stress, 6(3), 15-25.

Manov, A., & Lowther, L. (1983). A health care approach for hard to reach adolescent runaways. Nursing Clinics of North America, 18(3), 333-342.

Mechanic, D. (1983). Adolescent health and illness behavior: Review of the literature and a new hypotheses for the study of stress. Journal of Human Stress, 9, 4-13.

Myers, J., & Bean, L. (1968). Two-factor index of social position (appendix 3). In A decade later: A follow-up of social class and mental illness (pp. 235-237). New York: John Wiley and Sons.

Nelma, B. (1981). What is a normal adolescent? Journal of Maternal Child Nursing, 6, 402-406.

Newcomb, M., Huba, C., & Bentler, P. (1981). Multidimensional assessment of stressful life events among adolescents: Derivation and correlates. Journal of Health and Social Behavior, 22, 400-415.

Nye, F., & Edelbrock, C. (1980). Some social characteristics of runaways. Journal of Family Issues, 1(2), 147-150.

Olson, L., Liebow, E., Mannino, F., & Shore, M. (1980). Runaway children twelve years later. Journal of Family Issues, 1(2), 165-187.

Palmer, F. (1980). Adolescent perceptions of stressful life events. National League of Nursing Publication, 52, 38-52.

Passer, M., & Seese, M. (1983). Life stress and athletic injury: Examination of positive versus negative events and three moderator variables. Journal of Human Stress, 9(4), 11-16.

Peterson, A., & Spiga, R. (1982). Adolescence and stress. In L. Goldberg & S. Breznitz, (Eds.), Handbook of stress: Theoretical and clinical aspects (pp.515-528). New York: Free Press.

Piaget, J., & Inhelder, B. (1958(.). The growth of logical thinking. New York: Basic Books.

Polit, D., & Hungler, B. (1983). Nursing Research: Principles and Methods (2nd Ed.). Philadelphia: Lippincott.

Rahe, R. (1979). Life change events and mental illness: An overview. Journal of Human Stress, 5(3), 2-10.

Rich, P. (1982). The juvenile justice system and its treatment of the juvenile: An overview. Adolescence, 17(65), 141-152.

Selye, H. (1973). The evolution of the concept of stress. American Scientist, 61, 692-699.

State of California, Department of Youth Authority. (1983). California laws relating to youthful offenders. North Higreanas, CA: State of California Documents Section.

Sutterly, D. (1979). Stress and health: A survey of self-regulation modalities. Topics in Clinical Nursing, 1(1), 1-29.

Van Houston, T., & Golembiewski, G. (1978). Adolescent life stress as a predictor of alcohol abuse and/or runaway behavior. National Youth Work Alliance. Washington, D.C.

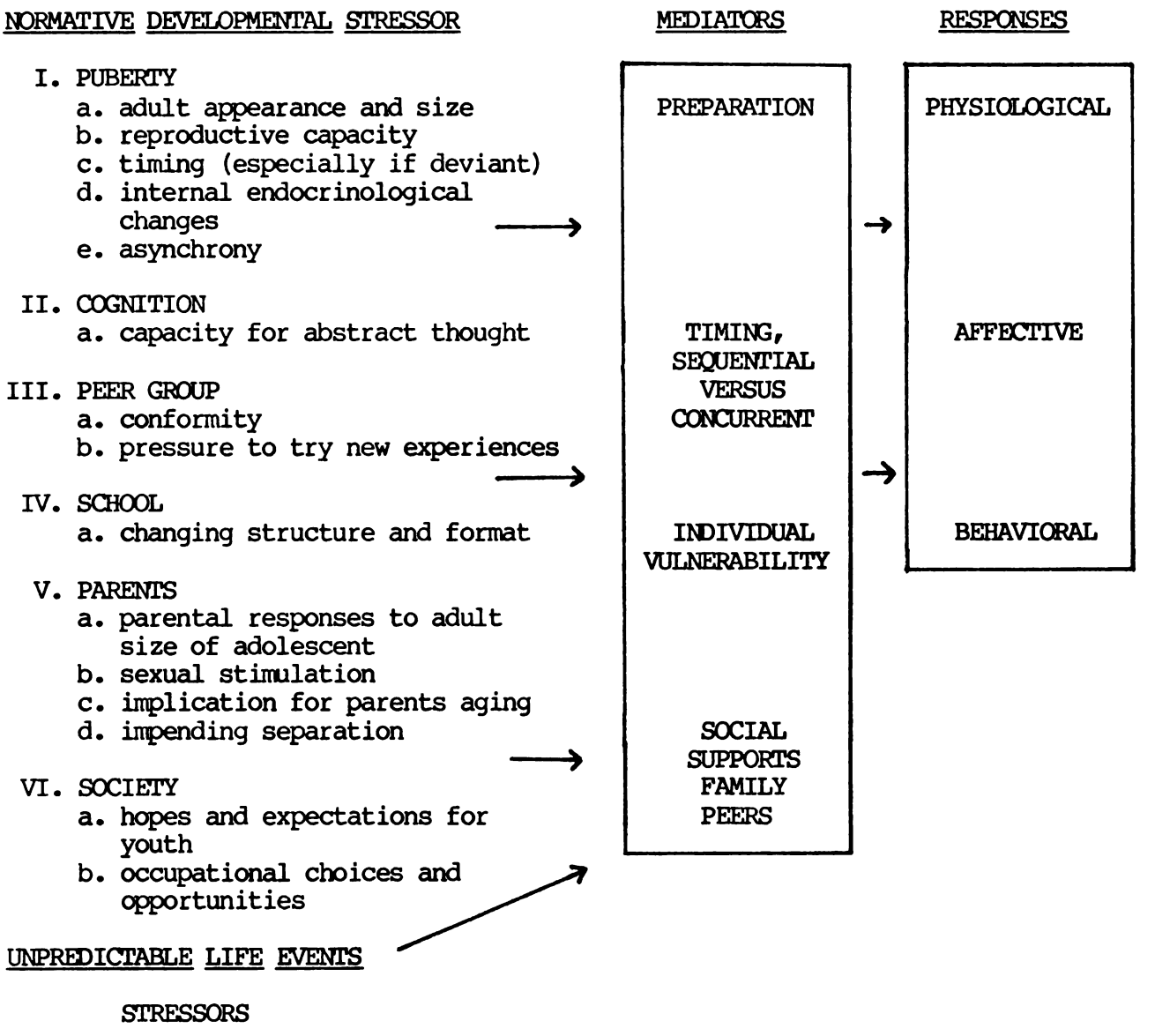
Yeaworth, R., York, J., Hussey, M., Ingle, M., & Goodwin, T. (1980). The development of an adolescent life change event scale. Adolescence, 15, 93-97.

Young, L., Godfrey, W., Matthews, B., & Adams, G. (1983). Runaways: A review of the negative consequences. Family Relations, 32, 275-281.

Zellers, R., & Belyea, M. (1984,March). Homeless youth in San Francisco. Committee report submitted by The Mayor's Criminal Justice Council, Homeless Youth Subcommittee, San Francisco.

Appendix A

Adolescence And Stress Model



Appendix B

Johnson Behavioral System Model for Nursing

ACHIEVEMENT

Goal: To master or control oneself or one's environment; to obtain or achieve a desired object, position, or need.

AFFILIATIVE

Goal: To be associated with others in some form of relationship (family, spouse, parent, child, church, work, community group, culture); to relate or belong; to engage in interpersonal relationships for pleasure, intimacy, friendship, etc.

DEPENDENCY

Goal: To maintain resources needed for obtaining help, assistance, attention, permission, reassurance, security, safety; to obtain trust and reliance.

RESTORATIVE

Goal: To relieve fatigue; attainment of a state of equilibrium, or balance, by reestablishing or redistributing energy among subsystems.

AGRESSIVE/PROTECTIVE

Goal: To protect oneself or others from real or imagined harmful objects, persons, or ideas; to obtain self protection and self assertion.

INGESTIVE

Goal: To take in needed environmental resources; to bring to the person that which he/she perceives is lacking (for pleasure, gratification, knowledge, or safety); to internalize the external environment in order to maintain the integrity of the organism.

SEXUAL

Goal: To procreate; to attract; to fulfill expectations associated with one's sex; to engage in activities that will lead to gratification and/or procreation; to care for others and be cared for by them.

From: Simon, B., Sigma Theta Tau Conference, Nursing Knowledge: Improving practice through theory. January 26, 1985. Anaheim, CA

Appendix C

Consent To Be A Research Subject

University of California, San Francisco

Jeanette Broering, R.N., is doing a study which seeks to learn how teenagers understand the good and bad effects of stress on their life and what stresses they have experienced.

If I agree to participate in the study, I will be asked to answer questions about life events that some teenagers may or may not find stressful. It will take about 10 minutes to complete this questionaire.

If I consent to participate in the study the risk may be that some of the questions may make me feel uncomfortable or upset. I am free to not answer any question that I feel uncomfortable or bad about.

The interview will be conducted in private. I will not be asked to put my name on the questionaire. The information from the study will be kept as confidential as possible under the law. When the study has been completed, all questionnaires will be destroyed.

Being in the study will not be of direct benefit to me, but the information given may provide useful information for other health care professionals in helping other teens deal with stress in their life.

If I have any questions while I complete the questionaire I may ask the researcher. If I think of any questions after I complete the questionaire I may call Jeanette Broering, R.N., at 621-2929 between the hours of 9 A.M. and 5 P.M. Monday through Friday.

I am free to decide not to be in the study or to refuse to answer any questions. There are no right or wrong answers. My refusal to participate in the study will not affect the health care I will receive during my stay at Huckleberry House. This information will not be part of my medical record.

I have been offered a copy of this consent form and a copy of the Patient's Bill of Rights to keep.

- -

_____ _____

Subject's Signature Date

Appendix D

Consent To Have Our Adolescnet Act As A Research Subject

University of California, San Francisco

Jeanette Broering, R.N. is doing a study which seeks to learn how teenagers understand the good and bad effects of stress on their life and what stresses they have experienced recently.

If I/we agree to allow our teenager to participate in the study he/she will be asked to answer a questionnaire about stressful life events. He/she will not be asked to put their name on the questionaire. He/she may refuse to answer any and all of the questions.

The risk from participating in the study may be that some of the questions may make him/her recall past painful life events. Events on the questionaire are considered confidential and I, as the researcher, cannot discuss individual answers with you that your son/daughter may answer. I may release results of the study to you after it has been completed.

The study will result in no direct benefit to me or my/our child, but the information gained may provide information for other health care providers in helping teens deal with stress in their life.

If I/we have any questions about the study, I/we may call Jeanette Broering, R.N. at 621-2929 between 9 A.M. and 5 P.M. Monday through Friday.

I/we have been offered a copy of this consent form and a copy of the Patient's Bill of Rights to keep.

Participation in this study is voluntary. Refusal to participate in this study will not in any way affect the health care received by my/our teenager while at Huckleberry House. If I/we do not wish to have our child participate in the study all we have to do is say no.

- -

_____ _____

Date Parent/s Signature

_____

Appendix E

Adolescent Life Change Event Questionnaire

ADOLESCENCE AND STRESS RESEARCH PROJECT

JEANETTE BROERING, R.N., INVESTIGATOR. MASTERS CANDIDATE,
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, SCHOOL OF NURSING

1. ID # _____/_____/_____

2. ADMISSION # _____/_____
   REASON FOR ADMISSION:

---

3. WHAT IS YOUR AGE?

   _____ 11 or under

   _____ 12

   _____ 13

   _____ 14

   _____ 15

   _____ 16

   _____ 17

4. WHAT IS YOUR GRADE IN SCHOOL?

   _____ 7th

   _____ 8th

   _____ 9th

   _____ 10th

   _____ 11th

   _____ 12th

   _____ NOT ATTENDING SCHOOL

   _____ G.E.D.

5. IF NOT ATTENDING SCHOOL WHAT GRADE DID YOU COMPETE? _____

6. WHAT IS YOUR SEX?

_____ FEMALE

_____ MALE

7. WHAT IS YOUR RACIAL OR ETHNIC BACKGROUND?

_____ WHITE

_____ BLACK

_____ HISPANIC

_____ LATINO

_____ ASIAN

_____ OTHER

8. WHAT IS YOUR FATHER'S EDUCATION?

_____ LESS THAN SEVEN YEARS OF SCHOOL

_____ COMPLETED SEVENTH GRADE

_____ SOME HIGH SCHOOL, DID NOT GRADUATE

_____ HIGH SCHOOL GRADUATE

_____ SOME COLLEGE TRAINING

_____ COLLEGE GRADUATE

_____ GRADUATE OR PROFESSIONAL TRAINING

_____ DON'T KNOW

9. WHAT IS YOUR MOTHER'S EDUCATION?

_____ LESS THAN SEVEN YEARS OF SCHOOL

_____ COMPLETED SEVENTH GRADE

_____ SOME HIGH SCHOOL, DID NOT GRADUATE

_____ HIGH SCHOOL GRADUATE

_____ SOME COLLEGE TRAINING

_____ COLLEGE GRADUATE

_____ GRADUATE OR PROFESSIONAL TRAINING

_____ DON'T KNOW

10. FATHER'S JOB? _____
(WHAT DOES YOUR FATHER DO FOR A LIVING? FOR EXAMPLE: DRIVES A BUS, MECHANIC FIXING A CAR, POSTMAN, ETC)

_____ CHECK HERE IF YOU DO NOT KNOW YOUR FATHER'S JOB.

11. MOTHER'S JOB? _____
(WHAT DOES YOUR MOTHER DO FOR A LIVING? FOR EXAMPLE: SCHOOL TEACHER, CASHIER, HOUSEWIFE, ETC)

_____ CHECK HERE IF YOU DO NOT KNOW YOUR MOTHER'S JOB.

12. PARENTS MARITAL STATUS

_____ NEVER MARRIED

_____ MARRIED

_____ SEPARATED

_____ DIVORCED

_____ MOTHER REMARRIED

_____ FATHER REMARRIED

_____ MOTHER DEAD

_____ FATHER DEAD

13. WRITE THE NUMBER OF PEOPLE WHO LIVE IN YOUR HOUSE. _____

_____ NO HOME

_____ GROUP HOME

_____ FOSTER HOME

14. WRITE THE NUMBER OF PEOPLE WHO LIVE IN YOUR HOUSE WHO ARE:

_____ MOTHER

_____ FATHER

_____ STEP-MOTHER

_____ STEP-FATHER

_____ BROTHER

_____ SISTER

_____ STEP-BROTHER

_____ STEP-SISTER

_____ AUNT

_____ UNCLE

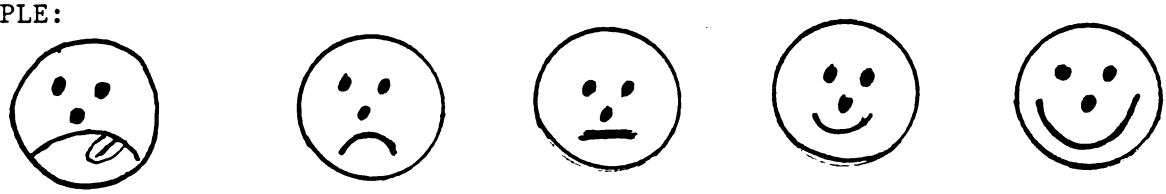
_____ GRANDMOTHER

_____ GRANDFATHER

_____ OTHERS (LIST)

THE NEXT FEW PAGES HAVE LIFE EVENTS THAT SOME TEENAGERS EXPERIENCE. PLEASE CIRCLE THE FACE AS TO HOW HAPPY OR UNHAPPY THEY WOULD MAKE YOU FEEL.

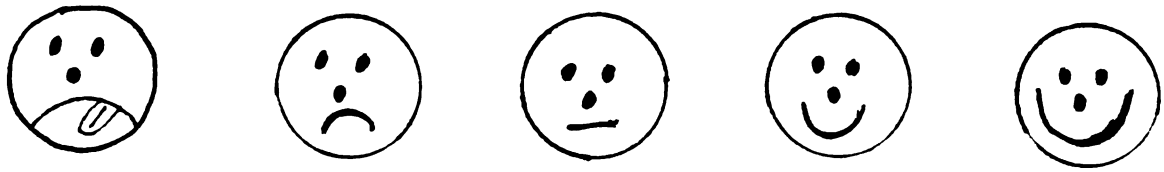
EXAMPLE:



(1) VERY UNHAPPY (2) UNHAPPY (3) NEUTRAL (4) HAPPY (5) VERY HAPPY

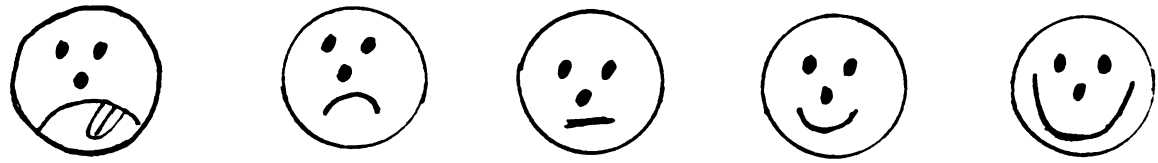
1. PARENTS DIVORCED.

2. FAMILY ACCIDENT OR ILLNESS.



3. FOUND A NEW GROUP OF FRIENDS.

4. USED ALCOHOL.



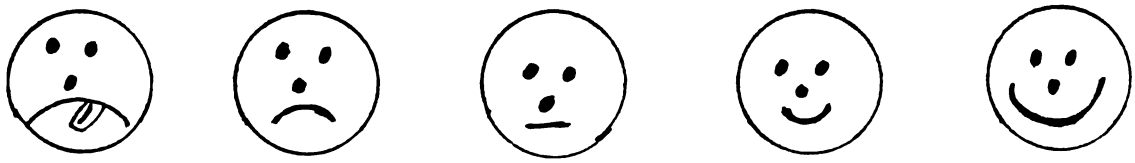
5. GOT IN TROUBLE WITH THE LAW.

6. STOLE SOMETHING VALUABLE.

7. BEEN BEATEN OR PHYSICALLY ABUSED.

(1)VERY UNHAPPY (2)UNHAPPY (3)NEUTRAL (4)HAPPY (5)VERY HAPPY

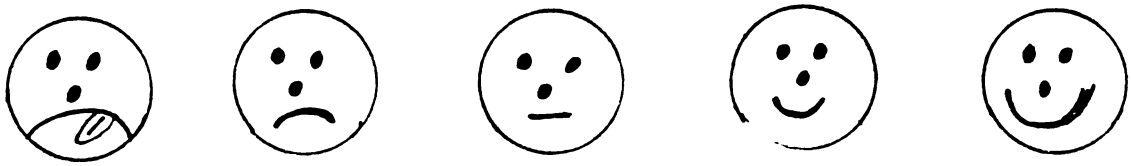
8. GIVEN MEDICATION BY A PHYSICIAN.



9. FELL IN LOVE.

10. FACE BROKE OUT WITH PIMPLES.

11. DEATH IN FAMILY.



12. BROTHER OR SISTER MOVED OUT.

13. STARTED SEEING A THERAPIST.

14. PARENT CHANGED JOBS.

15. BEGAN A TIME CONSUMING HOBBIE.

16. SMOKED MARIJUANA OR WEED.

(1)VERY UNHAPPY (2)UNHAPPY (3)NEUTRAL (4)HAPPY (5)VERY HAPPY

17. GOT OR MADE PREGNANT.

18. DECIDED ABOUT COLLEGE.

19. THOUGHT ABOUT SUICIDE.

20. CHANGED SCHOOL.

21. JOINED A CLUB OR GROUP.

22. GOT IN TROUBLE AT SCHOOL.

23. GOT OR GAVE A VENEREAL DISEASE.

24. MET A TEACHER I LIKED ALOT.

25. FAMILY HAD MONEY PROBLEMS.

26. BEEN FORCED TO HAVE SEX.

(1) VERY UNHAPPY (2) UNHAPPY (3) NEUTRAL (4) HAPPY (5) VERY HAPPY

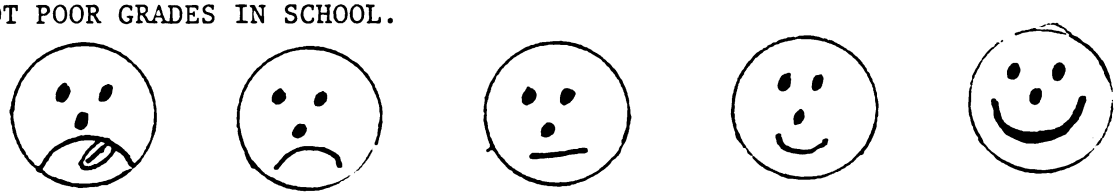
27. GOT OWN TV OR STEREO.

28. PARENTS ARGUED OR FOUGHT.

29. RANAWAY FROM HOME.

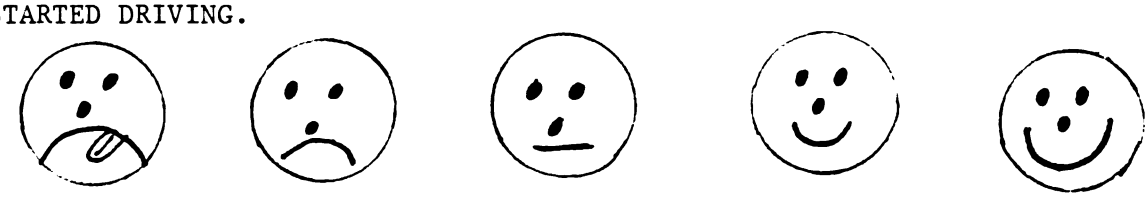
30. STARTED DATING REGULARLY.

31. GOT POOR GRADES IN SCHOOL.



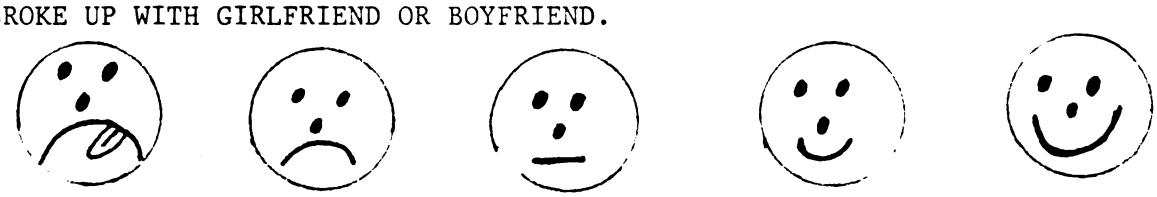
32. TOOK VACATION WITHOUT PARENTS.

33. STARTED DRIVING.

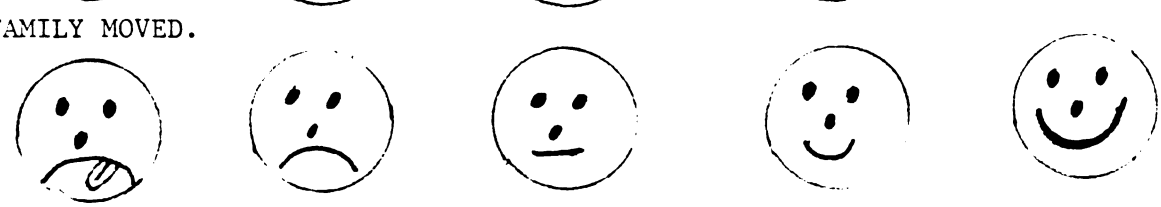


34. YELLED AT ALOT.

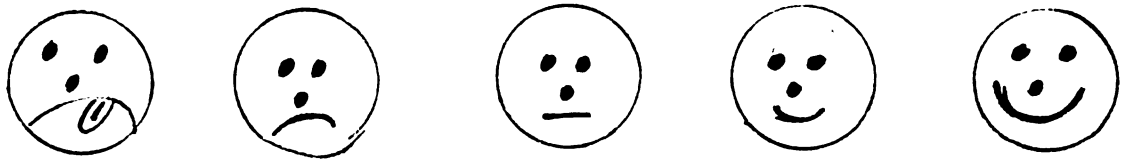
35. BROKE UP WITH GIRLFRIEND OR BOYFRIEND.



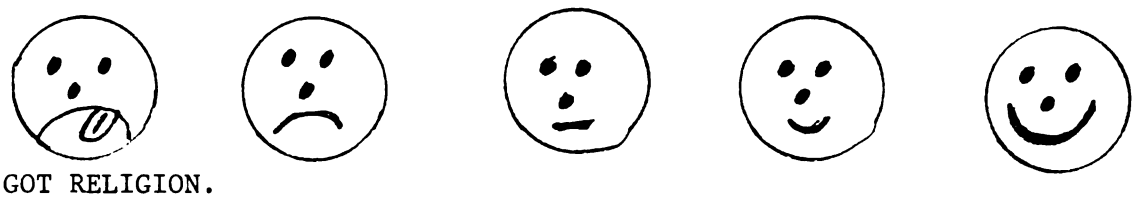
36. FAMILY MOVED.



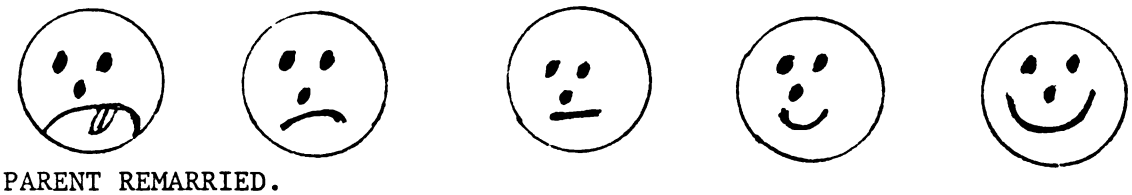
STARTED MAKING OWN MONEY.



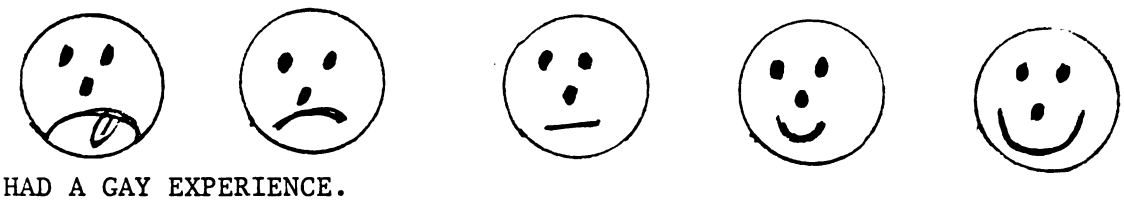
USED DRUGS.



GOT RELIGION.



PARENT REMARRIED.

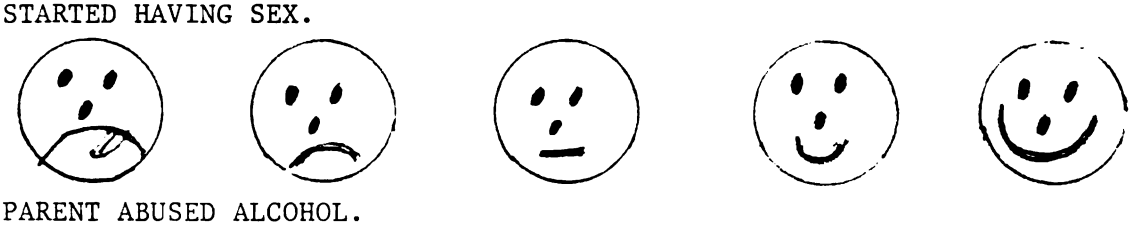


HAD A GAY EXPERIENCE.

GAINED ALOT OF WEIGHT.

SERIOUS ACCIDENT OR ILLNESS.

STARTED HAVING SEX.



PARENT ABUSED ALCOHOL.

PLEASE CHECK IF ANY OF THE FOLLOWING EVENTS HAVE HAPPENED TO YOU...

	DURING THE PAST YEAR (12 MONTHS)	BEFORE PAST YEAR
1. PARENTS DIVORCED.		
2. FAMILY ACCIDENT OR ILLNESS.		
3. FOUND A NEW GROUP OF FRIENDS.		
4. USED ALCOHOL		
5. GOT IN TROUBLE WITH THE LAW.		
6. STOLE SOMETHING VALUABLE.		
7. BEEN BEATEN OR PHYSICALLY ABUSED.		
8. GIVEN MEDICATION BY A PHYSICIAN.		
9. FELL IN LOVE.		
10. FACE BROKE OUT WITH PIMPLES.		
11. DEATH IN FAMILY		
12. BROTHER OR SISTER MOVED OUT.		
13. STARTED SEEING A THERAPIST.		
14. PARENT CHANGED JOB.		
15. BEGAN A TIME CONSUMING HOBBIE.		
16. SMOKED MARIJUANA.		
17. GOT OR MADE PREGNANT.		
18. DECIDED ABOUT COLLEGE.		
19. THOUGHT ABOUT SUICIDE.		
20. CHANGED SCHOOL.		
21. JOINED A CLUB OR GROUP.		
22. GOT IN TROUBLE AT SCHOOL.		
23. GOT OR GAVE A VENEREAL DISEASE.		

	DURING PAST YEAR	BEFORE PAST YEAR
24. MET A TEACHER I LIKED ALOT.		
25. FAMILY HAD MONEY PROBLEMS.		
26. BEEN FORCED TO HAVE SEX.		
27. GOT OWN TV OR STEREO.		
28. PARENTS ARGUED OR FOUGHT.		
29. RAN AWAY FROM HOME.		
30. STARTED DATING REGULARLY.		
31. GOT POOR GRADES IN SCHOOL.		
32. TOOK VACATION WITHOUT PARENTS.		
33. STARTED DRIVING.		
34. YELLED AT ALOT.		
35. BROKE UP WITH GIRLFRIEND OR BOYFRIEND.		
36. FAMILY MOVED.		
37. STARTED MAKING OWN MONEY.		
38. USED DRUGS.		
39. GOT RELIGION.		
40. PARENT REMARRIED.		
41. HAD A GAY EXPERIENCE.		
42. GAINED ALOT OF WEIGHT.		
43. SERIOUS ACCIDENT OR ILLNESS.		
44. STARTED HAVING SEX.		
45. PARENT ABUSED ALCOHOL.		

FOR REFERENCE

NOT TO BE TAKEN FROM THE ROOM

BRO DART CAT. NO. 23 012 PRINTED IN U.S.A.