

AN INVESTIGATION INTO THE RELATIONSHIP BETWEEN ADOLESCENT
PROBLEMS AND AGE, INTELLIGENCE QUOTIENT, SEX, SCHOOL
ACHIEVEMENT, AND SOCIO-ECONOMIC STATUS

by

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ABSTRACT

This study was directed towards gaining knowledge of factors which could influence the type of problems adolescents see themselves as having. The variables considered were: age, IQ, sex, school achievements, and socio-economic status. Two hundred and fifty students comprised the sample. Fifty students, evenly divided as to boys and girls, were chosen in each of the grades from eight to twelve. All subjects were administered the Symonds Scale, a 1933 ranking sheet for adolescent problems, and a revision of the West Scale which was a checklist of adolescent areas of concern. Results on the two measuring instruments were compared for boys versus girls, for each of the five grade levels, for three levels of school achievement, for three levels of IQ, and for three levels of socio-economic status. School achievement was measured with grade point average scores (GPA), and socio-economic status (SES) was determined by the administration of a Blishen Scale.

A computer analysis of the results showed that none of the variables, age, IQ, sex, GPA, or SES had a significant effect on the types of problems adolescents saw themselves as experiencing. Similarly, when the results of this use of the Symonds Scale were compared to the previous three uses

of the instrument (Harris, 1957; Kaczkowski, 1962; Chabassol & Thomas, 1969) no significant differences were noted.

Examiners:

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CHAPTER I

INTRODUCTION

In our culture, adolescence is a period of emotional upheaval, personality changes and conflicts. Today's young people are coming to maturity in a rapidly changing and complex society--at times it seems that the only thing we can be sure of is change itself. Not only must the adolescent cope with all the rapid and confusing changes he finds occurring within himself but he must also contend with changes in the family structure, and the school, and the work world. Margaret Mead, in her renowned work, Coming of Age in Samoa, has taught us to insert the precautionary phrase "in _____ culture" into statements about adolescent problems, but there is widespread agreement that adolescence is a unique and stormy period in North America (Gallagher & Harris, 1958; Hurrock, 1955; Josselyn, 1948; Mohr & Despres, 1958; Parsons, 1950; Pearson, 1958).

A number of theories have been presented which attempt to explain and clarify why adolescence is tumultuous.

Modern scientific investigation of adolescence as a separate and distinct phase in human development really began with the work of G. Stanley Hall (1904). His recapitulation theory explains that ontogeny (individual develop-

ment) is a brief and rapid recapitulation of phylogeny (the evolutionary development of the race) (in Conger, 1973, p. 8). That is, the experiential history of the human species has become part of the genetic structure of each individual. The law of recapitulation asserts that the individual organism, during its development, passes through stages that correspond to those which occurred during the history of mankind. Each person relives the development of the human race from early animal-like primitivism, through a period of savagery, to the more recent civilized ways of life which characterize maturity. Hall saw adolescence as the transitional stage between savagery and civilization--a period fraught with confusion and conflict. It was Hall who coined the phrase "Strum and Drang" or "Storm and Stress."

More current formulations of adolescence as an at least transiently disturbed, maladjusted state, stem primarily from psychoanalytic conceptualizations such as those of Anna Freud (1946, 1958, 1969). She offered a defense mechanism theory of adolescence which puts the emphasis on the relationship between the id (instinctual impulses), and the super ego (the conscience). The physical changes that occur during adolescence directly influence psychological changes so that the balance between the ego and the id is disturbed and internal conflict results. Josselyn (1954) explains this, saying, "The behavior of the adolescent is typical of that of individuals, of whatever age, who have not found an

adequate integrative pattern with which to reconcile their own impulses, the demands of conscience, and the demands of reality [p. 100]."

Erikson is a key figure in studies of adolescent development. He divides life into eight stages, each stage has two possible resolutions, one positive and one negative (see Table I).

The major task facing the adolescent is the establishment of what Erikson calls an "ego identity" and the avoidance of role or identity confusion. He explains that the period of adolescence provides a psychosocial moratorium, a period in which an individual has an opportunity to develop an identity of his own. The adolescent is still relatively free from adult responsibilities. This may be the last sustained opportunity for significant psychological change and restructuring before "the consolidation of personality that accompanies the onset of adulthood and entrance into the world of work, marriage, and social and personal responsibility [Conger, 1973, p. 35]." In contrast to childhood, where changes occur in a gradual and regular manner, without abrupt shifts from day to day or month to month, adolescence means rapidity of body growth and the confusion of advancing genital maturity.

Erikson (1968) makes the interesting point that a background of love and trust is fundamental to the establishment of a clear ego identity. Without these, a child's chances

TABLE I

Components of Erikson's* Eight Developmental Stages

Developmental Stages	Basic Components
1. Infancy	Trust vs. Mistrust
2. Early childhood	Autonomy vs. Shame and Distrust
3. Preschool age	Initiative vs. Guilt
4. School age	Industry vs. Inferiority
5. Adolescence	Identity vs. Identity confusion
6. Young adulthood	Intimacy vs. Isolation
7. Adulthood	Generativity vs. Stagnation
8. Senescence	Ego integrity vs. Despair

*1950, p. 100.

of becoming a reasonably happy, effective and contributing adult with a positive self-image are seriously impaired.

Rolf E. Muuss (1970) has coined the term "the secular trend" in his references to adolescence. He explains that today's children grow faster, experience the adolescent growth spurt earlier, reach puberty earlier, and attain their adult height earlier. "These patterns of accelerated physical growth are described as the 'secular trend' [p. 51]." Correlates of accelerated growth are found in other areas also, such as attitudes, interests, dating patterns and heterosexual activities. Muuss suggests that the main reasons for this secular trend are diet and environmental conditions and hybrid vigor. Under the heading "diet and environmental conditions" he includes such factors as better nutrition, improved prenatal care, immunization and reduction in serious childhood diseases, decrease in family size, increased number of hours under electrical illumination, improvements in housing and temperature control, and improvements in standard of living. The term "hybrid vigor" refers to the condition of out-breeding--a result of improved transportation which allows people to select mates outside the confines of their own village. Although physical maturity is reached earlier, other areas of development have not changed accordingly. Young people today find they must stay in school longer in order to get enough training to become financially independent. The result is that, with

earlier maturing and later attainment of adult status, the period of adolescence has been lengthened. Ethical and moral standards have not changed as rapidly and the sexually mature adolescent finds himself confronted with sexual taboos (Rogers, 1969). Most parents and teachers use chronological age as their frame of reference for judging what is acceptable behavior, not taking into account the earlier biological maturation of youth. Therefore, the western adolescent finds he has a sort of "marginal status." He stands in a psychological no-man's land, without a clear understanding of what is expected of him, struggling to attain acceptance as an adult (Muuss, 1971). Often he will turn to the more obvious "status symbols" of adulthood such as smoking, drinking and sexual conquest in an attempt to prove his adulthood.

Elizabeth Hurlock has been a prolific writer on adolescence. She suggests that the adolescent is more capable of handling his problems than he realizes. The reasons for his lack of confidence are threefold. First, the problems of adolescence cover a wider scope and affect more people than do problems of childhood and hence they seem proportionally more serious. Second, since the transition to adulthood is rapid, many problems are likely to pile up at once. And third, the adolescent has had little experience handling his problems alone (Hurlock, 1973). She also points out that adolescents today are faced with problems which did not

confront their parents and many of their teachers when they were teenagers. Therefore, these adults may not have an understanding of how serious the problems are to the adolescent or the former may feel that they are unqualified to help (Amos & Washington, 1960). Adolescents who had a democratic child rearing tend to be better able to solve problems than those who were products of an authoritarian home, not only because of their increased experience in decision making but also because the atmosphere of the democratic home encourages teenagers to ask parents for help (Landis, 1961).

Hurlock sees adolescents as having two types of problems --personal problems and problems characteristic of the period of adolescence. Under the first category she would include many issues not new to adolescence but carry-overs from childhood, now presented in a more serious form. Examples would be: achieving greater independence, or becoming more popular with peer group members (Wheeler, 1963). Other problems in this category would be new ones, as for example, their first experience with stiff academic competition. The problems characteristic of adolescence are derived from a major developmental task of this age, improvement of social relationships (Schutz, 1958).

James Adams (1963, 1964, 1966) has also done work in the area of adolescent problems. He suggests that most problems experienced during the teenage years can be related

to the physical and physiological changes of the period. For example, growth of breasts and onset of menstruation can create tension, embarrassment, and a tendency to withdraw. Similarly, skin eruptions can result in social and emotional trauma.

Friedenberg (1959) defines the central developmental task of adolescence as self-definition. He writes:

Adolescence is the period during which a young person learns who he is--and what he really feels. It is the time during which he differentiates himself from his culture, though on the culture's terms. It is the age at which, by becoming a person in his own right, he becomes capable of deeply felt relationships to other individuals perceived clearly as such [p. 29].

The characteristic way to achieve self-definition is to begin with strong group definition. Today's youngsters find it relatively easy to have at least symbolic independence from the family. They earn money of their own and spend it as they please. The automobile allows them to get miles away in a few minutes. As one boy said, "I could be ten miles away from home and my mother would have no idea of where I was or what I was doing [Adams, 1968, p. 28]."

Further, with both parents out of the house much of the time (Kieran, 1970, p. 48], the adolescent may receive little supervision. Since he has few necessary tasks to do around the home he will spend time with his peer group, seeking here a strong group definition (Adams, 1968, p. 29).

Adolescence, then, in our culture can be viewed as a tumultuous period. Teenagers are struggling with the

integration of interpersonal messages and appraisals from parents, teachers, and peers. They are attempting to put these diverse and often conflicting inputs together into a consistent self-image (Schmuck, p. 21). When the numerous worries that beset adolescents are analyzed one outstanding fact emerges, namely that adolescents want to be "normal" human beings. To be different is feared, the urge to conform is strong (Blair & Jones, 1964, p. 95).

The study central to this thesis was undertaken to learn more about adolescent problems. Clearly adolescence is not an easy period, for either the teenagers themselves or for those working with them! Information about adolescents' problems and concerns is considered important in providing an understanding of adolescents to parents and teachers who work with them.

CHAPTER II

ADOLESCENT PROBLEMS: A REVIEW OF THE LITERATURE

A considerable amount of research has been done in the area of adolescent problems, and a variety of techniques have been used. Open-ended questions, descriptive paragraphs, checklists, and ranking scales have all been used to investigate what issues adolescents view as problematic. Both longitudinal and cross-sectional studies have been used to investigate adolescent problems.

Harold E. Jones (1960) compared problem areas of boys and girls in a California study. He found that girls have a greater difficulty than boys in adjusting to changing social requirements, perhaps because of a greater switch in expectations. At the beginning of adolescence the group standard for girls is to be quiet, demure and lady-like while by late adolescence the popular girl is one who is aggressive, talkative, and active. The expectation for boys, on the other hand, tends to be more consistent. Athletic prowess, strength, and bravery are admired throughout adolescence.

Adams (1964), Garrison (1952), and Harris (1959a, 1959b) were also concerned about differences between boys' and girls' problems. They found that the number of problems boys experienced decreased with age while the number of

problems girls had increased. Boys indicated money, sex, and delays in starting work as problematic while girls had social problems centering around marriage, morals, religion, sex, and personal attractiveness.

Adolescent concerns with physique were investigated by Frazier and Lisonberg (1958). They found the girls tended to view themselves as heavy while boys viewed themselves as thin, especially in the upper arms and chest. Height concerns girls who see themselves as tall and short boys express a high degree of concern. Slow maturers expressed concern over their slowness and early maturers, especially girls, experienced social embarrassment. Complexion problems rated highest on the questionnaire of concerns for both boys and girls.

Havighurst (1954) compared the problems of American and British adolescents. He found that American youths were more concerned with problems relating to behavior of a personal and individualistic nature, while British teenagers were more attuned to their obligation to others and problems of a social nature.

Remmers (1957) and Strong (1957) both found that problems change as an adolescent matures, but not so much in type as in intensity. For example, the problems of both sexes increase in emphasis from the ninth to the twelfth grade.

Amatora (1957), Angelina (1955), Jackson (1960),

Meltzer (1964), Pomeray (1960), and Withey (1955) were all concerned with listing problems common to early adolescence. They agree that physical appearance (health and physical development), schoolwork (relationships with teachers, families, and peers), choice of vocation (money), and personal adjustments (morals and sex) are all problematic. Dixon (1958), Rust (1961), Tate (1954), and Williams (1950), on the other hand, concentrated on the problems of late adolescence. They agree on grades, how to study, selection of a career, shyness and feelings of inferiority, social sensitivity, family problems, money, and sex as problem items.

Garrison (1965) and Kuhlén (1963) found that the number and severity of concerns vary according to an adolescent's previous success in adjusting to problems. Unaccepted students tend to have not only more problems but also problems of a more serious nature. Their concerns are frequently centered around not feeling well, being overweight, lacking status or being unhappy, whereas the more accepted students are anxious about moral problems in relationships with the opposite sex, and about problems regarding future education and jobs.

Strong (1956) found that bright adolescents had concerns which differed from those of the average or below average student. Bright students tended to be more keenly aware of their problems and felt more intensely about them. Perhaps because of parental and teacher confidence in their abilities,

they often received less help in solving their problems. And, again because of their potential, the problem of vocational choice was greater.

Adams (1968) conducted studies in the 1960's in which he asked students of middle and upper classes in Philadelphia suburban schools, "What problem do you have right now which you think is a big problem?" He categorized the answers received into the following groups:

- (a) School--academic difficulties, extremely few negative comments about teachers.
- (b) Interpersonal--getting along with one's peer group and other people.
- (c) Maturity--recognition by others (mostly parents) and one's self.
- (d) Emotions--lack of understanding one's emotions, moodiness, fluctuations.
- (e) Work--finding a job, deciding upon a vocation.
- (f) Sports and Recreation--athletics, dancing, driving, use of leisure time.
- (g) Health--skin blemishes, weight problems, mental and physical health problems of self and family.
- (h) Ethical--moral problems in dating behavior, religion (girls).
- (i) Family--parents, siblings.
- (j) Habits--smoking, drinking.
- (k) Finances--personal financial needs, family, college.

- (l) Unclassifiable--very infrequent; e.g., "I robbed a store last night."
- (m) No Answer--did not give an answer.
- (n) No Problem--stated that he or she had no problem, frequently apologetically.

A summary of the responses is shown in Table II.

Offer (1970) did a longitudinal investigation of middle-class mid-Western adolescent boys, which showed that, particularly between the ages of 12 and 14, rebellion against parental dictates, characterized by "chronic in-fighting," was common. Evidence was found of anxiety, acting-out behavior and depression throughout adolescence, but both parents and adolescents agreed that the greatest number of difficulties in everyday relationships occurred in the pre-high school years.

Adams (1967) is the key figure associated with the use of open-ended questionnaires as a research tool in this area. He asked 4,000 students, aged 10 to 19 to identify their personal problems by writing a paragraph. Further, he asked the subjects for solutions for problems they listed. He found the personal problems most frequently mentioned centered around school, interpersonal relationships, the family, and money. He noted a sex difference in that boys reported school and financial problems more frequently than did girls. Conversely the girls indicated more interpersonal and family problems. Approximately one-third of the boys indicated

TABLE II

Percentages of Males and Females Who Identify Various Personal Problems

Age	Sex	School	Inter- personal	Maturity	Emotions	Work	Sports & Recreat.	Health	Ethical	Family	Habits	Finances	Unclass- ifiable	No Answer	No Problem	
10	M	20	22	0	0	1	12	8	1	6	0	6	11	5	6	80
	F	38	11	2	3	1	8	2	0	19	0	1	11	1	1	88
11	M	28	14	0	1	1	7	6	1	12	0	5	8	7	8	263
	F	20	20	4	3	1	4	5	2	21	0	3	9	3	3	268
12	M	32	12	0	2	2	6	2	1	16	0	6	9	4	7	328
	F	20	18	3	3	1	4	6	1	26	0	2	7	3	4	287
13	M	38	13	3	1	2	1	3	0	12	1	5	9	6	2	251
	F	23	29	3	1	1	0	4	0	19	0	2	6	5	6	213
14	M	45	12	2	2	4	3	0	0	6	0	7	7	5	6	176
	F	20	22	4	5	0	2	6	3	22	0	2	4	1	8	170
15	M	39	15	2	1	8	2	3	1	6	1	11	7	2	2	190
	F	17	27	3	3	4	1	3	2	24	0	5	5	2	3	238
16	M	34	9	1	1	12	5	1	0	8	0	16	5	5	2	237
	F	22	15	1	3	9	0	2	4	24	0	8	5	3	2	207
17	M	33	6	2	3	13	3	1	2	7	0	15	9	4	1	280
	F	23	15	2	3	17	1	1	3	18	0	6	5	4	1	220
18	M	39	8	3	2	14	3	0	1	4	0	14	7	2	2	196
	F	27	12	3	9	10	0	2	2	14	0	4	9	4	2	127
19	M	38	8	4	10	10	0	4	0	4	0	10	2	6	4	50
	F	30	8	2	8	12	0	3	13	8	0	7	3	5	0	60
Total	M	34	11	2	2	6	4	2	1	10	0	10	8	4	4	2051
	F	22	19	3	4	5	2	4	2	21	0	4	6	3	3	1878

that they had academic problems at school, a finding which Adams suggests should be noted by principals, administrators and counsellors.

A number of checklist type investigations have been carried out to determine adolescent problems on a self-description basis. The largest group of these uses the Mooney Problem Check List (MPCL), published in 1942. The list is available in four forms--adult, college, senior high, and junior high. The high school forms were compiled from a group of over 5,000 items taken from the free writing of 4,000 students as well as from case studies and interviews. The junior high form defines seven problem areas: (a) health and physical development; (b) school; (c) home and family; (d) money, work, and the future; (e) boy-girl relationships; (f) relations to people in general; (g) self-centered concerns. The senior high form defines eleven problem areas: (a) health and physical development; (b) the future--vocational and educational; (c) social and recreational activities; (d) courtship, sex, and marriage; (e) social-psychological reactions; (f) personal-psychological reactions; (g) morals and religion; (h) home and family; (i) finance and living conditions; (j) employment; (k) adjustment to school work. Morgan (1969) points out that the MPCL, or any checklist, is only valid if three conditions are met: (a) the students in the sample must be able to recognize their own problems; (b) the problems that the students actually

experience must be on the checklist; (c) the students must be willing to honestly indicate their problems. Mooney (1942), when publishing the MPCL, stressed that standardized norms were not available since the checklist was not intended to be a test but a method of self-description. Its value as an aid in planning school programmes lies in its ability to indicate individual and community differences.

Amos and Washington (1960) used the MPCL to compare pupils' and teachers' perceptions of pupil problems. Twenty-one teachers and eighty-seven students from junior high who had been identified as "behavior problems" filled out the MPCL. Amos and Washington found that teachers identified fewer problems than did the students themselves, especially in the areas of money, work, the future, health and physical development. Teachers' judgements were more similar for the boys than for the girls and for the ninth graders than for the seventh.

The MPCL was used to question 2,500 grade nines and tens in a study conducted by Abel and Gingles (1965). They found that areas of greatest concern were: (a) adjustment to school work; (b) social psychological relations; (c) social and recreational activities; while the areas of least concern were: (a) home and family; (b) curriculum and teaching procedures; (c) morals and religion; (d) the future--vocational and educational.

Paul M. Smith (1958) compared the personality character-

istics of rural and urban southern negro junior high school pupils using the Mooney Problem Checklist and the California Test of Personality. There was no significant difference in general characteristics and adjustments made to home and school between the two groups. But urban students had significantly more problems than did rural students, and girls had more problems than boys. Urban students ranked adjustments to schoolwork, teaching procedure and personal psychological relations as problematic, leading Smith to suggest that this might be a result of the large size of urban schools where, too often, the pupil becomes a number rather than a personality.

Morgan (1969) compared four studies that used the MPCL (Garrison & Cunningham, 1945; Pfiieger, 1949; Esper, 1953; Amos & Washington, 1960). He found that, for junior high school students, all four studies indicated "school" as the most common concern. Following this were money, work, and the future. In senior high, "school" again ranked as number one in all four, followed by courtship, sex, and marriage and social and personal psychological relationships. Morgan's examination of the four studies showed that a decrease in the mean number of problems was found as the age of the students increased.

Another problem checklist in use is the Science Research Associates (SRA) Youth Inventory which was constructed under auspices of the Purdue University Opinion Poll for young

people using 15,000 subjects. The 298 questions making up the inventory were developed from essays submitted by hundreds of students stating in their own words the problems that bothered them most. The problems were divided into eight categories: "school," "after high school," "about myself," "getting along with others," "home and family," "boy meets girl," "health," and "things in general." Norms were developed for boys and girls based on a national sample of 2,500 cases.

Remmers (1962) used this SRA Youth Inventory to do a cross cultural study of problems in the United States, Puerto Rico, West Germany, and India. Using culturally adapted forms of the test, he found that the types of problems indicated priorities in each culture were highly similar. In all cases "health" problems were of least concern and "post-high school" problems were of most. He found, however, that the intensity of worry varies greatly from culture to culture.

Another important instrument in the study of adolescent problems is the 1936 Symonds Scale. This is a ranking method for describing adolescent problems and interests. It was this scale that was chosen as the measurement instrument for this thesis.

The author considers a ranking scale to be of a higher order than a checklist for, although it makes the same three assumptions mentioned earlier with the MPCL, it provides the

researcher with an indication of the hierarchy of the adolescent's problems. Harris (1959), however, explains a limitation of the scale. Every time a subject makes a choice on the ranking scale he loses a degree of freedom which affects all of his subsequent choices. Since all the elements are related to one another, change in one aspect has widespread effects throughout the system. Also the selection of a rank scale rather than a checklist eliminates the very useful data number of problems indicated by various groups of adolescents. A copy of the scale, which was drawn up from lengthy discussions with teenagers about their problems, is found as Appendix A.

The scale was first used in 1936 on 373 boys and 439 girls at the junior and senior high school level (Symonds, 1936a). A wide range of problems were found with every item from one to fifteen listed as having first priority by at least one student. For both boys and girls, money was indicated as the one most common problem area. Following in order were health, personal attractiveness, study habits, personal and moral qualities and philosophy of life. The five listed as least important most frequently were sex, daily schedule, civic interest, safety and mental hygiene.

Symonds noted that the order in which the items were presented affected results. There is a tendency for items first on the list to receive higher ratings.

In a separate publication, Symonds (1936b) analyzed the

data from the above experiment to determine sex differences. He suggested that this analysis provides insight into areas in which curriculum should be different for boys than for girls. Girls considered personal etiquette and attractiveness to be more of a problem than did boys. Generally boys indicated greater interest in money, safety, health, civic affairs and recreation than did girls and less interest in personal attractiveness, etiquette and getting along with others.

Harris (1959) used the Symonds Scale with 1165 students in Minnesota. His hypothesis was taken verbatim from the Symonds experiment: change the economic and social structure of society and you immediately change the relative emphasis of these problems and interests. Twenty-two years and considerable social, economic and cultural changes separate Harris' work from Symonds' New York based test. Harris' results indicated that for female students in 1959 the rating of problems was as follows:

1. study habits
2. money
- 3.5 mental hygiene & personal attractiveness
5. personal and moral qualities
6. home and family relationships
7. philosophy of life
8. getting along with other people
9. civic interests

10. love and marriage
11. manners
- 12.5 daily schedule & health
- 14.5 recreation & safety.

Harris also found that money and study habits were of more importance to boys than girls but girls ranked mental health and home and family relations as being more important than did boys.

Kaczkowski (1962) used the Symonds Scale but, like the author of this paper, confined himself to the "problems" portion of the scale, ignoring "interests." His hypothesis concurred with Symonds' and Harris' but he made two modifications in sample selection. He used grades nine to twelve instead of seven to thirteen and drew his subjects from rural and urban environments instead of just urban. He had two samples: one of 400 and one of 200. The instructions were taken verbatim from the original study and the smaller sample was given the list in reverse order to the larger sample. He found that by 1961 issues involving love and mental health had become more problematic while recreation and courtesy had decreased in importance. The coefficients of concordance indicate an agreement in the range of .65 to .72 between Symonds, Harris and Kaczkowski. However, the variation between sexes was greater in 1961 than in 1957. Love and marriage and personal attractiveness were more important to girls than to boys but safety was more of a

problem for boys. Ranking high for boys and girls, regardless of order of presentation were money, personal and moral qualities and study habits.

The most recent work done with a Symonds Scale was conducted by Chabassol and Thomas (1969) who studied 1366 adolescents from Metropolitan Vancouver. Theirs is the only published Canadian implementation of the Symonds Scale. Chabassol and Thomas compared their findings to those of Symonds, Harris, and Kaczkowski. Once again the hypothesis that changes in the social and economic structure of society immediately change the relative emphasis of adolescent problems was stated. The study indicated that sex adjustments and mental hygiene were considered to be more important as problems in 1969 than previously. Chabassol and Thomas suggested that this was, perhaps, a reflection of the fact that modern society is more accepting of discussion and comment in these areas. Conversely, this study indicated that in 1969 manners, courtesy, and philosophy of life ranked lower on the problem scale than in earlier years. Areas that remained consistently high on the scale over the years were money and recreation (for males) and personal attractiveness (for girls). Safety has remained consistently low. Chabassol and Thomas suggested that three lists could be prepared from their data: one list would include those topics which seem to be influenced by changes which accompany the passing of time, another would include those topics which

remain relatively unchanged over the years, and a third would include those topics which follow no consistent pattern and about which it is impossible to generalize. List one would include "sex adjustments," "mental hygiene," "manners and courtesy," and "philosophy of life" while list two encompasses "money," "personal attractiveness," "recreation," and "safety." Finally, list three covers "health," "study habits," "personal and moral qualities," "home and family relationships," "daily schedule," "civic interests" and "getting along with others."

A slightly different approach to adolescent problems is credited to West and Zingle (1969). They developed a self-disclosure inventory for adolescents, a checklist designed to identify the kinds of topics that high school students discuss with a variety of people and, therefore, presumably view as being problematic. An adaptation of this inventory was chosen as a measurement instrument for the research described in this thesis. The original inventory by West and Zingle yielded a "grand disclosure" score, six "aspect-disclosure" subscores, and six "disclosure-to-target" subscores. The subject is asked to indicate whether he would discuss each of 48 items with a mother, father, friend of the same sex, or friend of the opposite sex and also to indicate the frequency of such discussions by encircling "never," "hardly ever," "sometimes," and "often." The inventory is reported to have highly satisfactory test-retest and split-

half reliability coefficients (West, 1969).

In an administration of the inventory by West (1971), 80 adolescents were tested with mother, father, friend of same sex, and friend of opposite sex as specified target persons. To test the validity of the inventory, analogous data regarding the disclosure of the subjects was independently collected from each target. Close correlation was found as shown in Table III.

For the purposes of the present study, a measure of socio-economic class was required and the author considered a number of techniques for measuring this variable.

Probably the most widely known index of SES is the North-Hatt Scale which is based on the evaluations of some 90 occupations by sample of the American population. It was published in 1947. Its limitations are that it is not Canadian, it is dated, and it is based on a narrow group of vocations.

In 1963 the North-Hatt Scale was revised by NORC (National Opinion Research Center) using better methods and an extended list of occupations (Hodge, Siegel & Rossi, 1964). However, this too is an American study and it was felt preferable to use a Canadian instrument.

Jacob Tuckman (1947) produced a scale based on 25 occupations rated for "prestige" by a selected group of college students and job applicants at a Jewish vocational service. This scale has the advantage of being Canadian but

TABLE III

Validity Coefficients for Scores and Subscores of
the Self-disclosure Inventory for Adolescents

Content Area	Target Person				
	Mother	Father	Friend Same Sex	Friend Opp. Sex	Total
School concerns	.51	.45	.24	.39	.48
Economic concerns	.44	.38	.33	.52	.47
Personal concerns	.53	.42	.48	.55	.51
Home & family relations	.64	.49	.42	.53	.59
Health & physical development	.43	.28	.55	.59	.47
Boy/girl relations	.61	.41	.61	.64	.63
Total	.61	.42	.53	.64	.54

Note: N = 34 males
46 females

All coefficients are significant at .05 level

Source: West, 1971, p. 93.

its limitations are obvious.

In 1958 the Blishen Scale appeared. It incorporated a method which ranked occupations listed in the Dominion of Canada census publication by socio-economic status. It made use of the income characteristics and educational level of the people holding these occupations in 1951.

After the publication of the first Blishen Scale, Pineo and Porter (1960) published a system which used the average prestige ranking made of an occupation title by a national survey. Blishen had used a simple function of the distribution of income and education. Unfortunately, Pineo and Porter only covered a portion of the list of occupations in the census publication whereas Blishen covered it all.

However, in 1961, Blishen revised his scale and assigned approximations of the Pineo-Porter prestige scale to the 1961 census occupational titles. It is noted, however, that the scale relates only to the occupation of the man. No adjustments are made in the index when a wife works whereas, in effect, this second income could influence socio-economic status markedly. A copy of the Blishen Scale (1961 revision) is found in Appendix B.

CHAPTER III

THE PRESENT STUDY

Rationale

It is the view of the present author that the work done with the Symonds Scale and the West Inventory can be extended. No one has taken into account such variables as IQ, age, school achievement or home background in analyzing the responses given on these scales. The Symonds Scale has been used only once in Canada. This present study served to contribute additional Canadian data and to introduce the variables mentioned above.

Socio-economic status, as measured by the Blishen Scale, was used as an independent variable. The most recent IQ score available on the school's record of marks card was used as a further variable, together with grade and sex. Grade point average was calculated for each subject by adding the total points for each of the subject's marks in their current school programme (e.g. A = 7, B = 6, C+ = 5, etc.) } and dividing by the number of subjects taken. This grade point average (GPA) served as a further variable. The West Inventory, which had been previously used to disclose whom students confide in, was utilized as a checklist of adolescent problems to yield additional information.

In converting the West Self-Disclosure Inventory to a checklist of adolescent problems, all the items on the inventory were grouped into the six categories of school, bodily concerns, parental relationships, friends, guilt feelings, and materialism, for the sake of convenience in handling the many separate items on the scale. Then, instead of asking the student to indicate in whom he would confide if faced with these problems, he was simply asked to check whichever items he viewed as problematic.

Definitions

For the sake of clarity, it was felt to be appropriate to define general terms which were used quite frequently in the study. These are as follows:

1. Problem: a problem exists whenever a situation occurs which an individual feels incapable of dealing with to his satisfaction (Hurlock, 1973, p. 13). The more important the matter or condition is to the individual, the more of a problem it will seem to be.

2. Adolescent: for simplicity the author will consider any student at Belmont-Fisher who is not registered as a "Mature Student" as an adolescent. A mature student is one who leaves school for a period of three or more years and then re-registers.

3. Symonds Scale: this refers to the ranking scale developed by Symonds in 1936. A copy of the scale is included in Appendix A.

4. Lloyd West Scale: this refers to the author's adaptation of the West and Zingle Self-Disclosure Inventory. A copy of the checklist is included in Appendix C.

Research Questions

In evaluating the data provided by the procedure outlined above, the following questions were considered:

- (a) Do boys and girls differ in their ranking of the problems on the Symonds Scale or on the selection of problems on the Lloyd West Scale?
- (b) Do high, medium, and low socioeconomic groups differ in their ranking on any of the problems on the Symonds Scale or on the selection of problems on the Lloyd West Scale?
- (c) Do high, medium, and low grade point average groups differ in their ranking on any of the problems on the Symonds Scale or on the selection of problems on the Lloyd West Scale?
- (d) Do high, medium, and low IQ groups differ in their ranking of any of the problems on the Symonds Scale or on the selection of problems on the Lloyd West Scale?
- (e) Do the various age groups of students differ in their ranking of problems on the Symonds Scale or on the selection of problems on the Lloyd West Scale?
- (f) Do the results of this study and either the Harris, Kaczkowski, or Chabassol and Thomas studies differ?

In all cases, the level of significance will be set at .05.

Subjects

A population of 1,800 students attending Belmont-Fisher Secondary School in the Sooke School District in Victoria, British Columbia was tested. From this population, a sample of 250 students was randomly selected, 50 from each grade level from 8 to 12, evenly divided as to boys and girls. Subjects ranged in age from 13 to 20 years.

Students attending Belmont-Fisher are residents of Colwood, Langford, and Metchosin, three rapidly growing communities on the outskirts of Victoria, B. C. The communities comprise an attendance area of approximately 100 square miles and a population of over 30,000. The attendance area is primarily rural and agricultural, although recent construction of a number of large subdivisions created a shift towards a residential community and a subsequent upward pattern in socioeconomic level. The area is a rapidly growing one as a result of these subdivisions; the actual increase in school population over the last five years has been 136% with a projection for a further increase of 75% over the next five years.

Procedure

Every student in the sample was given a copy of Symonds Scale and the West Scale in early December to fill out during an extended homeroom period. A copy of instructions provided for students is found in Appendix D. One-half of the sample received the items on the scale in reverse order, in order

to reduce the preference which might be enjoyed by problems listed first on the scale. Space was provided at the end of the scale for the student to indicate his age, and the occupation of his father or legal guardian.

When the students had filled out the form, the author referred to the school's records and added the following information to each student's sheet:

(a) high, medium, or low ranking for grade point average on October reporting session where high is 5-7.0, medium is 3-4.9, and low is 0-2.9;

(b) high, medium, or low ranking for the student's IQ according to the most recent test where high is 110+, medium is 90-109, and low is below 90;

(c) high, medium, or low ranking for socioeconomic status where high is a Blishen rank of 60+, medium is 50-59, and low is below 50.

CHAPTER IV

THE RESULTS AND CONCLUSIONS

The first research question concerned comparisons of boys and girls. Responses to the Symonds Scale are reported in Table IV. A Spearman Rho comparison here gives a ρ of .99. According to mean scores, boys and girls ranked the following items very similarly: health, sex adjustments, safety, mental hygiene, study habits, personal and moral qualities, home and family relationships, manners and courtesy, philosophy of life. Boys gave more importance to daily schedule, civic interests, and getting along with other people than did girls. Money, recreation, and personal attractiveness were ranked higher for girls than for boys. However, little fluctuation between boys' and girls' responses is found on any of the items. Median rankings for boys versus girls are shown in Appendix E.

A boy/girl comparison of the number of items checked in each of the six categories of problems on the West Scale is shown in Table V. A study of these data indicates a close similarity between responses of boys and girls ($r = .98$). Boys and girls have a similar number of problems in category one, school concerns. Girls indicated more problems in group two, bodily concerns and in groups three and four,

TABLE IV

Mean Ranking of Symonds Scale Items
for Girls and Boys

Items on Symonds	Mean Ranking for Boys	Mean Ranking for Girls
1. Health	6.04	6.67
2. Sex adjustments	7.12	7.31
3. Safety	8.04	8.05
4. Money	8.33	7.55
5. Mental hygiene	8.90	8.53
6. Study habits	9.20	9.37
7. Recreation	9.30	8.97
8. Personal & moral qualities	9.06	9.00
9. Home & family relationships	8.71	8.54
10. Manners & courtesy	8.19	8.89
11. Personal attractiveness	9.11	8.69
12. Daily schedule	7.96	8.78
13. Civic interests	7.77	8.24
14. Getting along with people	9.10	10.26
15. Philosophy of life	9.83	9.29

TABLE V

Comparison of Boys' and Girls' Means on Lloyd West

Category on West Scale	Mean % Checked by Girls	Mean % Checked by Boys
1. School	29.24	29.51
2. Bodily concerns	33.94	29.09
3. Parental relationships	32.36	29.52
4. Friends	31.36	26.15
5. Guilt feelings	28.01	35.52
6. Materialism	29.33	34.45

parental relationships and friends. On the other hand, boys indicated more problems in categories five and six, guilt feelings and materialism.

The second research question concerned comparisons of three socio-economic groups. Table VI shows the high, medium, and low SES groups mean ranking for each item on the Symonds Scale. Boys and girls are considered separately. Median rankings are shown in Appendix F. Kendall's W scores calculated between these columns indicate there is no significant difference between high, medium, and low SES groups' ranking on the Symonds Scale ($W = .54$). It is, however, interesting to observe that boys in the high SES group put the highest ranking on "health problems," "sex adjustments," and on "getting along with other people." Girls in the high SES group put the highest ranking on "recreation," "home and family relationships," and "philosophy of life." Boys in the middle socio-economic group were the ones showing the least concern over "home and family relationships" and "personal attractiveness," while girls in the middle socio-economic group showed the least concern over "daily schedule." Boys in the lowest SES category were the group least concerned about "recreation" but the most concerned about "personal and moral qualities" and "manners and courtesy." Girls in the low SES group expressed more concern over "safety," "mental hygiene," and "money" than did any other group.

Table VII shows a comparison of the high, medium, and

TABLE VI

Mean Ranking of Symonds Scale Items for Boys and Girls
in Three Socio-economic Status Categories

Items on Symonds	Boys			Girls		
	High	Middle	Low	High	Middle	Low
1. Health	5.09	6.25	6.27	6.60	6.72	6.61
2. Sex adjustments	5.26	7.60	7.35	6.54	7.82	6.81
3. Safety	7.04	8.09	8.77	9.00	7.99	6.90
4. Money	8.30	7.95	9.46	9.24	7.13	6.33
5. Mental hygiene	9.48	8.51	9.54	9.30	8.45	7.57
6. Study habits	9.17	9.28	9.00	9.97	9.04	9.52
7. Recreation	8.65	8.93	10.92	7.48	9.25	10.38
8. Personal & moral qualities	8.87	9.59	7.69	10.30	8.70	7.95
9. Home & family relationships	8.78	9.35	6.71	7.67	8.88	9.00
10. Manners & courtesy	8.70	9.04	5.27	8.30	9.25	8.57
11. Personal attractiveness	8.78	10.09	6.58	8.42	9.00	8.05
12. Daily schedule	7.39	8.38	7.23	8.79	9.39	6.71
13. Civic interests	6.83	7.99	7.96	7.97	8.62	7.38
14. Getting along with people	8.00	9.38	9.27	10.48	10.68	8.52
15. Philosophy of life	9.65	9.95	9.65	9.06	9.25	9.76

TABLE VII

Comparison of High, Medium, and Low SES Groups'
 Mean Percentage of Items Checked on West Scale

Category on West Scale	High SES		Med. SES		Low SES	
	Boys	Girls	Boys	Girls	Boys	Girls
1. School	23.47	32.16	31.19	26.93	28.61	34.31
2. Bodily concerns	31.04	30.16	33.69	26.01	37.19	37.57
3. Parental relations	30.52	30.16	34.22	28.16	29.03	33.05
4. Friends	33.82	27.32	31.53	25.70	28.65	26.05
5. Guilt feelings	32.69	34.96	27.25	34.73	26.07	38.78
6. Materialism	32.69	29.68	28.90	35.00	27.57	38.94

low SES groups' mean percentage of items checked for each category of the West Scale. Some observations can be made about this table. The high SES boys were the group least concerned about "school"--a surprising finding if one expected these students to be under parental pressure to succeed academically. They were, on the other hand, the group most concerned about "friends." Middle income boys were the group indicating the most concern over "parental relations" while middle income girls expressed the least concern over "body problems" and "parental relations." Low income girls, as a group, were least troubled with guilt feelings but, not surprisingly, the most concerned about "money and material possessions."

Question three concerned itself with a comparison of three grade point average groups.

Once again, consider the Symonds Scale first; Table VIII shows the high, medium, and low GPA groups mean ranking of problems on the Symonds Scale with boys and girls considered separately. Median rankings are shown in Appendix G. Again a Kendall's W of .4 indicates that there are no significant differences, but once again some points can be noted. The girls in the middle GPA group gave "health" a considerably lower priority than did any of the other groups. Boys in the high GPA group collectively expressed most concern about "recreation" and the least concern of any group about "getting along with other people." Boys at the middle GPA

TABLE VIII

High, Medium and Low GPA Groups' Mean Rankings of
Problems on Symonds: Boys and Girls Considered Separately

Item No. on Symonds	Boys			Girls		
	High	Med.	Low	High	Med.	Low
1. Health	5.71	5.52	6.13	5.96	8.53	6.81
2. Sex adjustment	5.65	7.93	7.11	7.31	7.73	8.67
3. Safety	7.56	10.00	7.00	8.94	7.62	6.90
4. Money	8.10	9.88	6.94	8.47	6.59	7.25
5. Mental hygiene	9.02	9.19	7.75	9.40	7.84	8.53
6. Study habits	8.60	9.11	9.50	9.78	8.46	9.90
7. Recreation	8.82	9.66	9.50	8.59	9.06	9.48
8. Personal & moral qualities	8.21	10.52	9.16	8.87	8.03	8.74
9. Home & family relationships	8.71	8.36	8.33	7.89	9.93	9.00
10. Manners & courtesy	7.93	8.58	9.72	8.63	8.40	8.14
11. Personal attractiveness	8.65	9.41	10.56	8.75	6.46	9.34
12. Daily schedule	7.41	8.47	9.94	9.22	6.68	8.11
13. Civic interests	7.41	6.94	9.58	8.50	6.25	8.83
14. Getting along with people	8.84	9.08	10.94	11.22	7.78	9.39
15. Philosophy of life	9.23	9.97	9.36	9.40	9.00	10.34

level showed the most concern over "health" but were the group least concerned about "moral qualities." "Money" was of great concern to girls at the middle GPA level as was "daily schedule" and "civic interests." Boys at the lowest GPA group level indicated the fewest concerns over "sex" of any group while girls at the lowest GPA level seemed the least concerned of any group over "personal attractiveness."

Table II shows the percentage scores for the number of problems checked in each category of the West Scale for the various GPA levels. Although statistically no significant difference was obtained ($W = .52$), the following trends can be noted. High GPA girls were the group the least concerned about "school" but the most plagued by "guilt feelings," and were the most "materialistic." Low GPA boys, as a group, expressed the most "body concerns" but had the fewest "guilt feelings" while low GPA girls indicated the fewest concerns regarding "body," "parental relations," or "friends."

Question four concerned itself with comparisons of three IQ groups. Consider initially the Symonds Scale. Table X shows the mean rankings for boys and girls in each of the three IQ groups. No significant difference is found between the six groups ($W = .5$). Median comparisons are available in Appendix H. No statistical significant difference can be determined between the rank ordering of the three IQ groups ($W = .5$). The following points are worth noting, however. The high IQ girls gave "study habits" an

TABLE IX

Percentage Scores for Problems Checked in Each
Group of West Problems at Each GPA Level

West Category	High GPA		Med. GPA		Low GPA	
	Boys	Girls	Boys	Girls	Boys	Girls
1. School	29.26	27.02	28.66	32.82	29.69	30.24
2. Bodily concerns	33.87	29.61	33.77	30.55	34.14	26.79
3. Parental relationships	31.73	32.29	33.11	29.03	32.69	25.51
4. Friends	32.02	26.83	31.11	26.62	30.76	24.58
5. Guilt feelings	28.89	34.61	27.88	39.27	27.16	33.24
6. Materialism	29.71	34.46	27.91	37.69	30.09	31.17

TABLE X

Mean Ranking on Symonds for Boys
and Girls in Three IQ Groups

Items on Symonds	High IQ		Med. IQ		Low IQ	
	Boys	Girls	Boys	Girls	Boys	Girls
1. Health	6.24	5.58	6.12	9.13	5.48	6.64
2. Sex adjustments	6.58	6.68	8.50	7.56	6.22	8.53
3. Safety	6.91	7.92	10.20	8.00	7.25	8.39
4. Money	8.25	7.86	8.92	6.56	7.59	7.85
5. Mental hygiene	9.24	8.94	8.25	7.40	9.14	8.75
6. Study habits	9.24	10.25	8.85	8.16	9.63	8.53
7. Recreation	9.03	8.80	7.95	8.80	11.85	9.57
8. Personal & moral qualities	8.74	9.17	9.77	9.16	8.70	8.39
9. Home & family relationships	8.82	8.43	8.17	9.03	9.25	8.28
10. Manners & courtesy	7.84	8.94	8.40	8.36	8.63	9.32
11. Personal attractiveness	9.37	9.89	9.20	6.70	10.40	7.92
12. Daily schedule	8.51	9.58	8.32	6.96	6.22	8.82
13. Civic interests	8.36	9.32	7.52	5.83	6.85	8.21
14. Getting along with people	9.74	10.26	8.90	8.23	8.03	7.71
15. Philosophy of life	10.03	9.03	9.90	9.16	9.29	10.03

interestingly lower ranking than any other group while the medium IQ boys placed less importance on "safety" than any other group. "Health" ranked lower for medium IQ girls than for any other group while they ranked "money" more highly than any other group. The lowest ranking of "personal attractiveness" was achieved by low IQ boys while the lowest ranking for "getting along with other people" was achieved by low IQ girls.

Table XI shows a comparison of mean percentages of items checked on the six categories of the West Scale for the IQ groups. A W of .5 indicates no significant differences between these groups. However, note some trends. For category one (school), the girls consistently showed a higher level of concern, whereas in category two (bodily concerns) the boys in each category indicate more problems. Boys in the lowest IQ bracket have a notably higher concern over "parental relations," while group four high IQ girls express the most concern over "guilt feelings." Medium IQ girls show the highest percentage of problems checked in the area of "materialism."

Question five concerned itself with the five grade levels. Tables XII and XIII show the mean ranking for boys and girls at each grade level for 15 items on the Symonds Scale. Median comparisons are available in Appendix I. Spearman Rho calculations are as indicated in Table XIV. Although statistically the data between the age levels do

TABLE XI

Mean Percentage of Items Checked by Three IQ
Groups on Each Category of West Scale

Category on West Scale	High IQ		Med. IQ		Low IQ	
	Boys	Girls	Boys	Girls	Boys	Girls
1. School	27.84	27.94	30.55	32.12	30.29	30.56
2. Bodily concerns	32.24	27.43	35.70	29.68	34.96	32.56
3. Parental relations	30.08	26.66	32.62	30.68	37.33	35.34
4. Friends	30.24	26.68	32.65	27.32	31.85	23.56
5. Guilt feelings	26.41	36.89	26.37	35.84	33.85	31.78
6. Materialism	28.81	31.50	27.02	39.20	33.85	36.56

TABLE XII

Mean Ranking for Boys at Each Grade Level on Symonds

Item on Scale	Boys in Grade				
	8	9	10	11	12
1. Health	5.08	6.88	5.48	7.68	5.08
2. Sex adjustments	5.96	7.60	7.12	7.96	5.96
3. Safety	6.48	10.44	8.24	8.56	6.48
4. Money	7.56	8.60	8.76	9.16	7.86
5. Mental hygiene	8.56	9.52	9.52	8.12	8.80
6. Study habits	8.80	10.96	9.72	7.72	8.80
7. Recreation	9.76	10.40	9.16	7.40	9.76
8. Personal & moral qualities	9.20	11.08	8.52	7.32	9.20
9. Home & family relationships	10.20	9.00	8.44	5.72	10.20
10. Manners & courtesy	8.72	10.20	7.32	6.00	8.72
11. Personal attractiveness	8.88	12.60	7.36	7.84	8.88
12. Daily schedule	6.16	12.56	6.20	8.48	6.40
13. Civic interest	6.76	10.52	6.76	8.04	6.76
14. Getting along with people	7.68	12.88	7.96	9.32	7.68
15. Philosophy of life	9.72	10.64	8.84	10.24	9.72

TABLE XIII.

Mean Rankings for Girls at Each Grade Level on Symonds

Item on Scale	Girls in Grade				
	8	9	10	11	12
1. Health	7.56	5.48	5.64	7.56	7.12
2. Sex adjustments	7.08	7.12	7.52	7.08	7.76
3. Safety	7.64	8.24	10.24	7.64	6.48
4. Money	6.44	8.76	8.76	6.44	7.36
5. Mental hygiene	9.08	9.52	8.96	8.08	8.00
6. Study habits	8.72	9.72	11.48	8.72	8.20
7. Recreation	8.12	9.16	11.48	8.12	8.00
8. Personal & moral qualities	7.96	8.50	12.16	7.96	8.40
9. Home & family relationships	7.80	8.44	10.04	7.80	8.64
10. Manners & courtesy	7.96	7.32	12.96	7.96	8.24
11. Personal attractiveness	7.36	7.64	12.00	7.36	9.08
12. Daily schedule	8.08	6.20	14.72	8.08	6.84
13. Civic interest	8.08	6.76	10.88	8.20	7.28
14. Getting along with people	9.72	8.48	15.04	9.72	8.36
15. Philosophy of life	9.00	8.84	9.36	9.00	10.24

TABLE XIV

Spearman Rho Calculations for All Grade Levels
on Symonds (Boys, Girls and Combined)

Grades	Rho for Boys	Rho for Girls	Rho Combined
8 x 9	.92	.89	.87
8 x 10	.95	.90	.88
8 x 11	.89	.91	.92
8 x 12	.88	.89	.90
9 x 10	.95	.87	.98
9 x 11	.96	.88	.97
9 x 12	.98	.95	.95
10 x 11	.96	.98	.97
10 x 12	.98	.90	.98
11 x 12	.89	.96	.96

Note: all the above are significant to the .01 level.

not differ significantly, observe the following points. With the boys, no clear cut pattern can be seen to develop as age advances. On item number one, "health problems," grade 8 and grade 12 boys are tied for the highest ranking spot of 5.08. For "sex adjustments," item two, all groups were fairly similar in their ranking, but grade 11 boys stressed it least while grade 8 and grade 12 boys tied once again for the highest ranking position. Grade 9 boys expressed the least concern for "safety," while the most concern, again, was shown by grade 8 and grade 12 boys. "Money" was of prime importance to grade 11 boys. By grade 12 the boys seemed less concerned about money, perhaps because by this time many students have part-time jobs. Very little differentiation was seen between the groups on the "mental hygiene" item, with all students ranking it around eighth. For "study habits," however, more variation is seen. Grades 9 and 10 seem to be the periods of least concern, while students in grades 8, 11, and 12 all ranked study problems as being more important. Grade 10 girls appear to be the ones least concerned about "recreation" problems while grade 11 boys were the most concerned, perhaps because so much social status accompanies athletic prowess for senior high school males. Surprisingly, grade 10 girls seem very unconcerned about "personal and moral qualities" (mean 12.16) but by grade 11 this has become an issue of considerably more importance (mean 7.96). Grade 11 boys, again surprisingly, seem most

concerned about "home and family relationships," while grade 8 and grade 12 boys express less concern over this, perhaps because they see their relationships with their families as being satisfactory. Grade 10 and grade 11 boys are most concerned about "manners and courtesy." Perhaps this is because as they begin more formal dating behavior they are concerned about proper conduct. As one would expect, the girls showed the most concern over "personal attractiveness," with the exception of grade 10 where the boys had a mean of 7.36 and the girls had a mean of 12.00. The upsurge of interest in personal appearance for boys could again be a result of the beginning of dating, characteristic, this author feels, of grade 10's. No pattern at all can be seen for interest in "daily schedule." Grade 8 boys, grade 9 girls, grade 10 boys, and grade 12 girls and boys all gave it a fairly high ranking. As one would expect, "civic interests" seem to become more acute as the students age, with grade 12's indicating fairly low mean scores (6.76 for boys and 7.28 for girls). Item fourteen, "getting along with other people," was of most concern to grade 8 and 12 boys while the final item on the list, "philosophy of life" was very similarly ranked by all students, but grade 8 and grade 11 girls expressed the most concern in these areas.

Table XV shows the percentage of items checked for each category on the West Scale for grades 8 through 12. Table XVI presents Rhos for the data in the cross grade comparisons

TABLE XV

Percentage of Items Checked for Each Category on West Scale at Each Grade Level

Category on West Scale	Grade 8		Grade 9		Grade 10		Grade 11		Grade 12	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1. School	33.96	31.91	33.12	26.60	23.76	30.56	29.20	30.33	26.16	25.14
2. Bodily concerns	36.72	28.33	39.12	23.88	28.56	30.08	35.69	34.58	29.60	28.00
3. Parental relationships	36.24	30.41	38.64	23.12	17.04	32.64	38.72	34.58	31.68	20.85
4. Friends	27.76	30.95	31.72	23.92	30.48	25.80	29.76	22.04	37.08	33.00
5. Guilt feelings	21.60	35.08	32.08	37.60	23.56	32.72	35.20	37.66	27.60	32.28
6. Materialism	24.08	38.66	33.60	25.64	25.12	35.20	35.20	38.75	28.64	34.00

TABLE XVI

Rho for Cross-Grade Comparison of Responses to
West Scale (Boys, Girls and Combined)

Grades	Rho for Boys	Rho for Girls	Rho Combined
8 x 9	.96	.96	.98
8 x 10	.95	.89	.98
8 x 11	.89	.90	.92
8 x 12	.87	.91	.93
9 x 10	.86	.92	.99
9 x 11	.89	.93	.97
9 x 12	.90	.91	.98
10 x 11	.91	.98	.98
10 x 12	.92	.96	.95
11 x 12	.94	.97	.96

Note: all the above are significant to .01 level.

for boys and girls on the West Scale. Kendall's W and Spearman Rho calculations indicate that there is no statistically significant difference between these results. In category one, "school problems," grade 8 and 9 boys indicated the highest number of problems while grade 10 boys indicated the fewest. Again with "body concerns," category two, grade 8 and 9 boys expressed considerable concern, most of which dissipated by grade 10. "Parental relations" seem to bother grade 10 boys a little, but they were more concerned about problems revolving around "friends." At every grade level girls indicated more "guilt feeling problems" than boys, with a peak being reached by grade 11 and declining by grade 12. With the exception of grade 9's, girls seem to be more materialistic than boys with the difference being very marked at grade 8 (24.08 for boys compared to 38.66 for girls).

Question six concerned itself with a comparison of the results of four uses of the Symonds Scale. Table XVI shows the results of Spearman Rho calculations done between the present study and previous users of the Symonds Scale. Comparisons could not be made with the Kaczkowski study as he did not provide a boy/girl split on his data. It is noted that no significant differences are observed in the time span from 1933 (Symonds) to the present. The following charts are provided in the appendix should the reader require additional information: (a) median ranking for each item on the Symonds Scale (for each total group) (Appendix J); (b) items on

TABLE XVII

Spearman Rho Calculations Between Girls' and Boys'
Rankings of Various Users of Symonds Scale

Studies Compared	Rho
Pearse and	
Chabassol - Boys	.70*
- Girls	.60*
Harris - Boys	.96**
- Girls	.93**
Symonds - Boys	.60*
- Girls	.94**

* significant to .05 level

** significant to .01 level

Symonds Scale ranked by median responses (for total group) (Appendix K); (c) total mean percentages for the Lloyd West Scale (for total group) (Appendix L).

General Statement of Findings

The findings of the study indicate that there are no characteristic patterns of problems which distinguish one group of adolescents from another. / None of the variables selected, i.e. socio-economic status, grade point average, grade, sex, or IQ, seemed to be strongly related to the kinds of problems the adolescents had. / / There was little evidence to support Symonds' hypothesis that if you change the economic and social structure of society you immediately change the relative emphasis of adolescent problems! That is, there is a general agreement between the ratings on the Symonds Scale as provided by the present subjects and those given by subjects tested by Chabassol and Thomas, Harris, Kaczkowski, or Symonds, even though these studies cover a span of 40 years.

Limitations of the Study

As mentioned earlier, in order to use the Symonds Scale three assumptions must be met (Morgan, 1969). That is, the students must be able to recognize their own problems, find them on the list, and be willing to indicate what they are. The latter was particularly important since the students had to be asked to put their names on the form so that matching

could be done with grade to average and IQ level. Because of this lack of anonymity, possibly some of the students hesitated to be completely frank in their evaluation of the Symonds list of problems. The slightly archaic terminology in the Symonds Scale may have been distorting of result. However, it was felt that it was preferable to retain this wording so that meaningful comparisons could be made with the findings of this author and the previous users of the scale.

The sheer bulk of data in the study created problems of presentation: how best to give the reader a clear and concise picture of the findings? When one is dealing with such a number of variables, it is difficult to identify trends or common elements in the mass of data which results. Consideration must also be given to the fact that some of the sample might not have taken the questionnaire seriously and might have filled it out in a superficial or facetious manner.

The validity and reliability of the instruments used to measure the variables can also be questioned. Meaningfulness of the IQ score is an issue now much discussed in educational circles. Further, the IQ scores on the students' record cards were done at a variety of different times in a variety of different places using a variety of different IQ tests. Grade point average can also be a deceptive measure. Perhaps it is a clearer indicator of a student's school adjustment than his academic success. For example, a

student with a GPA of 4 could be placed in the middle group and another with a GPA of 6 could be placed in the high group. If the first student happened to be taking a heavy seven-course academic load, with math and physics and history courses, could he be considered less academically successful than the second student who might have a six-course programme of, perhaps, music, home economics, and art?

The limitations of the Blishen Scale as a measure of SES have already been considered in an earlier chapter. However, once again it should be noted that the failure to adjust the scale for the home situation where both parents work could be a serious limitation.

Implications for Further Research

Clearly this study was intended to be an information providing exercise--a preliminary investigation which could lay the groundwork for more sophisticated kinds of studies. Educational researchers could hopefully look at the relationships indicated here and then pose hypotheses regarding curriculum and counselling procedures. Guidance programmes might be designed to deal with specific problem areas and counsellors could be made aware of typical adolescent concerns.

A number of questions arise from this work. Would variables be found between rural and urban groups or between a variety of schools providing a broader spectrum of SES

scores? Is there any system of coding which could be used which would allow the subject to assume he was being granted anonymity? Indeed, would such a system be moral? Would results be affected if students were given longer than a 15 minute homeroom period in which to answer the questionnaire, or if they had the reasons for the research carefully explained to them? Would the time of the year when the study was run affect results? For example, would "school problems" seem more acute just prior to a report card or examination session than in, say, early September when optimism runs high? Or would "money" rank as more of a problem just before Christmas? What differences would it make if the questionnaire had been given in guidance classes, segregated by sex, instead of in casually co-ed homeroom where students might look over one another's answers and tease back and forth? Would the kind of rapport between teachers and students in a school affect results? For example, in a school where every teacher was encouraged to counsel and relate on a casual, personal level with the students, would the answers be more frank than in an institution more cold and formal? School size might become a variable here, if one considers that the climate of a smaller school could be more personal than in a large institution like Belmont-Fisher, a school with 1,800 students and 85 staff. Would various environmental conditions affect results? What, for example, happens to the subjects' responses if many of them belong to various

racial, ethnic, or religious groups? Would results be affected if the scales were administered in an area where a large community of, say, Mennonites lived? Indeed, possibilities exist for doing comparisons between countries. Do Russians and Canadians or Chinese and English students experience similar or different problems?

It would appear, however, that in further research the variables of age, sex, grade point average, IQ, and socioeconomic status could be considered to have little effect on the type of problems adolescents see themselves as having.

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APPENDIX A

THE SYMONDS SCALE

Problems and Interests of Adolescents

Personal Problems

1. Health--eating, drinking, exercise, posture, sleep and rest, air and temperature, sunlight, clothing, bathing, care of special parts, cleanliness and prevention of disease, excretion and elimination, use of drugs.
2. Sex adjustments--love, petting, courtship, marriage.
3. Safety--avoiding accidents and injury.
4. Money--earning, spending, saving, etc.
5. Mental hygiene--fears, worries, inhibitions, compulsions, feelings of inferiority, fantasies, etc.
6. Study habits--skills used in study, methods of work, problem-solving.
7. Recreation--sports and games, reading, arts and crafts, fellowship and social activities, hobbies.
8. Personal and moral qualities--qualities leading to success, qualities of good citizenship.
9. Home and family relationships--living harmoniously with members of the family.
10. Manners and courtesy--etiquette.
11. Personal attractiveness--personal appearance, voice, clothing.
12. Daily schedule--planning twenty-four hours in a day.
13. Civic interests, attitudes, and responsibilities.
14. Getting along with other people.
15. Philosophy of life--personal values, ambitions, ideals, religion.

APPENDIX B

THE BLISHEN SCALE

Table I Socio-Economic Index for 320 Occupations
in 1961 Census of Canada

Occupation	Socio- Economic Index
Chemical Engineers	76.69
Dentists	76.44
Professors & College Principals	76.01
Physicians & Surgeons	75.57
Geologists	75.49
Mining Engineers	75.42
Lawyers & Notaries	75.41
Civil Engineers	75.16
Architects	74.52
Veterinarians	74.46
Electrical Engineers	74.34
Professional Engineers, n.e.s.	74.27
Physicists	73.81
Optometrists	73.77
Biological Scientists	73.22
Physical Scientists, n.e.s.	72.94
Pharmacists	72.87
Mechanical Engineers	72.78
Judges & Magistrates	72.24
Economists	71.90
Chemists	70.94
Industrial Engineers	70.43
Osteopaths & Chiropractors	70.25
School Teachers	70.14
Accountants and Auditors	68.80
Owners & Managers, Education & Related Services	68.32
Actuaries & Statisticians	67.78
Computer Programmers	67.50
Owners & Managers, Services to Business Management	67.28
Agricultural Professionals, n.e.s.	66.96
Owners & Managers, Chemical & Chemical Products Indus.	66.79
Advertising Managers	66.05
Air Pilots, Navigators & Flight Engineers	66.04
Owners & Managers, Electrical Products Industries	65.78
Owners & Managers, Primary Metal Industries	65.29
Owners & Managers, Paper and Allied Industries	64.78
Owners & Managers, Finance, Insurance, Real Estate	64.52
Authors, Editors, Journalists	64.23
Owners & Managers, Rubber Industries	64.09
Owners & Managers, Machinery Industries	63.76
Librarians	63.75

Table I (continued)

Occupation	Socio- Economic Index
Owners & Managers, Petroleum & Coal Products Indus.	63.02
Sales Managers	62.04
Owners & Managers, Mines, Quarries, & Oil Wells	61.99
Owners & Managers, Textile Industries	61.96
Owners & Managers, Transportation Equipment Indus.	61.75
Professional Occupations, n.e.s.	60.93
Credit Managers	60.81
Office Managers	60.42
Owners & Managers, Health & Welfare Services	60.07
Security Salesmen & Brokers	59.91
Radio & Television Announcers	59.81
Owners & Managers, Printing, Publishing & Allied Indus.	59.69
Owners & Managers, Federal Administration	59.60
Owners & Managers, Knitting Mills	59.28
Clergymen & Priests	59.20
Owners & Managers, Misc. Manufacturing Industries	58.29
Other Health Professionals	58.27
Artists (except commercial), Art Teachers	58.21
Inspectors & Foremen, Communication	58.17
Draughtsmen	57.82
Owners & Managers, Metal Fabricating Industries	57.60
Advertising Salesmen & Agents	57.23
Purchasing Agents & Buyers	55.62
Insurance Salesmen & Agents	55.41
Owners & Managers, Clothing Industries	55.37
Science & Engineering Technicians, n.e.s.	55.22
Brokers, Agents & Appraisers	55.19
Owners & Managers, Provincial Administration	54.77
Artists, Commercial	54.06
Owners & Managers, Transportation, Communication, & Other Utilities	53.85
Owners & Managers, Wholesale Trade	53.80
Owners & Managers, Local Administration	53.29
Surveyors	53.25
Commercial Travellers	52.68
Owners & Managers, Furniture & Fixtures Industries	52.11
Teachers & Instructors, n.e.s.	52.07
Stenographers	51.96
Owners & Managers, Food & Beverage Industries	51.70
Radio & Television Equipment Operators	51.51
Physical & Occupational Therapists	51.11
Athletes & Sports Officials	51.11
Musicians & Music Teachers	50.93
Nurses-in-training	49.91
Bookkeepers & Cashiers	49.55

Table I (continued)

Occupation	Socio- Economic Index
Funeral Directors & Embalmers	49.47
Foremen, Transportation Equipment Industries	49.21
Foremen, Primary Metals Industries	49.11
Real Estate Salesmen & Agents	48.74
Medical & Dental Technicians	48.56
Photoengravers	48.26
Photographers	48.07
Engravers, except Photoengravers	47.95
Ticket, Station & Express Agents, Transport	47.61
Batch & Continuous Still Operators	47.60
Office Appliance Operators	47.12
Owners & Managers, Construction Industries	46.95
Foremen, Electric Power, Gas & Water Utilities	46.75
Power Station Operators	46.20
Locomotive Engineers	45.99
Conductors, Railroad	45.68
Owners & Managers, Wood Industries	45.52
Owners & Managers, Misc. Services	45.48
Foremen, Paper & Allied Industries	45.36
Owners & Managers, Motion Picture & Recreational Serv.	45.19
Linemen & Servicemen---Telephone, Telegraph & Power	45.05
Foremen, Other Manufacturing Industries	45.01
Lithographic & Photo-offset Occupations	45.00
Toolmakers, Diemakers	44.82
Inspectors, Construction	44.76
Interior Decorators & Window Dressers	44.37
Foremen, Trade	44.32
Foremen, Mine, Quarry, Petroleum Well	44.27
Telephone Operators	44.20
Owners & Managers, Forestry, Logging	44.00
Actors, Entertainers, & Showmen	43.85
Owners & Managers, Retail Trade	43.69
Mechanics and Repairmen, Office Machines	43.05
Clerical Occupations, n.e.s.	42.98
Mechanics & Repairmen, Aircraft	42.76
Nurses, Graduate	42.57
Compositors & Type-Setters	42.30
Deck Officers, Ship	42.13
Religious Workers	41.84
Members of Armed Forces*	41.43
Locomotive Firemen	40.92
Electricians, Wiremen, & Electrical Repairmen	40.68
Auctioneers	40.48
Canvassers & Other Door-to-Door Salesmen	40.23
Brakemen, Railroad	40.22

Table I (continued)

Occupation	Socio- Economic Index
Paper Makers	40.17
Owners & Managers, Personal Services	40.14
Printing Workers, n.e.s.	40.13
Mechanics & Repairmen, Radio & T.V. Receivers	40.12
Photographic Processing Occupations	40.05
Engineering Officers, Ship	39.86
Millwrights	39.83
Inspectors, Graders & Samplers, n.e.s.	39.82
Inspectors, Examiners, Gaugers--Metal	39.76
Patternmakers (except paper)	39.75
Typists & Clerk typists	39.66
Postmasters	39.65
Well-Drillers & Related Workers	39.55
Foremen, All Other Industries	39.54
Pressmen, Printing	39.49
Telegraph Operators	39.37
Inspectors & Foremen, Transport	39.21
Projectionists, Motion Picture	39.15
Foremen, Textile & Clothing Industries	39.03
Lens Grinders & Polishers; Opticians	38.82
Bookbinders	38.54
Foremen, Food & Beverage Industries	38.21
General Foremen, Construction	37.90
Operators, Electric Street Railway	37.80
Stationary Enginemen	37.79
Rolling Mill Operators	37.76
Chemical & Related Process Workers	37.75
Prospectors	37.73
Foremen, Wood & Furniture Industries	37.63
Sales Clerks	37.14
Machinists & Machine Tool Setters	36.90
Jewellers & Watchmakers	36.55
Civilian Protective Service Occupations**	35.80
Stewards	35.32
Farm Managers & Foremen	35.05
Other Occupations in Bookbinding	34.97
Baggagemen & Expressmen, Transport	34.85
Metal Treating Occupations, n.e.s.	34.79
Mechanics & Repairmen, n.e.s.	34.77
Riggers & Cable Splicers, except Telephone & Telegraph & Power	34.77
Furnacemen & Heaters--Metal	34.75
Cellulose Pulp Preparers	34.69
Stock Clerks & Storekeepers	34.63
Logging Foremen	34.61

Table I (continued)

Occupation	Socio- Economic Index
Beverage Processors	34.44
Plumbers & Pipefitters	34.38
Heat Treaters, Annealers, Temperers	34.09
Paper Making Occupations, n.e.s.	34.07
Hoistmen, Cranemen, Derrickmen	34.06
Inspectors, Graders, Scalers--Log & Lumber	33.80
Electrical & Electronics Workers, n.e.s.	33.80
Switchmen & Signalmen	33.76
Fitters & Assemblers--Electrical & Electronics Equip.	33.57
Sheet Metal Workers	33.49
Metal Drawers & Extruders	33.40
Miners	33.38
Bartenders	33.29
Insulation Appliers	33.22
Roasters, Cookers & Other Heat Treaters, Chemical	33.14
Furriers	33.03
Boilermakers, Platers & Structural Metal Workers	32.93
Welders & Flame Cutters	32.79
Timbermen	32.61
Tire & Tube Builders	32.34
Filers, Grinders, Sharpeners	32.18
Service Workers, n.e.s.	32.17
Nursing Assistants & Aides	32.14
Shipping & Receiving Clerks	32.14
Millmen	32.13
Buss Drivers	31.86
Forest Rangers & Cruisers	31.85
Metal Working Machine Operators	31.67
Quarriers & Related Workers	31.61
Moulders	31.32
Porters, Baggage & Pullman	31.30
Mechanics & Repairmen, Motor Vehicle	31.30
Mechanics & Repairmen, Railroad Equipment	31.29
Fitters & Assemblers--Metal	31.28
Crushers, Millers, Calenderers--Chemical	31.12
Electroplaters, Dip Platers & Related Workers	31.07
Cutters, Markers--Textiles; Garment & Glove Leather	31.06
Production Process & Related Workers, n.e.s.	31.00
Lodging & Boarding Housekeepers	30.94
Barbers, Hairdressers, & Manicurists	30.94
Cabinet & Furniture Makers, Wood	30.88
Driver--Salesmen	30.74
Labourers, Primary Metal Industries	30.68
Metalworking Occupations, n.e.s.	30.60
Deck Ratings (ship), Barge Crews & Boatmen	30.56
Paper Products Makers	30.53

Table I (continued)

Occupation	Socio- Economic Index
Postmen & Mail Carriers	30.52
Service Station Attendants	30.48
Butchers & Meat Cutters	30.48
Meat Canners, Curers, Packers	30.48
Motormen (vehicle) (except railway)	30.48
Waiters	30.47
Hawkers & Peddlars	30.43
Oilers & Greasers---Machinery & Vehicles (except ship)	30.43
Tobacco Preparers & Products Makers	30.39
Upholsterers	30.27
Tailors	30.26
Labourers, Trade	30.19
Bleachers & Dyers---Textiles	30.18
Painters (Construction & Maintenance), Paperhangers & Glaziers	30.08
Taxi Drivers & Chauffeurs	30.07
Operators of Earth-Moving & Other Construction Mach.	30.03
Painters (except Construction & Maintenance)	30.00
Coremakers	30.00
Baby Sitters	29.99
Labourers, Mine	29.96
Blacksmiths, Hammermen, Forgemen	29.93
Bricklayers, Stonemasons, Tilesetters	29.93
Attendants, Recreation & Amusement	29.92
Plasterers & Lathers	29.90
Other Food Processing Occupations	29.89
Bottlers, Wrappers, Labellers	29.80
Clay, Glass & Stone Workers, n.e.s.	29.77
Materials---Handling Equipment Operators	29.76
Labourers, Paper & Allied Industries	29.73
Carpenters	29.71
Vulcanizers	29.62
Fruit & Vegetable Canners & Packers	29.60
Other Rubber Workers	29.51
Labourers, Communication & Storage	29.51
Milk Processors	29.49
Cooks	29.43
Construction Workers, n.e.s.	29.43
Longshoremen & Stevedores	29.41
Truck Drivers	29.31
Gardeners (except farm) & Groundskeepers	29.27
Bakers	29.26
Labourers, Electric Power, Gas & Water Utilities	29.26
Messengers	29.23
Warehousemen & Freight Handlers	29.18

Table I (continued)

Occupation	Socio- Economic Index
Polishers & Buffers--Metal	29.12
Boiler Firemen (except ship)	29.10
Labourers, All Other Industries	28.96
Launderers & Dry Cleaners	28.93
Other Agricultural Occupations	28.93
Dressmakers & Seamstresses	28.77
Riveters & Rivet-Heaters	28.76
Millers of Flour & Grain	28.75
Furnacemen & Kilnmen, Ceramics & Glass	28.69
Knitters	28.68
Transport Occupations, n.e.s.	28.63
Labourers, Other Public Administration & Defence	28.61
Woodworking Occupations, n.e.s.	28.56
Stone Cutters & Dressers	28.52
Apparel & Related Products Makers	28.44
Tanners & Tannery Operatives	28.42
Sawyers	28.29
Woodworking Machine Operators	28.29
Labourers, Other Manufacturing Industries	28.22
Janitors & Cleaners, Building	28.22
Labourers, Food & Beverage Industries	28.12
Kitchen Helpers & Related Service Workers	28.11
Engine-room Ratings, Firemen & Oilers, ship	28.11
Newsvendors	28.08
Labourers, Railway Transport	28.03
Finishers & Calenderers	27.97
Elevator Tenders, Building	27.96
Shoemakers & Repairers, Not in Factory	27.87
Sewers & Sewing Machine Operators	27.87
Cement & Concrete Finishers	27.86
Guides	27.79
Farm Labourers	27.77
Labourers, Transportation, except Railway	27.72
Labourers, Wood Industries	27.57
Labourers, Transportation Equipment Industries	27.49
Other Textile Occupations	27.44
Carders, Combers & Other Fibre Preparers	27.37
Labourers, Construction	27.25
Other Leather Products Makers	27.19
Fishermen	27.17
Leather Cutters	27.10
Loom Fixers & Loom Preparers	27.09
Lumbermen, including Labourers in Logging	27.01
Spinners & Twisters	26.94
Weavers	26.77

Table I (continued)

Occupation	Socio- Economic Index
Teamsters	26.71
Labourers, Local Administration	26.71
Winders & Reelers	26.63
Sectionmen & Trackmen	26.57
Labourers, Textile & Clothing Industries	26.56
Shoemakers & Repairers--in Factory	26.56
Fish Canners, Curers, & Packers	26.09
Trappers & Hunters	25.36

* Includes Commissioned Officers, Armed Forces; and Other Ranks Armed Forces

**Includes Firemen, Fire Protection; Policemen and Detectives; and Guards, Watchmen, n.e.s.

APPENDIX C

ADAPTATION OF WEST SCALE

Lloyd West Self-Discovery Inventory

Please check () as many of the following items as you feel are real problems or matters of concern in your life (i.e. How many of the following items are things you worry about).

Topics of Discussions	Check here
1. Which school subject I like and which I dislike.	()
2. My appetite and food preferences.	()
3. The ways in which my parents annoy me.	()
* 4. Whether I am popular with girls/boys.	()
5. Whether I can afford to buy the things I need.	()
6. Whether my parents understand me.	()
7. How I get along with my teachers.	()
8. The price of some of the things I have.	()
9. My posture and/or body build.	()
? 10. How I feel about tests.	()
11. The troubles I get into.	()
12. My vocational plans for the future.	()
13. My height and/or weight.	()
? 14. The things that get me worried or make me afraid.	()
15. How my parents treat me.	()
16. The boy (girl) whom I like very much.	()
17. How I feel about my school marks.	()
18. Whether I am in love.	()
19. How much money I have.	()
20. What I talk about on a date.	()
21. My skin condition or complexion.	()
22. My intelligence or ability to learn at school.	()
23. How well I get along with my father.	()
24. Where I buy my clothes.	()
P 25. The things that make me feel sad or unhappy.	()
26. Whether my parents criticize me.	()

27. How weak or strong I am physically. ()
28. My greatest faults or "shortcomings." ()
29. Whether I need more or better clothes. ()
30. Which sex behaviors are morally acceptable. ()
31. Concerns about my health. ()
32. How I feel about the use of alcohol and/or drugs. ()
33. How wealthy or poor my family is. ()
34. Whether I am developing normally. ()
35. How well I get along with my mother. ()
36. Questions or concerns about sex. ()
37. The aches and pains I have. ()
38. How I feel about homework. ()
39. The responsibilities I have at home. ()
40. What I do at a party. ()
41. How I earn my money. ()
- 7 42. The embarrassing situations I have been in. ()
43. How to make (or turn down) a date. ()
- P 44. My bad habits. ()
45. Whether my home life is happy. ()
46. Subjects at school in which I have difficulty. ()
47. How I feel about our house or car. ()
- P 48. Things that I have done about which I feel guilty. ()

APPENDIX D

MEASUREMENT INSTRUMENT FOR THESIS

Name: _____ Grade: _____ Div.: _____

Lloyd West Self-Discovery Inventory

Please check () as many of the following items as you feel are real problems or matters of concern in your life (i.e. How many of the following items are things you worry about).

Topics of Discussions	Check here
1. Which school subject I like and which I dislike.	()
2. My appetite and food preferences.	()
3. The ways in which my parents annoy me.	()
4. Whether I am popular with girls/boys.	()
5. Whether I can afford to buy the things I need.	()
6. Whether my parents understand me.	()
7. How I get along with my teachers.	()
8. The price of some of the things I have.	()
9. My posture and/or body build.	()
10. How I feel about tests.	()
11. The troubles I get into.	()
12. My vocational plans for the future.	()
13. My height and/or weight.	()
14. The things that get me worried or make me afraid.	()
15. How my parents treat me.	()
16. The boy (girl) whom I like very much.	()
17. How I feel about my school marks.	()
18. Whether I am in love.	()
19. How much money I have.	()
20. What I talk about on a date.	()
21. My skin condition and complexion.	()
22. My intelligence or ability to learn at school.	()
23. How well I get along with my father.	()
24. Where I buy my clothes.	()

Name: _____ Grade: _____ Div.: _____

25. The things that make me feel sad or unhappy. ()
26. Whether my parents criticize me. ()
27. How weak or strong I am physically. ()
28. My greatest faults or "shortcomings." ()
29. Whether I need more or better clothes. ()
30. Which sex behaviors are morally acceptable. ()
31. Concerns about my health. ()
32. How I feel about the use of alcohol and/or drugs. ()
33. How wealthy or poor my family is. ()
34. Whether I am developing normally. ()
35. How well I get along with my mother. ()
36. Questions or concerns about sex. ()
37. The aches and pains I have. ()
38. How I feel about homework. ()
39. The responsibilities I have at home. ()
40. What I do at a party. ()
41. How I earn my money. ()
42. The embarrassing situations I have been in. ()
43. How to make (or turn down) a date. ()
44. My bad habits. ()
45. Whether my home life is happy. ()
46. Subjects at school in which I have difficulty. ()
47. How I feel about our house or car. ()
48. Things that I have done about which I feel guilty. ()

Name: _____ Grade: _____ Div.: _____

Please read the following list of "problems of adolescents" and then do the questions on the next page.

Problems of Adolescents

Personal Problems

1. Health--eating, drinking, exercise, posture, sleep and rest, air and temperature, sunlight, clothing, bathing, care of special parts, cleanliness and prevention of disease, excretion and elimination.
2. Sex Adjustments--love, petting, courtship, marriage.
3. Safety--avoiding accidents and injuries.
4. Money--earning, spending, saving, etc.
5. Mental Hygiene--fears, worries, inhibitions, compulsions, feelings of inferiority, fantasies, etc.
6. Study Habits--skills used in study, methods of work, problem-solving.
7. Recreation--sports and games, reading, arts and crafts, fellowship and social activities, hobbies.
8. Personal and Moral Qualities--qualities leading to success, qualities of good citizenship.
9. Home and Family Relationships--living harmoniously with members of the family.
10. Manners and Courtesy--etiquette.
11. Personal Attractiveness--personal appearance, voice, clothing.
12. Daily Schedule--planning twenty-four hours in a day.
13. Civic Interests, attitudes, and responsibilities.
14. Getting along with other people.
15. Philosophy of Life--personal values, ambitions, ideals religion.

Please place in the boxes below the numbers of the problems on the accompanying mimeographed sheet to indicate the order in which they are personal problems to you.

First enter the numbers of the problems which are 1st, 2nd, and 3rd in order of being your own greatest personal problems --13th, 14th, and 15th, in order. Then come back and fill in the rest in order of groupings of 3. When you have finished, check over your ranking to make sure that you have used each number from 1-15. Be certain that your rankings represent your best judgement.

Place in the 3 boxes below in order the numbers of topics which are your greatest personal problems.

1st	2nd	3rd

Place in the next 3 boxes the numbers of the next 3 in order of being personal problems to you.

--	--	--

Place in the next boxes the numbers of the next 3 in order of being personal problems to you.

--	--	--

Then the next 3 in order of being personal problems.

--	--	--

And finally place the number of the 3 which are your least personal problems.

--	--	--

If there are any other problems or issues of concern to you which do not appear on the above scale--please list them in the space provided below.

APPENDIX E

Median Ranking for Symonds Scale Items by Girls and Boys

Items Symonds Scale	Median Ranking for Boys	Median Ranking for Girls
1. Health	3.47	5.00
2. Sex adjustments	5.48	5.63
3. Safety	6.45	6.60
4. Money	7.22	7.15
5. Mental hygiene	9.23	8.85
6. Study habits	9.45	9.68
7. Recreation	9.91	9.08
8. Personal & moral questions	8.84	8.77
9. Home & family relationships	8.21	8.47
10. Manners & courtesy	7.69	8.46
11. Personal attractiveness	8.44	8.14
12. Daily schedule	6.18	7.41
13. Civic interests	7.00	7.36
14. Getting along with others	8.69	9.14
15. Philosophy of life	10.87	10.08

APPENDIX F

Comparison of Median Responses on Symonds
for Three Socio-Economic Groups

Item on Symonds	High		Med.		Low	
	Boys	Girls	Boys	Girls	Boys	Girls
1. Health	3.20	5.01	4.83	5.33	3.33	3.25
2. Sex adjustment	4.92	6.61	5.50	5.63	7.10	5.33
3. Safety	6.00	8.01	6.00	6.80	8.70	5.88
4. Money	7.20	8.00	6.97	7.00	8.50	6.60
5. Mental hygiene	10.00	10.41	8.97	8.00	10.75	8.67
6. Study habits	10.00	10.11	9.25	8.42	9.25	10.00
7. Recreation	7.25	6.71	10.06	9.00	9.50	11.33
8. Personal & moral qualities	8.63	8.61	9.00	9.08	8.50	8.00
9. Home & family relationships	8.43	8.01	8.32	8.89	5.50	8.13
10. Manners & courtesy	8.40	8.01	8.25	8.75	4.00	8.75
11. Personal attractiveness	9.75	8.01	9.50	7.92	6.50	8.88
12. Daily schedule	6.25	7.13	5.88	7.69	7.17	6.88
13. Civic interests	6.00	7.38	6.83	7.67	7.50	6.00
14. Getting along with others	8.00	10.67	8.70	9.13	9.50	6.40
15. Philosophy of life	10.98	9.40	11.00	10.14	10.50	10.60

APPENDIX G

Comparison of Median Responses on Symonds
for Three GPA Groups

Item on Symonds	High		Med.		Low	
	Boys	Girls	Boys	Girls	Boys	Girls
1. Health	3.33	3.75	3.21	10.50	5.13	3.50
2. Sex adjustment	4.94	5.36	5.50	6.50	9.00	5.25
3. Safety	6.17	7.13	7.50	7.50	6.08	5.75
4. Money	7.08	8.14	8.50	6.50	6.86	6.75
5. Mental hygiene	9.28	10.20	9.50	7.83	8.75	6.17
6. Study habits	9.17	10.38	9.50	9.50	9.58	8.25
7. Recreation	9.17	7.42	9.50	9.50	10.29	9.50
8. Personal & moral qualities	7.41	8.00	9.10	9.83	9.20	8.90
9. Home & family relationships	8.25	8.14	8.07	10.50	8.25	7.75
10. Manners & courtesy	7.67	8.60	8.50	8.17	6.06	8.50
11. Personal attractiveness	8.50	8.15	9.50	5.83	7.67	9.00
12. Daily schedule	7.83	7.65	6.00	6.50	5.86	7.83
13. Civic interests	7.50	8.75	5.50	5.00	7.58	8.50
14. Getting along with others	9.50	10.60	6.50	7.00	7.67	9.50
15. Philosophy of life	11.00	9.88	10.75	10.00	10.86	10.30

APPENDIX H

Comparison of Median Responses on Symonds
for Three IQ Groups

Items on Symonds	High		Med.		Low	
	Boys	Girls	Boys	Girls	Boys	Girls
1. Health	4.50	3.00	3.50	10.75	3.13	6.00
2. Sex adjustment	5.30	5.27	6.90	6.50	5.20	6.50
3. Safety	5.63	6.22	8.00	7.83	6.75	7.00
4. Money	7.25	7.08	7.39	6.50	6.92	8.17
5. Mental hygiene	9.23	9.80	9.13	7.17	9.40	8.85
6. Study habits	9.25	10.14	9.50	8.50	9.67	8.50
7. Recreation	9.70	9.60	9.50	8.90	10.58	7.25
8. Personal & moral qualities	8.90	8.43	8.75	9.83	8.75	8.10
9. Home & family relationships	8.14	8.00	8.06	9.50	8.75	8.50
10. Manners & courtesy	7.60	8.43	7.50	8.00	8.25	9.00
11. Personal attractiveness	8.21	9.00	9.50	6.25	9.00	7.50
12. Daily schedule	7.17	7.78	5.90	6.93	5.00	7.50
13. Civic interests	7.70	8.80	6.50	5.00	5.75	8.83
14. Getting along with others	9.50	8.75	7.83	8.75	8.00	10.50
15. Philosophy of life	11.25	9.67	10.53	10.50	10.38	11.17

APPENDIX I

Comparison of Median Responses on Symonds for Five Grade Levels

Item on Symonds	Grade 8		Grade 9		Grade 10		Grade 11		Grade 12	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1. Health	3.00	8.75	6.00	2.88	2.88	3.00	9.63	8.75	3.00	5.25
2. Sex adjustment	5.08	6.00	6.67	6.00	6.00	5.00	8.63	6.00	5.08	7.67
3. Safety	5.38	7.00	7.00	7.75	7.75	6.33	7.80	7.00	5.38	5.33
4. Money	6.75	6.00	7.13	7.75	7.75	7.75	8.33	6.00	6.75	6.80
5. Mental hygiene	9.25	7.00	9.38	10.25	10.25	8.25	8.63	7.00	9.08	8.88
6. Study habits	9.63	8.00	9.75	10.13	10.13	10.33	8.33	8.00	9.63	8.33
7. Recreation	10.71	8.63	9.33	10.58	10.58	11.63	7.00	8.63	10.71	7.75
8. Personal & moral qualities	9.38	8.13	8.75	8.88	8.88	10.75	6.25	8.13	9.38	8.92
9. Home & family relationships	9.00	8.25	8.00	8.20	8.20	10.00	4.88	8.25	9.00	8.25
10. Manners & courtesy	8.75	8.67	8.38	6.38	6.38	11.00	4.38	8.67	8.75	8.13
11. Personal attractiveness	9.75	7.33	10.25	7.00	6.67	9.38	8.00	7.33	9.75	10.00
12. Daily schedule	4.40	7.80	7.13	5.67	5.67	8.00	9.13	7.80	4.40	6.00
13. Civic interests	6.00	8.75	8.75	6.63	6.63	9.00	8.25	8.75	6.00	7.00
14. Getting along with others	6.40	11.00	9.20	8.75	8.25	10.00	11.25	11.00	6.40	8.25
15. Philosophy of life	10.67	9.25	11.33	10.00	10.00	10.00	11.63	9.25	10.67	11.13

APPENDIX J

Median Ranking for Each Item on the Symonds Scale

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Health	69	22	29	4	13	8	5	0	7	23	5	15	16	21	13
2. Sex adjustments	11	59	3	10	42	7	24	7	15	0	10	16	21	7	16
3. Safety	13	6	39	11	33	23	12	16	19	17	7	12	11	2	25
4. Money	19	12	22	14	26	4	40	22	9	8	9	14	15	5	29
5. Mental hygiene	7	26	7	6	13	25	14	6	34	12	36	10	24	12	14
6. Study habits	9	2	19	14	19	10	11	26	13	30	24	27	15	12	15
7. Recreation	8	10	9	16	19	15	23	3	23	18	32	21	20	21	8
8. Personal & moral qualities	15	9	12	19	2	11	32	16	29	19	19	30	12	6	15
9. Home & family relationships	13	18	15	8	11	18	7	44	19	8	7	13	19	44	4
10. Manners & courtesy	19	13	8	28	6	31	5	26	17	22	5	9	25	15	15
11. Personal attractiveness	12	17	23	23	4	15	18	16	17	16	18	14	4	17	31
12. Daily schedule	15	16	24	31	8	19	23	25	8	10	13	16	24	6	6
13. Civic interests	20	13	19	25	18	17	18	13	10	22	23	8	22	6	11
14. Getting along with others	5	20	12	14	16	33	7	12	15	14	16	19	15	33	13
15. Philosophy of life	19	5	3	21	10	8	7	12	12	28	28	27	5	38	26

APPENDIX K

Items on Symonds Scale Ranked by Median Response
(for Total Group)

Question	Median
15. Philosophy of life	10.50
6. Study habits	9.57
7. Recreation	9.46
5. Mental hygiene	9.12
14. Getting along with others	8.90
8. Personal & moral qualities	8.81
11. Personal attractiveness	8.31
9. Home & family relationships	8.30
10. Manners & courtesy	8.08
13. Civic interests	7.22
4. Money	7.20
12. Daily schedule	7.02
3. Safety	6.50
2. Sex adjustments	5.50
1. Health	4.58

APPENDIX L

Total Mean Percentages for the West Scale
(for Total Group)

Groups	Mean (%)	
1	School	29.36
2	Bodily concern	31.73
3	Parental relations	31.12
4	Friends	28.98
5	Guilt feelings	31.43
6	Materialism	31.66

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