CHAPTER THREE

METHODOLOGY

3.1 Introduction

This research uses the case study design. The case study design is suitable because the focus of this study is holistic, that is to examine the complex dynamics that cause academic underachievement among four intellectually gifted Malaysian students. Apart from the eight instruments, data are obtained from test results, public examination results and CGPA scores. Observations are also made on the students and interviews are conducted with the four underachieving intellectually gifted students, their peers, parents and teachers.

3.1 Methodology

Case study is unique and personal because it emphasizes the contextual circumstances and the individual’s experience. Thus, it gives a holistic view of the subjects. It informs theory and practice through “grounded” insight and provides the framework to generate data-based hypothesis (Foster, 1981). Multiple observations are made over an extended period of time and they reflect various settings within the overall context of the subject’s activity.

The researcher used different instruments to gather as much data as possible in order to increase the validity of the findings.
3.2 Instrumentation

A number of instruments will be used in this study. These instruments are adaptations, derivations and modifications of instruments used by researchers in the past, both locally and abroad.

3.2.1 The Teacher’s Recommendation Checklist (Appendix B)

This instrument was used to facilitate teachers’ recommendation of students they think is gifted but underachieving. This checklist is adapted by the researcher based on articles produced by the Gifted Development Center in Colorado. It consists of 10 questions and these questions reflect the signs and symptoms of underachievement in gifted students. It will take about 10 to 15 minutes for a teacher to complete the checklist.

3.2.2 Background Data Questionnaire (Appendix C)

This instrument was used to furnish details of the personal background of the subjects concerned. Information on family, socio-economic status, hobbies, etc is important for the researcher to understand the subject’s environment better. Administered on the 5 subjects themselves, this questionnaire will take approximately 20 minutes to complete.

3.2.3 The Attitude Questionnaire (Appendix D)

This is an adaptation from two instruments, namely the Attitude Questionnaire and Cluster List, both used by Tannenbaum (1962) for the Talent Youth Project of the Horace Mann-Lincoln Institute of School Experimentation.
There are two parts to this questionnaire. Part 1 consists of 54 traits. The peers are required to tick off those applicable to their underachieving gifted peers. Part 2 has 4 trait lists, which contain phrases, and adjectives describing the positive and negative traits of the underachieving gifted.

The responses from this questionnaire will help the researcher to examine if the perceptions of peers contribute to underachievement.

3.2.4 The School Attitudes Inventory (Appendix E)

This inventory is an adaptation from the Evanston Interview Study (Raph, Goldberg & Passow, 1966). It will be used to discover the attitudes of the intellectually gifted underachievers towards school and school-related activities. It is hoped that this instrument will help to highlight to the researcher the problems in school that cause their underachievement. Section 5 of the original has been left out for it was found to be irrelevant to our schools and students. The items in this section were about foreign school practices that are not present in the local school environment. The instrument is now left with 12 sections. To administer this instrument, it will take about 45 minutes.

3.3.5. The Interview Schedule and Instruction Form (Appendix F)

This was adapted from the Evanston Interview Study (Raph, Goldberg & Passow, 1966). Only Part 1 of the original was used. This interview section is hoped to help the researcher understand better many of the responses in The School Attitudes Inventory. This instrument will allow the subjects to express his opinions and views verbally. Furthermore, it will also provide the researcher with the opportunity to probe further into his reactions, attitudes and answers.
3.3.6. Teachers' Evaluation Inventory (Appendix G)

Three parts make up this inventory. Part 1 is the Teachers' Evaluation Scale (Chiam, 1976). Part 2 is the Teachers' Rating of the Student (Evanston Interview Study) (modified) while Part 3 is the Teachers' Checklist. The questions in these three parts will provide further insights on the factors of academic underachievement in intellectually gifted students.

3.3.7. Hauick-2 (Appendix H)

Hauick stands for High-Ability Underachiever Identification Checklist: Version 2 (Wong, 1992). Hauick 2 is made up of three main sections and will be answered by the subjects of this study.

Section A deals with parental pressure and this consists of twenty positive items and three negative items. When the response "Always" is given to a positive item, four points are awarded. A regression of points follows such that "Never" response to a positive item will yield one point. The reverse scoring is used for negative items. The maximum score for this section is 92 and minimum is 23. A high score will indicate the presence of high parental pressure.

Section B deals with locus of control. 17 items are attributed to internal locus of control and 11 to external locus of control. An "always" response to an internal locus of control is rewarded one point and regressive scoring follows till a "Never" response earns four points. An "Always" response to an external locus of control will score four points and a "Never" response will score one point. The highest score is 112 and the lowest is 28. A high score for this section will show that the individual's underachievement is externally controlled.
Section C is a self-esteem checklist with seven positive items and eight negative items. The respondent only has answer "Yes" or "No" to all fifteen items. A "Yes" response to a positive item will score one point while a "No" response to a negative item will also score one point. There is no reduction of points for a wrong answer. The maximum score is 15 while the minimum is 0. A high score would indicate high self-esteem.

3.3.8. Other Methods

Numerous personal observations and interview sessions were the other methods used to get a more detailed view of each of the subjects. Interview sessions will be arranged with each of the five subjects at least twice, their teachers, their parents, and their peers.

IQ tests, CGPA results, public examination results, school records and school performance will be used to identify signs of underachievement in intellectually gifted students.

3.4. Sampling/Population

There were 5 adolescents (aged 19 to 21) taken from a private college in Petaling Jaya. In order to seek school and parental permission, letters were sent to their schools and parents.

3.4.1. Students

This study used IQ scores and teachers' recommendation as criteria to identify intellectually gifted students. The IQ scores to be used will be that measured by Cattell's Culture Fair Intelligence Test. Due to the constraints on time,
these were used to identify the intellectually gifted although these are not the only criteria to identify the potential to achieve and perform. CGPA scores, public examination results and school performance tests will be used to indicate academic underachievement.

3.4.2. Teachers, Parents and Peers

This study will also require the participation of teachers teaching the five subjects. These teachers will have to complete the checklist and will be interviewed by the researcher. Parents will be asked to participate in the study. If possible, both parents will be interviewed. Peers will also be interviewed in this study to gain insights on whether causes of underachievement are related to peers.

3.5. The Procedure

All students who are recommended will sit for an IQ test to assess their level of intellectual giftedness. Students with an IQ score of 140 and above will be selected for the second phase of this study.

In the second phase, the school records, test results, public examination results and CGPA will be examined to identify underachievement. The lecturers teaching these students will fill Teacher’s Recommendation Checklist. Five students who are identified as underachieving will be selected for this study.

These five underachieving intellectually gifted students will complete Background Data Questionnaire, The Attitude Questionnaire, Hauick-2, Teachers’ Evaluation Inventory and The School Attitudes Inventory. The researcher will also conduct the first interview based on The Interview Schedule and Instruction Form.
Further interviews and observations will be made necessarily. The parents, teachers and peers of these students will also be interviewed.