CHAPTER TWO
REVIEW OF LITERATURE

2.1 Definition of Underachieving Intellectually Gifted Students

American educators first started to pay serious attention to instructional programmes for the gifted when Russia launched its first Sputnik. This was in 1958. The American’s desire to maintain the nation’s superiority by identifying and nurturing competent students for careers in the applied sciences provided the impetus that educators needed in order to establish formal provisions and procedures for the identification, selection and placement of such students (Tidwell, 1980).

Since then, there are many studies on gifted students but those that focus on the underachieving gifted were few. Focus on the underachieving intellectually gifted is even less.

The first major study on the issue of underachieving gifted was initiated by Terman (1925). He studied over decades, the patterns of performance and non-performance in almost 1,500 gifted students. Until 1985, Baum (1985) mentioned in one study that as many as 33% of students identified as underachieving had superior ability and may be gifted. This identification by Baum is based on test scores, teacher interviews and assessment of scores of the Wechsler Intelligence Scale for Children/Revised. Since then and until today, not many can accept the fact that a child can be both gifted and underachieving. A colloquium held at The John Hopkins University in 1981 convened experts from the fields of both learning disabilities and giftedness to consider this issue. At this time, children who exhibited the characteristics of both exceptionalities had received scant notice. These are children with special needs but rarely are their problems identified. Thus, they
continue to struggle. As Professor E. Paul Torrance (1973) has warned, "for many (children), being gifted brings lifelong struggle" (p. 3).

Before any attempt to identify the underachieving gifted or to identify factors that contribute to underachievement among the gifted, a definition for what is gifted and what is underachievement need to be established. From the review of literature as cited in Dowdall and Colangelo (1982), there are various definitions of the underachieving gifted and the researcher has listed these definitions in Table 2.1.

From Table 2.1, it can be concluded that the underlying theme of almost all definitions is that there exists a discrepancy between potential and actual performance. In this study, a combination of definitions is used. Definitions used by Ohlsen and Gazda (1965), Pringle (1970), Newman, Dember and Krug (1973) and Saurenman and Michael (1980) are combined in the attempt to define academic underachievement and intellectual giftedness. In this study, a Cattell’s Culture Fair IQ score of 132 together with the teachers’ recommendations will be used to assess intellectual giftedness. Academic underachievement is the discrepancy between this ability and the actual performance (in achievement tests and academic tasks.). Therefore, a CGPA score of B or less will measure academic underachievement.
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<tr>
<th>Author</th>
<th>Definition</th>
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<tr>
<td>Gowan (1957)</td>
<td>The gifted underachiever appears to be a kind of intellectual delinquent who performs a full standard deviation or more below his or her ability score.</td>
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<td>Shaw and Mc Cuen (1960)</td>
<td>Upper 25% of the population on the Pinter General Ability Test (IQ over 110) and who had earned a GPA below the mean of his/her class in grades.</td>
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<td>Thorndike (1963)</td>
<td>Traditionally underachievement is measured in relation to some standard of expected or predicted achievement. It assumes people who are similar in one way (e.g. IQ scores) will perform the same in other ways.</td>
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<td>Durr (1964)</td>
<td>One who achieves below his potential, where potential is defined in terms of IQ and achievement in terms of teacher grades or achievement tests.</td>
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<td>Ohlsen and Gazda (1965)</td>
<td>One whose language or non-language IQ scores are 116 or above and whose achievement scores were at least one grade below the expected level and whose grades were B or less.</td>
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<td>Raph, Goldberg and Passow (1966)</td>
<td><strong>One who not only fails to achieve the academic level of which he is capable, but is often also found to be lagging behind the achievement levels of the contemporaries of average ability.</strong></td>
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<td>Fine, B (1967)</td>
<td>Students who rank in the top third of intellectual ability but whose performance are dramatically below that level.</td>
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<td>Bricklin and Bricklin (1967)</td>
<td>A child whose day by day efficiency in school is much poorer than would be expected on the basis of intelligence.</td>
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<td>Finney &amp; Dalsem (1969)</td>
<td>Students who are in the top 25% of the DAT (Differential Aptitude Battery) in verbal numerical score and whose GPA was below the mean for all students at the DAT level.</td>
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<td>Pringle (1970)</td>
<td>Students with IQs of 120 or above who were having educational or behavioral difficulties were used in her study of underachieving gifted students.</td>
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<td>Newman, Dember and Krug (1973)</td>
<td>A child achieving significantly below the level statically predicted by his/her IQ. (In this study, a GPA of C or below was considered as significant).</td>
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<td>Ziv (1977)</td>
<td>When a child with high IQ has low grades in school.</td>
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<td>Gallagher (1979)</td>
<td>Those for whom a gap exists between achievement test scores and intelligence test scores or between academic grades and intelligence test scores.</td>
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<td>Saurenman &amp; Michael (1980)</td>
<td>Stanford Binet 132 IQ or above and percentile ranking of 75 or below on CTBS (California Test of Basic Skills).</td>
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<td>Dowdall and Colangelo (1982)</td>
<td>The discrepancy between two standardized measures (e.g., teacher expectation and daily assignments).</td>
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<td>Whitmore (1980)</td>
<td>Students who demonstrate exceptionally high capacity for academic achievement and are not performing satisfactorily for their levels on daily academic tasks and achievement tests.</td>
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<tr>
<td>Redding (1990)</td>
<td>Students whose actual grades fall significantly below their academic performance as predicted through standardized achievement and/or intelligence tests.</td>
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2.1.1. Characteristics of the Underachieving Gifted

Waldron, 1991 (cited in Dowdall & Colangelo, 1982) provides us with some hints when he says that although students who are underachieving and gifted usually possess the positive characteristics of giftedness, they may also perform poorly. Yet, they may seem bored when remediation is directed toward academic skill areas, claiming that the work is too easy, even though they have not mastered it. The gifted underachievers also derive no apparent satisfaction from repeated demonstration of acquired skills, lacks academic initiative, inattentive in class and is test phobic (Whitmore, 1980).

Intellectually gifted underachievers are generally typical learners who are often characterized as smart students with school problems. Osborne (1990) noted that underachievers are academically disruptive and unmotivated. These students assume that learning tasks will be easy for them and are not prepared for the difficulty that arises from activities in the areas of their disability. This leads to frustration, tension and fear that eventually becomes defensive. Due to this frustration, these students tend to become aggressive, careless and frequently off task. Hannel (1990) confirmed this when he observed that new work never cease to cause frustration and anxiety for the gifted underachievers. They also cause classroom disturbances and seem deficient in tasks emphasizing memory and perceptual abilities. Rimm (1989) notes that underachievers are in the habit of “forgetting homework”, finding easy ways out or seeking ways to avoid the school learning process, not complying with the requirements of assignments, showing little respect for teachers and lacking academic confidence.
In addition, basic automatic skills such as perceptual scanning, sequencing, organization and study skills are at their center of difficulties (Baron & Starnes, 1989).

Intellectually able but academically underachieving students perceive themselves as deficient more frequently in academic areas, which most likely increases their motivation to avoid school tasks. These students feel shy and perceive themselves as less effective in school. They often show a lack of self-confidence and exhibit inferiority feelings (Rimm, 1990; Tannenbaum, 1983; Whitmore, 1980) and has weak ego controls. It becomes disheartening for these students with eager, bright minds to continuously experience failure in school while learning and creating successfully at home. This often leads to poor self-concepts and makes them feel as if they do not fit in with their peers. Low self-esteem and unhealthy self-concept result in difficulties in coping with emotions (Whitmore, 1980).

Although obtaining excellent academic results may not be their forte, there is success for some of them in sports, social occasions and after school jobs (Delisle & Berger, 1990). They tend to have more creative productive interests. They are able to conceptualize quickly, to see patterns and relationships readily, to reason abstractly, to generalize easily and to enjoy the challenge of solving novel problems autonomously. Hobbies and interests that require keen motivation and creative thinking abilities are often observed outside of the school environment. In school however, they are often referred to as street smart students with school problems. This indicates that underachievement may not be consistent in all circumstances.

The Resource Group for Gifted and Learning Disabled has also observed characteristics of gifted underachievers in the journal, Roeper Review 1996 (Volume
1 bulletin 2). One of the interesting characteristics is that the child can be perfectionistic to the point that they may not start or complete assignments or other activities because they are afraid that they would not be perfect. This may be due to the fact that the child is excessively critical of self and others and sets unrealistic expectations or make plans that are difficult, if not impossible, to complete. Another researcher who confirms this is Elliot (1989) who says that underachievers often procrastinate. They possess an all-or-nothing attitude and are workaholics paralysed by perfectionism.

In the psychological aspect, Rimm (1987) highlights that underachievers are under pressure to be brilliant, creative, good, popular, to do something spectacular or to be the best sibling. The Resource Group continues to observe that the gifted underachiever seems hyperactive because he or she is frustrated or bored by the demands of the classroom and may have more trouble with schoolwork with each passing year. He or she is distractible and can easily goes off on a tangent. This may be so because the child is rebellious against drill and excessive repetition and questions teachers and parents about the need for assignments. As such, we often find this child putting down the work that they are required to do, i.e. saying that "the work is dumb."

A new type of underachievement was described by Krissman (1989) whom he refers to as the "Trillium Children." These students did well in the regular classroom, were identified and then placed in the gifted resource room environment. For the first time, they encountered peers who have the same if not better ability in handling content and analytical skills. They no longer stand out as a "brilliant child" and a fear of failure develops (Elliot, 1989). Self-confident gifted children thrive on complexity and make routine tasks difficult for himself so as not to be bored whereas
"Trillium Children" withdraws from challenging environment. They can get angry, cry, give countless excuses, choose projects which are too overwhelming, refusing to scale it down and finally giving it a miss altogether. In addition to that, the child may also demonstrate motor skill problems like illegible, labored handwriting. The gifted underachiever is also extremely sensitive, that is to show inappropriate anger over a minor setback.

The child lacks social skills and may not know when to start or stop talking. The child becomes an "expert" in one area and dominates discussions with their expertise both at home and in school. Due to this, the gifted underachiever will vie for top spot through negative means and is often an attention seeking individual (Rimm, 1990). He or she can be socially isolated and has difficulty making or keeping friends because peer relationships and sports take on a more important role for them than academic achievement (Rimm 1989).

Rimm (1985, 1988) reported that the gifted underachiever is not interested in school attendance, avoids participation in school and has difficulty working in groups of any size although they are reported to be hyperactive. Osborne (1990) described gifted underachievers as stubborn, resistant, rebellious and unwilling or unable to apply themselves to classroom setting. In short, Mufson, Tolan and Kranz (1989) concluded that gifted underachievers are socially and emotionally less mature, less able to focus on one concern at a time, less accurate in their perception about themselves and their work and less hardworking.

Not all of these are in an individual but if more than a couple are observed; it is most likely that the child is both gifted and learning disabled. A summary by Dowdall and Colangelo (1982) confirms the Resource Group's observation (Appendix A).
2.1.2. Identification of the Gifted Underachievers

Durden and Tangherlini, 1993 (cited in Brody & Mills, 1997) stated that the social and emotional consequences of having high abilities and underachievement, when one or both of the conditions is unrecognized, can be pervasive and quite debilitating, as well as difficult to address if appropriate diagnosis never take place or are delayed until adolescence. Jones, 1986 (cited in Brody & Mills, 1997) says it is important to identify gifted underachieving because if not, they will always have negative emotional response. Siegel, 1989 (cited in Brody & Mills, 1997) confirms this and believes that the failure to identify such students will result in a great waste of intellectual potential.

It is easy to agree with Boodoo, Bradley, Frontera, Pitts and Wright, 1989 (cited in Brody & Mills, 1997) that at present, identifying students for gifted programs and special education services for the underachieving individuals tend to be mutually exclusive activities. With the Penilaian Tahap Satu (Phase One Assessment) to assess academically gifted students in Malaysia, one cannot help but say that too many students with underachievement who are intellectually gifted have failed to meet the eligibility requirements. This is because the identification protocols fail to consider the special characteristics of this population. Research has shown that teachers are much more likely to refer disabled students than students with underachievement for placement in gifted programs (Minner, 1990).

Dowdall and Colangelo (1982) have raised numerous objections to the use of IQ achievement discrepancy to identify gifted underachievers. This is true if applied to underachievers who are artistically or kinesthetically gifted but the fact remains that intellectually gifted underachievers would show evidence of a discrepancy
between their high IQ ability and their academic achievement. Thus, even though arguments against defining underachievement on the basis of a performance discrepancy have much validity for gifted underachievers in general, seeking evidence of a discrepancy between intellectual ability and academic underachievement is particularly important for identifying students who are intellectually talented and underachieving.

Finally, Graham and Harris, 1989 (cited in Brody & Mills, 1997) have the last word, saying that decisions as to the presence and severity of learning disabilities must ultimately rely on professional judgement based on a multifaceted assessment of which norm-referenced IQ and achievement data are only a part.” Their assertion seems appropriate for the underachieving gifted as well.

Hence, typical methods of identification of underachieving gifted today rely on standardized measures like IQ tests and achievement tests; teacher perceptions by using questionnaires and checklists, grades, assessment of daily work and comparison with other students. Parent, peer and self-nomination are occasionally used (Ciha, Harris, Hoffman and Potter, 1974).

Redding (1990), in his study, measured achievement level with the Scott Foresman Achievement Test Series, WISCR and grades from school records. Cooper (1981) used systematic classroom observation while Renzulli and Hartman (1971) used behavioral checklists. Emerick (1992), in her study, used standardized achievement test scores, scores on tests of general aptitude and “other objective and subjective indicators of potential for well above average academic performance.”

To simplify identification of gifted underachievers, many researchers like Bannatyne (1974), Baum (1988), Baum (1991) and Kaufman (1979) have focussed on Wechsler Intelligence Scale for Children Revised (WISCR) score patterns.
In short, the underlying theme in almost all the methods of identification is that a discrepancy between a student’s potential and his actual performance should exist.

2.2. Factors of underachievement

Educators and researchers have shown a growing attention in trying to understand the causes that are antecedent to underachievement. This could be justified because before any intervention or treatment can be given, it is essential to understand the different factors that contribute to the intellectually gifted student’s failure in attaining the level of achievement that they are capable of.

Intellectually gifted students, as opposed to those gifted in athletics, leadership or arts, are generally more at risk for academic underachievement for a variety of reasons. Whitmore (1979, 1980) suggested that their perceptions of the social aspects of schooling and their feelings about academic tasks shape the behaviour of these students into patterns of mild to moderate academic underachievement or even school failure. This pattern of underachievement will eventually result in some degree of low self-esteem, poor mental health and problem behaviour. Specifically, a sense of academic failure fosters withdrawal and disruption. As such, Whitmore (1980) advocated that there should be an accurate perception on the causes of underachievement so that the child, the teacher, the parents and the peers view the gifted child’s underachievement positively.

Rimm (1986) and Whitmore (1980) have identified causes of underachievement as the consequences of the individual’s social interaction with the immediate family, the school, the society and the larger environment. McIntyre
(1964) have classified the causes of underachievement into the physical, ecological, economic and psychological aspects.

One study by Baker and Bridger (1998) explored individual, family and school related factors that contribute to underachievement among gifted fourth grade students, ages 9 to 14 years. The study included 26 gifted underachieving gifted students and 30 gifted students achieving well. The researchers explored 3 simple models of factors contributing to underachievement as well as a complex model incorporating all 3 factors. Each of the 3 simple models was significant, suggesting the importance of an ecological cause as problems of underachievement among gifted students.

Like Baker an Bridge 1998), other researchers like Angelino (1960), Butler-Por (1987), Gallagher (1979), have also attributed the causes of underachievement to home and family-related factors, school-related factors and self-related factors.

2.2.1. Home, Parental and Family-Related Factors

Achievement and underachievement has a lot to do with the child’s upbringing. To a certain extent, it depends on the relationship between the child and the mother, father and siblings. Khatena (1983) pointed out that the parents’ educational level and a stimulating home environment facilitates achievement. High levels of aspirations, affectional support or appropriate achievement all contribute to achievement. Thus, when all these conditions do not exists, “the potential to achieve is threatened and underachievement can be expected”. Shaw (1960) agreed with Khatena (1983) and suggested that when the aspiration of the father is low, underachievement can be anticipated for the gifted son.
Underachievement in intellectually gifted children may also be caused by the parents’ failure to recognize the child’s giftedness. Due to this, they hold low expectations for the child’s performance and the child is encouraged to set low standards and goals. The child may become convinced that he or she is not gifted and learns to deny superior abilities in order to avoid embarrassment or rejection. The parents’ inaccurate perception of giftedness will result in academic underachievement among the intellectually gifted children because of inappropriate self-expectations.

On the other hand, some parents recognize the child’s giftedness but respond with inappropriate high expectations and pressure. A case study carried out by Baum, Renzulli and Hebert (1995) to examine the factors that contribute to underachievement. They found that a fifth grader felt the pressure of parental high expectations. The student revealed that her father had told her never to tell anyone when she made a mistake or did not know anything. She has learned to treat life seriously. Although she was excited about ballet and books, she perceives them as not as important as schoolwork. The researchers commented that the parental expectations that are endowed on her seemed to have taken the fun out of learning and had a profound impact on inhibiting the child’s academic achievement. Whitmore (1986) agrees by stating that high parental expectation may dampen motivation.

Some parents shower their child with love and attention. High supervision of parents, where parents take over the management of homework result in an overdependence on the adult which will eventually lead to underachievement among the gifted. In addition, these children are given extensive freedom, praise and are always at the receiving end of attention. These children are usually very secure and
confident in such an environment. However, this kind of attention may not be readily available in the school environment. Thus, the students feel let down and deprived as they compare their feelings to that received at home. This discontinuity in the environment may result in underachievement in the gifted child.

McIntyre (1964) commented that parents do not share executive functions in the home can lead to the child's underachievement. This refers to when one parent is dominant and the other submissive. McIntyre gives examples of a boy whose father is dominant and the mother is submissive. The boy would perceive it to be dangerous to be a man. If the mother is dominant and the father is submissive, the son is over-protected by the mother. In either case, according to McIntyre, he mistakes the parents' disinclination that he learns in school for a demand for high performance. As a result, he may try to get even with them by underachieving in school. McIntyre has attributed parenting inconsistencies to underachievement.

Rimm and Lowe (1988) seemed to agree with McIntyre. They found that parenting styles seem to be less important than consistency in parenting. Dissimilarities between parents with one expecting too much and the other protecting too much, is a main cause of underachievement. Fine and Pitts (1980) also agree with this issue of parenting style that contributes to underachievement. They found that there might be conflicts when a mother is supportive of a child but the father is less tolerant. The conflict causes underachievement.

Morrow and Wilson (1961) reports that parental attitude toward the child is a major contribution to underachievement. These parents are domineering, restrictive, prone to either sibling or simply pushing the child excessively. The reaction of these parents can be understood in the light of parents being threatened by the child's giftedness and fear of losing their authority (Haasbroek, 1988). When parents allow
the underachiever to blame himself for trouble at home, when anything go wrong, self-perpetuating negative self-image, the Scapegoat Phenomenon occurs.

The other extreme is an illustration by Rimm (1984, 1989) where she describes parents who “adultize” the child, assigning more responsibility, power and freedom that the child is capable of handling. This results in “attention addiction” and consequently underachievement. It was also suggested that good parent models account for much academic achievement.

Parental interest plays a role in underachievement too. Mufson, Tolan and Kranz (1989) studied a group of underachievers who perceived parents as having low interest in their school work. The belief that parents were not interested and therefore less strict, may imply a lack of clarity of motivation and thus affecting the work of underachievers. In another study by KUBLINS, 1990 (cited in Wong, 1992), subject specificity and parental interest were found to be related. Mathematics underachievement was influenced by low parental interest for girls only but effect on boys was unclear.

Haesbroek (1986) added that a lack of trust, authority and understanding between the domineering father and child, the absence of a father figure and a lack of achievement recognition results in underachievement.

Zuccone and Amerikaner (1986) suggest that the origins of underachievement focussed on parental attitude; child raring practices, independence training, degree of congruence between parental perceptions of the child and the child’s level of self-esteem.
2.2.2. School-Related Factors

This study of underachievement focuses on students who do not do as well in school subjects or obtain the kind of grades their I.Q. scores predict. Therefore, it is essential to focus on the underachiever in the school setting. Even Newell (1989) suggested that the social climate and the academic curriculum of the school were important contributors to underachievement among high ability students.

Studies of school-related factors on underachievement by Frankel (1960) and Morrow and Wilson (1961) reveal that college and high school underachievers dislike the courses they take and the lecturers who teach them. These academic underachievers spend very little time on their studies, use poor study techniques and have low-grade aspirations. A study conducted by Baum, Renzulli and Hebert (1995) indicates that poor, laborious and drill classes, boring work and a curriculum that fails to challenge the learner to high endeavor lead to academic underachievement. One particular student in their case study saw his participation as a way to be excused from a course he disliked. Another student complained that too many subjects were "too content based." Other students have indicated that they want more challenging project work.

A study by Rimm (1989) also reveals similar findings. For the gifted underachievers, school was boring, dull, irrelevant, useless and a place where too much work was given. Haesbroek (1988) observed that classrooms where lessons were boring and presentation was inappropriate and uninteresting for the gifted contribute largely to underachievement. He adds that these classrooms lack challenge and incorporates a lot of repetition. Opportunities for these students to
demonstrate high competencies in a more challenging environment should be made available and to that effect, acceleration was recommended as intervention strategy.

Like parents, the pressure and expectations of a teacher are instrumental to underachievement. Also, the failure of the teacher to recognize giftedness contributes to underachievement. Demos and Mosaka, 1972 (cited in Wong, 1992) found that underachievement is caused by the teacher's inability to estimate the student's high abilities. Thus, Thomas, 1973 (cited in Lalitha, 1999) found that the conformity demanded by many teachers leads intellectually gifted students to adhere to the academic expectations of teachers that may be below the levels of their potential achievement.

Baum (1988) conducted a pilot enrichment program that was designed to meet the needs of the gifted underachievers. In this program, seven bright underachievers in grades 4 and 5 met for 21/2 hours a week over nine months at a resource center for the gifted. The students were identified based on test scores, teacher interviews and assessment scores of at least 120 on the WISCR. Throughout the nine months, the students went through challenging enrichment activities based on The Enrichment Triad Model (Renzulli, 1977). At the end of the nine months, six of the seven students showed gains in self-esteem, learning behaviour and creative productivity. The results of this study reveal that the cause of underachievement seems to be the lack of a special class where students had access to information outside their classroom syllabus, where they had the opportunity to communicate their ideas based on individual strengths and where their disability was minimized.

According to Whitmore (1988), all intellectually gifted students will underachieve when the teaching strategies and styles of the teacher is not well suited to their own learning styles. It is found that most students respond adversely to
excessive amounts of drills and repeated demonstration of learning new facts and other skills.

Redding (1990) looked into the learning preferences and skill patterns among underachieving gifted adolescents. This study intended to test whether relative to gifted achievers, gifted underachievers exhibit relative performance deficits in tasks which require analytic information processing. Participants were 50 junior high school boys and girls whose mean age is 13.1. Three instruments were used. The Weschler Intelligence scale for Children is used to determine the criteria for giftedness (score of 130 or more). The Comprehensive Assessment Program of the Scott-Foresman Achievement Test Series is based on analytic and holistic tasks. Finally, students' grades were also obtained from school records. These grades are based on the mean GPA for English, Mathematics, Science, Foreign Language and Social Studies.

As predicted by Redding, the underachievers' mean scores on achievement subtests requiring analytical processing were significantly lower than their mean scores on subtests requiring a holistic information processing style. They perform at a high level on tasks which require synthesizing but do not perform as well on detailed, computational or convergent problem solving tasks which require precise and analytic processing. On the other hand, the achievers showed no such discrepancy. This study has its implications on learning styles and strategies. Whatever the teaching strategy may be, it should recognize that underachievers may have learning preferences which hinder performance in typical school tasks. Thus, teaching strategies should stress the importance of accuracy and persistent concentration toward problem solving by pointing out their weaknesses in analytical problem solving and showing them how such weaknesses in analytical problem
solving and showing them how such weaknesses can impair their school performance.

2.2.3. Peer and Social Factors

Cornell (1990) remarked that theorists from Erikson to Piaget have emphasized that a child's interaction with his peers provided a content for his cognitive development; growth of social skills, evolution of self-concept and establishment of social and moral values. In the presence of intense peer pressure in competitive schools, some intellectually gifted students begin to feel they do not meet up to the expectations of the school. Ambrose (cited in Bernado, 1990) reported that this feeling of inadequacy can grow and result in underachievement. The symptoms to look out for are depression and anxiety. The most obvious is being social withdrawn.

Some intellectually gifted and academically capable students may not want to risk rejection by their peers who place little importance on intellectual ability. These students could become ashamed of their talents and withdrawn, always giving excuses for failings and consciously underachieving (Karnes & Brown, 1980; Rimm, 1984). An additional frustration underlined by Goodstein (1980) was that although underachievers spent more time engaging in social activities than achievers, they are still less accepted by peers, date less and are less popular.

In a study done by Parker and Asher (1987), students with exceptionally high IQ rated themselves to be less popular and have difficulty in peer relations as compared with their agemates. This will indefinitely increase the chance of developing maladjustment problems. In addition, the high ability students also
perceive themselves to be introverted, less socially adept, highly inhibited, less athletic and less socially active.

In Malaysia, efforts have been taken to remedy academic underachievement. The Kurikula Baru Sekolah Rendah (KBSR) programme uses the method of grouping to meet the needs of intellectually gifted students. The programme allows opportunities for special groups within the regular class and for independent work. The programme assumes that teachers will use different strategies, materials and techniques of different levels of difficulty for the different groups of students. However, as Chua (1982) puts it, this programme has also open doors to weaknesses. The large class does not give the teacher opportunity to give individualised attention to any particular group, whether it is gifted, underachievers or average. The classes are made up of students of different abilities and achievements. Therefore, it is difficult for the teacher to pay attention to any particular group. The academic gifted underachievers are left out to struggle on their own, without any real help being extended to them. This condition in the school may account for academic underachievement too.

2.2.4. Self-Related Factors

Delisle and Berger (1990) studied underachieving gifted students and suggests that underachievement in gifted students is closely related to the development of self-concept. The self-concept is shaped by the positive and negative responses received from people in his environment. How a child perceives his or her successes depend on how they are perceived by his family and surrounding. When the child internalizes more negative responses than the positive, the child would acquire a low self-concept and this will provide him with no reason to excel in his
studies. Researchers like Gallagher (1985) agrees and adds that the low self-concept may mask actual capabilities and leads to underachievement.

Marsh, Cairns, Relich, Barnes and Debus (1985) warn that self-concept cannot be understood if its multi-dimensionality is ignored. This is found to be true as Cornell (1990) categorizes self-concept into social self-concept, physical appearance self-concept, athletic self-concept and academic self-concept.

Wong (1992) found that self-related factors are positively correlated to academic achievement amongst the high ability students. He also found that academic self-concept contributes significantly towards underachievement. Marsh, Smith and Barnes (1983) reveal that students who attribute their academic success to their own ability and effort tend to have better academic skills and higher academic self-concept. Students who attribute their academic failure to their lack of ability and effort tend to have poor academic skills and lower academic self-concept. Marsh (1987) also found that children who attended selective, high-ability schools suffer low academic self-concept than they would if they attended medium, low-ability schools.

The lack of motivation to excel can explain the cause of underachievement in intellectually gifted students. The literature indicates that the lack of motivation is inter-related to the other causes of underachievement. Whitmore (1986) comments that the lack of motivation to excel academically in school is a "product of a mismatch between the child's motivational characteristics and the opportunities provided in the classroom". When the classroom social climate is not nurturant, the curriculum content is not relevant to personal interests and the teaching processes is not appropriate for the child's learning style, low level of motivation occur and this will eventually lead to underachievement.
In addition to the above, Rimm (1986) provides us with more general information when he observed that the essential element of underachievement include the acquisition of excessive power directed toward manipulating others to avoid responsibility rather than to move toward accomplishment. The inability to cope with healthy competition and the impact of social changes related to family, education, competitive pressure and mass media are also mentioned as the causes of underachievement in potentially able students.

2.2.5. Locus of Control

It is also established that the underachiever is predominantly externally controlled. This means that internal locus of control and positive self-factors are factors resulting in academic achievement. Whitmore (1986) comments that there is tendency to attribute success and failure to external locus of control. Tannenbaum (1983) agrees saying that underachievers feel that trouble is the fault of someone else or the doing of fate.

Rimm (1986) reports that underachievers have an external locus of control. Rimm (1987) stated that the underlying characteristics revealed in most studies of underachievement is a lack of internal, personal locus of control. Underachievers do not internalize the relationship between effort and outcome, process and product. They do not own a sense of self-efficacy. They attribute failure to luck, difficult test or simply own stupidity (Fine & Pitts, 1980). Willings and Greenwood (1990) felt that underachievers feel they have lost control over the learning situation suggesting that underachievers are externals.

Kanoy, Johnson and Kanoy (1980) found that achievers have a significantly higher internal locus of control than underachievers. Laffoon, Jenkins-Friedman and
Tollefsson (1989) reports that gifted underachievers and non-gifted students are significantly more external in control than gifted achievers. The review of literature has revealed that academic underachievement is indeed a complex problem caused by a variety of factors which may adversely affect intellectually gifted students. This research seeks to find out if the above causes of underachievement affect Malaysian underachieving intellectually gifted students in the same way that they affect their foreign counterparts.

Many researchers in the field of giftedness have tried to study the factors that contribute to underachievement. However, not many of them studied the influence of these factors among intellectually gifted Malaysia students. Malaysian educators and parents need to know the result of this study so that they can understand better the phenomenon of the four underachieving intellectually gifted Malaysian students. This would help in the planning of intervention strategies to help these students.