

1992

Perception of stressors by 9th and 12th grade students utilizing the Youth adaptation rating scale

Michael James Krummel
Portland State University

Follow this and additional works at: https://pdxscholar.library.pdx.edu/open_access_etds



Part of the [Counselor Education Commons](#), and the [Education Commons](#)

Let us know how access to this document benefits you.

Recommended Citation

Krummel, Michael James, "Perception of stressors by 9th and 12th grade students utilizing the Youth adaptation rating scale" (1992). *Dissertations and Theses*. Paper 4368.

<https://doi.org/10.15760/etd.6225>

This Thesis is brought to you for free and open access. It has been accepted for inclusion in Dissertations and Theses by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: pdxscholar@pdx.edu.

AN ABSTRACT OF THE THESIS OF Michael James "Zip" Krummel for the
Master of Science in Education: Counseling presented November 4, 1992.

Title: Perception of Stressors by 9th and 12th Grade Students
Utilizing the Youth Adaptation Rating Scale.

APPROVED BY THE MEMBERS OF THE THESIS COMMITTEE:

[Redacted Signature]

Carol A. Burden, Chair

[Redacted Signature]

Dave Capuzzi

[Redacted Signature]

Arthur Terry

[Redacted Signature]

Connie Dawson

[Redacted Signature]

Dawn Graff-Haight

Stress is a fact of life. There has been much research done since the early 1970's dealing with the various aspects and relationships of stress and life events for all stages of human development. The purpose of this study was to investigate perceived life-event stressors of 9th grade and 12th grade

students in three Pacific Northwest rural schools. The study also sought to a) ascertain whether male students in the 9th grade and 12th grade perceive stressful life events differently than female students in the same grade, and b) explore if there was a difference in perceptions of students of “different” rural community populations and different age populations (9th & 12th graders).

The specific objectives of the study were as follows:

1. Identify changes since 1984, if any, in perceived life-event stressors in 9th and 12th grade students using the YARS.
2. Determine if differences in perceived life-event stressors exist between 9th grade students and 12th grade students.
3. Determine if differences in perceived life-event stressors exist between 9th grade male and female students and between 12th grade female and male students.
4. Identify any significant differences between 9th grade and 12th grade students in three different rural schools with different community and graduating class populations.

Participants in this study consisted of 9th and 12th graders currently enrolled during the 1991-1992 school year. The samples were taken from three different rural schools in Pacific Northwest with “different” enrollment sizes.

The instrument was the Youth Adaptation Rating Scale (YARS),

which was composed of a list of 58 life events that have been determined to create stress in adolescents that results from difficulty dealing with change, and that require some type of adaptation.

Each item on the YARS was ranked by respondents using a descriptive scale (0-5) according to the degree of adaptation required for each event. The YARS was color-coded to indicate grade and gender of the adolescent. Each set of YARS was alpha-coded to indicate which school (and population size) it came from.

Resulting data showed that 21 of the original 58 YARS life events showed a significant decrease ($p > .10$) in degree of severity ratio when compared to the original study.

Mean score results were:

1. The mean scores for males and females were significantly different at the .0001 level.

2. The mean scores for grade level were significantly different at the .0159 level.

3. The mean scores by school (population) were not significantly different for any of the three different schools (populations) measured.

4. The two-variable group, gender/school, had mean scores significantly different at the .002 level, showing a pronounced variance between gender groups of the different schools.

5. The mean scores for the two-variable group, grades/school, were not

significantly different.

6. The mean scores for the two-variable group, gender/grades, were not significantly different.

PERCEPTION OF STRESSORS BY 9TH AND 12TH GRADE STUDENTS
UTILIZING THE YOUTH ADAPTATION RATING SCALE

by

MICHAEL JAMES "ZIP" KRUMMEL

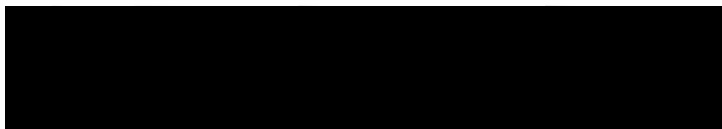
A thesis submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE
in
EDUCATION: COUNSELING

Portland State University
1992

TO THE OFFICE OF GRADUATE STUDIES:

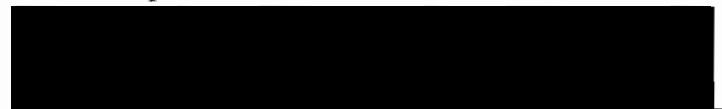
The members of the Committee approve the thesis of Michael James
"Zip" Krummel presented November 4, 1992.



Carol A. Burden, Chair



Dave Capuzzi



Arthur Terry

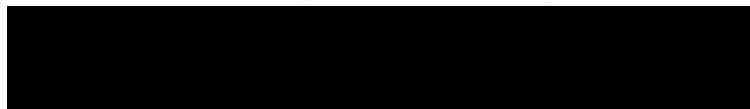


Connie Dawson

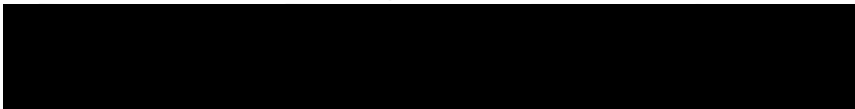


Dawn Graff-Haight

APPROVED:



Robert B. Everhart, Dean, School of Education



Roy W. Koch, Vice Provost for Graduate Studies and Research

DEDICATION

This thesis and the effort involved is dedicated to Tayler Lynne Krummel. She gives me new motivation and the desire to better understand adolescent stress before she has to experience it.

ACKNOWLEDGEMENTS

Probably the most difficult section of this thesis is my desire to acknowledge those that have made this project a possibility because it is like a farewell to a segment of my life that has been special for me.

Dr. Hanoch Livneh, although a member of the Counseling Ed Department, is not a member of my committee. However, without his freely-given help I may never have completed this thesis. His humor and willingness to help with the format, language, and statistical part of this research was invaluable. Thank you.

Connie Dawson is a member of the department I did not know until the thesis, and it was with some hesitation that I approached this “stranger” about being on my committee. Much to my surprise and pleasure, she readily agreed. She has been very helpful and has brought humor and insight to our meetings. Thank you.

I want to thank Dr. Dave Capuzzi for his support in this writing and for the opportunities he “provided” me in his classes to learn writing and research work in the APA Style. I groaned when receiving his written assignments, but (secretly) found myself excited and eager to begin the assigned research and writing. I learned about counseling and about myself. You’ve brought me out into the open—Thank You.

Dr. Art Terry has been my principle teacher and mentor while in the program. He was the first to involve me in adolescent stress and it was in one of his classes that I first learned about life event stress indicators and how outdated they might be. He has been a real motivator throughout my time in the Counseling program. Thank you for your friendship, mentorship, and guidance.

Dr. Carol Burden has also been very special to me these past four-plus years. Besides being my department advisor, she has been a friend and mentor. She taught me the differences between crossing a bridge and burning a bridge, and has given me many other things to think about that have affected my personal and professional development. Thank you for your friendship, mentorship, and guidance.

To all five of you I offer my Love and Friendship.

It is said that everyone needs a hero, and you five are mine!

Thank you.

TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER	
I INTRODUCTION	1
Statement of the Problem	2
Definitions	3
Limitations	3
II REVIEW OF THE LITERATURE	5
Background	5
Life Events as Stressors	8
Children and Stress	9
Adolescents and Stress	11
III METHODOLOGY	14
Population and Sample	14
Sample	
Instrument	
Procedure	

	Treatment of Data and Analysis	18
	Rating	
	Response Rate	
IV	REPORT OF FINDINGS	21
V	DISCUSSION, IMPLICATIONS, LIMITATIONS, AND RECOMMENDATIONS	31
	Discussion	31
	Purpose	
	Objectives	
	Calculations	
	Conclusions	
	Implications	36
	Recommendations	40
	REFERENCES	42

LIST OF TABLES

TABLE		PAGE
I	Response Population (N) Distribution	19
II	YARS Mean Ratios of Degree of Severity	22
III	Proposed Life Events With Significant Degree of Severity Ratios	23
IV	Life Events Rated as Less Severe.	24
V	Raw Score Means.	25
VI	Matrix of Correlation Coefficient Between Grade Group Ratios and Between Grade Groups and Mean Ratios	27
VII	Matrix of Correlation Coefficient Between Grade Groups, Gender Groups, and School Groups	28
VIII	Analysis of Variance (ANOVA) Results	29
IX	Additional Life Events as Suggested by Respondents	37

LIST OF FIGURES

FIGURE		PAGE
1.	Response Population (N) Distribution	20
2.	Raw Score Means by Stack	26

CHAPTER I

INTRODUCTION

“All diseases of the body proceed from the mind or soul.”

Plato, 4th Century B.C. Greek philosopher

Stress is a fact of life. There has been much research done since the early 1970's dealing with the various aspects and relationships of stress and life events for all stages of human development. Many researchers and mental health specialists have further identified adolescence as a particularly stressful stage of development for various reasons. In working with adolescents, identifying life events that contribute to stress has become a primary tool used in stress management (Beall & Schmidt, 1984).

Many health textbooks used in secondary schools contain the Social Readjustment Scale (SRRS) (Holmes & Rahe, 1967). This allows students to do a self-assessment of stress levels based upon adaptation to life events. However, the SRRS was developed as a predictor of illness for adults and, hence, does not measure the causes of adolescent adaptation, nor does it offer adolescents, parents, or teachers a clear perception of events that may be related to adolescent stress. To meet this need, Beall & Schmidt (1984) developed the Youth Adaptation Rating Scale (YARS). The YARS was based

developed the Youth Adaptation Rating Scale (YARS). The YARS was based upon adolescent perception of stressful life events.

STATEMENT OF THE PROBLEM

The purpose of this study was to investigate perceived life-event stressors of 9th grade and 12th grade students in three Pacific Northwest rural schools. The study also sought to (a) ascertain whether male students in the 9th grade and 12th grade perceive stressful life events differently than female students in the same grade, and (b) explore if there was a difference in perceptions of students of different rural community populations and different age populations (9th & 12th graders).

The specific objectives of the study are as follows:

1. Identify changes since 1984, if any, in perceived life-event stressors in 9th and 12th grade students using the YARS.
2. Determine if differences in perceived life-event stressors exist between 9th grade students and 12th grade students.
3. Determine if differences in perceived life-event stressors exist between 9th grade male and female students and between 12th grade female and male students.
4. Identify if any significant differences between 9th grade and 12th grade students in three different rural schools with different community and graduating class populations.

DEFINITIONS

The following terms are provided with specific definitions appropriate to the study at hand. All of the following terms used in the context of this paper will carry the meaning provided below:

1. Rural: Areas outside of cities that are considered to be “in the country” and where the primary source of income is from local agriculture.
2. Stressor: any action or situation that places special physical or psychological demands upon a person (Tanner, 1976).
3. Stress: The nonspecific response of the body to any demand made upon it (Selye, 1974).
3. Distress: That stress resulting from life-events perceived to be negative. These life-events create the perceived need for extreme adjustment by the individual.
4. Eustress: That stress resulting from life-events perceived to be positive. Selye (1978) described eustress as the stress that creates the desire to succeed.

LIMITATIONS

Because of the nature and structure of this study, it was subject to the following limitations:

1. YARS response: It was assumed that high school students would respond accurately to the YARS and that they could determine their own

perceived stressors based upon the listed life-events. No objective verification of a student's life-experiences was undertaken to verify how well they were able to relate to the listed life-events.

2. An inherent inability to generalize results to urban populations.

3. A lack of random sampling of participants from the three rural communities.

4. It was assumed that the selected high school instructors would accurately follow directions provided them in regards to dissemination of the YARS and the color-coding used to distinguish evaluated populations.

5. It was assumed that a distribution of rural communities with varying populations would provide an overall truer response to this research than an objective selection of one community and one high school because it provides a wider population base and possibly different perceptions.

CHAPTER II

REVIEW OF THE LITERATURE

According to the available research, interest in “stress” has been active since the mid-50’s, but there has been limited activity in developing accurate, usable tools to determine stress levels and/or what are stressors. A lot of research has been done on the nature of stress but even that has yet to reach consensus within the field of mental health.

BACKGROUND

As early as 1956, research by Selye had pointed out that a certain amount of stress is an inevitable part of living, but excessive stress can have damaging consequences. Stress calls forth extreme emotional reactions and can lead to marked changes in attitudes and behavior (Selye, 1956).

According to Monroe (1980), those who have studied stress observe that:

1. Some forms of stress are common to all, some are peculiar to certain cultures or socioeconomic groups, and some are unique to certain people.
2. Each of us perceives and deals with stress differently, depending on our personalities, environments, and backgrounds.
3. Mild stress can result in improved performance, but intense stress or long periods of mild stress can result

in poor performance.

4. Long-term stress generally causes frustration, confusion, and despair — even illness.

5. Some stress, however, is necessary to our well-being (p. 3-4).

Another qualification of the general formulation — stress as imbalance of demand and response capability — was that stress or threat only occur when the consequences of failure to meet the demand are important; or rather, when they are perceived by the organism to be important. Thus, when environmental demands are such that the focal organism can ignore them or fulfill them adequately without serious consequences to oneself, those demands will not generate threat for that organism however much they may exceed one's response capabilities. Threat or psychological stress, then, implies the anticipation of adverse consequences arising from failure to meet demands (McGrath, 1970).

An important qualification of "perceived" stressors was represented by Lazarus' (1976) concept of cognitive appraisal and psychological stress or threat. In this view,

...an environmental demand can produce (psychological or perceived) stress only if the focal organism anticipates that he or she will not be able to cope with it, or cope with it adequately, or cope with it without endangering other goals. Stress exists not in an imbalance between objective demand and the organism's response capability, but in an imbalance between perceived or subjective demand and perceived response capability. One is not threatened by demands which he or she does not "receive", or by demands which one perceives himself

to be capable of handling without undue expenditure of resources (whether or not that judgment is in fact correct). One is threatened by the anticipation that he will not be able to handle perceived demands adequately (whether those perceived demands are or are not "real", and whether the anticipated inability to handle them does in fact occur). This view makes the cognitive appraisal of a demand-capability imbalance the necessary and sufficient condition for "threat" or "psychological stress". (pp 17-18)

In his book Stress, Tanner (1976) talked about the three types of response to stressors: emotional (the most obvious and most difficult to measure), behavioral (easier to analyze objectively), and physiological (has the deepest significance to one's health), each distinguishable from but related to the others.

Complete absence of stress has a negative side. Tanner (1976) pointed out that if people cannot long tolerate stress overload, neither can they tolerate severe underload. Too little of the external stimuli considered stressful may presage symptoms that, paradoxically, are similar to those of stress. It seems that the absence of stressors is itself a kind of stressor.

The accumulation of distress is associated with illness symptoms and depressed mood. Prospective analysis showed that positively rated circumstances (eustress) moderated the impact of negative circumstances on both illness symptoms and depressed mood.

LIFE EVENTS AS STRESSORS

One body of research that investigates the impact of stress consists of studies of life events. Holmes and Rahe (1967) developed the Social Readjustment Rating Scale (SRRS), a life-event stress identification instrument. For this particular scale, "marriage" was arbitrarily assigned the magnitude of 50 points, and the subjects then rated the other items by number as to how much more or how much less change each requires in comparison with marriage. Other life-event instruments have utilized a similar approach.

Monroe (1980) observes that stress can be evoked by any change in life circumstances. Whether pleasant or unpleasant, various experiences are perceived differentially in terms of the estimated magnitude and amount of required adaptation. According to Yamamoto (1979), research shows that the overall rankings of life events may be remarkably similar not only among sub-populations in the United States, but also among people in other countries. Moreover, the sum of the relative weights assigned to events actually experienced in the recent past may offer predictive value for subsequent illnesses (Gunderson & Rahe, 1974).

Among the criticisms that have been leveled against life-events research is the narrow conceptualization of what constitutes a stressor. In the majority of studies, the focus has been on discrete life events to the exclusion

of both stress of an ongoing nature (Pearlin & Lieberman, 1979) and minor everyday hassles and uplifts (DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982).

CHILDREN AND STRESS

Children can respond to emotional distress in various ways.

According to Chandler (1981), one child may turn inward, another may act out. In either case, the stimulus to the response may be characterized as a stressor (McGrath, 1970).

People begin dealing with stressors at an early age. Children model their problem-solving skills on the behavior of the adults around them. Through imitation the child lays the groundwork for handling stressful situations throughout his or her life (Monroe, 1980).

Chandler (1981) stated his belief that stress has both physical and psychological meaning, but feels psychological stress is the primary concern for children. He further argues that:

Psychological stress is a state of emotional tension arising from traumatic life events and from situations perceived as traumatic. Although each child tends to adopt his or her characteristic way of coping with stress, some adopt extreme patterns. Their behavior may interfere with their effective functioning, and may cause further distress to themselves and/or others. Emotional problems can be viewed as extreme patterns of behavior adopted in response to stress (p. 165).

Chandler continued by stating:

Psychological stress arises from two main conditions: (a) failure of the environment to meet the needs of the individual, or (b) environmental demands. Children commonly experience stress when significant others fail to meet their needs, or when they encounter excessive demands, real or perceived, in their environment (p. 166).

Data from children's own reports of what is stressful to them highlight the preeminence of strains relative to events. Lewis, Siegel, and Lewis (1984) interviewed children about "What happens that makes you feel bad, nervous, or worry?" From these interviews, they developed the Feel Bad Scale, which assesses the frequency and intensity of 20 commonly occurring stress-provoking circumstances. Although five or six of the circumstances that children said made them feel bad represented the type of discrete event that would appear on a life-events checklist, the majority of items, especially those with a high frequency of occurrence, were more similar to resistant strains. Thus, the Feel Bad scale is most appropriately described as a measure of stressful life circumstances (Siegel & Brown, 1988).

Although the specific Feel Bad circumstances were generated from interviews with children about what makes them feel bad, prior research (Compas, 1987) emphasizes that the relative positivity or negativity of an event depends on the timing, meaning, and context in which such circumstances occur.

A few available studies have either left unexplained the comparative stressfulness of childhood experiences (Murphy & Moriarty, 1979) or

depended entirely on adult judgments (Coddington, 1979). However, "stress as experienced by the child and stress as estimated by the adult observing the impact of the stress on the child are frequently of very different orders of magnitude" (Anthony, 1974, p. 106).

ADOLESCENTS AND STRESS

Clinical accounts have described adolescence as a period of turmoil, identity confusion, and stress (Erikson, 1950; Freud, 1958). In contrast, empirical studies by Weiner (1985) have cast doubt on the notion that adolescence is inevitably stormy and, instead, have emphasized the continuity of development from childhood through adulthood. These approaches converge, however, in their recognition that adolescence is a period of great physical, cognitive, and social change. Early adolescence, in particular, has been characterized as a developmental transition because of the significant changes that occur in several aspects of development (Peterson, 1986).

A cross-sectional study (Swearingen & Cohen, 1985) of adolescents showed that negative life events most strongly affect health status in the relative absence of positive life events. Prior studies on adolescent mental health have indicated that distress predicts subsequent life events, rather than events predicting psychological distress (Compas, Wagner, Slavin, & Vannatta, 1986; Swearingen & Cohen, 1985).

Studies of negative circumstances and grade-level comparison of type of interaction revealed that the effect of negative circumstances on depressed mood is primarily seen among the younger adolescents. Thus, as suggested by developmental research, early adolescence appears to be a time of relatively greater vulnerability to stressors than middle or late adolescence. Circumstances rated positively did not directly influence physical or mental health (Siegel & Brown, 1988).

The life-events approach has been used as one framework for studying adolescent stress. Similar to research with adults, cross-sectional studies of adolescents show that the accumulation of life events is related to a variety of measures of psychological and somatic health. The greater impact of negative events than that of positive events is also consistent with the adult literature. Thus, adolescent change perceived as negative may be more related to dysfunction rather than to adolescent change through emotional development (Siegel & Brown, 1988).

Research from early use of the Youth Adaptation Rating Scale (YARS) (Beall & Schmidt, 1984) showed that the combination of many negatively rated, and a few positively rated, circumstances was most predictive of subsequent distress. Lazarus, Kanner, and Folkman (1980) hypothesized that positive feeling states may improve the individual's ability to cope by providing a "breather" from negative experiences. Selye (1974), who first coined the expression "eustress", believed that the stress from positive

experiences was the “kind of stress that makes you come alive”.

All of the available research used in this paper agreed, or supported, the idea that stress is resultant on an individual’s perception of the event, perception of the criticality of the need for adjustment, and the individual’s perception of how well he or she can deal with it. How an individual deals with an event and stress is largely dependent upon their age and experience. This thesis intends to clarify some of the earlier research results and expects to support most of it.

CHAPTER III

METHODOLOGY

POPULATION AND SAMPLE

Sample

Participants in this study consisted of 9th and 12th graders currently enrolled during the 1991-92 school year. The samples were taken from three different rural schools in Pacific Northwest with different enrollment sizes. The total enrollment sizes were 980 (Hood River Valley High School), 475 (Goldendale High School), and 145 (Cascade Locks School).

To develop a framework, the schools were selected from a common area — the Columbia Gorge — with a minimum enrollment difference of 20-percent (20%) required to distinguish the three different school communities tested. Permission to use the YARS in each school and enrollment verification was provided by the building principals and verified by a school counselor. Several schools either denied permission or expressed no desire to participate, narrowing the choices of available schools within the Columbia Gorge area and with a 20% difference in population sizes.

Instrument

The instrument was the Youth Adaptation Rating Scale (YARS), which

was composed of a list of 58 life events that have been determined to create stress in adolescents that results from difficulty dealing with change, and that require some type of adaptation. The authors, Beall and Schmidt (1984), developed the YARS because there was no instrument available that measured the causes of adolescent adaptation so that needed coping skills could be identified. Another reason they developed the YARS was to have an instrument for parents, teachers and adolescents that provided a clearer perception of events that may cause stress during adolescence. The development of the YARS included four phases:

1. Teaching about stressors to senior high school students and allowing them to brainstorm the events that caused stress in their lives and the lives of other adolescents, creating the 58 life events used in the YARS.
2. Establishing a measure of severity for each scale item by having a different group of 453 adolescents rank each one of the 58 life events using the descriptive scale (0-5) as suggested by both Cleary (1981) and Chinboga (1977). A ratio value (degree of severity) was developed by dividing the total value for each item by the highest possible score. For example, if there are 50 students rating items, the highest possible score for each item would be 5×50 (250). The total of all ratings would then be divided by 250 to attain a ratio of severity for each item (Beall & Schmidt, 1984).
3. Determining the validity and reliability of the scores. Validation of the YARS was planned for by having a different population of adolescents

rank the items to determine ratio values or degrees of adaptation required for each item. It should be noted that very little validity data were provided in the original study. Responses by the group correlated ($r = .935$) with those of the original group. Reliability was determined by the test-retest method by administering the YARS to 234 adolescents twice within a week. The two sets of scores were correlated using the Pearson Product Moment procedure; the YARS was found to have a test-retest reliability coefficient of .935 ($r = .935$).

4. Determining the utility of the scale in a wide variety of settings. The authors used five different population groups, six ethnic categories, both genders, and grades seven through ten. The returned data were analyzed by means of the ANOVA, and results showed (a) the mean scores were not significantly different for any of the four population categories measured; (b) mean scores for males and females were significantly different at the .0001 level, females registering the higher scores; (c) mean scores for grade level were significantly different at the .0461 level, with the higher scores noted from the 12th graders; (d) mean scores for those students who had received instruction in stress due to life events were not significantly different than those students not receiving instruction in stress due to life events; and (e) mean scores for the different ethnic groups were not significantly different from each other.

The Thesis Committee for this study acted as an initial research committee to assist the author in developing contemporary life events to be

rated along with the original YARS life events for possible inclusion as updates. The nine new life events developed were as follows:

1. Not drinking alcohol
2. Fear of getting AIDS
3. Concern over sexual orientation
(gay/lesbian/bisexual)
4. Being able to live as well as or better than parents do
5. Parents getting laid off from their jobs
6. Not having money for college
7. Getting an abortion
8. Not knowing both biological parents
9. Having no one you can trust to talk to

These new life events were tested for validity using the test-retest method. Reliability was not checked. The nine new life events were added to the end of the original YARS, and numbered 59-67. Respondents were also asked to list and rank any other life events that should be considered but were not listed.

Each item on the YARS was ranked by respondents using a descriptive scale (0-5) according to the degree of adaptation required for each event. The YARS was color-coded to indicate grade and gender of the adolescent. Each set of YARS was alpha-coded to indicate which school (and population size) it came from.

Procedure

Each teacher administering the YARS was provided with a brief introduction and instructions. The students received a copy of the YARS, brief written instructions, and matching verbal instructions from the teacher. Both the cover sheet for the YARS and the verbal instructions from the teacher emphasized that it was voluntary. Upon completion of the YARS they were collected by the teacher.

TREATMENT OF DATA AND ANALYSIS

Rating

The rating procedure was the same as recommended by Beall and Schmidt (1984), the originators of the YARS. A ratio value, or degree of severity of adaptation, was determined for each event of the scale. This was accomplished by dividing the total of all ratings for each item by the highest possible score for each item.

Formulas:

$$5 \times N = \text{highest possible score for each item } (S_h)$$

$$R_t / S_h = \text{ratio of severity}$$

(where R_t equals total of all ratings for each item)

For example: if there are 50 students rating items, the highest possible score for each item would be $5 \times 50 = 250$. If the total ratings for that item equaled 160, the ratio of severity would be $160 / 250 = .64$.

The Pearson Product Moment correlation coefficient was used to

determine the degree of relationship between groups, and between each group and the total group tested.

Returned data were analyzed by the ANOVA procedure to determine the difference between scores on the YARS for : (a) males and females; (b) two grade levels; (c) three school populations; and (d) the original perceptions from the early 1980's and the perceptions of the current samples.

Response Rate

Usable responses were received from three schools: Hood River Valley High School (HRVHS), Goldendale High School (Golden), and Cascade Locks School (CLS). Total population for this work was 296 (N = 296). The population (N) distribution is shown in Table I. Figure 1 shows the population (N) distribution graphically.

TABLE I
RESPONSE POPULATION (N) DISTRIBUTION

School	9th Grade	12th Grade	Male	Female
HRVHS	92 (42%)	96 (58%)	96 (46%)	92 (51%)
Golden	62 (62%)	0	34 (60%)	28 (65%)
CLS	26 (90%)	20 (92%)	14 (88%)	32 (91%)
Totals	180	116	144	152

TOTAL N = 296

NOTE: % figures are for total 9th grade, total 12th grade, total 9th & 12th grade males and females for that school.

Female students comprised 51% of the respondents in this study and 9th grade students comprised 61% of the respondents.

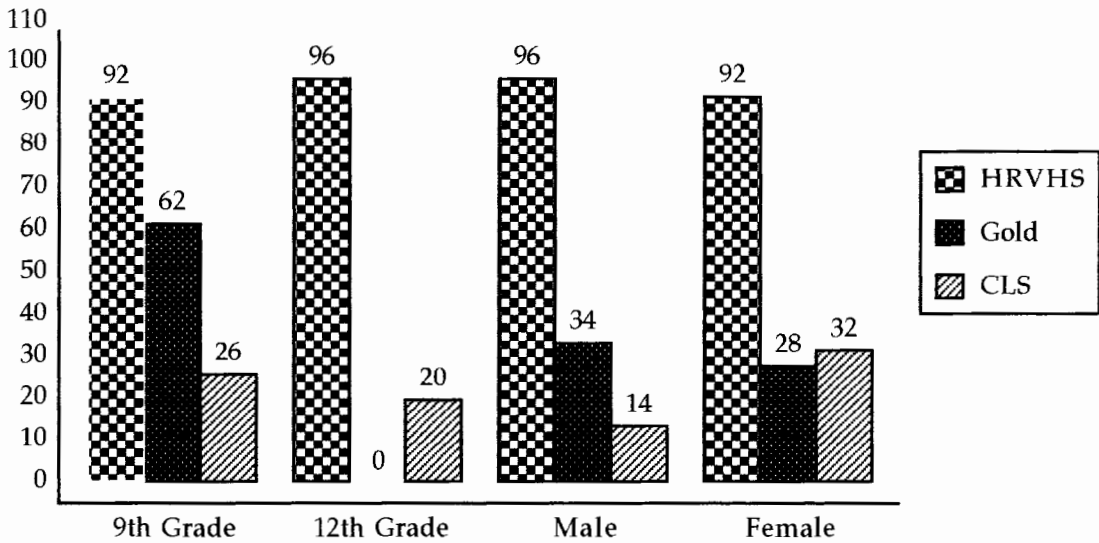


Figure 1. Response population (N) distribution.

Goldendale High School reported that they were unable to distribute and gather the YARS to the 12th graders before graduation interfered. It was discovered that those responses from Goldendale color-coded for 12th graders were duplicates of the 9th grade responses, done secretly by a few of the 9th graders before returning the responses to the author. The false responses were not counted.

CHAPTER IV

REPORT OF FINDINGS

The purpose of this study was to investigate perceived life-event stressors of 9th grade and 12th grade students in three Pacific Northwest rural schools. The study also sought to (a) ascertain whether male students in the 9th grade and 12th grade perceive stressful life events differently than female students in the same grade, and (b) explore if there was a difference in perceptions of students of different rural community populations and different age populations (9th & 12th graders).

Findings of the study were summarized according to the defined groups that participated in the study: three rural schools with significantly different population sizes, 9th grade males and 9th grade females from each school, and 12th grade females and 12th grade males from each school.

Table I shows the distribution of student respondents.

Using the initial study by Beall & Schmidt (1984) as the model, a ratio value, or degree of severity, was calculated for each group for each of the 58 original YARS life events plus the nine life events developed by the research committee.

Table II represents the scale items with the resulting mean ratios.

TABLE II

YARS MEAN RATIOS OF DEGREE OF SEVERITY

<u>Life Event</u>	(1984 ratio)	(1992 ratio)
□ Graduation	(.57)	(.46)
□ Pet dies	(.55)	(.39)
□ Fights with parents	(.67)	(.58)
□ Getting pressure about having sex	(.63)	(.40)
□ Caught cheating or lying repeatedly	(.73)	(.53)
□ Getting a major illness/injury/car accident	(.81)	(.64)
□ Becoming religious or giving up religion	(.63)	(.37)
□ Referral to the principal's office	(.47)	(.40)
□ Getting acne/warts	(.45)	(.32)
□ Trouble getting a date when it was not a problem before	(.61)	(.41)
□ Problems developed with teachers/employers	(.59)	(.44)
□ Making career decisions (college, majors, training, etc.)	(.64)	(.72)**
□ Starting to go to weekend parties or rock concerts	(.35)	(.29)
□ First day of school	(.37)	(.42)**
□ Going on first date/starting to date	(.53)	(.48)
□ Death of a parent/guardian	(.95)	(.93)
□ Not getting promoted to next grade	(.76)	(.75)
□ Getting caught using drugs	(.86)	(.64)
□ Getting attacked/raped/beat up	(.84)	(.78)
□ Getting a ticket or other minor problems with the law	(.58)	(.62)**
□ Parents getting a divorce or separation	(.83)	(.78)
□ Getting expelled/suspended	(.71)	(.56)
□ Fad pressure	(.43)	(.31)
□ Breaking up with boy/girlfriend	(.57)	(.62)**

<u>Life Event</u>	(1984 ratio)	(1992 ratio)
□ Getting minor illness (cold, flu, etc.)	(.30)	(.27)
□ Arguments with peers/brothers/sisters	(.46)	(.39)
□ Starting to perform (speeches, presentations, musical or drama performances)	(.60)	(.61)**
□ Getting fired from a job	(.63)	(.64)**
□ Going into debt	(.72)	(.70)
□ Being stereotyped/discriminated/having bad rumors spread about you	(.70)	(.65)
□ Death of a close family member	(.94)	(.87)
□ Death of a boy/girlfriend/close friend	(.94)	(.89)
□ Getting VD	(.86)	(.73)
□ Getting someone pregnant/getting pregnant	(.92)	(.85)
□ Taking Finals/SAT	(.61)	(.67)**
□ Moving to a different town/school/making new friends	(.67)	(.62)
□ Getting a car	(.35)	(.32)
□ Trying to get a job/job interview	(.49)	(.50)**
□ Getting an award, office, etc.	(.36)	(.30)
□ Making a team (drill, athletic, debate, etc.)	(.44)	(.35)
□ Getting married	(.73)	(.69)
□ Getting beat up by parents	(.86)	(.66)
□ Taking the driver license test	(.55)	(.56)**
□ Getting a new addition to the family	(.45)	(.50)**
□ Going to the dentist or doctor	(.37)	(.32)
□ Going to jail/reform school	(.88)	(.73)
□ Starting to use drugs	(.82)	(.60)

TABLE II
YARS MEAN RATIOS OF DEGREE OF SEVERITY
(continued)

<u>Life Event</u> (1984 ratio)(1992 ratio)	<u>Life Event</u> (1984 ratio)(1992 ratio)
<input type="checkbox"/> Losing or gaining weight (.49)(.42)	<input type="checkbox"/> Fear of getting AIDS (.)(59)
<input type="checkbox"/> Changing exercise habits (.21)(.32)**	<input type="checkbox"/> Concern over sexual orientation (gay / lesbian / bisexual) (.)(27)
<input type="checkbox"/> Pressure to take drugs(.71)(.49)	<input type="checkbox"/> Being able to live as well as or better than parents do (.)(44)
<input type="checkbox"/> Moving out of the house (.56)(.55)	<input type="checkbox"/> Parents getting laid off from their jobs (.)(57)
<input type="checkbox"/> Falling in love (.66)(.53)	<input type="checkbox"/> Not having money for college (.)(72)
<input type="checkbox"/> Getting a bad haircut(.57)(.41)	<input type="checkbox"/> Getting an abortion (.)(60)
<input type="checkbox"/> Getting glasses (.49)(.36)	<input type="checkbox"/> Not knowing both biological parents (.)(46)
<input type="checkbox"/> Family member moved out (.47)(.45)	<input type="checkbox"/> Having no one you can trust to talk to (.)(64)
<input type="checkbox"/> Getting a bad report card (.59)(.52)	
<input type="checkbox"/> Not drinking alcohol(.)(29)	

NOTE: Those ratio-pairs designated by ** indicates life events rated more severe in stress by the respondents of this study than those of the previous study.

Only one life event showed a significant increase ($p < .10$) in this study in terms of degree of severity: 51. Changing exercise habits (+.11)

Five of the nine new (proposed) life events showed significant ($p < .50$) degree of severity ratios. Table III lists those five proposed life events.

TABLE III
PROPOSED LIFE EVENTS WITH SIGNIFICANT
DEGREE OF SEVERITY RATIOS

<input type="checkbox"/> Fear of getting AIDS (.59)	<input type="checkbox"/> Getting an abortion (.60)
<input type="checkbox"/> Parents getting laid off from their jobs (.57)	<input type="checkbox"/> Having no one you can trust to talk to (.64)
<input type="checkbox"/> Not having money for college(.72)	

Twenty-one of the original 58 YARS life events showed a significant decrease ($p > .10$) in degree of severity ratio when compared to the original study. These 21 are as shown in Table IV.

TABLE IV
LIFE EVENTS RATED AS LESS SEVERE

<u>Life Event</u> (decrease)	<u>Life Event</u> (decrease)
<input type="checkbox"/> Graduation (-.11)	<input type="checkbox"/> Problems developed with teachers/employers (-.15)
<input type="checkbox"/> Pet dies (-.16)	<input type="checkbox"/> Getting caught using drugs (-.22)
<input type="checkbox"/> Getting pressure about having sex (-.23)	<input type="checkbox"/> Getting expelled/suspended (-.15)
<input type="checkbox"/> Caught cheating or lying repeatedly (-.20)	<input type="checkbox"/> Fad pressure (-.12)
<input type="checkbox"/> Getting a major illness/injury/car accident (-.17)	<input type="checkbox"/> Getting VD (-.13)
<input type="checkbox"/> Becoming religious or giving up religion (-.26)	<input type="checkbox"/> Getting beat up by parents (-.20)
<input type="checkbox"/> Getting acne/warts (-.13)	<input type="checkbox"/> Going to jail/reform school (-.15)
<input type="checkbox"/> Trouble getting a date when it was not a problem before (-.20)	<input type="checkbox"/> Starting to use drugs (-.22)
	<input type="checkbox"/> Going on a diet (-.12)
	<input type="checkbox"/> Pressure to take drugs (-.22)
	<input type="checkbox"/> Falling in love (-.13)
	<input type="checkbox"/> Getting a bad haircut (-.16)
	<input type="checkbox"/> Getting glasses (-.13)

Table V contains the raw score means for the entire population of respondents.

The group with the lowest mean ratio for degree of severity was the 9th grade males (across all three schools) with a raw score mean of 2.571. The highest mean ratio for degree of severity was the 12th grade females (across both schools) with a raw score mean of 3.180. Both 12th grade males (2.756) and females (3.180) (across both schools) had a higher raw score mean than their 9th grade gender counterparts (2.571 and 3.005, respectively) (across all

three schools).

TABLE V
RAW SCORE MEANS

<u>Source</u>	<u>Mean</u>	<u>Std. Dev.</u>
Total	2.864	.721
<u>SCHOOLS</u>		
HRVHS	2.841	.720
Golden	2.979	.725
CLS	2.805	.720
<u>GRADE LEVEL</u>		
12th Graders	2.990	.658
9th Graders	2.783	.750
<u>GENDER</u>		
Females	3.079	.689
Males	2.638	.686

Interestingly, Goldendale High School had the highest raw score mean and that was based entirely on 9th grade respondents, having no 12th grade respondents.

Figure 2 graphically presents the raw score means for the various groups as shown in Table V.

The original study (Beall & Schmidt, 1984) calculated correlation coefficients using the different group means rather than raw scores of the grouped respondents. The original research also used grade groups of 7th-8th grade, 9th grade, and 10th grade. The present study used only 9th grade and 12th grade. Table VI shows the comparison between the previous study and the present study regarding the correlation coefficient between grade group ratios, grade groups, and mean ratios. Because it is the oldest age group

presented, Table VI uses the original study's 10th grade group ratios and group means compared against the present study's 12th grade group means.

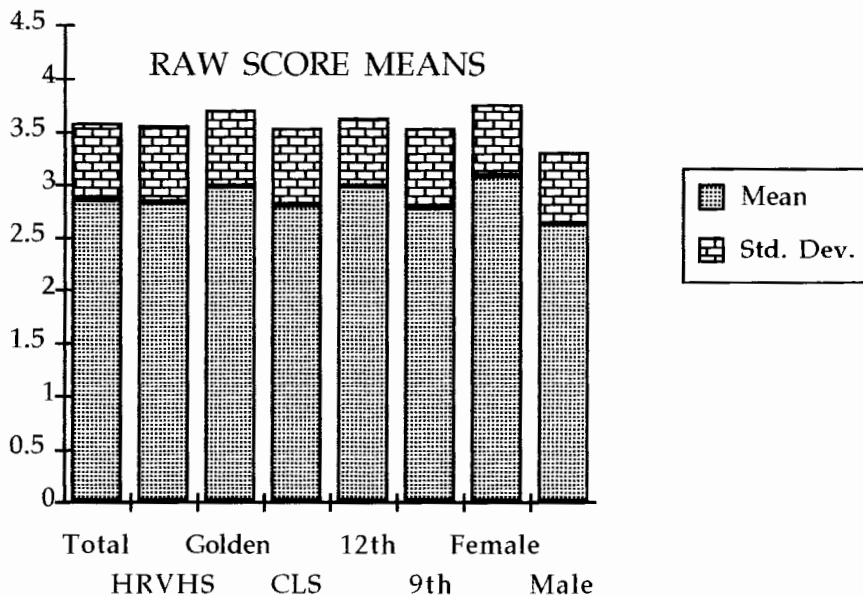


Figure 2. Raw score means by stack.

All of the correlation coefficients from this study shown in Table VI are lower than the original study.

The correlation coefficient calculations were done as a matrix between groups by school, by gender, and by grade, against the total group. All correlations were positive. The highest correlation was between the present study's 9th graders and the overall score for HRVHS (.984), and the lowest correlation was between the gender groups; overall male scores and overall female scores (.825). In the original study the correlations for all three groups were near the .950 level with the mean ratios. In this study only 7 of the 21 different correlation coefficients calculated fell near the .950 level (.940 - .960)

(e.g., in only 33.33% of the total).

TABLE VI
MATRIX OF CORRELATION COEFFICIENT BETWEEN GRADE
GROUP RATIOS AND BETWEEN GRADE GROUPS
AND MEAN RATIOS

	<u>9th old</u>	<u>9th new</u>	<u>10th old</u>	<u>12th new</u>	<u>Mean old</u>	<u>Mean new</u>
9 new	.852	1.000	**	.907	.852	.865
9 old	1.000	.852	.914	.812	.969	.852
12th new	.812	.907	**	1.000	.812	.846
10th old	.914	**	1.000	**	.957	**
Mean new	**	.865	**	.846	**	1.000
old	.969	.915	.957	.812	1.000	**

NOTE: The designation "old" refers to the original (1984) study; the designation "new" refers to this study.

Only two correlations had a coefficient significantly above the original study's .950 level; 9th graders correlated to the overall HRVHS scores (.984), and 12th graders correlated to the overall Golden scores (.964). The average (mean) for the total correlation coefficients in this study was .926. This drop in correlation between groups in this study and the correlation between groups in the original study is not considered significant.

The total correlation coefficient matrix for this study is shown in Table VII.

TABLE VII

MATRIX OF CORRELATION COEFFICIENT BETWEEN GRADE
GROUPS, GENDER GROUPS, AND SCHOOL GROUPS

Name	Males	Females	9th	12th	HRVHS	Golden	CLS
Males	1.000	.825	.946	.924	.945	.948	.921
Females	*	1.000	.909	.944	.908	.927	.914
9th	*	*	1.000	.899	.984	.949	.925
12th	*	*	*	1.000	.911	.964	.945
HRVHS	*	*	*	*	1.000	.953	.905
Golden	*	*	*	*	*	1.000	.902
CLS	*	*	*	*	*	*	1.000

Like the original study, an Analysis of Variance (ANOVA) procedure was used to analyze the differences between scores on the YARS for: (a) males and females; (b) grade levels; (c) and three school (population) parameters. The ANOVA could not be used to analyze the differences between the original YARS scores (total group) and scores from this study (total group) because the raw scores from the original study were not available.

Factorial ANOVA was selected because of the variable options. Table VIII shows the results.

The results, as indicated in Table VIII, are that:

1. The mean scores for males and females were significantly different at the .0001 level. This was the same as in the original study. This

significance was reverified using the Fisher PLSD (.157), showing the mean scores to be significantly different at the 95% (.05) level.

TABLE VIII
ANALYSIS OF VARIANCE (ANOVA) RESULTS

Source	DF	SS	Mean Square	F	P
Gender	1	14.409	14.409	30.481	.0001**
Grades	1	3.010	3.010	5.884	.0159**
Schools	2	1.085	0.542	1.044	.3535
Gender/ School	2	5.738	2.869	6.350	.0020**
Grades/ School	2	0.850	0.425	0.845	.3588
Gender/ Grades	1	0.002	0.002	0.003	.9540

2. The mean scores for grade level were significantly different at the .0159 level. This was of a more pronounced difference than in the original study (.0461). This significance was reverified using the Fisher PLSD (.168), showing the mean scores to be significantly different at the 95% (.05) level.

3. The mean scores by school (population) were not significantly different for any of the three different schools (populations) measured. This was similar to results obtained in the original study.

4. The two-variable group, gender/school, had mean scores significantly different at the .002 level, showing a pronounced variance

between gender groups of the different schools. The gender/school combination that scored highest was the Female/Golden group (3.452 mean), possibly because this group did not have 12th grade females to influence the score. The lowest gender/school combination was the Male/CL group (2.226 mean), possibly because of the small population of males in this group (14) and socioeconomic influence of the area (predominantly poor, out of work, or employed in timber). This calculation was not done in the original study.

5. The mean scores for the two-variable group, grades/school, were not significantly different. This calculation was not done in the original study.

6. The mean scores for the two-variable group, gender/grades, were not significantly different. This calculation was not done in the original study.

CHAPTER V

DISCUSSION, IMPLICATIONS, LIMITATIONS, AND RECOMMENDATIONS

DISCUSSION

Purpose

The purpose of this study was to investigate perceived life-event stressors of 9th grade and 12th grade students in three Pacific Northwest rural schools. The study also sought to (a) ascertain whether male students in the 9th grade and 12th grade perceive stressful life events differently than female students in the same grade, and (b) explore if there was a difference in perceptions of students of different rural community populations and different age populations.

Objectives

The specific objectives of the study are as follows:

1. Identify changes since 1984, if any, in perceived life-event stressors in 9th and 12th grade students using the YARS.
2. Determine if differences in perceived life-event stressors exist between 9th grade students and 12th grade students.
3. Determine if differences in perceived life-event stressors exist

between 9th grade male and female students and between 12th grade female and male students.

4. Identify any significant differences between 9th grade and 12th grade students in three different rural schools with different community and graduating class populations.

Calculations

The responses to the YARS instrument were analyzed statistically by calculating degree of severity ratios; mean scores were figured based upon those severity ratios. Correlation coefficients were calculated between grade groups, gender groups, school groups, and across groups. An Analysis of Variance (ANOVA) procedure was used to analyze the differences between respondent scores on the YARS for the different groups.

Conclusions

The conclusions are listed by research hypothesis.

Hypothesis Number One: There was a decreased degree of severity, sometimes pointed, in responses from the total group for 21 of the 58 original YARS life events (or 36%).

Of the 21, the eight life events that showed the largest decrease in stress severity were (from largest decrease to least): Becoming religious or giving up religion; Getting pressure about having sex; Getting caught using drugs/Starting to use drugs/Pressure to take drugs; and Caught cheating or

lying repeatedly/Trouble getting a date when it was not a problem before/Getting beat up by parents.

Eleven of the original YARS life events, or 19%, showed an increase in degree of severity of stress. The one statistically significant life event that showed the largest increase in stress severity was: 51. Changing exercise habits.

Conclusion: There have been some changes in stress severity responses according to scores of 9th and 12th graders on life events from the original YARS in 1984. However, approximately half (45%) of the responses from this study match the original, showing that today's adolescents still face most of the life events and the resulting stress the same as the same age groups did in 1984.

Research has long shown a connection between physical health and mental health, including handling of stressors on a psychological and physiological basis. That this knowledge has made it to the public schools is shown by the life event with the largest rise in severity, 51. Changing exercise habits. While the way in which exercise habits have changed was not specified to create the rise in stress, the fact that any change in exercise was stressful could be viewed as a positive note that today's youth take exercise seriously.

Hypothesis Number Two: There was a statistically significant difference between the degree of severity of stress for the YARS life events for

9th and 12th grade students in the population of this study. The difference was even more pronounced (.0159) than for the original study (.0461) in 1984.

Conclusion: The older the student, the higher the need for change/adaptation in dealing with a life event stressor as shown on the YARS scale. This also held true across the gender breakdown by grade. This finding parallels the original study and substantiates the authors implications that the need for adaptation/change or the recognition of that need becomes more evident as the adolescent grows older.

The longer we live, the more experiences we have realized and are influenced by. The results of this hypothesis should not be a surprise as older adolescents have more stressors to contend with as they near adulthood. Also, while they have more stressors to contend with, they do not necessarily have more coping skills to handle this increase in perceived stressful life events; thus, some events will be rated as more stressful than younger adolescents will rate them.

Hypothesis Number Three: There was a strong statistical significance (.0001) in responses between 9th grade males and females, and 12th grade males and females. The findings match those of the original study.

Females in both the 9th and 12th grades responded with higher mean scores than the males of either grade: 9th grade females by 0.434 raw score means over 9th grade males, 12th grade females by 0.424. over 12th grade

males, and females in the 9th grade had higher mean scores over 12th grade males by 0.249 raw score means.

Conclusion: During the adolescent years, females develop more rapidly than the male, becoming more aware of stressors. This is especially true during the first two years of puberty. Age differences and gender differences both affect the types of event included in the lives of adolescents. As the adolescent matures, more events requiring adaptation are included in their lives and are seen as more critical to them. The findings parallel those of the original study, and there was no research-based reason to expect it to have changed.

Again, like conclusions from Hypothesis Number Two, the increased number of experiences realized by older adolescents gives them a wider range of life events to relate to but not necessarily the coping skills. Many of these coping skills are learned, if at all, once the adolescent is a young adult and away from home. It is strongly recommended that coping skills to be taught in health classes while dealing with stress issues. This would give many adolescents a headstart in the development of skills and abilities to deal with stressful events.

Hypothesis Number Four: There was no statistical significance in responses between the three school populations in this study.

Conclusion: It was anticipated that adolescents from different size community and school populations would be confronted by different degrees

of stress as measured by the YARS. This did not prove true in this study; the present results resemble those of the original study.

These results were not anticipated. It was believed that the difference in socioeconomics between the three schools and their communities would influence the rated severity of the listed life events. That this did not prove to be true may be because of the isolationism inherent in being a full-time student, and because of living at home under parental care moderates fluctuations.

IMPLICATIONS

“Happiness is an imaginary condition, formerly often attributed by the living to the dead, now usually attributed by adults to children, and by children to adults.”

Thomas Szasz, 1973

The original intent of Beall and Schmidt (1984) in developing the YARS “was to have a tool for the general adolescent population which would measure stressful events in their lives and serve as a means to increase awareness of stress.” (p. 199). To a large extent they have succeeded. This study validates most of their results but there appears to be an important need to update and expand the listed life events to be more inclusive and current. Respondents in this study were asked to list and rank any other life events that should be considered that were not listed. There resulted 27 suggested life events that were recommended by two or more respondents.

The list of recommended life events are listed (with average ranking) in Table IX. Some of these should be added to the YARS for better coverage of adolescent life event stressors.

It is interesting to note that most of the recommended life events deal with relationships, primarily sexual relationships and relationships with adults (usually parents). Seventeen of the 27 recommended life events were listed by 9th graders, a time when many adolescents are discovering sexual selves and the physiological aspects of that self-discovery.

TABLE IX

ADDITIONAL LIFE EVENTS AS SUGGESTED BY RESPONDENTS

Not having sex - 5	Choosing a boy/girlfriend - 5
Telling boyfriend you are pregnant - 5	Telling parents about pregnancy - 5
Not getting enough sex - 5	Learning boy/girlfriend is cheating - 5
Getting cited for Minor In Possession (MIP) - 4	Trying to tell someone you love them - 5
Trying to understand the opposite sex - 5	Being sexually active - 4
Getting grounded - 4.5	Parents not liking boy/girlfriend - 5
Being hurt by a close friend - 5	Parents too restrictive - 4
Forced into school/team competition - 4	Stepparents - 4
Caught between two divorcing/divorced parents - 5	Being sexually/physically abused by a relative - 5
Having to live away from home - 5	One-sided relationships - 3.5
Being yelled at by parent/teacher/administrator in front of others - 5	Not having money for school activities - 4
Learning you may/will die - 5	Bad teacher(s) - 4
House burning down - 4	Parents don't trust you - 4
Overprotection by parents - 4.5	

People have different levels of stress tolerance and different modes of responding. Psychological defenses and symptom formation are the usual outcomes of attempts to "fight" the anxiety or "flee" from it (the "flight or

fight” responses). Since the coping repertoire of young adolescents is limited because of their youth, immature defenses, and lack of life experience, they are particularly vulnerable to stressors and often require assistance to obtain relief from their anxiety and to learn new coping methods. The YARS should be considered one of a group of tools available to assist the caregiver (counselor, teacher, parent, etc.) in identifying problems so needs can be met. As noted before, there can be a marked difference between what an adolescent perceives as stressful and what an adult perceives as stressful to the adolescent. The YARS can help clarify that difference between perceptions.

Recommendations for using the YARS includes:

1. Give the adolescent an opportunity to think about a wide variety of possibly stressful life events besides the one currently causing their anxiety. This could allow a refocusing by the adolescent and the development of a new perception of the current stressor.
2. Provide the adolescent the opportunity to possibly re-evaluate the severity of the current life event stressor in respect to the variety offered in the YARS. What may seem terrible when dealt with as a stand-alone event can seem less severe when compared to other possible life events and the potential stressors they involve. This could be a major step to self-healing/self-coping with the current crisis.
3. Give the YARS administrator a tool with which to compare the respondent’s rankings with the mean scores for their gender and age group.

This will enable the YARS administrator to make note of those life events ranked markedly different than the mean for discussion with the adolescent. This gives the caregiver opportunities to translate primary and secondary stressors not forthcoming from the child (the child may not even be consciously aware of the influence of seemingly unimportant unrelated life events). This could be the information needed to answer what it is about *this* particular crisis situation that makes it intolerable for this particular child at this particular time.

4. Be used as a teaching tool. By helping students become aware of the events in their life that cause stress may make it possible for some of these students to cope better with (and even alleviate) some of their stressors.

5. Be used as one of a group of tools used by counselors to aid in diagnosing potential problems, to aid in focusing the adolescent on the actual stressor, to be a learning tool for adolescents with coping skill deficiencies, and as an aide in getting the adolescent working towards self-discovery and self-help in crisis coping.

Other tools used with the YARS could be a Genogram (helps establish a frame of reference from a three-generation picture of the family system and culture); an Eco-Map (helps illustrate and analyze potential support systems surrounding the individual and family); a Crisis Situation Rating Form (a short form that provides intake information and helps the counselor evaluate severity of stress); and any of several available tools that can help

the counselor evaluate the child's temperament (influences reaction to stressor) and level of cognitive and moral development (age-adequate, retarded, or precocious). These would give the counselor a complete set of tools to evaluate and work with adolescents and the stressors resulting from discrete life events.

RECOMMENDATIONS

There are several follow-up studies that could be done as future research resulting from the original research and this study.

A study with a much broader population range, similar to the original study, could be done to re-verify the importance and pertinence of the original life events and suggest possible new life events for inclusion in the YARS.

Another study using rural communities of a more isolated nature (no proximity to urban/city populations) as a comparison could be more elucidating in regards to differences between rural communities.

As mentioned in the original study, an in-depth study should be done between different ethnic groups with an analysis of the types of stressful events inherent with that ethnic group. The results would give a clearer picture of the differences, if any, in stressful life events by culture and would allow for more culturally accurate use of the YARS.

Finally, another study should be done retesting the original study and

this study and, if still valid, efforts should be made to have the YARS published for widespread use by counselors, teachers, and parents. Also, the YARS should be used in high school health books as an instrument for evaluating stress among adolescents instead of the presently used instrument geared toward adult populations.

REFERENCES

- Anthony, E. J. At risk -- vulnerability intervention model for children of psychotic parents. In Anthony, E. J. and C. Koupernik (Eds.), The child in his family (Vol. 3), New York: Wiley, 1974.
- Beall, S. & Schmidt, G. (1984). Development of a youth adaptation rating scale. Journal of School Health, 54, 197-200.
- Chandler, L. A. (1981). The source of stress inventory. Psychology in the Schools, 18, 164-168.
- Chinboga, D. A. (1977). Life event weighting systems: A comparative analysis. Journal of Psychosomatic Research, 21 (6), 415-422.
- Cleary, P. J. (1981). Problems of internal consistency and scaling in life event schedules. Journal of Psychomatic Research, 25 (4), 309-320.
- Coddington, R. D. (1979). The significance of life events as etiologic factors in the diseases of children: I. A survey of professional workers. In K. Yamamoto. Children's ratings of the stressfulness of experiences. Developmental Psychology, 15, 581-582.
- Compas, B. E. (1987). Stress and life events during childhood and adolescence. Clinical Psychology Review, 7 (3), 275-302.
- Compas, B. E., Wagner, B. M., Slavin, L. A., & Vannatta, K. (1986). A prospective study of life events, social support, and psychological symptomatology during the transition from high school to college. In J. M. Siegel & J. D. Brown, A prospective study of stressful circumstances, illness symptoms, and depressed mood among adolescents. Developmental Psychology, 24, 715-721.
- DeLongis, A., Coyne, J. C., Dakof, G., Folkman, S., & Lazarus, R. S. (1982). Relationship of daily hassles, uplifts, and major life events to health status. In J. M. Siegel & J. D. Brown, A prospective study of stressful circumstances, illness symptoms, and depressed mood among adolescents. Developmental Psychology, 24, 715-721.

- Erikson, E. H. (1950). Childhood and society. In J. M. Siegel & J. D. Brown, A prospective study of stressful circumstances, illness symptoms, and depressed mood among adolescents. Developmental Psychology, 24, 715-721.
- Freud, A. (1958). Adolescence. In J. M. Siegel & J. D. Brown, A prospective study of stressful circumstances, illness symptoms, and depressed mood among adolescents. Developmental Psychology, 24, 715-721.
- Gunderson, E. K., & Rahe, R. H. (Eds.). (1974). Life stress and illness. Springfield, Ill.: Charles C. Thomas.
- Hamburg, B. H. (1974). Early adolescence: A specific and stressful stage of the life cycle. In G. V. Coelho, D. A. Hamburg, & J. E. Adams (Eds.), Coping and Adaptation I (pp. 101-124). New York: Basic Books.
- Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale. Journal of Psychosomatic Research, 11, 213-218.
- Lazarus, R. S. (1976). Psychological stress and coping process. In O. Tanner, Stress. Time-Life Books: Human Behavior. New York: Time-Life Books.
- Lazarus, R. S., Kanner, A. D., & Folkman, S. (1980). Emotions: A cognitive phenomenological analysis. In R. Plutchik, & H. Kellerman (Eds.), Theories of emotion, (pp 189-214). New York: Academic Press.
- Lewis, C. E., Siegel, J. M., & Lewis, M. A. (1984). Feeling bad: Exploring sources of distress among preadolescent children. American Journal of Public Health, 74, 117-122.
- Manera, E. S. & Wright, R. E. (1981). Can you identify your source of stress? Clearing House, 55, 53-58.
- McGrath, J. E. (1970). A conceptual formulation for research on stress. In McGrath, J. E. (Ed.), Social and Psychological Factors in Stress. New York: Holt, Rinehart, & Winston.
- Monroe, M. (1980, November). Families, day care, and stress. paper presented at the Annual Meeting of the National Association for the Education of Young Children, San Francisco, CA.

- Murphy, L. B., & Moriarty, A. E. (1979). Vulnerability, coping, and growth. In K. Yamamoto. Children's ratings of the stressfulness of experiences. *Developmental Psychology*, 15, 581-582.
- Pearlin, L. I., & Lieberman, M. A. (1979). Social sources of emotional distress. In J. M. Siegel & J. D. Brown, A prospective study of stressful circumstances, illness symptoms, and depressed mood among adolescents. *Developmental Psychology*, 24, 715-721.
- Peterson, A. C. (1986, April). Early adolescence: A critical developmental transition? Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Selye, H. E. (1956). The stress of life. In J. E. McGrath, (Ed.), Social and Psychological Factors in Stress. New York: Holt, Rinehart, & Winston.
- Selye, H. E. (1974). Stress without distress. New York: J. B. Lippincott Co.
- Siegel, J. M., & Brown, J. D. (1988). A prospective study of stressful circumstances, illness symptoms, and depressed mood among adolescents. *Developmental Psychology*, 24, 715-721.
- Smolensky, J. (1977). A guide to child growth and development. Dubuque, Iowa: Kendall/Hunt Publishing Co.
- Swearingen, E. M., & Cohen, L. H. (1985). Life events and psychological distress: A perspective study of young adolescents. In J. M. Siegel & J. D. Brown, A prospective study of stressful circumstances, illness symptoms, and depressed mood among adolescents. *Developmental Psychology*, 24, 715-721.
- Tanner, O. (1976). Stress. Time-Life Books: Human Behavior. New York: Time-Life Books.
- Weiner, I. B. (1985). Clinical contributions to the developmental psychology of adolescents. In J. M. Siegel & J. D. Brown, A prospective study of stressful circumstances, illness symptoms, and depressed mood among adolescents. *Developmental Psychology*, 24, 715-721.
- Yamamoto, K. (1979). Children's ratings of the stressfulness of experiences. *Developmental Psychology*, 15, 581-582.