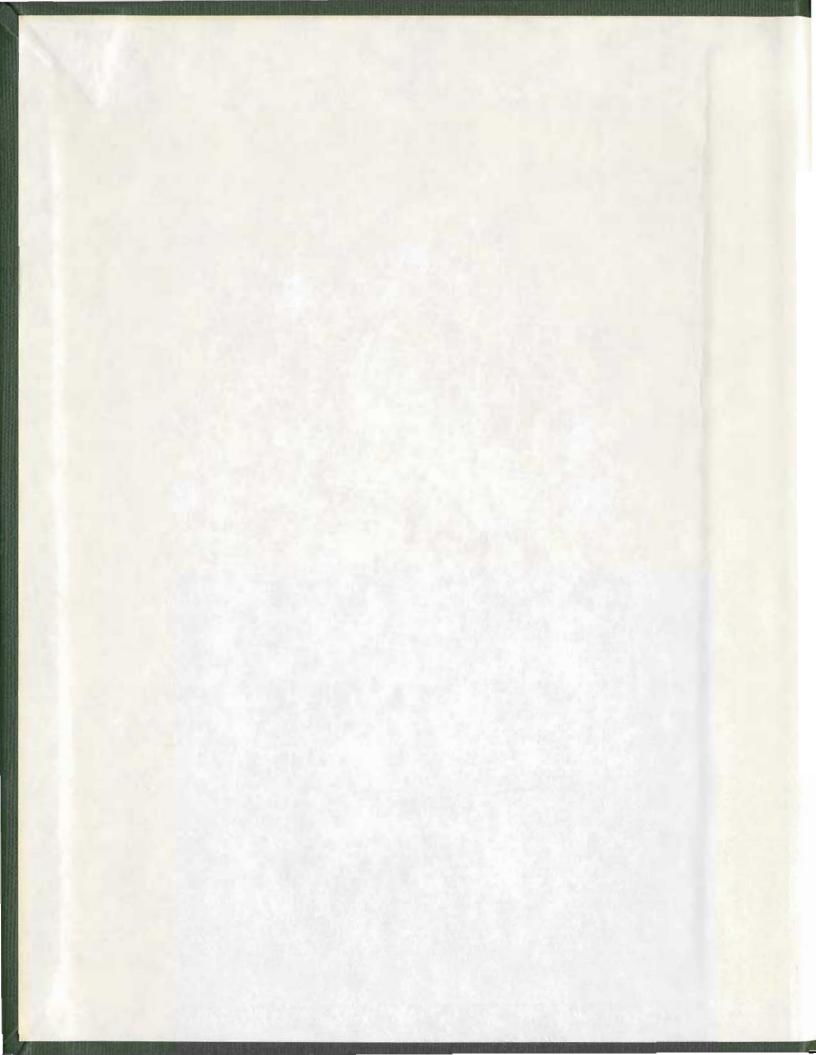
ADJUSTMENT AND
ACHIEVEMENT: A COMPARISON
OF TWO METHODS
OF COUNSELLING

CENTRE FOR NEWFOUNDLAND STUDIES

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The undersigned certify that they have read, and do recommend for acceptance, a thesis entitled "Adjustment and Achievement: A Comparison of Two Methods of Counselling" submitted by Keith C. Dicks, B.A., in partial fulfillment of the requirements for the degree of Master of Education.

	Supervisor	
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ADJUSTMENT AND ACHIEVEMENT: A COMPARISON OF TWO METHODS OF COUNSELLING

BY

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A Thesis submitted in partial fulfillment of the requirements for the Degree of Master of Education

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Abstract

Adjustment and achievement: A Comparison of Two Methods of Counselling

by Keith C. Dicks

This thesis was designed to set up a short-term counselling programme in an institutional setting and to evaluate the results of that programme. It was hoped that the evaluation of counselling programme in this kind of setting might have lead to the establishment of a permanent counselling programme designed to meet the needs of the population involved.

This research was also designed to assess the results of counselling by using multiple measurement criteria which might have been able to measure more variables of change and thus yield more accurate indications of change through counselling.

On the basis of the review of the literature, it was proposed that those persons who were more adjusted, also held a higher achievement level than those who were not as well adjusted. It was also noted that counselling could produce both positive and negative changes and therefore the study was designed to take this into account.

Two groups were counselled with differing methods of counselling, while one group acted as a control. The groups were pre and post tested with the Bell Adjustment Inventory, the Mooney Problem Check List, their grade point averages, and a rating scale administered to the teachers involved. The data were collated and evaluated.

Generally the results yielded no significant differences between any of the groups at the end of the counselling programme. Recommendations and suggestions for further research were made.

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Chapter 1

Introduction

In the process of counselling, the counsellor often deals with several areas of a person's life, but seldom does he deal with all areas. Is it sufficient for a counsellor to limit his concern and work to a client's academic achievement or vocational planning without also becoming involved with other aspects such as the person's social and family life or his self concept? It is possible for a counselling programme to operate in such a way that it deals only with the immediate aspects of a person's life, such as academic achievement, without sufficiently exploring the many other aspects of a person's development.

At the time of this study, the evaluation of counselling programmes seemed to be inconclusive with regard to the effectiveness of counselling with individuals. In a review of the literature, Carkhuff and Truax (1965-1966) reported that many studies in counselling show no significant differences between treated and untreated groups. Other studies such as Bergin, 1966, reported that the experimental groups showed more positive and more negative changes than those not treated. However, these studies, as well as other studies of counselling effectiveness assessed counselling effectiveness with only one outcome criterion, (Davis, 1959-1960; Ofman, 1964; Sawyer and Martin, 1969).

The practice of evaluating counselling effectiveness with a single criterion seems limited since the counselling process varies according to such factors as approach used, problem dealt with, setting and age of client. Kiesler (1971, p.45) says:

"the answer lies in greater theoretical specificity as to the kinds or degrees of patient changes (in-and extra-therapy) that should occur with various groups of patients receiving various therapist inter-ventions.... In other words there is no answer to the criterion problem."

(as decided by the Family Court and/or the Department of Social Services) may be admitted to this home. Several boys have been transferred to the orphanage from the Boy's Home and Training Schools operated by the Department of Social Services, or who have been accepted on the basis of emotional and/or behavioral disturbance. At the time of the study, there was no formal counselling programme in operation in this institution. The home accommodates children in grade levels from kindergarten to grade eleven. Until September 1970, boys attending Memorial University of Newfoundland lived at the orphanage; they now live in either a university residence or in a private home.

The orphanage is on twenty-six acres of land. It includes a three-storey monastery, a chapel, a kitchen, a refectory, and six dormitories, with an approximate average of twenty boys assigned to each dormitory. The dormitories are segregated by grade levels, and each group has an assigned classroom space in which supervised study is provided. Near the dormitories there are recreation areas which include television rooms, lounge areas, and activity rooms for pool, table tennis, and table games. The facilities also include outdoor basketball, hand-ball and tennis courts, a gymnasium and an indoor swimming pool. Near the main entrance are administrative offices, a staff lounge and an infirmary.

The counselling interviews took place in a small office near the classrooms in the basement.

Significance of the Study

This study is of significance for two reasons:

1. The measured intelligence scores of the subjects produced a normal distribution (see Table 2); however the over-all academic results for these boys has been below average. Since these boys do not

have as much one-to-one adult contact as those in a normal family setting, and since no formal counselling programme exists at the Home, the attention which can be given to the educational, vocational, and personal-social development is somewhat limited. In line with such limitations this study evaluates a counselling programme oriented toward the educational, vocational and personal-social needs of these boys in an effort to assess whether or not such a programme is in fact able to provide help to boys in such a setting. In addition, the study will give some indication as to how the different developmental areas are affected by the counselling programme.

2. As mentioned at the beginning of this chapter, studies which have evaluated the outcome of counselling tended to do so with only a few criteria. This seemed to limit knowledge about actual counselling effectiveness. A more refined approach, using multiple criteria to study both the positive and negative effects of counselling, is felt to be more informative and more likely to result in a valid evaluation of counselling effectiveness (Bates, 1968; Kiesler, 1971).

Definition of Terms

The following are definitions of terms used in this study:
Achievement

Grade Point Average obtained in school examinations at Christmas, 1970, Easter, 1971, and June, 1971.

Adjustment

The scores obtained by the students on the Bell Adjustment Inventory

1962, Revised Student Form H (Bell, 1962) on the six scales of Home

Adjustment, Health Adjustment, Submissiveness (Social Adjustment), Emotionality

and Hostility, and Masculinity-femininity. The inventory obtains information

about "how well the individual understands and has learned to live with his feelings and emotions" (Bell, 1962). The six scales are defined as follows:

Home Adjustment. Individuals scoring high here tend to feel that their home relations have been unsatisfactory; low scores indicate satisfaction with regard to home adjustment.

Health Adjustment. High scores on Health Adjustment reflect either a history of health difficulty or an excessive pre-occupation with one's body, or both.

<u>Submissiveness</u>. Those scoring high tend to be submissive and retiring in their social contacts. Those with low scores tend to be self-confident and assertive.

Emotionality. Individuals with high scores tend to be unstable emotionally while those with low scores tend to be emotionally secure.

Hostility. Individuals with high scores tend to be hostile and critical in social relationships. Those with low scores tend to be friendly and accepting toward people.

Masculinity-femininity. Males who score high tend to be strongly masculine in their interests while those who score low tend to have the interests of females.

Citizenship Grades

The average results of a rating scale used to evaluate the individual child by each of his subject teachers on citizenship in school. See Appendix A for a copy of the rating score.

Educational Counselling

Educational Counselling included the following procedures:

- 1. A discussion with the client of his grade point average.
- 2. A discussion with the client of his ability compared with

his achievement.

- 3. An assessment of each school subject area by the client and the counsellor to determine the appropriateness of the client's standing in that subject.
- 4. A further discussion of the specific subjects needing improvement, if any. This included specific recommendations to improve the subject standing through consideration of study habits and methods, requesting teachers for extra help and/or arranging for a specific tutor.
- The establishment of contact with a teacher if remedial work or extra tutoring was deemed necessary.

Personal Counselling

Included in personal counselling were the following procedures:

- 1. Discussion of the overall results of the Mooney Problem Check List. (Mooney and Gordon, 1950)
- 2. Further discussion of the counsellee's particular problem areas as indicated on the Mooney Problem Check List. These areas on scales were:
 - a. Health and physical development
 - b. Finances, living conditions and employment
 - c. Social and recreational activities
 - d. Social-psychological relations
 - e. Personal-psychological relations
 - f. Courtship, sex and marriage
 - g. Home and family
 - h. Morals and religion
 - i. Adjustment to school work
 - j. The future: vocation and education

- k. Curriculum and teaching procedure
- 3. Discussion on and explanation of <u>any</u> problem area not indicated on the Mooney Problem Check List but brought up by the counsellee during the counselling itself.
- 4. The discussion of teachers' expectancies and the counsellee's relationships with his teachers.
- 5. Integration, by discussion, of the counsellee's problem areas in total relationship to his home, the school, society and the counsellee himself.

Vocational Counselling

Included in vocational counselling were the following procedures:

- 1. Discussion with the client about his vocational and occupational plans after high school.
- 2. An assessment with the counsellee of his expressed interests and vocational goals, leading to further refinement toward a particular vocational goal.
- 3. Encouragement of the client by the counsellor to work toward this particular vocational goal.
- 4. The administration and interpretation of a vocational interest blank, if requested by the counsellee.
- The provision of occupational information, if requested by the counsellee and deemed necessary by the counsellor.

Intelligence

Intelligence is defined as the scores obtained on the verbal battery of the Lorge-Thorndike Scale--1957 (Lorge and Thorndike, 1957).

Problem

A problem is that as indicated by the client on the Mooney Problem

Check List (see above).

Structured Feedback

Information given to the counsellee in the Mooney Problem Check
List on his grade point average (Achievement), on the results from
any vocational interest testing, or on the feasibility of any vocational
plans he may have expressed.

Variability Range

The range of scores from the highest to the lowest obtained on the Bell Adjustment Inventory, the Mooney Problem Check List, grade point average results, and citizenship ratings. The range of scores was considered separately for each of these evaluation criteria.

Hypotheses

Three different groups were involved in this study. Group number I received personal-social, educational and vocational counselling; group number II received only educational and vocational counselling, while group number III acted as a control group and received no counselling. Each of the three groups was evaluated in a pre and post fashion using the measurement criteria of the Bell Adjustment Inventory, the Mooney Problem Check List, grade point average (achievement) and a rating scale of school behavior (citizenship).

The following hypotheses are proposed:

- 1. There will be no significant difference between the groups as measured by grade point average as follows:
 - a. Between groups I and II from:
 - i. Christmas and Easter
 - ii. Easter and June
 - iii. Christmas and June
 - b. Between groups II and III from:
 - i. Christmas and Easter

- ii. Easter and June
- iii. Christmas and June
- c. Between groups I and III from:
 - i. Christmas and Easter
 - ii. Easter and June
 - iii. Christmas and June
- 2. There will be no significant difference between the groups as measured by the pre and post administration of the rating scale as follows:
 - a. Between groups I and II
 - b. Between groups II and III
 - c. Between groups I and III
- 3. There will be no significant difference between the groups on each of the six scales of the Bell Adjustment Inventory as follows:
 - a. Home Adjustment:
 - i. Between groups I and II
 - ii. Between groups II and III
 - iii. Between groups I and III
 - b. Health Adjustment:
 - i. Between groups I and II
 - ii. Between groups II and III
 - iii. Between groups I and III
 - c. Submissiveness:
 - i. Between groups I and II
 - ii. Between groups II and III
 - iii. Between groups I and III
 - d. Emotionality:
 - i. Between groups I and II
 - ii. Between groups II and III
 - iii. Between groups I and III
 - e. Hostility:
 - i. Between groups I and II
 - ii. Between groups II and III
 - iii. Between groups I and III
 - f. Masculinity-femininity:
 - i. Between groups I and II
 - ii. Between groups II and III

iii. Between groups I and III

- 4. There will be no significant difference between groups as measured by the Mooney Problem Check List as follows:
 - a. Circled Score:
 - i. Between groups I and II
 - ii. Between groups II and III
 - iii. Between groups I and III
 - b. Totalled Score:
 - i. Between groups I and II
 - ii. Between groups II and III
 - iii. Between groups I and III
- 5. Group I will have a greater absolute difference of change (when considering both positive and negative changes) than group II, which in turn will have a greater absolute difference of change than group III.
- 6. There will be a significant positive correlation to the level of .05 between the final scores of adjustment and grade point average as follows:
 - a. Home Adjustment and Grade Point Average
 - b. Health Adjustment and Grade Point Average
 - c. Submissiveness and Grade Point Average
 - d. Emotionality and Grade Point Average
 - e. Hostility and Grade Point Average
 - f. Masculinity-femininity and Grade Point Average

Limitations of the Study

Some limitations of this study are as follows:

I. The subjects in each group were matched on the three criteria of intelligence level, grade level, and age level. There are other possible factors such as exposure to different teachers and differing stimulations from relatives and friends, which may affect the matching, but which were not controlled by random selection.

- 2. During this study, there were some internal fluctuations of the institution causing changes in the study schedules and an increase in the study time available. However, all groups were affected equally by this increase in time.
- 3. In any testing situation, there is the possibility that students will not apply themselves. This possibility exists here with the pre and post testing situations.
- 4. Generalized applicability of the findings to other settings may be more limited than usual because of the specific nature of the setting.
- 5. The strike by the teachers within the Newfoundland Teachers' Association caused the students in Grades 9, 10 and 11 to be out of school for six weeks. This may have interfered with the applicability and appropriateness of educational counselling during that time period and with the amount of school work done during that period. The effects, if any, would have been equally distributed.
- 6. The counselling interviews were carried out in the time between the pre and post evaluations. Any effects of counselling would be due to that limited number of counselling interviews conducted during that period of time. In addition, since no counselling had previously been set up at the institution, the investigator found it necessary to spend some of the initial interview time explaining the counsellor's role to the students.

Organization of the Report

Chapter 1 has presented an introduction to the study. Chapter 2 will contain a review of the literature related to the subject. A description of the procedures followed, instruments used, and methods of

data analysis will be presented in Chapter 3. Chapter 4 will discuss the findings of the study while the summary, conclusions and some recommendations will be contained in Chapter 5.

Chapter 2

Review of Literature

The review of literature for this study has been carried out in the areas related to: (1) change through counselling, (2) personal development, (3) adjustment and achievement, and (4) counteracting non-achievement through adjustment. This review is presented below.

Change through Counselling

One tends to expect change through a counselling process, but change may or may not take place. Generally, one hopes that when a person enters a counselling relationship, he does so with motivation to attain certain goals and one also hopes that a counsellor or therapist can facilitate the attainment of these goals. The change may not always be positive as Bergin, 1966, indicated. He concluded that "psychotherapy can and does make people worse than their control counterparts (p. 235)." Braucht, 1970, disagreed with Bergin; he maintained that the "Deterioration Effect" seen by Bergin was probably because of research problems such as criterion validity, lack of experimental control, and inadequate experimental methodology and design.

Bergin had reviewed Barron and Leary, 1955, whose research demonstrated deteriorating effects in the treatment group, while the control group tended to show improvement. The authors' comments on their results tended to support Broucht's ideas about research problems. Barron and Leary felt that even though therapy had not begun, Simple commitment to therapy may begin action to break the neurotic circle. This commitment may be a motivation for and a beginning of change. They also suggested that the initial interview and testing may be therapeutic in nature; even being placed on a waiting list can be an important step forward for the counsellee and can

help facilitate improvement without counselling or therapy. Bergin, 1975, states that the issue of negative effects of therapy has come up only in recent years. Early studies tried to assess the change in clients assuming that all change due to treatment would be positive. He noted that the idea of the negative changes in therapy had not occured to some researchers. Bergin described results which showed that therapy produces greater positive results than would occur without therapy. That is, "65 percent of those in therapy get better. But 40 percent of those who never see a therapist also improve. That leaves us with 25 percent whose improvement can fairly be attributed to the benefits of therapy (p. 98)". Eysenck (1952) reviewed the literature to that date and concluded that there was an inverse relationship between recovery and psychotherapy. He noted that there was failure to prove that therapy facilitates the recovery of patients.

... roughly 2/3 of a group of neurotic patients will recover or improve to a marked extent within about 2 years of the onset of their illness, whether they are treated by means of psychotherapy or not (p.322).

Levitt (1957) drew similar conclusions to that of Eysenck.

The experience of the counsellor also appears to be related to the amount of counselling change. Dymond, 1954, studied changes in adjustment by using scores from the Thematic Apperception Test. He separately analysed results obtained by experienced therapists and inexperienced therapists and found "those in therapy with experienced therapists to have significantly improved on both tests, whereas those in therapy with inexperienced therapists not to have improved ... in fact they boardered on a significant decrease in health on the T.A.T. (p. 217)." Carl Rogers, 1973, feels that the experienced counsellor or therapist may not

necessarily be the most effective when compared with inexperienced counsellors or even unqualified persons. He notes that in many instances therapists become academically qualified to practice without real accountability for their results or methods. "In my estimation, we must face the fact that in dealing with human beings, a certificate does not give much assurance of real qualification (p. 383)". Bergin, 1975, cited the difficulty of identifying a particular type of therapist profile with specific end results of therapy, but said that the therapists who are psychologically healthier and who have the capacity to form appropriate relationships with others, get the best results..

Cartwright and Vogel (1960) concluded that adjustment changes regardless of the direction of change, were larger for those subjects receiving therapy than for those not receiving therapy. Carkhuff and Truax (1965-1966) studied the literature in an attempt to explain the reason for the frequent lack of reported significant differences between counselled groups and their controls. Their findings indicated that:

(1) there are no overall differences between traditionally treated groups and their controls and (2) the treatment groups showed significantly greater variability on change indices than did the control groups. In other words, experimental groups tended to show more positive and more negative changes than did control groups, thus indicating that counselling was producing both positive and negative change.

In their study with junior high school students Mink and Isaksen (1959) reported no significant differences in adjustment outcomes between control and treatment groups. However, as reported by Carkhuff and Truax, the variability of change indices for the counselled group was greater than that for the control group. Mink and Isaksen also found that the

counsellor may have both a positive and a negative effect.

Carkhuff and Truax concluded that the problem in many studies was the variety of counsellors performing therapy. Since many different persons and different approaches in counselling produce different effects in clients (some effects being positive and others negative), overall research results would tend to balance each other out, thereby producing the final result of no significant difference.

Why are there such differences in the effects of counselling?

Hills and Williams (1965) investigated the difference in the effects

between two methods of test feedback to students. It was hypothesized

that communication of educational-vocational test results through the

counsellor's written summary would bring about substantial positive

changes in self-perceptions of clients. It was found that communicated

results in written form did not have a positive effect, in fact, results

which differed from the clients' pre-conceived notions of themselves had

negative effects. Hills and Williams felt that the:

Key to the positive self-perception changes associated with brief educational-vocational counselling seems to rest where the client-centered theorists have proposed it does, in extended personal-adjustment counselling, namely, in the client-counsellor interpersonal relationship (p. 281).

Through ex-post facto analysis, the researchers were able to discover why there were negative results and subsequently advocate a seemingly better process, namely that of an interpersonal relationship process.

Mitchell (1969) pointed out that many estimations of change after counselling were severely limited by the reliability and validity of the instruments used to measure change. He concluded that most studies provided little information about the actual counselling process, and that change within the interview had rarely been considered a legitimate

variable. Since most tests are not available in enough forms, it is difficult to give a subject enough tests, other than pre and post, to evaluate the change process within various steps. Mitchell used a previously developed questionnaire both to evaluate change within the interview and to see if individual results rather than overall group results, could be used in research. He found positive results for both areas of concern.

It seems there may be limitations in the evaluation of counselling by overall outcome data, which includes too few measures of clients' changes. Schmidt (1972) feels that since human behavior is complex, research needs to use "multivariate" methods of data analysis. This would necessitate the use of many tests to give the counsellor a more valid picture of the counsellee throughout the process and therefore provide a more accurate assessment of counselling.

Data should be evaluated for variability of change in both experimental and control groups since it appears that counselling can produce positive and negative change. It also seems desirable to assess individual results of counselling as well as group results, since it is through this kind of assessment that both positive and negative changes can be seen. Schontz (1972) felt that research may be improved by taking the individuality of subject goals into account. He concluded that it was possible to achieve an assessment of overall treatment effectiveness when changes in each subject were evaluated in terms that apply uniquely to that individual. As Braucht (1970) pointed out:

Research in psychotherapy should involve individual predictions. The wholesale application of research strategies and designs... can, at best, result in confusing conclusions at deceptively impressive significance levels. At worst, as we have seen, this can result in reporting "deterioration" when improvement is the case (p. 298).

Eysenck (1975) was critical of the inadequacey of studies which purport to evaluate the effectiveness of therapy. He advocated that researchers should not accept a low standard in research since the reported outcomes of that research can have considerable effects on society. He stated the need for more efficient experimental designs which include appropriate controls and which avoids special relation of clients which can prejudice the research results.

Personal Development

Within the educational process, one is primarily concerned with the personal development of the individual in educational, intellectual, physical, emotional and social areas. An evaluation of a counselling programme is essentially a study of how the counsellee has developed in one or more of these areas. As Kuhlen (1952) wrote:

...it is unfortunate that although much research has been done on the nature of physical, intellectual, and social development, few investigations have been made of the interrelationships of these various aspects of development in the same individual (p. 12).

He felt that growth in one area of an individual could only be understood by looking at it in relation to other aspects of growth. Beilen (1955) also observed that "there is hardly any aspect of development that is not affected by some other (p. 57)."

Havighurst (1953) viewed an individual's growth as a series of developmental tasks. He felt these tasks to be progressive goals an individual had to reach before society considered him to be a reasonably happy and successful person.

A developmental task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and success with later tasks, while failure leads to unhappiness in the individual, disapproval by society, and difficulty with later tasks (p. 2).

Havighurst went on to say that there were two reasons why the concept of developmental tasks is useful to educators. First, it helps in discovering and in studying the purposes of education, since education is the effort of society to help the individual achieve certain developmental tasks in his life, and secondly, there are certain times in development when certain tasks should be taught and learned. "When the body is ripe, and society requires, and the self is ready to achieve a certain task, the teachable moment has come (p. 5)". In counselling, as in traditional education, one should be aware of the possibility that some counselling programmes may be designed to change certain aspects of an individual before he is developmentally ready.

Crites and Semlar (1967) concluded a cross-sectional and longitudional study on the interrelationship of adjustment, educational achievement, and vocational maturity as dimensions of adolescent development. Four hundred and eighty-three fifth graders were followed up seven years later as twelfth graders. Analysis of the data provided a hierarchical construct of development in which adjustment was a general dimension while educational achievement and vocational maturity were more specific dimensions. The explained that:

Adjustment appears to be a suprafactor on which both educational achievement and vocational maturity have "loadings", the relationship between them being a function of this communality. The better adjusted adolescent, as perceived by his counsellors and teachers, is more educationally advanced as well as more vocationally mature (p. 495).

Crites and Semlar felt that the most relevant theoretical framework for their results was that of Havinghurst.

Adjustment and Achievement

It seems from the previous section that the relationship between adjustment and achievement is a hierarchical one, rather than a co-ordinate one. This was proposed by Vernon (1950) and later verified by Crites and Semlar (1967), (see Table 1).

Table 1

	Adjustment		
Educational Achievement		Vocational - Maturity	

It seems that when one has mastered a basic step in development, other sequential developmental areas are more easily attained. Kuhlen (1952) noted that generally with a superiority in one trait there was a superiority in other traits.

Liebman (1970) investigated the relationship of certain factors of personal and social adjustment (as measured by the Winnetha Scale for Rating School Behavior and Attitudes, the California Test of Personality, the Rogers Test of Personal Adjustment and the Rorschach) to that of academic achievement (as measured by a ratio of educational age, on the Metropolitan Achievement Test, and mental age, on the California Test of Mental Maturity). He found that:

1. Where the intelligence of the subjects was average for the grade, the individuals who appeared better adjusted on the complete test

^{*}Crites and Semlar, 1967, p.495

battery achieved more adequately.

- 2. The Winnetha Scale, the California Test of Personality, self and social adjustment, and the Family Maladjustment score on the Rogers Test of Personality Adjustment, all correlated at a significant level with the achievement ratio.
- 3. The high achievers could be discriminated from low achievers, on the basis of all the test scores, except the Rorschach.

Crabbie and Scott (1972) recently reported a high intercorrelation of the self reported feelings of inadequacy. Generally there seems to be a direct association between adjustment and achievement, with adjustment as a pre-requisite to achievement, but not necessarily accompanied by achievement.

Counteracting Non-Achievement through Adjustment

It seems that before counselling for educational achievement can be carried out, it is necessary for the counsellee to be developmentally ready for achievement counselling. That is, he should be a developmentally adjusted individual before a positive and significant change in achievement can take place. Perhaps this consideration has repercussions for counselling processes which hope to improve academic achievement through counselling.

Roth and Meyersburg (1963) explained their constructs of the Non-Achievement Syndrome which they developed. Their constructs were:

- A student's poor achievement does not arise from an inability to achieve.
 - 2. Poor achievement is an expression of the student's choice.
- His choice for poor achievement operates in the preparation be makes for it.

- 4. Poor achievement is a function of the preparation for achievement made by the student.
 - 5. Poor academic skills are an outgrowth of achievement choice.
- 6. Poor achievement may be expressed as overall limited achievement, or achievement in deviant channels.
- 7. The patterns of choice for poor achievement do not undergo spontaneous change.
 - 8. Achievement patterns are part of personality organization.
- 9. The counselling relationship can serve as the impetus to change the achievement patterns.

The process through which Roth and Meyersburg felt this change in achievement patterns could take place was to allow the counsellee to express his concerns as completely as possible in as many areas of his life as possible. The author viewed any expression of a difficulty with study as a possible personality difficulty which might direct attention away from study or preparation. If there were intentional escapes, then it may be said the client was viewed as choosing failure making it necessary for the counsellor to help him change his self defeating behavior.

Roth et al (1967) set out to significantly raise grade point average of potential drop outs. In their process the authors dealt with study habits in both authoritative and client-centered group therapy. Students dealt with group dynamics, recognition of their own defence patterns for taking responsibility for their decisions, consideration of their defence to parent demands, parent relationships and an examination of vocational goals. The authors felt that the appropriate method of dealing with underachievers was to first approach non-achievement from a personal-

social aspect and to encourage achievement and development of academic skills by helping the person change previous behavior.

Nelson (1967) proposed an approach to counselling low achieving students based on the Individual Psychology of Alfred Adler. The principles of Individual Psychology in relation to non-achievement are as follows:

- 1. Each person wishes to achieve.
- 2. Learning occurs from life experiences.
- Failure to learn in certain areas bring about discouragement in relationship to learning.
- Each person develops a life style which governs all his actions and perceptions of life.
- 5. The way a student behaves in relation to his academic work is consistent with his life style.
- 6. When he can conceptualize his life style, he is in a better position to change behavior which hinders him.
- 7. The counsellor can help this change. Nelson felt that these principles worked by first identifying the counsellee's life style using tests and/or interviews, then confronting him with his life style, and finally relating the student's life style to his academic work. The counsellor must then help the person both identify goals and move towards them.

Schwartz and Ohlsen (1968) studied socially effective behavior using three types of students, namely (1) socially effective, (2) aggressive, and (3) withdrawn. Each student's interview was analysed for topice content and affect associated with the content. In general it was found that the socially effective group discussed more topics than the two other groups, and displayed more affect than the other two types. It seems

likely that the more adjusted individual will display more socially effective behavior.

The general trend seems to indicate that a counselling process which allows for the consideration of all aspects of the individual is more facilitative to adequate counsellor-client interpersonal relationships and a process which can assist achievement through adjustment.

Summary

It seems feasible that counselling which limits itself to one or two aspects of a person, without giving consideration to all aspects of the person's life, runs the risk of insisting a person develop skills or produce tasks for which he is not yet ready and thereby possibly producing negative or neutral results. Since personal-social adjustment seems to be at the base of other personal developments, such as academic achievement, a counselling process using adjustment orientation as a basic factor, while still considering all other aspects of the person's development, is advocated.

This relationship between adjustment and achievement was further investigated by this study.

Chapter 3

Method

This chapter presents the design of the study. It will include information about the following: the overall design of the study, description of the sample, preparatory procedure, instruments and scales, method of data collection and scoring, and analysis of data.

Overall Design of the Study

This study was a pre-post evaluation of a counselling programme. A counselling programme was set up and run by the investigator in the setting, described in Chapter 1, from November, 1970 to May, 1971.

Two experimental groups were counselled, each with a different approach. Experimental group number one received personal-social, educational, and vocational counselling as defined in Chapter 1. This approach was based on the theoretical framework of Vernon (1950) and Havighurst (1953) as discussed in Chapter 2. The emphasis was to help the person reach a satisfactory level of adjustment to himself, to his associates, to his social situations and his surroundings, and to integrate these adjustments with educational and vocational counselling in an attempt to raise his level of academic achievements. Experimental group number two received educational and vocational counselling as defined in Chapter 1. The emphasis here was to attempt to raise achievement level and provide vocational goals, but not to deal with personal-social adjustment areas.

This approach was chosen so as to assess the theoretical framework, cited above, through a comparison of group one's adjustment ratings, grade point average, number of problems and citizenship grades, with those of group number two. Group three acted as a control and received no counselling.

The differences between groups on the pre and post testing were evaluated to assess the results produced by the two approaches to counselling. The overall design of the study is represented in Table 2.

Table 2

Overall Design of the Study Before
Data Analysis*

Group	Pre- Test	Approach	Intermediate Test	Post- Test
1	B.A.I. M.P.C.L. G.P.A. R.S.	Per-Soc., Ed., Voc.	GPA (Easter)	B.A.I., M.P.C.L. G.P.A. R.S.
2	B.A.I., M.P.C.L. G.P.A. R.S.	Per-Soc., Ed., Voc.	GPA (Easter)	B.A.I. M.P.C.L. G.P.A. R.S.
3 (Control)	B.A.I. M.P.C.L. G.P.A. R.S.	None	GPA (Easter)	B.A.I. M.P.C.L. G.P.A. R.S.

*Abbreviations within the table are:

- 1. B.A.I.: Bell Adjustment Inventory
- 2. M.P.C.L.: Mooney Problem Check List
- 3. G.P.A.: Grade Point Average
- 4. R.S.: Rating Scale
- 5. Per-Soc.: Personal-Social Counselling
- 6. Ed.: Educational Counselling
- 7. Voc.: Vocational Counselling

Description of the Sample

The subjects in this study were boys in grades 8, 9, 10, 11 and special education, with ages ranging from 13 to 18 years, who had been in the Home for two years or more. There were 48 boys in this category.

Thirteen matched boys were placed in each of the three groups and randomly assigned an experimental condition. This sample of 39 agreed to participate in the study. The remaining 9 boys of the original 48 were either unable to be matched, invalidated the intelligence test, or refused to participate in the study. Therefore, 84% of the possible population participated in the study (see Table 3).

Table 3

Description of the Sample

Grade Level	Number of Subjects	Age Level	Number of Subjects	Intelligence Level*	Number of Subjects
8	17	13 - 14	6	89 and below	9
9	5	14 - 15	8	90 - 109	24
10	8	15 - 16	9		
11	6	16 - 17	10	110 and up	6
Spec. Class	3	17 - 18	6		
Totals	39		39		39

^{*} As measured by Lorge-Thorndike Intelligence Tests, Verbal Battery, Levels 4 and 5.

Preparatory Procedures

Permission for the Study

The idea of a counselling study within the institution was first discussed with the Superintendent, and later submitted in writing.

Agreement was given verbally and later in writing from the Provincialate (see Appendix B).

The principals of the elementary school and the high school were contacted and the study explained to them. Their assistance was necessary to collect students' grades from their school records and to administer the rating scale to the teachers, who would rate the boys on six criteria. It was also requested that the investigator be allowed to contact any teacher in the schools, if necessary, to better help the subjects. Verbal permission for each of these requests was given.

Intelligence Testing

One of the criteria on which the boys in each group were matched was intelligence. There were no recent intelligence ratings available on these boys, so it was necessary to establish levels prior to matching. The Lorge-Thorndike Intelligence Tests, Verbal Battery, Levels 4 and 5 (Lorge-Thorndike, 1957) were administered on September 8, 9 and 10, 1970.

This test was chosen because of its wide use in Newfoundland and because of its availability. The fact that the test may have been culturally biased in this setting was not a necessary consideration since the test was used to match only, and not used to record a true intelligence level, although it appears the results were reasonably accurate.

Matching of the Groups

It was decided to match the subject within groups on three criteria, namely, (1) grade level, (2) intelligence level, and (3) age. Socio-

economic status was not considered as a matching criterion since the boys considered for the study had been in the orphanage for two years or more.

Matching by grade level automatically placed each boy in the same dormitory where he was exposed to the same staff, the same time schedules, and the same study times and areas. Those at grade 8 level and in special education were exposed to the same school and the same teaching staff. Those at the Grade 9, 10 and 11 levels were exposed to the same school, but only to some of the same teaching staff.

A three section code system (G.I.A.) was devised to match these subjects. G.I.A. refers to Grade, Intelligence Level, and Age Level respectively. After the codes had been fixed for each subject an impartial assistant randomly assigned numbers 1 to 42 to the list of subjects. A list of numbers and appropriate codes was then made and matching was done on the basis of these assigned codes. Thirteen groups of three were matched, resulting in three lists of thirteen groups each; each list was then randomly assigned an experimental condition. Group one, received personal-social, educational and vocational counselling; group two, received educational and vocational counselling; and group three acted as a control.

Individual Request to Participate

The next procedure was to interview each boy assigned to an experimental situation. Theses interviews were carried out over a one month period since the investigator's time was limited and the boys were available only during after school hours and before or after study periods. The selection for the interview was based on whoever was available at the time.

The purposes of the interview with each subject was to report back

operation in the study. The test was interpreted by range and any test variables which either the investigator or the subject felt had entered into its interpretation. These variables ranged from a lack of motivation and interest to work at the test adequately, as reported by the student, to observations the investigator may have made during the testing. If necessary intelligence level was further interpreted in relation to the boys' present academic standings. All were interpreted so as to provide encouragement with school work. After the interpretation of the test result each subject was asked if he would help the investigator in his work as follows:

- 1. Each subject in Group 1 was asked to see the investigator periodically to talk over school work, study, better marks, future education and vocational plans, and to discuss personal problems and other areas if he wished. He was asked to take two tests at the beginning of November; he was told that these were questionnaires about himself and would have nothing to do with his ability. He was asked to take the same tests again in May. The confidentiality aspect of counselling was explained.
- 2. Each subject in Group 2 was asked to see the investigator periodically to talk over school work, study, better marks, future education and vocational plans. He was asked to take two more tests in November; he was told that these were questionnaires about himself and would have nothing to do with his ability. He was asked to take the same tests again in May.
 - 3. Each subject in Group 3 was asked to take the tests as outlined.
 Out of the 40 subjects interviewed, only one refused. This

person refused because of the test requirement but was willing to be

counselled. His place was filled by another subject with appropriate characteristics, and this boy was counselled outside of the study.

Practice Interviews

In dealing with group number 2, personal-social areas had to be avoided in discussions since there would not have otherwise been a clear distinction between the process in group 1 and that in group 2. (see definitions of counselling p.6 and 7). It was therefore felt necessary for the investigator to practice avoiding these issues with the clients. Roleplaying was carried out with an associate who deliberately brought up personal-social areas. These interviews were video-taped and played back to the faculty adviser for analysis and criticism.

The techniques agreed upon and practiced when these personalsocial areas arose were:

- To recognize the problem exists so the client knows he is understood, but not to deal with the problem directly.
- To restructure the interview by stressing the importance of educational and vocational counselling.
- To introduce topical areas related to educational and vocational counselling and to move away from the personal-social areas.
- 4. To suggest that the educational and vocational areas should be dealt with in the present interview, and that he might consult someone else about the problem or try to solve it himself.
- 5. If the personal problem was deemed too serious, to remove the subject from the study and counsel him on that problem. Removal of a subject from the study because of a serious problem was necessary in one case.

Instruments and Scales

The instruments and scales used to evaluate the pre and post conditions of counselling were:

The Bell Adjustment Inventory

The first Bell Adjustment Inventory Student Form was published in 1934 after three years of research and experimental use with high school and college students (Bell, 1963). It originally contained measures of home, health, social and emotional adjustment.

... the Bell Adjustment Inventory is a self report of the individual's life adjustments as they have been experienced by him... The Inventory seeks to obtain information from the individual concerning what he thinks and feels about his family relationships; his functioning body; his friends and acquaintances outside the home; including how aggressive or retiring he is around them and how much he feels he can trust people; and finally, how well he has come to play the roles society expects of him (p. 3).

In the development of the original form, there was an attempt to include a measure of hostility, but there was difficulty finding suitable items. There was also a need for socio-economic background items as well as some items of masculinity-femininity. In 1957 these were included in the original test as an experimental test edition, but after analysis it was decided to remove the socio-economic items but to include the measures of hostility, and masculinity-femininity. The 1962 revised student form, therefore, provides six measures of personal and social adjustment:

- 1. home adjustment
- 2. health adjustment
- 3. submissiveness
- 4. emotionality
- 5. hostility
- 5. masculinity-feminity

These are defined and described in Chapter 1.

The coefficients of reliability computed by correlating odd-even items and applying the Spearman-Brown Prophesy Formula, ranged from .80 to .89 (Bell, 1963, p. 14) (see Table 4).

Table 4

Coefficients of Reliability for Subtests of the Bell Adjustment Inventory

		r	P.E.
а	home adjustment	.89	.008
ь	health adjustment	.80	.015
2	submissiveness	.89	.008
i	emotionality	.85	.012
2	hostility	.83	.012
£	masculinity-femininity	.84	.011

The validity of the six scales was established by having high school and college counsellors select students who they felt would represent opposite extremes of each variable. The cross validation studies made it apparent that scales a, b, c, and d:

... clearly distinguish between the representative extreme groups by large raw score differences and that section of sharply separate male college students from females. Section e, which seeks to distinguish between very friendly and very hostile students, produces a much smaller (though statistically significant) difference (Bell, 1963, p.15).

The content validity of four scales was investigated by a correlation with relevant scores from the Thurstone Personality Schedule, the Allport Ascendance-Submission Test, the Bernreuter Personality Inventory, the Guilford-Zimmerman Temperament Survey (hostility scale) and the Masculinity-Femininity scale of the MMPI. The product moment correlations range from, r = .72 to r = .93. The validity of the instrument is not without significance since original four scales of a, b, c, and d have been studies by Bell for the past 28 years and that scales e and f have been studies for 15 years.

The inventory is self-administering, with no time limit. It requires approximately 30 minutes to complete the 200 questions. Each person is to interpret the questions for himself and answer either yes or no on the hand scored answer sheet.

Descriptive norms are available for high school (male and female) and college (male and female) which provide a description of the raw score ranges obtained by the subject. This description indicates either excellent, good, average, poor, or unsatisfactory adjustment on each of the six scales from a to f. This test seemed to have wide use as a fairly reliable indicator of adjustment, hence it was chosen as the evaluator of the adjustment dimension for this study.

The Bell Adjustment Inventory has been previously used in adjustmentachievement studies to assess the level of adjustment in relation to the
level of achievement. Resnick (1951) reported a positive correlation
with the Bell Adjustment Inventory and Achievement, while Griffiths (1953)
reported a negative correlation. Dana and Baker (1961) designed a study
to clarify the status of the Bell Adjustment Inventory as a predictor of
school achievement. Items indicating social ease and extraversion, conflict
with parents, and personal problems, when subjected to item analysis,
indicated that:

High achievement in high school may be defined...as relative freedom from conflict with parents, and from personal problems, coupled with social ease and extraversion. In other words, as Bell Adjustment increases, G.P.A. also increases (p. 356).

There was also found to be significant correlations between Bell adjustment scores on home, social and emotional adjustment and grade point average.

The six scales provide more information than the one adjustment score on most other tests and provides a source of correlation with some scales on the Mooney Problem Check List as well as providing information about problem

areas within the setting of the study.

Mooney Problem Check Lists: High School Form

The Mooney Problem Check List (Mooney and Gordon, 1950) is a list of 330 problems divided into eleven catagories of 30 items each. These catagories are:

- 1. health and physical development
- 2. future vocational and educational.
- 3. social and recreational activities
- 4. courtship, sex and marriage
- 5. social-psychological relations
- 6. personal-psychological relations
- 7. morals and religion
- 8. home and family
- 9. finance living conditions and employment
- 10. adjustment to school work
- 11. curriculum and teaching procedures

The student is asked to read through the list and underline any problem which he feels applies to him. After he has done this, he is asked to re-read those he has underlined and circle the problems which are of major concern to him. The use of the check list assumes that:

- 1. students recognize their own problems
- 2. the problems which students actually experience are items on the check list
- the students are willing to honestly indicate their problems (McIntyre, 1953).

The 1950 revised edition resulted from a series of studies and analyses made over a 10 year period. It originated from a desire to

systematize the senior author's methods of discovering the problems of young people. The possibility of a check list approach was explored, and in 1941 and 1942 the first published editions of these educational forms were ready. The items for the editions and various forms were selected and developed from a master list of over 5,000 items from the following sources:

- 1. Experiences of the author as counsellor and administrator.
- 2. Analysis of case records and counselling interviews with school and college students.
 - 3. Review of the literature on student problems.
- 4. Analysis of paragraphs written by 4000 high school students describing their personal problems.
- 5. Intensive analysis of expressed problems of 250 students in grades 7 through 12.
- 6. Review of 5,000 cards itemizing the personal-educational needs expressed by 950 students in grades 6, 9 and 12.
- 7. Other miscellaneous sources. (Mooney and Gordon, 1950, p.11)
 Selection and phrasing of items was based on such criteria as language
 level of students, rapid reading, commonality to groups and level of
 significance to the individual. The items were centered on a personal
 orientation rather than a general social orientation, and "vague enough
 in 'touchy' spots to enable the student to check the item and still feel
 that he can hide his specific problems in later conferences if he chooses
 to do so (Mooney and Gordon, 1950, p. 12)". There was a general aim to
 select items which would give a naive, rapid "feeling" response from
 the subject; that is, a spontaneous, rather than a deliberate, reaction
 was sought.

Validation of this check list was carried out differently from other tests, because it was not intended to be a test. The check list can be used for many purposes and therefore the authors felt a single over-all index of validity for the check list would be meaningless. The manual for the test cites several studies which indicate that students respond to the check list well and feel that it is representative of their problems. These results are quite similar to Mooney's original research on the check lists. In one of the first articles in which Mooney (1943-1944) examined the Problem Check List, High School Form, it was assumed that many students would be unwilling to mark their personal problems. It was found that the average number of problems marked was 27. Over 90% of the high school students said they enjoyed filling out the list and 78% of the students said they appreciated the chance to indicate their problems. At that time the list was thought to be useful in that it helped both the student and his counsellor to get a picture of the students problems, and that it helped the counsellor to discover those who wanted and needed counselling most. It was also thought to be useful for research workers in discovering patterns of problems which tend to be associated with given problems or particular factors. This validity and usefullness still held constant at the time of this study.

The check list was designed to reflect the changes in circumstances of the individual or changes in his feelings about these circumstances. Therefore, if reliability is considered to be the consistency of results between a first and second administration of the test, then changes in the person's life may be reflected in the check list, thus altering the reliability. However, there is assurance that the data reflects the concerns of a group and remain stable over a period of time. An unpublished study

by Gordon (Mooney and Gordon, 1950, p.9) on the College form, investigated the results between the first and second administration of the form to 116 college students. The frequency with which each item was marked on the first administration was correlated with the frequency with which each of the same items was marked on the second administration. The correlation coefficient was .93. The same reference cites a correlational study over a 10 week period. The eleven problem areas were ranked according to mean number of problems checked in each area, and this order was found to be virtually the same from one administration to another. The rank order correlation coefficients ranged from .90 to .98. The check list is felt by the investigator to exhibit sufficient reliability for use in this study.

Rating Scale

The investigator felt the need to evaluate overt behaviors as they appear to the teacher and to evaluate whether or not counselling could change this overt behavior. Although this study was not an investigation of the method(s) of changing classroom behavior, it was hoped that educational counselling might affect behavior in the school in the areas of interest in and motivation toward school work, respect for teachers' situations, and adequate work habits.

There was no available instrument for this purpose; therefore, the investigator devised his own. The scale assumed the teachers have had a chance to observe these areas of tehavior in the classroom, and are able to be objective in rating the student.

The six scale Rating Scale included the areas of:

Work Production and Ability. The degree to which a pupil achieves in relation to his academic ability, as rated by the teacher.

Individual Adjustment. The degree to which the pupil appears comfortable in the school setting and is able to cope with it.

Assigned Classroom Work. The amount of work a student does in the classroom within a given time.

Courtesy to Teachers. The degree to which the student is polite to and respects teachers.

Homework. The degree to which homework is prepared.

<u>Class Progress</u>. The degree to which the student facilitates progress in the class by discussion and general co-operativeness.

Each area had a five point scale with point 1 as the level at which the desired behavior is rated not present, moving to point 5, where the behavior is rated as always present. These six areas were adapted from Davis (1959) who assessed the effects of a counselling programme on classroom behavior. The Citizenship Grades used to measure changes in behavior were in the areas of co-operative attitude, courtesy for others, promptness, coming prepared for work, using class time to the best advantage and having respect for school property.

The actual development of the rating scale followed the guidelines that Thorndike and Hagan (1969) set down for the construction of rating scales. They suggested that the person doing the rating should have the opportunity to observe the person rated; that the trait rated be observable; that the trait be defined as accurately as possible; that the scales have a standard to which to compare the behavior. These suggestions were embodied in the development of this scale.

Thorndike and Hagan pointed out that many ratings of the same person have the same effect on reliability as the lengthening of a test.

...the Spearman Brown formula...can legitimately be applied in estimating the reliability of pooled independent ratings. Thus, if the reliability of one rater is represented by a correlation of .55, we have the following estimates for the reliability of pooled ratings:

2 raters .71 3 raters .79 5 raters .86

the school.

10 raters .92 (p. 433)

In this study, each pupil in Grade 8 was rated by 5 teachers, those in special education by 1 teacher (3 students), while those in grades 9, 10 and 11 were rated by 5 or more teachers who had classroom exposure to them.

The rating scale as first constructed, was pre-tested by teachers at a high school to assess wording, ease of understanding, and appropriateness of content. The constructive criticisms of these teachers and the faculty advisors were incorporated in the final scale which was used during the study. A copy of this final scale is found in Appendix A.

Grade Point Average

Achievement has been defined as Grade Point Average for purposes of this study. This average is the average results of all school subjects obtained by the student at the end of term examinations or tests given by

The success of counselling is frequently assessed by using grade point average as the outcome criterion. Counselling studies which stress educational counselling, study habits, and so forth, seek to find an appropriate approach to raise G.P.A., and the use of the grades obtained from school examinations is a common practice to provide meaningful data.

Ofman (1964) evaluated the process of counselling on study habits and skills, and evaluated this by using the grade point average as outcome criterion; there were positive and significant results. Brown (1965) and

Bates (1968) both used grade point average to assess the outcome of their counselling programmes which were oriented toward improvement of grades through the improvement of academic skills and academic adjustment.

Grade point average was also a necessary criterion for this study since the relationship between adjustment and achievement (G.P.A.) was assessed. For this study, only the results of examinations designed and given by the schools were used, so as to ensure some measure of internal validity of these results. The grade eleven results at the end of June semester were not used because these results were based on a Public Examination system and were not on the same criterion level as those administered by the school. Therefore, for grade 11 students, only two measures of G.P.A. were available, (Christmas and Easter). Only six subjects were in this catagory and it was assumed that the overall results will not be greatly affected by it.

Method of Data Collection and Scoring The Bell Adjustment Inventory

The administration of this test was conducted by two impartial persons and scoring was conducted by one of these persons. The investigator did not carry out the testing and scoring (pre and post) since it was felt there might be some subjective biases which could affect the results.

The pre-test results of this inventory were handed to the investigator after scoring, but were not known so as to avoid biases when interviewing subjects. The post-test results were handed to the investigator after scoring, and both the pre-test and post-test scores were tabulated for the first time.

Mooney Problem Check List

The administration of this test was conducted by two impartial persons and scoring was conducted by one of these persons. The investigator

did not carry out the testing and scoring (pre and post) so as to avoid possible subjective biases.

The pre-test results of Group I were given to the investigator for use as structured feedback in the subjects' interviews. The results of Groups II and III were not known. The post-test results of Group I, II and III were given to the investigator and all results of the pre-test and post-test were tabulated for the first time.

Rating Scale

This scale was administered by the investigator to the teachers at both pre and post conditions.

The pre-test was scored by an impartial person and tabulated by the investigator. The post-test was scored and tabulated by the investigator.

Grade Point Average

The grades for each of the student's academic subjects and his grade point average were tabulated by the investigator with the help of school personnel. This procedure was carried out at Christmas, Easter and June (pre-evaluation, mid-evaluation, and post-evaluations respectively).

Analysis of Data

The data was analyzed for each hypothesis as follows:

- Hypothesis 1, 2, 3 and 4 were evaluated by an analysis of covariance between the groups thereby testing the differences of the post scores with the pre scores used as covariates.
- 2. Hypothesis 5 was evaluated by subjecting the absolute difference of change on each measurement per group to a t-test analysis of significance.
- The data for Hypothesis 6 was analyzed by a test of correlation between adjustment scores and grade point average.

Chapter 4

Analysis of Data

The purpose of this study was to evaluate the effects of a counselling programme by using multiple criteria to assess the results. This chapter contains an examination of the data collected and also presents any differences which exist between the experimental groups. Results of Hypothesis Testing

Hypothesis 1. (There will be no significant difference between the groups as measured by grade point average). This hypothesis was evaluated by subjecting the grade point averages to a two-factor analysis of variance with repeated measures. The results of this analysis support the null hypothesis indicating that there were no significant differences between the three experimental groups as measured by grade point averages at Christmas, Easter and June. The results are summarized in Tables 5 and 6.

Table 5

Summary of the Means (M) and Standard Deviations (SD) of the Grade Point Averages per Group for Each
Time of Measurement

	Group I		Gro	Group II		Group III	
	M	SD	М	SD	M	SD	
Christmas	60.800	14.182	61.627	11.399	57.210	13.607	
Easter	56.231	16.604	57.245	12.562	55.509	9.240	
June	65.636	11.614	63.789	13.916	64.156	10.441	

Table 6

Levels of Difference Between the Experiemental Groups on repeated Measures of G.P.A.

Christmas - Pre-Test (1-2-3)	p = 0.9256732
Christmas - Easter - June between 1-2-3	p = 0.0702189
Any other Combination of Time and Groups	p = 0.3438377

Hypothesis 2. (There will be no significant difference between the groups as measured by the pre and post administration of the rating scale). The hypothesis was first evaluated by an analysis of variance between two groups at one time. The analysis yielded the results of no significant difference between the averages or post scores of group I and II and between groups II and III. It is therefore logical to assume there would be no significant difference between groups I, and III, however the analysis yielded a significant difference of p = 0.012.

To investigate this discrepancy it was decided to further evaluate the hypothesis by an analysis of covariance between groups I, II and III thereby testing the differences of the post scores with the pre scores used as covariates. This overall analysis of the three groups caused the null hypothesis to be rejected since there was a statistical difference of p = 0.036. A summary of these results is shown in Tables 7 and 8.

Summary of Unadjusted Raw Scores, Mean Pre Scores, Mean Post Scores and Standard Deviations for the Rating Scale per Group

Table 7

	Grou	ıp 1	Group 2		Group 3	
	Pre	Post	Pre	Post	Pre	Post
Raw Scores	2.7	2.6	2.5	3.0	2.5	2.8
	3.9	3.8	2.9	2.8	2.7	4.1
	2.4	3.1	2.6	3.0	3.6	3.7
	3.5	3.4	2.6	3.9	3.2	3.9
	2.9	3.5	3.5	3.6	2.7	2.1
	2.8	2.6	3.1	4.2	3.4	4.3
	2.9	2.1	3.7	3.5	1.8	3.1
	4.2	4.5	2.7	2.7	3.8	3.0
	3.2	3.5	2.5	2.8	2.5	3.8
	2.7	2.3	2.6	2.6	3.1	4.2
	2.5	2.0	3.1	3.9	3.7	2.9
	3.0	2.7	4.2		3.9	
	2.3	2.7	2.7		2.1	
Mean	3.0	2.977	3.082	3.273	3.055	3.445
Standard Deviation	0.569	0.732	0.521	0.564	0.723	0.705

Table 8

Analysis of Covariance Between Groups on the Rating Scale

	Groups	Groups	Groups	Groups
	1,2,3	1,2	2,3	1,3
Post - Test Differences	p = 0.036	p = 0.223	p = 0.171	p = 0.012

Hypothesis 3 states that there will be no significant difference between the groups on each of the five scales of the Bell Adjustment Inventory. The results are below.

Hypothesis 3a. The analysis of covariance of the adjusted post

Home Adjustment scores, using the pre scores as covariates, indicated

no significant difference between any of the groups. Hypothesis 3a was

therefore accepted (See Tables 9 and 10).

Table 9

Summary of Mean Pre Scores (M), Mean Post Scores and Standard Deviations (SD) per Group for the Bell Adjustment Inventory

		Gro	Group 1		Group 2		Group 3	
		Pre	Post	Pre	Post	Pre	Post	
Home Adjustment	М	9.250	8.333	13.818	10.545	14.400	16.183	
	S.D.	5.396	5.662	6.661	9.059	6.398	6.080	
Health Adjustment	М	7.417	7.583	9.909	7.727	11.300	10.455	
	S.D.	4.814	3.848	4.989	5.623	5.458	5.592	
Submissive- ness	М	13.250	12.417	17.727	14.364	13.800	15.091	
	S.D.	5.172	6.097	6.857	5.591	5.287	6.057	
Emotional- ity	М	10.250	8.167	15.909	11.000	14.800	14.273	
	S.D.	6.851	6.534	7.956	8.222	5.884	6.635	
Hostility	М	10.283	10.333	16.091	13.091	15.600	15.455	
	S.D.	5.617	5.449	6.107	6.268	3.406	4.083	
Masculinity Femininity	M	16.333	19.667	16.727	16.727	16.400	17.273	
	S.D.	4.075	2.146	4.221	4.474	2.836	4.33	

Table 10

Analysis of Covariance Between Groups on the Bell Adjustemnt Inventory

	Groups	Groups	Groups	Groups
	1, 2, 3	1, 2	2, 3	1, 3
Home Adjustment	0.119	0.999	0.070	0.071
Health Adjustment	0.999	0.999	0.240	0.999
Sub- missiveness	0.999	0.999	0.999	0.237
Emotionality	0.078	0.999	0.057	0.043*
Hostility	0.999	0.999	0.202	0.207
Masculinity- Femininity	0.444*	0.016*	0.990	0.043*

^{*}Significant Difference

Hypothesis 3b. In this hypothesis the adjusted post Health
Adjustment scores were also subjected to an analysis of covariance with
the pre scores used as covariates. Here again the results indicated no
significant differences between the groups. This hypothesis was accepted
(See Tables 9 and 10).

Hypothesis 3c. The analysis of covariance of the adjusted post

Submissiveness scores of all groups indicated that there were no significant differences between any of the groups. This hypothesis was also accepted.

Hypothesis 3d. This hypothesis was first evaluated by an analysis of variance between groups. Hypothesis 3d i and ii were accepted, however Hypothesis 3d iii was rejected when a significant difference between groups I and III was indicated. Therefore an analysis of covariance was carried out with all groups with the overall results indicating no significant differences between the changes in groups after the post testing. (See Tables 9 and 10).

Hypothesis 3e. The analysis of covariance of the adjusted post Hostility scores, with the pre scores used as covariates, indicated that there were no significant differences between any of the groups (see Tables 9 and 10). This hypothesis was also accepted.

Hypothesis 3f. Initially the scores of the Masculinity
Femininity scale were subjected to an analysis of variance which yielded significant differences between groups I and II and between I and III, but not between groups II and III. Therefore an overall analysis of covariance of the three groups was done using the pre scores as covariates. This analysis indicated significant differences between the groups. The null hypothesis was therefore rejected (see Tables 9 and 10).

Hypothesis 4 predicts there will be no significant difference between the groups as measured by the Mooney Problem Check List.

Hypothesis 4a. The analysis of covariance of the adjusted post circled scores on the Mooney Problem Check List indicated no significant differences (p = 0.999) between any of the groups. This hypothesis was accepted.

Hypothesis 4b. The analysis of this part of the hypothesis also indicated no significant difference (p = 0.999) between the adjusted post totalled scores on the Mooney Problem Check List for each

experimental group. Thus this section of the hypothesis was also accepted.

Hypothesis 5. This hypothesis states that group I will have a greater absolute difference of change (when considering both positive and negative changes) than group II, which in turn, will have a greater absolute difference of change than group III. The individual sections of this hypothesis are presented below:

- 1. Grade Point Average: The analysis of data showed no significant differences between the changes in groups I and II and between the changes in groups II and III. The means and standard deviations are shown in Table 5 while the t-test results for the groups are depicted in Table 12.
- 2. Citizenship Rating Scale: Here again the data analysis yielded no significant differences between the changes in groups I and II and groups II and III. The relevant data for these results are shown in Tables 7 and 12. This section of hypothesis 5 was therefore rejected.
- 3. Bell Adjustment Inventory-Home Adjustment Scale: The analysis of the pre and post scores of this scale showed no significant differences in changes between groups I and II and groups II and III. This part of hypothesis 5 was not upheld (see Tables 9 and 12).
- 4. Bell Adjustment Inventory-Health Adjustment Scale: Again there were no significant differences between the changes in groups I and II and groups II and III after the t-test analysis had been completed, thus causing this part of the hypothesis to be rejected (see Tables 9 and 12).
- 5. Bell Adjustment Inventory-Submissiveness Scale: Here the analysis indicated that there were significant differences between changes measured in groups I and II, but there were no significant differences between the changes measured in groups II and III. Since all criteria were not met, this section of the hypothesis was rejected (see Tables 9 and 12 for a summary of results).

Summary of Pre and Post Means (M) and Standard Deviations (SD) for Each Group on the Mooney Problem Check List (Circled and Totalled scores)

Table 11

		Circ	led Scores				
	Gro	Group 1		Group 2		Group 3	
	Pre	Post	Pre	Post	Pre	Post	
М	24.077	21.883	23.545	19.364	20.727	14.091	
SD	39.218	29.580	24.566	20.427	24.171	19.511	
		Tota	lled Score	s			
	Gro	up 1	Gro	up 2	Gro	up 3	
	Pre	Post	Pre	Post	Pre	Post	
M	57.923	48.083	64.091	66.364	53.364	47.718	
SD	46.940	57.180	46.803	38.484	29.425	31.136	

- 6. Bell Adjustment Iventory-Emotionality Scale: There were no significant differences indicated by the evaluation of the changes measured in groups I and II and between the changes measured in groups II and III. This section of hypothesis 5 was therefore rejected (see Tables 9 and 12).
- 7. Bell Adjustment Inventory-Fostility Scale: This section of the hypothesis was also rejected since the analysis showed no significant differences between the changes measured in groups I and II and in groups II and III (see Tables 9 and 12 for a summary of results).

Table 12

Summary of Analysis of Variance of Absolute Difference of Change Between Groups 1 and 2 and Groups 2 and 3 on Grade Point Average, Rating Scale, Mooney Problem Check List (Circled and Totalled) and the Bell Adjustment Inventory

	t - test 1-2	t - test 2 - 3
Grade Point Average	1.7430	1.1440
Rating Scale	0.1260	0.4134
Mooney Problem (Circled)	0.6197	0.3751
Mooney Problem (Totalled)	0.2521	0.5375
Home Adjustment	0.9535	1.3747
Health Adjustment	0.8785	0.0198
Submissiveness	2.7290*	1.9570
Emotionality	0.5732	1.1527
Hostility	0.3731	0.9668
Masculinity-femininity	0.7613	0.4181

^{*} indicates significance

- 8. Bell Adjustment Inventory-Masculinity-femininity Scale: The t-test analysis indicated that there were no significant differences between changes measured in the groups. This part of the hypothesis was not upheld (see Tables 9 and 12).
- 9. Mooney Problem Check List-Circled Scores: There was no significant differences reported between the changes measured in groups I and II and in groups II and III (see Tables 11 and 12). This section of the hypothesis was also rejected.
- 10. Mooney Problem Check List-Totalled Scores: The analysis of data again showed no significant differences between groups I, II and III on changes measured within the groups. Again this part of the hypothesis was rejected (see Tables 11 and 12).

Hypothesis 6. (There will be a significant positive correlation to the level of .05 between the final scores of adjustment and grade point average). The results of the analysis of data for this hypothesis indicated that there was no significant positive correlation between any of the post-subtest scores of the Bell Adjustment Inventory and the post Grade Point Average scores. The specific correlation results are as follows:

- 1. r = 0.07749 between Home Adjustment Scores and Grade Point Average.
- r = 0.03236 between Health Adjustment Scores and Grade Point
 Average.
- 3. r = 0.18050 between Submissiveness Scores and Grade Point Average.
 - 4. r = 0.02931 between Emotionality Scores and Grade Point Average.
 - 5. r = 0.15317 between Hostility Scores and Grade Point Average.
- 6. r = 0.08169 between Masculinity-Femininity Scores and Grade
 Point Average.

Discussion

It appears that the overall results of this study show that there were no significant differences or changes between the three experimental groups at the end of counselling programme when the post scores had been adjusted with the pre scores as covariates. However, there were isolated areas of difference between groups as measured by the Rating Scale and the Bell Adjustment Inventory. The results of Hypothesis 2c (see Table 8), Hypothesis 3d and f (see Table 10) and Hypothesis 5(5) Submissiveness Scale (see Table 12) indicate some differences between groups. However,

it is assumed that these four differences do not hold enough experimental value to effect the overall decision that this study produced no significant changes between groups. This isolated variation in the overall results could be expected by chance. It was the purpose of this study to evaluate the outcome of therapy using multiple criteria so that the evaluation would not have to rely upon an inadequate number of measurement criteria, and thus risk changes not being measured. Since this study has used multiple measurement criteria, many variables have been evaluated with the overall results of the study showing no changes because of the counselling programme.

Chapter 5

Summary

This chapter includes a summary of the results of this study, a discussion of these results, and recommendations for action and further research.

Outline of Study

As mentioned in Chapter 3, each experimental group in this study received a different approach within a counselling programme conducted in a boys' orphanage. Group 1 received education, vocational and personal counselling; Group 2 received educational and vocational counselling; and Group 3 acted as a control. The programme was run from December, 1970 to May, 1971 and multiple measurement criteria were used to evaluate the outcomes of the counselling.

Summary of Hypothesis, Outcomes and Discussion

Hypothesis 1. There will be no significant difference between the groups as measured by grade point average as follows:

- a. Between groups I and II from:
 - i. Christmas and Easter
 - ii. Easter and June
 - iii. Christmas and June
- b. Between groups II and III from:
 - i. Christmas and Easter
 - ii. Easter and June
 - iii. Christmas and June
- c. Between groups I and III from:
 - i. Christmas and Easter
 - ii. Easter and June
 - iii. Christmas and June

This hypothesis was supported since the results indicated there were no significant differences between any of the groups' scores on Grade Point Average measured at Christmas, Easter and June.

Hypothesis 2. There will be no significant differences between the groups as measured by the pre and post administration of the rating scale as follows:

- a. Between groups I and II
- b. Between groups II and III
- c. Between groups I and III

The analysis of data showed a significant difference between groups I and III but not between groups I and II, and II and III at the end of the counselling programme as measured on the rating scale in the pre and post conditions.

Hypothesis 3. There will be no significant difference between the groups on each of the five scales of the Bell Adjustment Inventory as follows:

- a. Home Adjustment:
 - i. Between groups I and II
 - ii. Between groups II and III
 - iii. Between groups I and III
- b. Health Adjustment:
 - i. Between groups I and II
 - ii. Between groups II and III
 - iii. Between groups I and III
- c. Submissiveness:
 - i. Between groups I and II
 - ii. Between groups II and III
 - iii. Between groups I and III
- d. Emotionality:
 - i. Between groups I and II
 - ii. Between groups II and III
 - iii. Between groups I and III

e. Hostility:

- i. Between groups I and II
- ii. Between groups II and III
- iii. Between groups I and III

f. Masculinity-femininity:

- i. Between groups I and II
- ii. Between groups II and III
- iii. Between groups I and III

The null hypothesis was also upheld here with no significant differences reported between groups on the Bell Adjustment Inventory at the end of the counselling after pre and post measurements.

Hypothesis 4. There will be no significant difference between groups as measured by the Mooney Problem Check List as follows:

a. Circled Score:

- i. Between groups I and II
- ii. Between groups II and III
- iii. Between groups I and III

b. Totalled Score:

- i. Between groups I and II
- ii. Between groups II and III
- iii. Between groups I and III

No significant differences between any of the groups were reported here after an analysis of data was completed. The null hypothesis was again supported.

The overall results of these four hypothesis fit well into the kind of trend Eysenck (1952) noted in his review of literature. He concluded there was a failure to prove that therapy facilitates the recovery of patients. Similar conclusions were drawn by Carkhuff and Truax (1965 - 1966) who reviewed the literature and reported that many studies in counselling show no significant differences between treated and untreated groups. However, in this study, it was hoped that the use of multiple

measurement criteria may have yielded measurements indicating change.

Mitchell (1969) advocated the use of more measurements to assess change throughout therapy. Mitchell attained positive results with this approach and also Schmidt (1972) stated the counsellor needs to use more tests to attain a valid picture of the outcome results. Despite the use of multiple measurement criteria this study did not show significant results.

Hypothesis 5. Group I will have a greater absolute difference of change (when considering both positive and negative changes) than group II, which in turn, will have a greater absolute difference of change than group III.

This hypothesis was not upheld since there were no significant differences between the three groups when the sum of the absolute differences between pre and post measures on all tests was evaluated.

Carkhuff and Truax (1965-1966) reviewed the literature in an attempt to explain the frequently reported "no-significant difference" in counselling studies. They reported that even though there are no overall differences noted, experimental groups tended to show more positive and more negative changes than did control groups. Studies by Cartwight and Vogel (1960) and Mink and Isaksen (1959) reported similar results. This form of data analysis did not show the kinds of changes as previously reported in other studies.

Hypothesis 6. There will be a significant positive correlation to the level of .05 between the final scores of adjustment and grade point average as follows:

- a. Home Adjustment and Grade Point Average
- b. Health Adjustment and Grade Point Average
- c. Submissiveness and Grade Point Average

- d. Emotionality and Grade Point Average
- e. Hostility and Grade Point Average
- f. Masculinity-femininity and Grade Point Average

The correlations for each of the areas above were not significant, and therefore this hypothesis was not upheld.

The review of the literature provided much support for the predicted outcome of this hypothesis. The work of Havighurst (1953), Crites and Semlar (1967) and Liebman (1970) all support the positive correlation of adjustment with achievement. However this study did not replicate this relationship. It is possible that given the limited number of counselling interviews available to the clients, as listed in the limitations of this study, not enough time was available to change adjustment and achievement to the appropriate level for each student so this correlation would exist.

Recommendations for Further Study

The following are a list of points to be considered in further research:

- 1. As mentioned in Chapter 1, Limitations of the Study, much counselling time seemed to be spent in defining the counselling programme to the clients. It is suggested that a study, conducted over a longer period of time, could be implemented which might take this problem of role definition into account and simultaneously provide more counselling time related to the areas of need.
- 2. The research area related to the measurement of change in individuals who have taken part in a counselling programme needs more investigation. There seems to be room for the development of methods to better evaluate the outcomes of therapy for individuals which in turn

may necessitate the use of more measurement criteria and/or more measures on the same variable over longer periods of time.

- 3. A multivariate approach in data analysis would correct for the changes which occur by chance, thus indicating more accurately if change had actually taken place.
- 4. Other settings, other than traditional institutions, could be investigated in a similar manner or as indicated in 1 and 2 above.
- 5. This study attempted to control the varying effects of different counsellors by conducting the study with one counsellor. It was therefore necessary for one counsellor to vary his approaches in counselling depending on the clients assigned experimental condition. It is possible that the counsellor was not effective with either one or the other methods of therapy since one approach may have meant a departure from the counsellors' established techniques. It is therefore recommended that an effort be made to more closely match counsellors' techniques and styles to the appropriate experimental group so as to avoid these possible biases.
- 6. Since this work is quite out-dated, caution is suggested before basing further research on it since other studies may have been more successful with this area.

One of the difficulties inherent in research is the application of pre designed methods of measurement to the investigation of persons who may or may not be able to be evaluated by that method. Kiesler (1971) discussed the problem of the "uniformity myths" of research in which all clients are expected to respond in the same way to a therapist who is supposed to operate in the same manner with all persons, thus insuring controlled studies with uniformity of research outcome. However researchers are beginning to look more and more at the interdependant variables in

such research and to consider individual client-counsellor relationships and outcomes. This study is perhaps limited in that it had expected to measure all clients with similar methods and had expected the single therapist to be consistant in the assigned approach to the counsellees. It is quite possible that this study has produced more positive results for some of the students without their being shown through the research data. One hopes, regardless of the research outcome, that positive outcomes for individuals were realized.

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Appendix A

M		
Teacher,	Grade	

The following is a rating form to be used for a research thesis by K. C. Dicks, at Memorial University. You are kindly asked to evaluate the following student.

Student	
Grade	

Other teachers in your school will be evaluating the same student.

Please do not consult others as to their evaluations since it is
absolutely necessary that your evaluation be an independent one.

The results of your evaluation will be confidential; only the general results of all evaluations will be used.

Thank you,

Keith C. Dicks, Graduate Student Please rate this student on the six areas below. Simply place a check mark () at the appropriate point along the horizontal scale.

1. Work Production and Ability:

Always works well Sometimes works Never works and to ability level; to ability. adequately; is is achieving.

2. Individual Adjustment:

Appears totally Appears to have Not at all adjusted to school. problems but able adjusted to school. to cope adequately.

3. Assigned Classroom Work:

Always makes use Works occasionally. Never works in class time to work.

4. Courtesy to Teachers:

Is always polite; Is occasionally Is frequently never talks back; is friendly. polite and friendly. impolite; talks back; is insulting.

5. Homework:

Homework is always Is occasionally Is never prepared.

6. Class Progress:

Frequently helps class Occasionally helps Hinders class class progress. progress. progress. Ex. Occasionally Ex. Doesn't take Ex. Takes part in discussion; disrupts; sometimes part in class never disrupts class; is discusses. discussion; isn't co-operative. co-operative.

September 17th, 1970

This is to inform you of the progress made so far in my theses at

So far I have compiled statistical information from your files. That is, I have a list of the boys including their date of birth, date of admission to ______, grade, grade point average of their last term's school work and home town.

It was decided to work with only those boys in Grade eight to eleven inclusive. The boys are to be divided into three groups of approximately thirteen; the grouping procedure will be randomized selection and matching procedure between groups will be based on age, grade and approximate intelligence level.

Administration of intelligence tests (Lorge-Thorndike, 1957, U.S.A.) was therefore necessary, and was accomplished on September 9th, 10th and 11th. This was done by dormitory and within their study period; actual time of administration to each group was one hour.

Once each group has been formed, it will be necessary to interview each child individually, explain the procedure of the study and what he and I may be doing during the year (7 months). He will be asked to cooperate and if he agrees, his partisipation will be expected throughout. Each group of children will receive a different type of attention. One group will receive guidance in academic work, future education, vocational planning and personal counselling. They will also receive a series of approximately nine scheduled events outside ______, which hopefully will broaden their experiences and make them more aware of the recreational, cultural, and other educational possibilities in _____. This will be done by field trips, movies, and events at the Arts and Culture Center. The extra expense of this will be provided for the boys. These activities will be on weekends so as not to interfere with study. You will be provided with a tentative schedule of this as soon as it is drawn up.

A second group will receive guidance counselling in the areas of academic work, educational and vocational planning. The third group will not be given any counselling, but used as a control group by which to compare the other groups' performances.

Each child will be interviewed by me approximately once a month by a scheduled appointment plan, to keep a running check on his situation in school and his personal situation. It may be necessary for the two groups receiving counselling to assemble very occasionally for the purpose of guest speakers on vocational areas in which they are interested or any other counselling procedures necessary. Also if any child in these two groups requires or requests extra time from me, it will be given.

As soon as the boys are grouped, I should like to begin interviews which would take place every night for a week. I should like this to begin September 21st; from then on the regular schedule as outlined above will be set up.

The actual purpose of this study is to access the effects of Guidance Counsellling. It is hoped that those boys counselled on an individual basis will show an improvement in personal adjustment, a raise in academic grade average, be rated as "improved" students by their teachers, and be considered to have benefited psychologically, educationally and socially as rated by me.

I am happy to report the very kind co-operation of	of
Principal, , and of	, Principal,
, in their willingness to all	
school grades of these boys and to establish any contact	ct felt necessary
with teachers and/or Guidance Counsellors.	

If any matter requires further explaination, please contact me. Thank you for your co-operation.

Yours truly,

Keith C. Dicks,

Dr. L. Klas, Assistant Professor of Education Thesis Chairman

