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Gifted underachievers : a review of the past and present with implications for the future

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Gifted underachievers : a review of the past and present with implications for the future

Abstract

The academic underachievement of gifted students has perplexed educators, parents, and researchers for over half a century. With such a controversial background, gifted underachievers have become a topic of increased interest in the last few decades. A large body of quantitative research has attempted to fill this void. Numerous personality and environmental factors such as lack of effort, learning styles, family dynamics, and peer relationships have been linked to underachievement.

A plethora of inadequate and unsuccessful interventions have been implemented, researched, and scrutinized. With such an increased awareness, why do potentially gifted students continue to fail and what can we do about this underachievement? This paper attempts to review the last few decades of research on gifted underachievement and to identify effective intervention strategies that will provide useful implications for the future.

GIFTED UNDERACHIEVERS: A REVIEW OF
THE PAST AND PRESENT WITH
IMPLICATIONS FOR
THE FUTURE

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Submitted
in Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Education

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The academic underachievement of gifted students has perplexed educators, parents, and researchers for over half a century. With such a controversial background, gifted underachievers have become a topic of increased interest in the last few decades. A large body of quantitative research has attempted to fill this void. Numerous personality and environmental factors such as lack of effort, learning styles, family dynamics, and peer relationships have been linked to underachievement. A plethora of inadequate and unsuccessful interventions have been implemented, researched, and scrutinized. With such an increased awareness, why do potentially gifted students continue to fail and what can we do about this underachievement? This paper attempts to review the last few decades of research on gifted underachievement and to identify effective intervention strategies that will provide useful implications for the future.

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CHAPTER 1

INTRODUCTION

Academic underachievement among the gifted has perplexed educators, parents, and researchers for over half a century. Far too often, for no apparent reason, students who show great potential and academic promise fail to perform at a level commensurate with their previously documented abilities (Whitmore, 1980). Even more puzzling in this era, in a time with increasing demand for accountability from our schools, there is still a general lack of awareness, concern, or systematic provision for the gifted. Increasingly problematic is when gifted students go unrecognized because of a seemingly noticeable discrepancy in their achievement and their potentially gifted ability.

A survey of the literature indicates that bright underachievers have been a persistent problem in education for over fifty years (Rimm, 1997b). Because of a concern for these students, researchers have sought ways to help those who are caught in the web of underachievement. Some researchers even state, "Gifted children are the most misunderstood and educationally neglected group in the American schools today" (Whitmore, 1980, p.3). In an attempt to identify gifted underachievers, descriptors of the gifted underachiever have emerged as complex and often contradictory.

Gifted students are often identified as students whose mental age is considerably higher than actual age when compared with children in the general population (Whitmore, 1980). The most frequently used definition of underachievement involves a discrepancy between a child's school performance and some index of the child's ability

(Rimm, 1997a). If children are not working up to their ability in school, they are underachieving (Rimm & Davis, 1998).

In general, attempts to develop effective interventions to reverse the underachievement pattern have failed or attained limited success (Dowdall and Colangelo, 1982). Substantial evidence points out that early intervention of gifted underachievers is necessary for adequate intervention to occur (Whitmore, 1980). Still, there are intellectually gifted children and young adults who have moved from the pattern of underachievement to patterns of academic achievement without a planned intervention in place (Bricklin and Bricklin, 1967). Unfortunately, no studies exist that focus specifically on the gifted underachievers that reverse their underachievement without a planned intervention. Thus, a serious investigation into the problem of gifted underachievement is needed.

In the researcher's opinion, it is a major travesty that every year, thousands of gifted children fail to achieve in our schools. The failure of these children to realize and meet their creative and intellectual potential represents a tragic loss to our society and to the world in its need for leadership, innovation, and competence.

Methodology

The process of collecting and reviewing theoretical literature was three-fold. The researcher first reviewed textbooks by prominent authors in the field of gifted underachievement. The references from these general resources were screened for other related literature. The second step of this process involved an electronic search on the ERIC and PsycINFO databases. Topics that were researched included gifted students,

underachieving students, gifted underachievers, underachievement of the gifted, underachieving gifted, defining gifted underachievers, characteristics of gifted underachievers, and interventions for gifted underachievers.

As the third step, articles from the databases were compared for similar content and organized around the topics of this paper. The final step involved a critical review and interpretation of the materials. Notes were taken on note cards and then arranged into the order of the literature review. Reviewed materials included resources from the University of Northern Iowa Rod Library and the University of Northern Iowa Curriculum Laboratory. Articles and books that could not be obtained through these resources were found through inter-library loan.

Research Questions and Cautions

The literature review conducted for this paper identified a limited amount of research that examined the gifted underachiever (Reis & McCoach, 2000). Few studies reported effective interventions for the underachievement of the gifted population.

Therefore, these sources were reviewed to answer the following questions:

- a) What is the definition of a gifted underachiever?
- b) What are the characteristics of gifted underachievers?
- c) What are the causes of gifted underachievement?
- d) How do gifted underachievers cope with their underachievement?
- e) How do family, school, and peer relationships affect gifted underachievers?
- f) How do we identify a gifted underachiever?

- g) What interventions are effective in reversing underachievement in the gifted population?
- h) What is the role of the family and the school in reversing underachievement?

The answers to these questions are critical for educators to understand when they are helping bright students achieve their potential. “Because students underachieve for a variety of different reasons, no one intervention strategy can possibly reverse the behaviors in all underachieving gifted students” (Reis & McCoach, 2000, p. 152). This paper attempts to review and analyze decades of research that encompass these questions. The differing definitions and criteria researchers use to study academic underachievement, along with factors such as gender, race, age, or socioeconomic status that may contribute to the diversity of participants in a study, have created a myriad of subpopulations described in the research literature on underachievement.

As a result, research findings in this field have been equally diverse thus making it difficult to arrive at a clear picture of underachieving gifted students. Therefore, the reader must be cautious in making generalizations from this research. This review will encompass a variety of interventions and ideas that could potentially reverse underachievement. Accordingly, these concerns must not be taken lightly if services to gifted underachievers are to be made more effective.

CHAPTER 2

REVIEW OF THE LITERATURE

The underachievement of gifted students is an increasingly problematic issue in our society. Why do so many of our brightest students encounter failure in our school systems? Researchers have been asking this question for over fifty years. In a recent Carnegie Corporation report, *Years of Promise* (1996), the seriousness of underachievement in the United States is exemplified. As the report states:

Make no mistake about it; underachievement is not a crisis of certain groups; it is not limited to the poor; it is not a problem afflicting other people's children.

Many middle and upper-income children are also falling behind intellectually.

Indeed, by the fourth grade, the performance of most children in the United States is below what it should be for the nation and it is certainly below the achievement levels of children in competing countries (p. 2).

Gifted underachievement has seriously affected the gifted population in the United States. A report from the National Commission on Excellence in Education (1983) states that half of gifted students do not perform to their tested abilities. In addition, high school dropout studies have found that between 10% and 20% of those who do not complete high school are in the tested gifted range (Lajoie & Shore, 1981; Whitmore, 1980). This epidemic emerges again in college. Of the top 5% of this country's gifted high school graduates, 40% do not complete college (DeLeon, 1989).

Treating giftedness as a static condition that can be characterized by a well-defined set of characteristics can result in a wide range of identification outcomes

(Lupart, Pyryt, 1996). Moreover, it is assumed by many people that students with high ability already have an advantage over other students and there is an associated expectation that these students will be high achievers in school. These expectations can be extremely misleading. Johnson (1981) reported that 45% of Iowa students with IQs over 130 had grade averages lower than a "C," and Seeley's (1985) review indicates that up to 30% of the drop-out population could be considered gifted. With the rising number of gifted students failing school and dropping out we must take a closer look at the issues in defining and identifying underachieving gifted students.

Defining Underachievement in Gifted Students

The process of defining underachievement in the gifted population and explaining the reasons for this underachievement has continued to be controversial among practitioners, researchers, and clinicians. Despite the increased interest in this area, researchers have defined this problem as an enigma (Reis & McCoach, 2000).

Underachievement of gifted students is truly a perplexing phenomenon that deserves special attention.

Defining underachievement in gifted students seems as if it should be easily tackled with a few operational definitions. However, as Dowdall & Colangelo (1982) point out, research on underachieving gifted students has created more confusion and circularity than clarity and direction. Controversy centers on how to define the magnitude and nature of this discrepancy. Operationally, educators have defined underachievement as performance judged either by grades or achievement test scores, or both that are significantly below the student's measured or demonstrated potential for

academic achievement. A significant difference between potential and actual performance has been considered to be a discrepancy of one or more years (Whitmore, 1980). When a child's achievement level is based on an achievement test that is significantly below that of his or her superior IQ on an intelligence test, he or she is usually considered an underachieving gifted student (Lupart & Pyryt, 1996). This discrepancy is the most commonly used definition in researching gifted underachievers. Unfortunately, there is no universally agreed upon definition that currently exists in this field.

Definition Themes

While conducting this literature review, the most extensive and concise report of definitions associated with gifted underachievement was found in an article by Reis and McCoach (2000). The definitions were broken into the four tables (Tables 1-4) below. The most common component of these definitions is identifying a discrepancy between ability and achievement (Baum, Renzulli, & Herbert, 1995a; Butler-Por, 1987; Dowdall & Colangelo, 1982; Emerick, 1992; Redding, 1990; Rimm, 1997a; Supplee, 1989,1990; Whitmore, 1980).

There are three themes that appear in the many operational and conceptual definitions of gifted underachievement. The first theme, displayed in Table 1, depicts underachievement as a discrepancy between potential (or ability) and performance (or achievement). Another smaller group of authors define underachievement as a discrepancy between predicated achievement and actual achievement. These definitions, as shown in Table 2, are based on the idea that if a student performs more poorly on

measures of achievement than one would expect based on measures of ability, then he or she is underachieving.

Table 1
Definitions of Gifted Underachievement That Include
a Discrepancy Between Potential and Performance

Author	Date	Key Concept
Baum, Renzulli, & Hébert	1995	High potential as evidenced by intelligence, achievement tests, or tests of specific aptitude, teacher observations, grades; underachievement as evidenced by discrepancy between performance and potential.
Butler-Por	1997	Large discrepancy between school performance and potential.
Dowdall & Colangelo	1982	Discrepancy between potential and actual performance.
Emerick	1992	Evidence of giftedness included standardized achievement test scores, scores on tests of general aptitude, or other indicators of potential for well-above average academic performance...Evidence of underachievement included average or below average academic performance as assessed by test scores, grades, and teacher observations.
Whitmore	1980	High aptitude scores but low grades and achievement test scores, or high achievement test scores but low grades due to poor daily work.

(from Reis & McCoach, 2000)

Table 2
 Definitions that Emphasize Specific IQ/Ability
 Test Score as a Criterion for Identification
 As a Gifted Underachiever

Author	Date	Key Concept
Colangelo et al.	1993	Giftedness as evidenced by scores on the 95 th percentile or above on the ACT; underachievement as evidenced by GPA of 2.25 or below in high school coursework.
Gowan	1957	Giftedness as evidenced by an IQ of 130 or above. Diagnosis of underachievement occurs when a student falls in the middle third in scholastic achievement in grades, and severe underachievement occurs when a student falls in the lowest third in scholastic achievement.
Green, Fine, & Tollefson	1988	Giftedness as evidenced by scores in the top 2% of the Tollefson norm group on an intelligence test. Underachievement as evidenced by one of the following criteria: (a) earning a C or below in at least one major academic subject; (b) having at least a one-year difference between expected and actual performance on a standardized achievement test; or (c) failing to complete work or submitting incomplete work at least 25% of the time as indicated by teacher records.
Krouse & Krouse	1981	Underachievers—those individuals who consistently, over a number of years, perform at higher levels on instruments than they do in regular classroom situations.
Supplee	1990	High academic ability as assessed through an IQ score or through achievement test scores at the eighth or ninth stanine. Low (table continues)

Author Supplee	Date 1990	Key Concept
		achievement as evidenced by achievement test scores that were at least two stanines lower than the IQ score, or by teacher ratings, or by school grades showing a marked discrepancy from expected achievement based on IQ or achievement tests.

(from Reis & McCoach, 2000)

Table 3
Definitions of Gifted Underachievement That Stress
Predicted Achievement vs. Actual Achievement

Author	Date	Key Concept
Gallagher	1991	“If the actual achievement scores fall some distance lower than what was predicted the student can be labeled underachiever” (p. 223.)
Lupart & Pyryt	1996	1. Determine the correlation between IQ and achievement . 2. Estimate the expected IQ in relation to achievement for each student using the standard error of estimate. 3. Individuals with a discrepancy beyond one standard error of estimate were targeted as possible underachievers.
Redding	1990	“Underachievement—the discrepancy between actual GPA and predicted GPA, based upon a regression procedure used to predict BPA based upon full-scale WISC-R IQ scores” (p. 7).
Thorndike	1963	Underachievement refers to the fact that a group of pupils all of the same age, the same IQ, the same type of home background, will still vary in the scores they receive in school.

(from Reis & McCoach, 2000)

Table 4
Definitions of Gifted Underachievement
That Stress Development of Potential

Author	Date	Key Concept
Richert	1991	“1. Achievement among gifted students—developing four aspects of giftedness: Ability, Creativity, Productivity, Performance, Motivation-Emotions-Values. 2. Underachievement among gifted students—underachievement in any of the four areas necessary for the manifestations of giftedness” (p. 142).
Rimm	1997a	“If students are not working to their ability in school, they are underachieving” (p.18).

(from Reis & McCoach, 2000)

The third theme, illustrated in Table 3, views underachievement as a failure to develop or make use of latent potential without reference to other external criteria. Researchers in this group make no attempt to explicitly define or measure potential. In this view of underachievement, underachievers may be viewed as individuals who fail to self-actualize (Reis & McCoach, 2000). Table 4 simply emphasizes the importance of developing potential.

Problems With Defining Achievement, Underachievement, and Giftedness

With a myriad of definitions, one common theme prevails; gifted underachievement is a discrepancy between potential and performance. Now the problem becomes how do we operationally define ability and achievement. Some of the most common methods of defining ability involve the use of an IQ test, such as the

WISC-III or the Stanford-Binet IV. Defining achievement can be even more problematic (Reis & McCoach, 2000). Some common measures of achievement are standardized achievement scores (e.g., the California Achievement Tests, the Iowa Test of Basic Skills, the Terra Nova, etc.) and classroom performance measured by course grades. Although standardized achievement tests offer documented, empirical evidence of reliability, they may not directly reflect the actual school experiences. Classroom grades, though sometimes unreliable and subjective, tend to provide one of the most commonly used methods to evaluate students. Most colleges and universities use high school GPA for part of their admission procedures.

Unfortunately, the criteria used to identify giftedness vary from state to state, district to district, and school to school. Many schools use differing criteria to label a student as gifted. Thus, some students who are considered gifted in one school may not be identified as gifted in another school. The phenomenon is often called “geographic giftedness” (Borland, 1989).

An additional problem with defining underachievement involves what would actually constitute a discrepancy between ability and achievement. If a student scores in the 99th percentile on an IQ test, should he or she score just as high on a standardized measure of achievement? Consequently, we should not believe that all gifted students should achieve the same on both measures (Janos & Robinson, 1985) or that ability and achievement should be perfectly correlated (Thorndike, 1963). Thorndike presents four reasons that these two should not be taken as mirror images and that measured achievement is less than a perfect insight into underachievement.

Thorndike's Cautions

The first reason Thorndike (1963) states for less than perfect measures are that no test is 100% reliable. Differences in scores result in sampling errors and depending on the day, the mood, or the health of a student, these scores can fluctuate. In addition, caution must be taken with regard to confidence intervals. An observed score of 130 on WISC-III is in the 98th percentile. The 90% confidence interval for a score of 130 is 124-134. If the student were to take the same test again, there is a 90% probability that his or her score would fall between 124 and 134. A score of 124 would put the student at the 95 percentile, while a score of 134 would place the student in the 99th percentile. Thus, it can be stated that with 95% confidence that this student's IQ places him or her in the top 5% of the population on this measure. However, there is still a 10% chance that this student's "real" IQ is lower than 124 or higher than 134 because of errors of measurement.

A second caution involves the heterogeneity of the criterion (Thorndike, 1963). With the use of standardized achievement test scores, one should expect a certain amount of heterogeneity in the criterion variable. This variability can be partially explained by the error of measurement of the criterion. If the criterion is academic achievement, such as a course grade, it is impossible to compare grades across subject areas or even across classes or students because of the variability in the content and presentation. Therefore, it is erroneous to compare grades in one class or to another class or from one student to another student because of the differences in teachers' curriculum, grading policies, and testing procedures. Just as standardized IQ tests are not 100% reliable, neither are

standardized achievement test scores. These tests are subject to errors of measurement due to content sampling, time sampling, and other related issues.

A third issue is limited scope in the predictors. Thorndike (1963) described, All behavior is completely determined. No one predictor will ever include all the determinants of a behavioral outcome. We have tended to become preoccupied with scholastic aptitude measures because they do correlate substantially with later achievement, and consequently do permit some improvement in the accuracy of predictions. But neither our psychological insights nor our statistical evidence give us reason to believe that a scholastic aptitude test measures all of the significant determiners of scholastic achievement. (p. 5)

Neisser et al. estimated that the correlation between IQ scores and GPA is approximately .5 (1996). Therefore, this moderate correlation between intelligence test scores and school grades means that IQ scores explain only 25% of the variance between school grades and IQ scores. Obviously, the remaining 75% of variance is determined by other factors. Such as motivation, personality characteristics, family environment, school environment, and peer pressure. Overall, the combination of the outside factors may account for more variance in achievement than ability alone (Thorndike, 1963).

The fourth reason not to take the correlation between measured intelligence and measured achievement too seriously involves the impact of varied experiences and environmental influences on the student's achievement. Health problems, family problems, and other individualized experiences can dramatically affect a student's achievement. For instance, a student with a severe eating disorder or with other

emotional or drug related issues may experience a major decline in academic achievement. It is crucial that we be aware of these other factors because they may have a greater impact on a student's achievement than what is initially expected (Reis & McCoach, 2000).

Concluding Issues Regarding the Definition of Gifted Underachievement

Richert (1991) summarizes the problems with defining underachievement in five major categories. These five issues summarize what has been discussed thus far.

1. *Confusion about the definition of underachievement.* As Dowdall and Colangelo (1982) have pointed out, definitions of underachievement vary and conflict. Most definitions of underachievement among the gifted do have the common factor of assuming that there is a discrepancy between potential ability and demonstrated achievement.
2. *Confusion about what constitutes gifted potential.* In the literature on gifted underachievers, potential is defined in a variety of ways, but most often it is related to IQ. Almost invariably, underachievement is defined in terms of academic achievement and is measured either by a standardized achievement test, grades, or meeting specific teacher expectations.
3. *Absence of clear distinctions between academic and gifted achievement.* Repeated studies (Hoyt, 1965; Taylor, Albo, Holland, & Brandt, 1985) have revealed no correlation, or sometimes even a small negative correlation, between academic achievement (good grades) and adult giftedness in a wide range of fields. This makes it clear that half of gifted adults were high

achievers in school—and half were not. Giftedness, or original contribution to a field, requires nonacademic abilities unrelated or even inversely related to school achievement, such as propensity for convergent thinking, conformity to expectations of teachers or test makers, meeting externally determined deadlines, paper and pencil evaluation—may well be inversely correlated with adult eminence or original contributions in virtually all fields. Therefore, research does not support either the use of academic achievement to measure gifted underachievement, or the use of academic underachievement to predict giftedness in adults.

4. *Underestimation of the amount and degree of underachievement among students with gifted potential.* At least 50% of students identified through IQ have been designated as academic underachievers (Gowan, 1957; National Commission on Excellence In Education, 1984; Raph, Godberg, & Passow, 1966; Terman & Oden, 1947). Yet the 50% figure does not include underachievement among students who were not identified because IQ was used.
5. *Development of counterproductive curriculum objectives for gifted underachievers.* There exists confusion between definitions of gifted and academic underachievement. It is highly questionable whether the goal for “underachieving” gifted student should be primarily academic achievement and higher standardized test scores. The bias that drives such goals has been

the pervasive myth that academic achievement is always the path to adult giftedness. (p. 139)

In conclusion, some operational definitions of gifted underachievement are specific (e.g., Redding, 1990) and others are broader and more inclusive (e.g., Rimm, 1997a). Operationally defining gifted underachievement provides researchers with a clearer picture of the composition of the sample being studied. “Operational definitions may provide clarity but they sacrifice flexibility and inclusiveness in a quest for precision” (Reis & McCoach, 2000, p. 156). Ford (1996) promotes using a more holistic approach to defining and identifying gifted underachievers: “Broad, inclusive definitions of underachievement support the notion that underachievement is a multidimensional construct that cannot be assessed with unidimensional instruments” (p. 54). Moreover, if our concern is to preserve and develop the potential of our children, it is imperative that we do not become stymied by a desire for statistical precision and reliability in measurement before educational needs are diagnosed and special treatment is offered to a child (Whitmore, 1980).

Vocabulary facilitates communication and without a common vocabulary, professionals may not know if they are discussing similar constructs. Clarifying the myriad of definitions of gifted underachievement will enable professionals to communicate and investigate the phenomenon more effectively (Reis, McCoach, 2000). In the end, a practical, multidimensional definition of underachievement that results in early identification and intervention would be most valuable.

1. Reduce external pressures as much as possible through such means as elimination of grades and emphasis on cooperation rather than competition.
2. Seek to understand the motivational makeup of the child and capitalize upon it in planning, pairing strengths with weaknesses, likes with dislikes, and so on.
3. Maximize the flexibility, alternatives, student choices, and opportunities for self-evaluation.
4. Intentionally develop the social skills and values of the child to prepare him or her for effective citizenship and possible leadership roles.
5. Build success and meaningful rewards for effort.
6. Develop in the students a rational understanding of the problems or limitations they must deal with.

Other interventions include strategies that teachers can utilize while attempting to reverse gifted underachievement (Whitmore, 1980):

Supportive Strategies. Use classroom techniques and designs that allow students to feel they are part of a “family” verses a “factory.” Include methods such as holding class meetings to discuss student concerns or designing curriculum activities based on the needs and interests of the children and allowing students to bypass assignments on subjects in which they have previously shown competence.

Intrinsic Strategies. These strategies incorporate the idea that students’ self-concepts as learners are tied closely to their desire to achieve academically. Thus, a classroom that invites positive attitudes is likely to encourage achievement. The teachers encourage attempts, not just successes; they value student input in creating classroom rules and

responsibilities; and they allow students to evaluate their own work before receiving a grade from the teacher.

Remedial Strategies. Teachers who are effective in reversing underachieving behaviors recognize that students are not perfect—that each child has specific strengths and weaknesses as well as social, emotional, and intellectual needs. With remedial strategies, students are given chances to excel in their areas of strength and interest while opportunities are provided to improve in specific areas of learning deficiencies. This remediation is done in a “safe” environment in which mistakes are considered a part of learning for everyone, including the teacher (Delisle, 1990)

Research that directly ties children’s perceptions of their gifts to their achievement behaviors remains to be conducted. However, McNabb (1997) suggests that teachers follow five specific suggestions when working with gifted underachievers until we find out more about the perceptions:

1. Emphasize the role of effort in learning focusing on the process and progress rather than on the outcome and external evaluation.
2. Sacrifice accuracy, occasionally, for risk taking.
3. Help students to see the relationship between their effort and outcomes.
4. Use rewards sparingly, and only to reinforce behaviors that are not already rewarding.
5. Model an incremental view of intelligence by emphasizing the importance of skill acquisition and downplaying normative performance.

In the end, underachievement requires modified teaching strategies which aim at enhancing the student's self-concept through improved academic success (Wolfe, 1990). Gifted underachievers need the chance to be creative in challenging, student-centered learning activities that raise self-concept and achievement.

Ramifications for Parents

Rimm (1997b) recommends the following guidelines for parenting gifted children who are underachieving. These suggestions emerge from comparisons of gifted underachievers with high achievers.

The preschool years. Child-centered environments are typical for most gifted children. However, stay away from putting the adult status on gifted children. This may carry the risk of "disempowerment" later on. Some praise is healthy and encouraging, but too much praise and admiration can confer a "specialness" that is hard to adjust to once in school. Dependence on too much positive reinforcement may reduce intrinsically motivated behaviors (Rimm, 1990).

Parenting styles. Styles of parenting seem to be less important than consistency in the parenting style. Dissimilarities between parents, with one expecting too much and the other overprotecting, can be the main source for problems for children who underachieve.

Homework and learning. Gifted children may not need regular help with their homework. Positive monitoring of homework and study habits is effective. Most importantly, encourage intrinsically interesting learning experiences and independence.

Modeling. Parents should model valuing personal careers and work to promote a child's achievement. Children internalize what they see and hear.

Organization. Reasonable standards of organization provide a model for organization and leaves more time for family time and independence.

In summary, if parents aren't clear about the achievement messages they give their children, their children may underachieve (Rimm, 1996). It is important to keep in mind Rimm's Law #1: Children are more likely to be achievers if their parents join together to give the same clear and positive message about school effort and expectations (Rimm, 1995).

Conclusion

Ultimately, gifted underachievers are a very heterogeneous group with diverse behavior, abilities and interests. Because they underachieve for a variety of reasons, no one intervention strategy can possibly work for all gifted underachievers. We should individualize programs for gifted underachieving students, at least as much as for achieving gifted students or for students with disabilities (Reis & McCoach, 2000). We should also provide a menu of intervention options to each student and his or her teachers and parents. These interventions may include any of the previously mentioned (e.g., differentiation options, such as curriculum compacting, grade or subject skipping, counseling, self-regulation training, etc). We must also realize the influences of the home, peer, and educational environments on achievement (Fine & Pitts, 1980). It is usually a combination of causal factors, not just one specific factor that leads to underachievement. We may not be able to control each and every external or internal factor that may contribute to a child's underachievement. However, we can be that one

individual who supports and believes in a gifted underachiever and who helps them break through the web of underachievement.

CHAPTER III

SUMMARY, IMPLICATIONS, AND CONCLUSION

Overall, it seems that the milieu of gifted underachievement is expansive and complex, yet unyielding in its perplexity. However, we do know that:

1. "Gifted underachievers, like the population as a whole, come in many shapes and sizes and in a variety of disguises. These are often the students who mystify us with their knowledge about a particular subject. They may on occasion exhibit a high level of skill or creativity and yet frustrate us because they seemingly refuse to participate in a way that leads to traditional academic achievement" (Roach & Bell, 1989, p. 67).
2. We also know that gifted students do have special needs; needs that need to be met by our educational systems. In some schools, giftedness is often thought of as an "exceptionality." However, it has also been said that giftedness may be the least accepted and understood reality of special education (Christopher, 1989).
3. There are a variety of causes of underachievement, some are environmental and involve cultural and specific school factors, and some are personal, involving family and self-concept factors (Gallagher, 1991).

Unfortunately, we often forget that gifted children are as susceptible to these factors that cause underachievement, as are children of normal intelligence (Supplee, 1989). We know that gifted children are not necessarily academically able in all areas and some areas that they may be gifted in can be easily overlooked. Gifted children are

also not small adults (Rimm, 1997b). Just because they may have a large vocabulary, doesn't necessarily mean that they correspond with adults emotionally and socially.

In the end, we cannot expect gifted children to develop superior academic skills unchallenged by a conventional curriculum after accumulating years of successful school experience without developing the skills ultimately essential for meaningful academic success (Christopher, 1989). We must find new ways to help reverse the underachievement in our gifted students and motivate them to reach their maximum potential. With continued research, we can reach these goals and move beyond what we already know to new areas of significant insight and awareness.

Future Research

Even though gifted underachievement is widely discussed in the professional literature, it is still vague as to what would be the most precise, yet applicable definition. In the absence of a clear, precise definition of gifted underachievement we are faced with the restrictions in finding a suitable identification process, a concise list of characteristics, the real causes, and a suitable line of successful interventions. The psychological characteristics of gifted underachievers seem to vary and sometimes contradict each other.

Furthermore, the inadequate research continues to examine the cause and cures of gifted underachievement. More longitudinal data is needed to precisely indicate which path to take next. More research is needed to accurately reflect the characteristics and the personal needs of gifted underachievers. With such a limited amount of successful interventions, more research is needed to address the need for effective interventions that

target, not only the underachiever, but other environmental issues that have been neglected. For instance, we may need to switch our focus to educational counseling, curriculum modification or differentiation, and strive to find the solutions that fit each individual gifted underachiever.

Thus, future research should undoubtedly focus on establishing an applicable definition and identification process to help us identify the profile and prevalence of gifted underachievers (Gallagher, 1991). We really don't know if we are talking about a fraction of one or ten to twenty percent of students who are gifted and need special modifications. This may be an unrealistic goal, but any research that can help us better identify gifted underachievers is greatly needed.

We must move beyond correlational studies of common characteristics of gifted underachievers and start to explore links and flow of causality among these different characteristics and student achievement. For example, many authors (e.g., Belcastro, 1985; Bricklin & Bricklin, 1967; Bruns, 1992; Diaz, 1998; Dowdall & Colangelo, 1982; Fine and Pitts, 1980; Fink, 1965; Ford, 1996; Kanoy, Johnson, & Kanoy, 1980; Schunk, 1998; Supplee, 1990; Van Boxtel & Mönks, 1992; Whitmore, 1980) suggest that self-concept appears to correlate with student achievement. Reis and McCoach (2000) point out that this brings up an interesting question: Does low self-concept cause underachievement or does underachievement cause a decline in self-concept, or does a third unknown factor influence both underachievement and self-concept? The area of self-concept and underachievement has not been adequately addressed in past research.

Reis and McCoach (2000) suggest that longitudinal studies of achievers and underachievers and the development of structural equations models of achievement and underachievement may help to clarify these questions. Other research that would help explain the flow of causality between student achievement and self-efficacy, self-regulation, student attitudes, peer attitudes and other factors that may influence underachievement may help educators and researchers develop more effective intervention strategies for gifted underachievement.

Another interesting area of new research could involve whether and how gifted underachievers differ from non-gifted underachievers. Most research compares gifted underachievers only to their same mental ability cohorts: gifted achievers (McCall, Evahn, & Kratzer, 1992). These studies have found qualitative differences between gifted achievers and gifted underachievers. Thus, an interesting line of study would be to compare gifted underachievers to other students who are at the same achievement level as measured by GPA and other achievement tests, apart from measured mental ability (Reis & McCoach, 2000). Some questions may be: Do gifted underachievers resemble lower achieving students? And, do gifted underachievers have more in common with lower achievers who are not gifted than with gifted achievers? Dowdall & Colangelo (1992) speculate that gifted underachievers have more in common with underachievers than with gifted achievers. Future research might want to investigate whether interventions that are successful with gifted students are also successful with underachievers in general.

As a final point, researchers must translate their knowledge and insights about the causes and correlates of underachievement into models and strategies that are applicable

and more effective in building prevention and intervention programs in the schools. First of all, researchers need to explore the relationships between academic achievement and specific classroom practices. For instance, are schools that are already differentiating instruction or high-ability students have fewer incidences of underachievement than schools that are not yet modifying their curriculum? Research has suggested that providing differentiated curriculum, such as compacting or Type III enrichment opportunities, may actually increase achievement among bright and gifted students (Reis, Burns, & Renzulli, 1992). Future research could also look into these programs and investigate whether full or part-time special modification is beneficial to gifted students and at what age is it the most critical.

No one intervention will work for each and every underachiever. Future research will need to look at which combinations of interventions work with which type of underachiever. Because family, school, and individual factors all seem to contribute to underachievement, we must find interventions that target all of these areas. Different types of underachievers may require different amounts of counseling, curriculum modification, etc. With the need for such a complex approach, research in this area will need to become more sophisticated and will need to implement a variety of design techniques.

Concluding Thoughts

There is no simple answer to the complicated question of gifted underachievement. A gifted underachiever is a "precious talent that is being wasted, not only for the individual, but for our nation" (Roach & Bell, 1989, p. 68). Ultimately, it is

the choice of the underachievers to reverse their harmful patterns. However, it is the nation's responsibility to lead them in the right direction and give them the support and encouragement they so desperately need. Instead of encouraging gifted individuals to automatically adapt to the traditional system, we should invite them to use their unique skills to achieve their goals. By building on these passions, underachievers can learn to be successful in an often unaccepting world (Willings, 1998).

Because giftedness has traditionally been equated with academic talent and high academic achievement, the stereotype persists of the clever, enthusiastic, well-rounded gifted student who seems to "do everything well." Many educators have bought into this stereotype, thus closing the door on the gifted student who does not meet these stereotypical expectations (Roach & Bell, 1989, p. 67).

We can't continue to let these exceptional students fall through the cracks. We need to change our expectations and stereotypes and use this knowledge to educate others, especially those who are in charge of teaching our children. Consequently, educators can't do it all. They need the support from other resources in the community and within the school. School psychologists, special education consultants, gifted and talented coordinators, and other paraprofessionals need to "step up to the plate" and provide this support. Through the education of others and ourselves, we can win this battle. In the end, we need to combine what we know with what we think we know and use that knowledge to help us find answers to what we still don't know.

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