DOMAIN-SPECIFIC SELF-CONCEPTS OF ELEMENTARY SCHOOL CHILDREN RELATED TO PLACEMENT OR NONPLACEMENT IN A GIFTED PROGRAM

by

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ABSTRACT

The purpose of the study was two-fold: (a) to describe and compare the characteristics of the differentiated self-concept of three different ability groups of children (considering also differences by gender and grade level) with particular emphasis on the academic domain and (b) to explore the psychometric characteristics of the self-worth system as a test of some aspects of Harter's cognitive developmental theory about the determinants of self-worth in children in late childhood (Grades 5, 6, and 7).

The subjects (N = 170) were upper-elementary children from schools in British Columbia. A variety of measures obtained from average children, gifted children, and excluded children (assessed for a gifted program but not accepted) were compared in five domains: scholastic, athletic, physical appearance, behavioral conduct, and social acceptance. The Self-Perception Profile for Children (Harter, 1985) was used to measure the children's perceptions of competence and evaluations of importance. In addition, a questionnaire was written for this study to collect reports of reference groups used by the three ability groups in making social comparisons of competence.

The results suggest that the higher global self-esteem of gifted and excluded children revealed in this study is determined by judgements of superior performance in specific domains (scholastic competence and behavioral conduct), not from a global sense of superiority. Gifted and excluded children appear to be psychometrically similar to average children in areas where superior intellectual ability is not salient (social acceptance by peers and physical appearance). All three groups of children reported general agreement about the degree of importance of the five domains in their lives with one notable exception, athletics. The gender stereotypes about boys' greater ego-involvement in athletics seem to be upheld, especially for average and excluded boys, but gifted boys and all three ability levels of girls reported lower scores in both competence and importance ratings for athletics. None of the analyses by grade level revealed significant differences. Moderate support was demonstrated for Harter's theory that global self-worth can be predicted from the size of the discrepancy between judgements about competence and importance. Gifted children apparently chose average children as a reference group to enhance their sense of self-worth in the scholastic domain, but excluded children chose the gifted children as a reference group to achieve cognitive clarity on the relative merits of their performance in the classroom.

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DEDICATION

To Michael, Gyllian, and Holly
for their unconditional support and encouragement
in this year of graduate study away from home

AND

To my mother, Jayne Wiegert,
whose influence has engendered in me
a lifelong love of learning

CHAPTER I

Introduction

The purpose of this study was to examine some aspects of the self-concepts of children whose differing levels of academic achievement were signified by the fact that some of them had been identified as gifted (hereafter called gifted), others had been assessed and identified as not gifted (hereafter called excluded), and still others had not even been considered as having gifted potential (hereafter called average). The author investigated some aspects of self-concept that are hypothesized to determine a sense of self-worth as a student and motivation to achieve in school. The study was, in part, a test of a theory of the determinants of global self-worth and, in part, a comparative description of the variations in self-concept among the three groups of children (gifted, average, and excluded).

The construct of self-concept has been the subject of a vast number of studies and has inspired many commercial educational packages and books promoting programs that have been implemented in many schools. And yet, there have been very few results to show for all the effort (Hansford & Hattie, 1982; Harter, 1986; Rosenberg, 1986; Shavelson, Hubner, & Stanton, 1976; Wylie, 1974, 1979). Why, then, does the construct continue to demonstrate such power?

What is the function of the self-concept? Howard Gardner has answered this question by assigning the self the prime executive function in his theory of multiple intelligences (1983).

> ...in my view, every society offers at least a tacit sense of a person or a self, rooted in the individual's own personal knowledge and feelings....In certain cultures, such as our own, the emphasis on the individual self may become sufficiently extreme that it leads to the appearance of a second-order capacity, which presides over and mediates among the other forms and lines of intelligence. (p. 276).

The rationale for choosing the self-concept as a focus in this study is certainly bolstered by the fact that the sense of self or self-concept plays s1uch a powerful role (at least in Western culture) in a major theory of intelligence. However, the sceptical and scientific reader, aware that research into the construct of self-concept has presented a far from clear empirical picture, may echo the words of Susan Harter (1986), a psychologist who is one of the leading researchers into the construct of self-concept and its major elements:

> What function does one's sense of global self-worth actually play, does it serve to mediate particular behaviors of interest? In our zeal for assessing the self-perceptions of children, have we given careful thought to what the concept of self-worth buys us in the market place, to what it predicts? Perhaps constructs such as self-worth are epiphenomenal, and we would do better to focus on more situation-specific indices in our predictions of a child's motivation, affect, and behavior. (p. 138)

In the following chapters, the question of what the concept of self-worth can predict will be more fully

explored in the discussion of Harter's (1982, 1985a, 1985b, 1986) cognitive developmental theory of self-worth and its application to special populations for whom ability and evaluations of ability are highly salient such as gifted and other high ability children (excluded children). The author of the present study assumed that older children see ability as a stable construct, that children are motivated to assess their ability level, and that children use social comparison information in evaluating their ability. If this is so, what, then, is the effect on children's own assessments of ability when some of them are officially designated as academically gifted? How might the label of gifted or (implicitly) nongifted affect the value that children assign to schoolwork or other nonacademic domains of their lives? What effect does identification have on their choice of comparison groups? How do the assessment processes of ability and valuing in specific domains of a child's life (e.g., the academic domain) relate to more general feelings of self-esteem for oneself as a person, especially if one assumes that ability is stable and the process of identification as gifted or nongifted is definitive and global.

One of the conceptual problems that arise with global designations such as "gifted" is the tendency to overgeneralize the specific label of academically gifted into a general label of global giftedness. Manaster and

Powell (1983) suggest that we create a social environment which is healthier for the gifted child if we adopt the attitude: "The gifted must be seen as average with gifts, not as superior with faults" (p. 73). In what ways, then, is the average child (with gifts) different from the average child (without gifts?) and from the child who is highly able, but also implicitly designated as "nongifted"?

A vehicle expressly designed to examine some of the ways in which children differ is The Self-Perception Profile for Children (Harter, 1985b), a measure of self-concept in which children report their perceptions of their abilities in various domains and the values they assign to these domains. Harter's careful and systematic approach to construct development, theory, and measurement of self-concept has encouraged the present investigator to make another addition to the self-concept literature on comparisons of gifted with other populations. It was hoped that new findings about the self-concept of the gifted would emerge with the use of a different and superior instrument than has been used in previous studies.

In addition, the present study was also seen as another verification attempt for Harter's model of self-worth. The focus of the study was on a comparison of the self-concept of children in the context of their educational settings, because the definition of giftedness operative in this study related to intellectual giftedness. Thus, self-concept in

the scholastic domain was the primary consideration and self-concept in other domains was examined mainly to bring into sharper contrast the comparisons of the scholastic self-concepts exhibited by the three groups of children (average, excluded, and gifted).

There are three additional influences on self-concept which are investigated in this study. Although the research results have been inconsistent and inconclusive with respect to the effects of gender on self-concept, many writers (e.g., Fox, 1978; Hollinger, 1983; Reis, 1987) in the area of gifted education have found gender-related effects on achievement motivation for gifted females. Therefore, comparisons of self-concept scores are made by gender in this study. A finding which, by contrast, has been well-documented (e.g., Harter, 1983; Rosenberg, 1979, 1986) is the influence of age-related changes on self-concept. Consequently, analyses were also made on the basis of grade level to determine if there were any age-related trends. The final contribution of the study is its application of the concepts of social comparison and reference groups to illuminate findings of similarities and differences of domain-specific self-concepts among the three different levels of ability.

CHAPTER II

Review of the Literature

Wylie's (1974, 1979) two-volume encyclopedic review of the self-concept literature concludes on a note of frustration and optimism. The frustration is over the "yield from the very large number of researches considered in this book" which are seen as "disappointing and ambiguous". The optimism is engendered by the hope that, having sufficiently explored "simplistic hypotheses" to their dead-end, researchers in the field will now begin to approach "inquiry with the sophistication of thought and method appropriate to the subtlety and complexity of these constructs, their hypothetical relationships among themselves, and their hypothetical relationships with other variables" (pp. 700-701).

Wylie's theme has been echoed in an influential article by Shavelson, Hubner, and Stanton (1976) who stated, "...it appears that self-concept research has addressed itself to substantive problems before problems of definition, measurement, and interpretation have been resolved" (p. 412). Their note of optimism was to declare that the construct is important enough to make construct validation research "vitally needed", because enhancement of students' self-concept is important either as an educational outcome in itself or as a moderator variable of achievement.

To date, the authors of most self-concept studies, including those in the gifted field, have examined relationships between a measure of self-concept and measures of other constructs such as achievement or creativity (e.g., Milgram & Milgram, 1976; Dean, 1977); or differences in the means of self-concept scores among different populations of students such as gifted, average, and/or handicapped, (e.g., O'Such, Havertape & Pierce, 1979; Ringness, 1961; Rodgers, 1979; Stopper, 1978; Winne, Woodlands & Wong, 1982); or changes in self-concept attributable to some treatment, such as a gifted program of some sort, (e.g., Coleman & Fults, 1982, 1983, 1985; Kolloff & Feldhusen, 1984; Rodgers, 1979; Stopper, 1978). Shavelson et al. (1976) conclude with a judgement about self-concept studies: taken individually, they may provide important insights into factors that motivate pupils, but considered as a body of research, the generalizability of self-concept findings is "severely limited" and data on students' self-concepts is "ambiguous" owing to problems of definition, measurement, and interpretation. The review of self-concept studies relating to the area of gifted education which follows reveals the same problems of definition, measurement, interpretation as discussed above.

Authors of self-concept studies with gifted students generally have two reasons for considering self-concept. One reason is related to the goal of developing programs

which enhance healthy self-concepts as a desirable outcome in and of itself. The other reason is related to the goal of enhancing gifted behavior and achievement through the mediating influence of a healthy self-concept. Many educators in addition to those in gifted education have assumed unhesitatingly that achievement and ability variables are strongly related to self-assessments of achievement and ability, as well as over-all self-esteem (Wylie, 1979). Wylie concluded that "the correlations of achievement indices and overall self-regard indices tend to be small in absolute terms, offering no support to the commonly accepted lore that achievement and self-regard are strongly associated" (p.406). Furthermore, a meta-analysis of 128 studies representing a total population of 202,823 persons (Hansford & Hattie, 1982) on the relationship between various self-measures and measures of performance and achievement revealed that "it was not possible to reject a null hypothesis that the true relationship between measures of self and performance/achievement is zero" (p. 127). The authors state "Given the volume and diversity of the literature, it is possible to find some support for virtually any viewpoint regarding the relationship between self and performance" (p. 126).

The preceding statement seems to present a dilemma for the present study. If the classifications of the three groups of children in the present study are an accurate

representation of their ability (average, above-average, and superior), what interpretation can be made of the relationship between the covariations in self-concept and ability, if any exist? The picture looks bleak, and yet there are several hints in the description of the meta-analysis which offer hope. Shavelson et al. (1976) mentioned the problems of self-concept definitions and measurements as obstacles to making generalizations across studies. Hansford and Hattie (1982) found no less than 15 terms used for describing the self. The two terms used with greatest frequency, "self-concept" and "self-esteem", seemed to result in similar correlations (.18 and .22) with achievement measures, a somewhat puzzling result as self-concept and self-esteem are distinctly different concepts, in that self-concept is the total organization of ideas about the self, one such idea being self-esteem which is the product of self-evaluation. Nevertheless, many writers use the terms interchangably as if they meant the same thing. However construed, the low correlations with measures of achievement of the terms, self-esteem and self-concept, contrasted sharply with the correlations of the more specific term "self-concept of ability" (.42) with measures of achievement.

On the measurement issue, Hansford and Hattie (1982) reported 58 tests relating to the self and only three of these tests (Bills, 1951; Coopersmith, 1959; Piers & Harris,

1964) were each used in more than 15 studies. The vast majority of researchers preferred to devise their own instruments specific to a particular study. The "home-made" instruments were not much better and often worse in terms of correlations (.16 to .24) between self-measure and performance measure than the three major published tests. There was one notable exception, however. The Brookover test (Brookover, Paterson, & Thomas, 1962) with its specific focus on academic ability, produced a very high and significant relationship (.43) of academic self-concept and measures of achievement. Note that when a definition or test of self-concept is domain-specific, such as the Brookover test, the relationship between academic self-concept and measures of achievement become very much higher than when the definition of self-concept is global and unidimensional (i.e., not multifacted or domain-specific) and the measurement is represented by one score which sums responses to items across a variety of domain contents (which is true of the three major tests).

This focus on domain-specific results provides an insight into the reasons for reports of the unimpressive or inconsistent relationships between the construct of self-concept with measures of achievement reported in the self-concept literature. Self-concept as a unidimensional global construct has had little predictive power but, when conceived as a multifaceted construct, it seems to grow in

power. The multifaceted feature of self-concept is one of seven features which Shavelson et al. (1976) have identified as critical to the construct definition of self-concept. The others are: organized, hierarchical, stable, developmental, evaluative, and differentiable. Each of these features can be turned into an empirical research question, but a more desirable plan would be for a researcher to construct a theory of the self-system, "translate theoretical concepts into researchable formulations which can be empirically tested within a developmental context" (Harter, 1978, p. 34). Harter and her associates are engaged in just such programmatic research with the purpose of exploring the antecedents, consequences, and correlates of self-concept, along with their implications for educational practices.

The discussion of Harter's model of the self-concept properly begins with her definition of self. Harter regards the self of children as "an active cognitive construction, continually undergoing developmental change" (1983, p. 292). She sees the self as a self-theory, constructed to organize one's thinking about one's relationship to the social world and to direct one's behavior. This view of the self as a self-theory has had many proponents (e.g., Epstein, 1973; Greenwald, 1980), although Epstein and Greenwald wrote about the self-theory as experienced by adults. Harter has taken the concept of self-theory and is investigating how the

nature of the theory changes as the child's cognitive structures change. Thus, her approach meets two of Shavelson et al.'s (1976) critical functions: organized and developmental.

Harter (1986) has also considered in her theory the other critical functions. The issue of a multifacted self-concept as opposed to a global or nondifferentiated self-concept has been resolved by incorporating both into a hierarchical model of the self. Harter agrees with Rosenberg (1979, 1986) that individuals do have a generalized sense of themselves to which they assign positive or negative values that then create self-affect. Rosenberg postulates that the various facets of the self are weighed, hierarchized, and combined according to some complex equation of which the individual is probably unaware. Rosenberg has constructed a measure to tap this sense of global self-worth directly. Harter believes that it is possible to identify and measure not only the global self-concept but also the important underlying facets (or domains) which enter into the complex equation of self-worth. In her model, elementary children have five domains which impact on global self-worth: scholastic competence, athletic competence, social acceptance by peers, behavioral conduct, and physical appearance. However, the child's assessments of competence or adequacy in each domain are not the only factors which influence global self-worth.

It is also critical to assess the importance that a child ascribes to each domain, because a combination of the importance hierarchy and the evaluative judgements of competence or adequacy allow global self-worth to be predicted.

Harter has constructed a measure, the Self-Perception Profile for Children (1985), which assesses both the judgements of competence and of importance in each of the five critical domains. This instrument was used in this study and will be discussed in more detail in the Methods chapter. It is important to note, however, that this instrument and its predecessor, the Perceived Competence Scale for Children (Harter, 1982) were both extensively validated through the multitrait, multimethod approach advocated by Shavelson, et al. (1976). As part of her emphasis on the developmental nature of the self-concept, Harter has designed additional versions of her scale: a pictorial version for preschool and primary children (Harter & Pike, 1984), as well as versions for adolescents, college students, and adults. Harter and her research associates have used the elementary versions of the scale to study average children as well as gifted, learning disabled, mentally retarded, and chronically ill children. They have discovered that the scale has different psychometric properties with special populations (learning disabled and mentally retarded children). An impressive cross-cultural

validation study using the four scales of the 1982 instrument was conducted by Stigler, Smith, & Mao (1985) who tested 714 fifth-grade children in Taiwan. "Most striking is the nearly perfect replication of the factorial validity of the four subscales in the Chinese sample. Also similar across the 2 groups [Chinese sample and American normative group] is a high correlation between perceived cognitive competence and actual achievement in school" (p.1259).

The above discussion of the scales serves to highlight the interaction between theory, measurement, and construct validation. Harter was guided by her theory in constructing her instrument, but unlike some (e.g., Piers & Harris, 1969-see discussion in Harter, 1986), she has attempted systematically to test and revise her instrument logically and empirically through the use of factor analyses, path analyses, and correlational and experimental studies. The careful work which Harter and her associates have undertaken is beginning to address the shortcomings of definition and measurement which has plagued the field of self-concept research. (See Harter, 1982, 1983, 1985a, 1985b, 1986, for a fuller description of her programmatic research.)

Harter's theory has postulated a number of factors which enter into the complicated prediction of global self-worth. Harter's results suggest that one of the major determinants is what she calls the competence minus importance discrepancy (the competence judgements in the

various domains and the importance that children ascribe to these domains). Another important source of global self-worth is children's perceptions of social support and positive regard that they get from significant others. Also important are perceptions of control, the extent to which children assume reponsibility for their successes and failures. Another important factor in predicting global self-worth is the accuracy of the judgements of competence or adequacy and the affective reactions to these judgements. In the present study, only three influences on global self-worth were measured, two of them being the judgements of competence and value judgements of importance, the third being a measure of social comparison processes to be discussed later. These three influences were chosen for study for theoretical and practical reasons: (a) they comprised a conceptual unit of influence on self-worth which made a predictive test of Harter's theory possible, (b) they were contained within one instrument which made the collection of data much easier, (c) many of the questions raised in the literature about the self-concept of gifted students could be most effectively addressed through focusing on these three features, and (d) there were more published accounts of research in this area by Harter and others which made it possible to compare my results with other results.

Even assuming that we can make accurate measurements and predictions of self-worth, the so-what question arises again. Or as Harter has phrased it, what does the concept of self-worth buy us in the market place? Hansford and Hattie (1982) in their meta-analysis of studies on self-concept and achievement reported that the hypothesis of a zero relationship between achievement and self-concept cannot be rejected, but the studies analyzed through the meta-analysis were based almost entirely on global self-concept measures. To predict achievement, Harter has chosen a more complex focus on domain-specific judgements of competence modified by value judgements of importance and influences of social support. Using path analysis, Harter (1986) has tested a model in which the competence and importance discrepancy predicts self-worth with a path coefficient of .40. The discrepancy factor also directly influences motivation with a path coefficient of .15. The perceptions of social support and positive regard influence self-worth with a path coefficient of .40. Self-worth in turn influences affect with a path coefficient of .58 and affect influences achievement motivation with a path coefficient of .38. Social support/positive regard also directly influences affect and motivation with path coefficients of .29 and .14, respectively. In other words, Harter's model says that in the cognitive domain, actual achievement predicts evaluation of academic competence which

in turn directly influences affective reactions which in turn influence motivation for academic tasks which cycles back to influence achievement behavior.

By now, the reader will appreciate that Harter has abandoned the "simplistic hypotheses" so rightly criticized by Wylie in the quotation which introduced this review of the literature. There are many other themes which Harter and her associates have pursued in their quest to understand the antecedents, correlates and consequences of the self-concept, such as intrinsic/extrinsic motivation (Harter & Connell, 1984) and the role of affect and beneffectance (Harter, 1985a). However, only one theme remains to be explored in the context of this study and that is the theme of social comparison processes. Harter (1985b) states

> Our research has also documented the fact that children's scores are directly influenced by the particular social reference groups they are employing. In certain cases, a seemingly puzzling pattern of scores will be obtained, unless one determines subjects' social comparison group. For example, the scholastic competence scores of mainstreamed mentally retarded children (50 to 70 IQ range) are higher (Silon & Harter, 1985) than the scores of mainstreamed learning disabled children within the normal range of intelligence (Renick, 1985). Individual interviews revealed that the mainstreamed retarded child compares his/her performance to other mentally retarded children, whereas the learning disabled child's comparison group constitutes the regular classroom children. Thus, the mentally retarded child does not consider his/her scholastic performance to be deficient, compared to other mentally retarded children, whereas the learning disabled child feels that they [sic] are less scholastically competent, compared to most regular classroom children. In another study (Harter & Zumpf, 1986) we found that the scores of intellectually gifted children vary,

> depending upon whether they are comparing themselves to other gifted students or to pupils in the regular classroom. It is urged, therefore, that one obtain information on the particular social comparison group employed, especially if one is dealing with special populations (p. 22).

There are two concepts which need to be carefully distinguished in this discussion, for they have quite different psychological properties. Tesser and Campbell (1983) discuss the concept of the social comparison theory as originally articulated by Festinger (1954) which suggests that, in the absence of objective standards of comparison, people will employ others in their environment as the bases for making estimates of competence. And, given the choice of relatively similar or dissimilar others, similar others are more likely to be selected as the bases for social comparisons. Campbell and Tesser suggest that Festinger's theory assumes that people are seeking cognitive clarity, rather than self-enhancement per se, i.e., one is seeking the answer to the question "How am I doing?" by comparing one's performance with someone else's performance who is similar enough to give a meaningful and fair comparison.

But, suggest Campbell and Tesser, there is another dynamic to social comparison which seeks to maintain or enhance self-evaluation. This dynamic process allows one to enhance or maintain self-esteem by unconsciously manipulating the factors of closeness, relevance, reflection/comparison and performance. For example, we can

enhance our feelings of self-esteem through the "pride of reflection", i.e., basking in the glory of someone else's performance. If we are sufficiently close to this person, if the quality of the performance is sufficiently good, and if the domain of performance is sufficiently remote from domains that we claim competence in, we will bask, i.e., take pleasure and self-regard from the performance rather as if it were our own. However, if the domain of performance is relevant to a domain in which we are ego-involved, and the quality of the performance is good, and the relationship is close, we will feel the "pain of comparison". There are a number of ways in which we will avoid this pain, according to Tesser and Campbell. We may be able to deny the relevance of the performance to our own situation; we may be able to denigrate the quality of another's performance; or we may attempt to deidentify with the performer. Tesser and Campbell have undertaken some interesting experiments in the laboratory and in natural settings which have provided empirical support for their self-evaluation maintenance model (Tesser, 1980; Tesser & Campbell, 1983).

Researchers (Bandura, 1982; Rosenberg, 1979) who have investigated the information-seeking function of social comparisons (in contrast to the self-esteem maintenance function) have indicated that such comparisons play an important role in the development of self-judgements. For example, Bandura sees vicarious information gained through

social comparisons as an important source of information for making judgements of self-efficacy. Rosenberg states that "The principle of social comparison is fundamental to self-concept formation..." (p. 67), but he has a caution: the principle is powerful, but too general. "...it is always easy for the investigator to think of some plausible group with which the individual is presumably comparing himself and to explain his findings in these terms" (p. 68-69). Harter's instructions to find out rather than assume are well-founded!

A question regarding the developmental trends of the process of social comparison may legitimately be raised. To what extent do children engage in this process and at what ages? This question has been investigated by a number of people (e.g., Ruble, Feldman, & Boggiano, 1976; Suls & Mullen, 1982). Suls and Mullen have developed a life-span model of the process of social comparison. They make two points. First, there are three major modes of self-evaluation: social comparisons with similar others, social comparison with dissimilar others, and temporal comparisons (comparing one's performance in the present with one's performance in the past). Second, the choice of a mode may depend mainly on the cognitive developmental level of the individual seeking information, on the relative complexity of the performance that must be observed, and on situational and societal factors.

In Suls and Mullen's (1982) life-span model, the use of the mode of social comparisons with similar others is highest in the late childhood, adolescence, and young adulthood period (ages 8 to 40). By contrast, social comparisons with dissimilar others is highest in middle childhood (ages 4 to 8) and middle age (ages 40 to 65), but drops to its lowest point of preference during ages 8 to 40. Temporal comparisons appear around age 3 or 4 and increasingly predominate for a few years, then remain at a steady level throughout middle life, and drop in later years (age 65 and older). Suls and Muller cite evidence for their model, although most of the empirical studies relate to early childhood, college-age, and older adult populations. All of the authors cited in this paragraph agree that the preference for the use of social comparisons of similar others does not appear until around the age of eight.

If we accept the findings that children, eight years and up, have the cognitive maturity and the motivation to engage in social comparisons, the question still arises: with whom do they compare themselves? Hyman and Singer (1971) discussed the concept of reference group which has been helpful in puzzling out unexpected results, particularly in the area of self-measures. The idea, briefly, is that individuals can choose the group or prototypical individual as a reference, that this group need not necessarily be one of which they are a member, and that

the choice of reference group can function to maintain self-esteem. This theory has been tested extensively with various special populations; the research relevant to the present study deals with children who have deviant learning abilities or styles, i.e., learning disabled and gifted.

A powerful study by Rogers, Smith, and Coleman (1978) demonstrated empirically that academic achievement and self-concept were positively related and that the self-concept and academic achievement relationship was strongest when academic standing within immediate peer-reference groups (i.e., classrooms) was incorporated into the analysis. Rogers et al. concluded that "the dimension of self-concept that should be most sensitive to within-classroom social comparisons is self-concept of academic ability" (p. 55). Strang, Smith, and Rogers (1978) compared the self-concepts of academically handicapped children who were either in self-contained classrooms, or mainstreamed for part of the day. They found that the partly mainstreamed children who were instructed to respond to the self-report measure as if they were mainstreamed for the whole day showed a decline in self-regard, whereas those children wholly or partially in special classes with other handicapped children, who thus still had a reference group available to them that provided opportunities for comparisons which would enhance self-regard, apparently chose the reference group of handicapped children and either

reported no diminished self-regard or reported augmented self-regard. Another study which compared the self-concepts among learning disabled, normal, and gifted students (Winne, Woodlands, & Wong, 1982) came to the same conclusions.

In contrast to the above studies where children appeared to use a reference group to enhance self-esteem, the following group of studies reported the reverse. Stopper (1978) contrasted two gifted groups, one in a special program and the other in regular classes, with average children in an elementary school. Sixth grade children in the special gifted program felt less secure about themselves as learners in the academic domain than the children in the other groups. Similarly, Rodgers (1979) compared two groups of gifted children, both eligible for a gifted program. One group of gifted attended the program one day a week; the other group remained in the regular class. Over a seven-month period, the self-concept scores of the gifted children in the gifted program decreased, whereas the self-concept scores of the gifted children who remained in the regular classroom increased.

Coleman and Fults (1982, 1983, 1985) have done a series of studies on the impact of inclusion in gifted programs on the self-concept of gifted children. In every study, some of the gifted children demonstrated lowered global self-concept during the operation of the program. However, in the 1982 study, when the program ended and the children

returned full-time to their regular classrooms, their self-concept returned to its preprogram level. Coleman and Fults suggested that the decline and subsequent increase in self-concept was due to a change in reference groups used for social comparisons of ability. They found further support for this idea in one study (1985) where they separated the "lower" IQ (i.e., IQs in the 130 to 140 range) from the higher IQs (above 140). Coleman and Fults reported that the self-concept of the higher IQ children remained constant before and during the gifted programming, whereas the lower IQ children suffered a decline in self-concept after placement. Presumably, the lower IQ children were using the gifted group as their new reference group. Coleman and Fults did not report whether the children were explicitly asked about their reference groups, although Harter (1985) and Rosenberg (1979) have advised researchers to seek information on this point.

The research results regarding reference groups, gifted programs, and self-concept are more contradictory compared to the results on academically handicapped children. Perhaps part of the problem is a consequence of the use in the gifted studies of instruments like the Piers-Harris (1969) self-concept test or the Coopersmith (1967) test which measure global self-concept. By contrast, the studies cited on self-concept and academically handicapped children all used measures which included, or were specific for,

self-concept of academic ability. The weak relationship between ability/achievement and global self-concept has already been discussed.

Several researchers, in contrast to those discussed above, found no reported loss of self-concept (presumably, referring to self-esteem) associated with gifted programming. In contrast to the 1985 study by Coleman and Fults in which the self-concept scores of children seemed to distinguish "lower" IQ gifted children (120 to 140) from higher IQ gifted children (140 and above), Milgram and Milgram (1976) found no difference in the self-concept scores of their sample when they were dichotomized into lower and higher IQ groups. These Israeli children were also in a part-time gifted program, but there was no pre- and postmeasure of self-concept as in the Coleman and Fults study. The self-concept scores (using an Israeli adaptation of the Tennessee Self-Concept Scale) were taken at one point in time during the operation of an after-school enrichment program. Four authors (Evans & Marken, 1982; Karnes & Wherry, 1981) who compared gifted children in programs with gifted children not in programs found no differences in global self-concept between the two groups. Other authors (Kolloff & Feldhusen, 1984) who compared the global self-concept of gifted children before and after participation in a part-time gifted program reported no change in self-concept as a result of the program

experience. In two studies (Harty, Adkins, & Hungate, 1984; Maddux, Scheiber, & Bass, 1982) the comparison of the self-concepts of gifted children under three treatment conditions (full-time gifted program, part-time gifted program and nonplacement in gifted program) showed no difference among the global self-concepts of the gifted children under the three different conditions.

And finally, one author (Tidwell, 1980) who reported on findings similar to those of many other studies (Davis & Connell, 1985; Grenier, 1985; Guskin, Okolo, Zimmerman & Peng, 1986; Janos, Fung & Robinson, 1985; Ketcham & Snyder, 1977; Lehman & Erdwins, 1981) examined the global self-concepts of 1,593 gifted high school students in the California Mentally Gifted Minor program. Using both the Piers-Harris Children's Self-Concept Scale (1969) and the Coopersmith Self-Esteem Inventory (1967), Tidwell found that the gifted sample scored above the norm group on the Piers-Harris test and within the range of means reported for the norm group on the Self-Esteem Inventory. This variation between instruments is a phenomenon reported in other studies as well. The most common finding is that gifted students seem to score higher than average students on global self-esteem measures, but especially with the Piers-Harris test.

Another category of self-concept studies is the comparison of the self-concept of bright/gifted achievers to

that of bright/gifted underachievers. A study by Ziv, Ramon, and Doni (1977) illustrates Harter's (1986) postulate that, for purposes of determining self-worth, the importance assigned to a domain is as critical as the competence in that domain. The comparison of gifted achievers and gifted underachievers in Israel revealed that the underachievers had the more positive self-concept, a finding which contradicted the more usual reports (e.g., Monks, van Boxtel, Roelofs, & Sanders, 1985; Saurenman & Michael, 1980) of lowered self-esteem for gifted underachievers. This surprising finding was explained by Ziv and his colleagues as being influenced by the excellent extracurricular enrichment opportunities provided by the families of the gifted children. With these gifted children, achievement in school is presumably not valued, whereas achievement outside of school in extracurricular activities is the salient context for enhancement of self-esteem. The study by Ziv et al. certainly suggests the usefulness of examining the various domains which might be salient to self-concept of children. Very few studies do examine specific domains, since most studies use measures of self-concept which survey a variety of domains, and then lump the responses into one global self-concept score.

There are a few authors who have looked at some domains besides the academic area. Ross and Parker (1980) obtained a measure of social self-concept and academic self-concept

through the use of the Sears Self-Concept Inventory. They discovered that gifted students in Grades 5 through 8 possess significantly lower expectations for success in their social versus their academic endeavors. Ringness (1961) reported that high IQ children rated themselves most highly in the academic area compared to average children, but were less different from average children in the social areas. As well, Winne, Woodlands, and Wong (1982) used two different scales (Coopersmith Self-Esteem Inventory, 1967, and the revised Sears Self-Concept Scale, 1966) to investigate whether self-concept did seem to be a differentiated construct. They reported a cautious affirmative and, in addition, noted that "there may be weak evidence that gifted students have lower self-concepts in the social and physical domains than do LD [learning disabled] students" (p. 474).

An author (Bracken, 1980), who compared the attitudes of gifted elementary children with nongifted children in regular classrooms using the variables, attitudes towards learning, peer relations, and global self-concept, concluded that the attitudes of gifted and nongifted children differed significantly in the one area that separated the two groups by definition, namely, learning. In this domain only, gifted children had more favorable attitudes. In the domain less relevant to intellectual abilities, peer relations, there was no difference between gifted and nongifted attitudes,

nor did they find that the more favorable attitudes generated through academic success generalized to more favorable attitudes about the global self-concept.

In contrast to the above studies where gifted children were compared to average and learning disabled children and were found to have average or inferior scores in the social domain, Lehman and Erdwins (1981) found the social and emotional adjustment of gifted third graders to be significantly higher than the adjustment levels of average children as measured by scores in positive self-concept, school relations, family relationships, and social skills. Austin and Draper (1981) reviewed the research relating to peer relationships in the academically gifted and concluded that in the peer social acceptance domain, "the bulk of evidence regarding peer relationships of elementary school-age children [shows] that gifted youngsters generally enjoy a fairly high social status within the peer group" (p. 132).

Another source of variation in self-concept might be gender. As with the ability and domain-specific variables, the research picture on gender and self-concept is far from clear. Rosenberg (1986) has summed up the gender research with the judgement that, although boys do seem to enjoy a more positive self-concept, the difference is small, except in the domain of physical appearance, where girls have a significantly lower self-concept (a trend which starts in

middle childhood and grows more pronounced in adolescence). Coleman and Fults (1982), however, reported that gifted girls had higher global self-concept scores than gifted boys, a difference which approached significance. This finding was replicated in a later study (Coleman & Fults, 1983). Loeb and Jay (1987) found that gifted girls had a higher self-concept than average girls, but that there was no difference between gifted boys and average boys. In contrast to the Coleman and Fults' study, however, in four studies (Dean, 1977; Janos, Fung, & Robinson, 1985; Ketcham & Snyder, 1977; Loeb & Jay, 1987) there were reports of no significant differences between the global self-concept scores of gifted boys and gifted girls, although boys and girls in the Loeb and Jay study did differ significantly on other measures in the social-emotional area.

Other studies which involve gender as a self-concept variable also indicate mixed results. In the social and academic domain, Ross and Parker (1980) found no difference in self-concept scores between gifted boys and girls. In contrast, Ringness (1961) found that in athletics, leadership, and intelligence, bright boys rated themselves higher than bright girls did, but that bright girls rated themselves higher than bright boys in social acceptance with peers and adults.

Harter (1985) found that average children differed by gender in the athletic and social domains in a way similar

to those indicated by Ringness. In the population used for the development of norms for Harter's Self-Perception Profile for Children (1985), boys reported seeing themselves as substantially more competent in athletics than did girls. In contrast, girls saw themselves as better behaved than did boys. In addition, for some samples, boys saw themselves as more physically attractive (a trend already noted by Rosenberg, 1986) than girls saw themselves to be.

Summary

What sense is to be made of the inconsistencies and contradictions in the results of these various self-concept studies? Wylie (1979) noted in her comprehensive review on self-concept that past studies have yielded flawed or inconsistent results due to bad designs, poor measures, inadequate or nonexistent theoretical bases, and improper attempts to correlate global self-concept scores with ability and achievement scores. Despite these difficulties, Wylie (1974, 1979) recommended that research continue in the areas which have shown the most promising results, namely, using reports of self-perceptions of competence in specific domains rather than global self-esteem scores. This current study is an attempt to apply a better measure of self-concept, based on a more sophisticated theoretical base than heretofore, focused on self-perceptions of children in specific domains as well as a measure of reference groups used to estimate competence in those domains.

The study provided a contrast of the self-perceptions of three groups of children--those included in a program which provides academic and creative enrichment for intellectually gifted students, those who were assessed for the program and then not accepted, and a group of average children. The results will be discussed from two perspectives: (a) the descriptive perspective which will give a more detailed, domain-specific profile of the group of gifted children as they compare to the groups of average and excluded children as well as a comparison of group profiles by grade levels and gender for the entire sample (all ability levels combined), and (b) the theoretical perspective as a confirmation or disconfirmation of Harter's (1986) theory of self-worth.

Research Questions

The specific research questions relating mainly to the descriptive perspective were:

1. How do the self-judgements of competence (in the scholastic and athletic domains) or adequacy (in the social acceptance, physical appearance, and behavioral conduct domains) of the gifted children compare to those of the average children and to those of the excluded children?

2. How much importance is given to these different domains by gifted children in contrast to average and excluded children?

3. Looking at the total sample, what differences might be found between boys and girls in their perceptions of competence and adequacy in various domains, in their evaluation of the importance of various domains, and in their choice of reference groups used in making their comparisons of competence?

4. What reference groups do gifted, average, and excluded children use in making their comparisons of competence and adequacy about themselves in the different domains?

5. What age-related trends exist in the measures of competence and adequacy, importance, and choice of reference groups?

The theoretical perspective (a test of Harter's theory of the determinants of self-worth) is embodied in the question below. A moderate to high positive relationship between discrepancy scores (a mean score of competence minus importance ratings for important domains only) and global self-worth scores would provide support for Harter's theory.

6. What relationships exist among the ratings of competence, importance, and global self-worth?

CHAPTER III

Method

Subjects

The subjects in this study (N = 170) were three groups of upper-elementary children from a medium-sized suburban school district which serves mainly a middle-class, nonethnic population. The subjects are summarized in Table 1. The gifted group (n = 59) consisted of children from Grades 5, 6, and 7 who were identified as intellectually gifted and chosen for a part-time pull-out program for the academic and creative enrichment of the top 2 to 3% (in terms of various assessment criteria) of all students in the district. The children are transported by their parents from 13 of 19 possible feeder schools to 2 central schools in order to participate in gifted programs one afternoon a week. The program in one school serves the west end of the district and the program in the other school serves the east end of the district. Results from both schools were merged, because the two programs serve areas which are comparable in terms of demographic characteristics.

Table 1

Frequency Counts of Demographic Characteristics of Sample, by Sex, Ability, and Grade Levels.

	Boys			Girls		
Grade	5	6	7	5	6	7
Average	3	9	12	6	14	11
Gifted	3	10	14	6	13	13
Excluded	6	9	9	11	7	14

There were 27 boys and 32 girls identified as gifted in the sample. The assessments used in this identification included a WISC-R, a standardized achievement test, and checklists of academic performance and task commitment which were completed by classroom teachers and parents. Children chosen for the gifted program were required to have IQs in the 97th percentile and achievement rankings in reading or mathematics at the 90th percentile or above, based on Canada-wide norms.

The gifted sample (n = 59) in this study included only those children (71% of the total enrollment of 83) who returned a consent form signed by their parents in time for their tests to be released for inclusion in the study. In

total, 76 children in the gifted program were tested but test results from some children who were late in returning consent forms were not used because of the need to balance the demographic characteristics of the gifted group (in terms of gender and grade levels) with the average group and the excluded group. There did not appear to be any consistent source of bias operating in the selection of the 59 children included in the study, because a number of factors were responsible for the failure to remember the consent form on time (e.g., failure of some of the 13 principals from the feeder schools to remind the teachers to remind the children to bring their forms to their gifted classes on the appropriate day, or failure of some teachers to pass on the reminder, or failure of parents or children to remember in spite of reminders).

The second sample of children in this study (n = 55) consisted of intact groups of average children from regular Grade 5, 6, or 7 classrooms in a school that was selected by a district administrator as reflecting the average achievement and demographic characteristics in the school distict. The second group (71% of the total number in the classrooms surveyed) included only those children who returned a consent for testing form signed by their parents.

The third sample of children in this study (n = 56) consisted of children who had been assessed for the gifted program, but who were not accepted into the program, and who

were still in the district. The names of these excluded children were obtained from district records. The assessment procedure for these excluded children was the same as for the children accepted into the gifted program. When the assessments were completed and the selections for the gifted programs were made, the children who were not accepted for the program were so informed by letter. Some of the children could have been excluded the year previous to this study and others could have been excluded two or three years previous to this study. One result of the differential time lapse could be that the impact of rejection from the gifted program was stronger on some students than on others. Thus, the effects of short-term impact and long-term impact were confounded in this study. In no case, however, was the "rejection episode" recent because the shortest interval between rejection and the assessments done in this study would have been approximately 10 months.

The original list of children excluded from the program contained 92 names: 17 from Grade 5, 34 from Grade 6, and 41 from Grade 7. Some children on the list had moved away from the district, some had been re-assessed and accepted into the gifted program after all, and others attended schools which were not selected for inclusion in this study. The schools chosen for testing of the excluded children met the criteria of providing the closest possible match of the

excluded sample (in terms of gender and grade levels) with the gifted and average groups. There was a high degree of overlap in this study (10 out of 13 schools in common) between the schools from which the gifted children were drawn and the schools from which the excluded children were drawn. There is no reason to suppose that the exclusion of three schools has biased the data. The children chosen for the study (n= 59) who had been assessed but not selected for the gifted program were distributed throughout the district in 10 schools. Two children in the excluded group refused to participate in the study and one child was absent on the day of testing.

Instrument

The instrument (see Appendix D) used to measure self-concept in five domains was the Self-Perception Profile for Children (Harter, 1985). The Profile is a revision of Harter's earlier Perceived Competence Scale for Children (1982). In the 1985 revision, two more scales were added to the original four: physical appearance and behavioral conduct. Social competence was renamed social acceptance to better reflect item content and social reality and various items in specific scales were revised. Cognitive competence was renamed scholastic competence to reflect the school-related nature of the items.

The instrument used in this study consisted of three parts. The first two parts contained statements with a

"structured alternative format" (Harter, 1982, p. 89) designed to offset the tendency to give socially desirable responses. As well, the questions were worded to allow investigation into questions concerning reference groups or individuals that children might compare themselves to when making judgements about themselves. In the administration of the first part, the verbal instructions required the children to think about "which kids are most like you." Each item was a statement such as, "Some kids feel like they are just as smart as other kids their age BUT other kids aren't so sure and wonder if they are as smart" (Harter, 1985, Appendix p. 1). The child was asked to choose one side of the sentence (to the left of the BUT) or the other side (to the right of the BUT) that best described or was most like him or her. He or she then made a judgement of whether this part of the sentence was Really True for me or Sort of True for me. The response was then scored as 1, 2, 3, or 4, with 4 being the highest score in terms of representing the child's self-perception of competence.

The internal consistency reliabilities obtained by Harter for all six scales of the first part of the Self-Perception Profile for Children, using Cronbach's alpha, were acceptable, ranging from .71 to .85 on four previous samples with a total N of 1543 children in Grades 3 to 8. Means and standard deviations are given for each subscale by grade and gender, but in general the means

fluctuate around the value of 3.0, which is above the midpoint of the 4 point scale. The majority of standard deviations fall between .50 and .85, indicating considerable variation among individuals.

Validity of the revised Self-Perception Profile was supported by Harter using the results of a factor analysis. The factor analysis (oblique rotation) of the items in the five scales (excluding the global self-worth scale) reveal that each subscale defines its own factor with substantial loadings within each scale and low cross loadings between the scales (range of cross loadings across factors is between .04 and .08 with only one as high as .18). The Perceived Competence Scale, the original version of the Self-Perception Profile for Children (Harter, 1985), has been empirically validated (Harter, 1982) through a multimethod approach. Presumably, Harter deemed that similar validation of the revised version was not necessary.

The second part of Harter's 1985 instrument, entitled How Important are These Things to How You Feel About Yourself as a Person?, consists of ten questions (two questions per subscale) with the same question format as the Profile. These questions are based on a sample of the five domains in the Profile. The items that are answered positively, indicating that the domain is important to the child, are used to calculate a "domain importance" score. This allowed the investigator to compare the importance of

various domains to gifted, average, and excluded children as well as to boys compared to girls. There are no reliabilty data reported for this scale.

The third part, Who Do You Compare Yourself To?, was devised for this study based on recommendations for alternative question formats given in Harter's 1985 manual. This part was designed to obtain information on the particular reference groups or individuals employed by the students as they answered the questions on the Profile relating to the five different domains. The children were asked to identify the "kids" they were thinking about when they decided that they were most like "kids" with a particular characteristic from each of the six subscales. They were given a checklist of three choices: kids in the [gifted] program, kids in my class, and an other category. For example, each child was asked whether he or she was comparing himself or herself to children in the gifted program or average children in their classroom or someone else not in the gifted program or in their regular class when they answered Item 25 in the scholastic domain: "Some kids do very well at their schoolwork BUT Other kids don't do very well at their schoolwork" (Harter, 1985, Appendix p. 3). The administrator stressed in the instructions that if a reference child was in the gifted program and in their regular classroom, the correct choice was kids in the [gifted] program.

Procedure

The gifted children were contacted in March 1987 through their gifted classes which met one afternoon a week in one of two central schools. The teachers of the gifted classes allowed me to meet briefly with each class so that I could explain the purpose of the study, the nature of the questionnaire, and invite them to participate. (See Appendix C for script.) Informational letters for parents with consent forms attached (see Appendix B) were distributed to children at that meeting. Parents were invited to phone me if they had questions, but no one did. The children were tested one to two weeks later.

The gifted children were assessed with the paper and pencil instrument in a group setting during their pull-out enrichment classes, each class consisting of a homogeneous grouping by grade level. The administration took 25 to 30 minutes. The administrator stressed that the activity was a survey, not a test, and that there were no right or wrong answers. (See Appendix C for script.) It was stressed that answers will indicate "what kind of person" each child is like, and since every one is different, each child will be answering the questions in different ways. The instructions were presented orally with the aid of large charts which contained facsimile questions from the three parts of the questionnaire. After the instructions were delivered, the children worked independently to complete their

questionnaires. I monitored their responses on the first page to ensure that they were following directions and answered individual questions about the questionnaire which arose as the children were filling it out. The children without parental consent who were not doing the questionnaire and those finishing early were asked to either continue with their regular work or read a library book while the rest of the children worked on the questionnaire. After the three parts of the instrument were administered, the children were invited to ask questions and to discuss the experience. The same procedure was used with the intact classes of average children.

The excluded children were tested during a two-week period in May 1987. After the schools were selected as described in the section on subjects, the principals were contacted by telephone. The purpose of the study was briefly explained to each principal and an appointment was made for a visit. The purpose of the visit was to fully explain the nature of the study, to display the actual testing materials and sample letters to parents, to check the list of names against the current enrollment records of the school, and to secure the permission and assistance of every principal for the study. All ten principals agreed to cooperate by arranging with the classroom teachers for the children to be withdrawn from classes on two occasions, by reminding children to return the parent consent forms and

keeping a record of the returned forms, and by arranging for a quiet and private testing place. The principals were also provided with enough information to answer questions from teachers and parents. In addition, the letters to parents included an invitation to parents to phone me directly if they had any questions about the study. Only two parents phoned with a request about sharing of individual results (which was impossible under the terms of the study).

I met with the excluded children of each school twice. The first time was a five-minute meeting to explain who I was, the purpose of the study, and an invitation to volunteer for the study. I gave parent consent forms to all children who were willing to volunteer (only 2 out of 59 refused) and asked them to return the forms to the principal by the testing date, usually scheduled for two days later. All forms were returned by the appropriate date and only one child was absent at the time of testing. Thus, the sample of the excluded group was 77 % of the entire available population of excluded children, and 64 % of the original list. There is no reason to suppose that bias was introduced into the sample as a result of some families moving out of the district.

The children were summoned to the introductory meeting by the principal. In most cases, they were puzzled and slightly apprehensive about the unexpected summons. I spoke to them alone with immediate reassurances that they were

being invited to participate in a study and that their names were obtained from records at the central school board office as representing capable students who scored well on standardized tests. As most of them had just taken the district-wide Canadian Achievement Test, they understood immediately what that meant. They were given the same information about the self-concept test and the purpose of the research as the gifted and average groups. The letters to parents (see Appendix A) contained the same message about how and why the children were chosen for the study. Only the principals knew the real basis for the choices, and they were asked to keep it confidential.

On my second visit to the school, I contacted the principal who gave me the consent forms, collected the children from the various classrooms, and escorted us to the testing area (in most cases either the staff room or the school library). The size of the groups varied from two to eleven with children coming from three to six different classes. However, as most schools practice some form of ability grouping, children from the same grade were usually in the same division and generally had one or more pupils from the gifted program in their class. The children finished at different times, usually within 15 to 20 minutes. Before they returned to their classrooms, I quietly invited each student to ask questions and to comment on the experience. The excluded children responded in a

manner similar to the gifted and average groups in that they had few questions and generally indicated that the questionnaire had been easy to fill out and mildly to moderately interesting. The rest of the testing procedure was as close as possible to the procedure used with the gifted and average groups.

CHAPTER IV

Results

The first research question related to the judgements of competence or adequacy by gifted, average, and excluded children. Table 2 presents the means and standard deviations for the six subscales of the Self-Perception Profile for Children. These subscales represent the self-ratings of scholastic competence, social adequacy, athletic competence, and adequacy of physical appearance and behavioral conduct, as well as the children's perceptions of global self-worth. Higher scores represent a more favorable perception with a range of 1 to 4. In general the means ranged above the midpoint of the scale (2.5). This is consistent with the normative data from Harter (1985). The majority of standard deviations fall between .50 and .85 indicating considerable variation among individuals (again consistent with Harter's normative data).

Table 2

Means and Standard Deviations for Competence Scores of the Self-Concept Scales by Sex and Ability

		Boys			Girls		
Competence		Avg.	Exc.	Gift.	Avg.	Exc.	Gift.
SCH	*M*	2.92	3.25	3.58	2.74	3.30	3.43
	SD	.77	.59	.39	.76	.55	.44
SOC	*M*	3.03	3.22	2.81	2.81	2.92	2.88
	SD	.68	.54	.66	.88	.75	.71
ATH	*M*	3.11	3.29	2.73	2.49	2.54	2.47
	SD	.72	.56	.66	.75	.91	.70
PHY	*M*	2.73	2.94	2.62	2.40	2.67	2.64
	SD	.59	.64	.50	.66	.81	.75
BEH	*M*	2.65	2.88	2.96	2.92	3.17	3.18
	SD	.70	.62	.66	.68	.63	.51
GSW	*M*	3.13	3.32	3.27	2.79	3.23	3.21
	SD	.48	.51	.40	.64	.59	.55

Note. Scores are based on responses to a scale from 1, which equals lowest self-competence rating, to 4, which represents highest self-competence rating.

SCH Scholastic competence
SOC Social acceptance
ATH Athletic competence
PHY Physical appearance
BEH Behavioral conduct
GSW Global Self-Worth
Avg. Average children; Exc. Excluded; Gift. Gifted.

The second research question related to the importance given to the different domains by the gifted children, the average children, and the excluded children. Table 3 presents the means and standard deviations for the five subscales of the ratings that give an indication of the importance of the five domains to the children. As with the means of the competence ratings, the means of the importance ratings range above the midpoint of the scale, but there is considerably more variability in the importance ratings, reflecting perhaps the small number of items for each scale (two items per importance scale vs. six per competence scale). In comparison to the data on importance ratings for the domain of cognitive competence (mean = 3.81) reported by Harter (1986), the mean ratings in my study are somewhat lower (mean for entire sample = 3.34).

Table 3

Means and Standard Deviations for Importance Scores of the Self-Concept Scales by Sex and Ability

		Boys			Girls		
Importance		Avg.	Exc.	Gift.	Avg.	Exc.	Gift.
SCH	*M*	3.35	3.23	3.39	3.24	3.36	3.46
	SD	.89	.64	.65	.74	.79	.68
SOC	*M*	2.94	2.88	2.83	2.73	2.92	2.92
	SD	.86	.80	.81	.88	.82	.85
ATH	*M*	3.13	3.38	2.64	2.50	2.30	2.69
	SD	.76	.77	.91	.82	1.05	.92
PHY	*M*	2.65	2.67	2.60	2.82	2.42	2.77
	SD	.78	.73	.84	.75	.82	.78
BEH	*M*	3.15	3.15	3.15	3.11	3.42	3.38
	SD	.98	.80	.76	.75	.49	.60

Note. Scores are based on responses to a scale from 1, which equals lowest importance rating, to 4, which represents highest importance rating.

SCH Scholastic competence
SOC Social acceptance
ATH Athletic competence
PHY Physical appearance
BEH Behavioral conduct
Avg. Average children; Exc. Excluded; Gift. Gifted.

The first research question required an analysis to determine if significant differences exist among the three groups of children with respect to their judgements of competence and adequacy. A multivariate 3 x 2 analysis of variance with ability and sex as independent variables was used to assess the differences among the six ability/gender groups using as dependent variables the five competence variables and the global self-worth variable from the Self-Perception Profile for Children. As well, in order to address the fifth question, a separate analysis by grade levels was made to determine if there were any significant developmental trends. The three grade levels were merged, as there was no significant grade effect: Pillais F (12, 326) = 1.56, p = .10. There was no significant interaction effect (Sex x Ability) on the MANOVA: Pillais F(12, 320) = .78, p = .666. There was a significant main effect for ability: Pillais F(12, 320) = 3.93, $p < .001$. There was also a significant main effect for sex: Pillais F(6, 159) = 5.99, $p < .001$. For the significant multivariate main effects, subsequent univariate F tests were examined to discern which variable contributed most to each effect. Table 4 summarizes these univariate F tests for each variable.

Table 4

MANOVA Results for Competence and Importance Subscale Scores: Univariate F Tests by Sex and Ability

	Univariate F Tests	
Subscale	F Ratio: Ability	F Ratio: Sex
Competence		
Scholastic	18.78***	.98
Social	1.43	1.87
Athletic	2.71	23.25***
Physical appearance	1.84	3.39
Behavioral conduct	3.31**	6.99***
Global self-worth	5.65***	3.79*
Importance		
Scholastic		.09
Social		.02
Athletic		15.97***
Physical appearance		.07
Behavioral conduct		1.81

Note. Multivariate F for Competence MANOVA: Ability, $F(12, 320) = 3.93$, $p < .001$; Sex, $F(6, 159) = 5.99$, $p < .001$.

Multivariate F for Importance MANOVA: Ability, $F(10, 318) = .74$; Sex, $F(5, 158) = 3.83$, $p = .003$

* $p = .05$. ** $p<.05$. *** $p<.01$.

For the main effect of ability with competence variables as dependent variables, three of the subscales produced significant univariate Fs. There were significant differences among the three ability groups in scholastic competence, $F(2, 164) = 18.78$, $p < .001$; behavioral conduct, $F(2, 164) = 3.31$, $p = .039$; and global self-worth, $F(2, 164) = 5.65$, $p = .004$. A Scheffé procedure was used for a post hoc analysis to determine the group or groups most influencing the significant results. For the variable, Scholastic Competence, the significant ($p = .05$) difference in group means was between the gifted group ($M = 3.50$) and the average group ($M = 2.81$). In addition, there was a significant difference between the excluded group ($M = 3.28$) and the average group. There was no significant difference between the group means of the gifted group and the excluded group, although the mean of the gifted group was larger than the mean of the excluded group. The variable, Global Self-Concept, was similar to Scholastic Competence, in that the gifted ($M = 3.24$) and excluded ($M = 3.27$) groups were both significantly different from the average ($M = 2.94$) group, but not from each other. For the variable, Behavioral Conduct, no two groups were significantly different at the .05 level.

For the main effect of sex (third research question) with competence variables as dependent variables, two subscales produced significant univariate Fs, and two scales

produced an F ratio which approached significance. Boys scored themselves significantly higher than girls in athletic competence, $F(1, 164) = 23.25$, $p < .001$. In physical appearance, $F(1, 164) = 3.39$, $p = .067$, the average boys scored higher than the average girls, the excluded boys scored higher than the excluded girls, but the gifted boys scored slightly lower than the gifted girls and the excluded girls. With respect to behavioral conduct, girls scored themselves significantly higher than boys, $F(1, 164) = 6.99$, $p = .009$. Average, gifted, and excluded girls had higher means than average and excluded boys, but the mean of the gifted boys group was almost equal to the mean of the average girls group which was the lowest girls' mean. In global self-worth, boys scored themselves higher than girls, but the results only approached significance, $F(1, 164) = 3.78$, $p = .053$. Here, the big difference in means was between the average girls ($M = 2.79$) and the average boys ($M = 3.13$); the mean of the gifted boys was quite close to the mean of the excluded boys and the means of the gifted girls and excluded girls were also quite close to one another.

The second research question focused on the importance ascribed to the different domains by average, gifted, and excluded children. As with the competence measures, there was no significant grade effect among importance scores for Grade 5, 6, and 7: Pillais $F(10, 324) = 1.40$, $p = .18$. Therefore, data were collapsed across grades. A MANOVA

analysis was used to assess the differences among the six gender/ability groups, using the five importance variables from the Self-Perception Profile for Children. Table 4 summarizes these univariate F tests for each variable. There was a significant interaction effect (Sex x Ability) on the MANOVA: Pillais $F(10, 318) = 1.86$, $p = .049$. The univariate F tests revealed that the variable, Athletic Importance, provided the significant interaction effect (Sex by Ability), $F(2, 162) = 5.80$, $p = .004$. There was no significant main effect for ability: Pillais $F(10, 318) = .74$, $p = .68$.

The third research question related to differences between the importance evaluations of boys and girls. There was a significant main effect for sex: Pillais $F(5, 158) = 3.83$, $p = .003$. Subsequent univariate F tests involving gender as the independent variable were examined to reveal that the importance of athletics was the variable that contributed most strongly to the significant multivariate gender difference, $F(1, 162) = 15.97$, $p < .001$. This difference was caused by the fact that the average boys ($M = 3.13$) and excluded boys ($M = 3.38$) rated the importance of athletics higher than gifted boys ($M = 2.64$), average girls ($M = 2.50$), gifted girls ($M = 2.69$), and excluded girls ($M = 2.30$). It is noteworthy that, although there were four significant differences by sex and by ability in some of the competence ratings, there was only one

significant difference in the ratings of the importance of the five domains for gender/ability groups.

A fourth research question asked if the children compared themselves to different reference groups (kids in my class, kids in the [gifted] program, or other) when they answered the questions about competence. Five domains were investigated: scholastic, athletic, behavioral conduct, physical appearance, and global self-worth. Chi-square tests were used to compare choices made by ability groups, gender groups, and grades. There was a significant relationship between ability and choice of reference groups only in the domain of scholastic competence, $X^2(4, N = 170) = 15.73, p = .0034$. In this domain, the association was particularly influenced by the disproportionately greater number of excluded children who compared themselves to gifted children significantly ($z = 2.36, p < .02$) more often than did either the gifted children or the average children. There were no other significant differences in the use of reference groups by the three ability groups for the other four domains. The chi-square results regarding the choices of the ability groups are summarized in Table 5.

There were no significant relationships between gender groups and choice of reference groups in any domain, but there was one relationship which approached significance, $X^2(2, N = 170) = 5.52, p = .0634$, in the domain of

behavioral conduct, wherein girls used other as a reference group disproportionately more often than boys. There were no significant relationships between grade levels and choice of reference groups in any domain.

Table 5

Chi-Square Relationships Between Ability Groups and Reference Groups

Ability Groups	Reference groups: My class (frequency counts)	Gifted (frequency counts)	Others (frequency counts)	X^2	p
	Scholastic				
Average	38	5	12	15.72	.003
Gifted	44	6	9		
Excluded	38	16	2		
	Athletic				
Average	33	1	21	1.92	.75
Gifted	42	1	16		
Excluded	39	1	16		
	Physical appearance				
Average	35	2	17	3.97	.41
Gifted	37	3	19		
Excluded	29	1	26		
	Behavioral conduct				
Average	35	3	17	2.48	.65
Gifted	33	5	21		
Excluded	39	3	14		
	Global Self-Worth				
Average	32	5	18	9.95	.04[a]
Gifted	40	3	16		
Excluded	29		27		

Note: [a]Three cells out of nine had an expected frequency of less than five.

The sixth question required an examination of relationships between the global self-worth scores and a measure of the competence/importance ratings through correlational procedures (Pearson *r*). First, the scores of each child were scanned to determine which domains were considered important or very important (i.e., domains with a mean score of 3.0 or larger), because discrepancy scores are calculated only for domains which the child values. For each domain rated important or very important, the corresponding competence score was ascertained. An equation was set up to determine the discrepancy between the importance assigned to a domain and the competence assigned to that same domain by subtracting the importance score from the competence score for each domain; this resulted in one or more discrepancy scores per child. These discrepancy scores were summed for each child and divided by the number of domains rated as important by that child, resulting in a mean discrepancy score for each individual. (See Appendix E for information on distributions of discrepancy scores.) These discrepancy scores were then correlated with children's corresponding global self-worth scores. Scatterplots and regression equations were calculated for the total sample and subgroups divided by ability, by sex, and by grade. The equations were calculated so that a positive correlation (when the discrepancy score was less than zero) meant that as the discrepancy scores increase in

a positive direction, the global self-worth scores increased. A discrepancy score of zero would indicate that the importance and competence judgements were perfectly in balance. A positive discrepancy score would indicate that these children saw themselves as very competent in domains that were somewhat important. In the 8 sets of scatterplots, a small number of cases (ranging from 3 to 9) had positive discrepancy scores.

The sample of boys provided the lowest correlation between discrepancy scores and global self-worth, $r(71) = .34$, which was significantly lower ($p < .01$) than the correlation of the girls' sample, $r(94) = .64$. The girls' correlation provided almost the highest correlation, with only the Grade 6 sample showing a slightly higher correlation, $r(60) = .66$. The total sample provided a moderate correlation, $r(165) = .54$, $p < .001$. The Pearson correlation coefficients for all groups are presented in Table 6.

Table 6.

Pearson Correlation Coefficients: Relationships Between the Mean Discrepancy Scores (Competence-Importance) and Global Self-Worth, by Sex, Ability, Grade, and Total Sample.

Sample	n	Pearson r	p	Significant differences within groups
Total	165	.54	.000	
Average	54	.42	.001	
Gifted	56	.52	.000	NSD
Excluded	55	.64	.000	
Girls	94	.64	.000	$p < .01$
Boys	71	.34	.002	
Grade 5	34	.51	.001	
Grade 6	60	.66	.000	NSD
Grade 7	71	.47	.000	

Note: NSD means no significant difference between any two pairs within the group.

CHAPTER V

Discussion

Interpretation

There are some clear differences in the patterns of judgements of competence between gifted, excluded, and average children investigated in this study. Although the data indicate that gifted and excluded children have a greater sense of global self-worth than average children, this is largely determined by the fact that they judge themselves to be more competent than average children in scholastic matters and behavioral conduct. There is no sense of superiority (or inferiority) when the two groups, gifted and excluded children, compare themselves to average children (or vice versa) in social acceptance by peers, in physical appearance, or in athletic competence. In general, gifted and excluded children are psychometrically similar to one another and different from average children in three areas: scholastic competence, behavioral conduct, and global self-worth. The means for scholastic competence and behavioral conduct do follow an expected, although nonsignificant, trend with increasing values across average, excluded, and gifted for both boys and girls. However, in the global self-worth scores, the gifted and excluded boys were very close to one another and considerably higher than the average boys. They were also higher than the gifted

girls and excluded girls who in turn were higher than the average girls who had the lowest scores of all the groups.

The mean for scholastic competence reported by Harter (1985) for boys and girls in Grades 5, 6, and 7 (n= 1151), is 2.88, which is close to the mean (M = 2.83) of the average boys and girls in this study. Harter (1985) reported that in a comparison of intercorrelations of scales, there is a tendency for scholastic competence and behavioral conduct scales to cluster. That tendency was suggested in the present study as well as indicated by the clustering of higher scores for gifted and excluded children in scholastic and behavioral conduct domains. The subscales of social acceptance, athletic competence, and physical appearance cluster together in Harter's analysis. Harter speculates that physical attractiveness and athletic competence may lead to greater acceptance or popularity among one's peers.

Surprisingly, gifted children do not see school as being more important to them than average or excluded children do, nor is there a significant difference in most other domains. The one exception is the domain of athletics. In this domain, the average and excluded boys are similar in their affirmation of the importance of athletics to them, whereas the gifted boys, by contrast, are similar in their ratings to the gifted girls (average and excluded girls providing the lowest ratings of all). There

is agreement between gifted, excluded, and average children on the importance of the other facets of children's lives with school and good behavior ranked higher than physical appearance and social acceptance. In terms of replication, Harter (1986) makes only passing mention of importance scores in the discussion of a study where the children were divided into three groups: high global self-worth (GSW), medium GSW and low GSW. The three groups rated the cognitive domain for importance ($\underline{M}$ = 3.82, 3.78, and 3.82, respectively, for high, medium, and low GSW). In my study, the mean rating for importance was a much lower 3.34 for the total sample. These differences might imply that Canadian children do not feel that success in scholastic activities is as important to their sense of self-worth as American children do. On the other hand, the measures of importance (comprised of 2 items per scale) perhaps lack sufficient reliability (in contrast to the measures of competence comprised of 6 items per scale, where adequate reliability has been established empirically). Consequently, it is possible that the differences may not be significant.

The third question related to differences by gender. There are differences in two domains: boys rate themselves as more competent than girls do in athletics and, by contrast, girls rate themselves as better behaved in their conduct than boys do. Perhaps athletics makes a bigger impact on boys than good behavior does on girls, because

boys did score higher than girls in global self-worth. There was an interaction effect in the importance of athletics scores. Average and excluded boys showed a strong tendency to value athletics compared to gifted boys and all three groups of girls. As in the gifted, excluded, and average comparison, girls and boys are in fairly close agreement that school and good behavior are more important than appearance and social relations with peers.

Another surprising result in answering the fourth question was that gifted children and average children use the same reference groups (children in their regular classroom) in making their judgements of competence or acceptance in every domain. The children in the gifted program do not seem to be very salient for comparisons even in academic matters to either gifted or average children. However, there was a striking difference with the excluded children in the scholastic domain only, in that the excluded group chose to compare themselves to the gifted group in a significantly greater proportion than gifted or average children did.

The fifth question was focused on the developmental aspect of Harter's model. No significant trends were found in any measure, as has already been noted, although there were some interesting nonsignificant trends worth exploring in future studies.

The sixth question was a test of Harter's model of global self-worth, namely, that mean discrepancy scores (a mean of the competence minus importance scores for all domains rated as important or very important) will predict global self-worth. Harter postulates that children whose valuing of domains is not congruent with their performance will have a higher negative discrepancy score which will, in turn, be associated with lowered global self-worth. The ideal score, presumably, would be a zero. This would occur when the importance that a child ascribes to domains exactly matches the competence that a child assigns to himself or herself in those same domains. A score which is harder to interpret is the positive score. This score (and there were not many of them in this study) occurs when a child assigns higher values to competence than to importance in domains. Harter does not discuss this possibility in the research reports dealing with prediction of self-worth scores. In my study the great majority of scores were in the negative end of the scale. A graph presented by Harter (1985) which plots self-worth scores against mean discrepancy scores allows only for scores as high as zero (and those are associated with global self-worth scores of 3.6 to 4.0). Unfortunately, there is no discussion of this graph in terms of the index of correlation used to derive it, or the sample on which it was based.

The pattern of discrepancy scores in this study (see Table 6) is a puzzling one. One possible interpretation of the correlation between the discrepancy score and global self-worth could be that it is an indicator of a conflict between values and self-assessments, resulting in confusion about the self. Harter's model would indicate that children with low congruence would have an inconsistent self-theory. There is a moderate relationship (r = .54) between discrepancy scores and global self-worth for the entire sample in this study. This correlation is smaller than the correlation of .76 reported by Harter (1986) for one sample of 90 Grades 5 and 6 children who had been trichotomized into three self-worth groups: high, medium, and low. Harter's replication of that study with a different sample of 90 pupils in Grades 5, 6, and 7 resulted in a correlation of .67. The results of my study suggest moderate support for Harter's theory. The relationship between mean discrepancy scores and global self-worth might have been stronger and closer to Harter's results, if my data had been analyzed in the same way as Harter's data; unfortunately, Harter's account was not sufficiently detailed to permit that. The differing relationships reported among ability groups and grade levels, while not significant (perhaps due to small sizes of subsamples), suggest that different ages and ability populations may have differing psychometric

properties, perhaps reflecting underlying differences in psychological dynamics of the self-system.

An example of different psychometric properties is illustrated by the most marked difference in the correlations which was significant: namely, the correlation between discrepancy scores and global self-worth for boys and girls (r = .34, .64, respectively, p <.01). I speculate that this difference might be accounted for by the greater affinity and awareness that girls have in the social and emotional area. McGuire & McGuire, (1982), using children's spontaneous self-descriptions as a source for studying the contents of the self-concept, found that the self-definitions of girls were more people-oriented than that of boys, that girls defined themselves in terms of relations to others more than did boys. If Rosenberg (1986) is correct in his postulate that self-perception is a special instance of person-perception, then perhaps girls are more congruent because they have "worked" more on their self-theory than boys and consequently are able to perceive themselves more accurately. Accuracy about perceptions of competence is an important factor in the prediction of global self-worth from discrepancy scores. Harter (1985a) found that, while the majority of children are accurate raters of their competence in the cognitive domain for most ages, there is a minority of children who err in either underrating or overratering their competence. Harter

reported that for the underraters the correlations between discrepancy scores and global self-worth were noticeably weaker than for accurate raters, and for the overraters there was virtually no relationship. Thus, for the boys in this study, the drop in the correlation of the discrepancy scores with the global self-worth scores could be caused by their relative lack of accuracy in their judgements of competence.

The differences among correlations by grade are nonsignificant. However, there is an interesting climb from .51 in Grade 5 to .66 in Grade 6, followed by an abrupt drop in Grade 7 to .47. This pattern is worth considering, even though nonsignificant (perhaps due to small sample sizes), because it follows a trend discovered by Harter (1985a). The discussion on accuracy of rating in the paragraph above may provide a clue. Harter found that there were some developmental periods in which the majority of students are inaccurate raters. The correlation between children's ratings of their scholastic competence and objective indices (test scores and teacher ratings) steadily increases from about .30 in Grade 3 to .60 in Grade 6 and then drops to .30 in Grade 7 as students adjust to junior high school and then rises to a high of .65 in Grade 9. The problem with this finding is that all of the children in Grade 7 in my study were still in elementary school. In Harter's results it is possible that the school change was confounded with another

developmental change. That this might be so is suggested in a study by Rosenberg (1986) on the stability of the self-concept. He found that the self-concept becomes more volatile in early adolescence, showing a sharp increase in volatility around the age of 12 to 13 (Grade 7 ages) with a gradual process of stabilization beginning around the age of 14.

In relating the results of this study to other studies (Davis & Connell, 1985; Grenier, 1985; Guskin, Okolo, Zimmerman & Peng, 1986; Janos, Fung & Robinson, 1985; Ketcham & Snyder, 1977; Lehman & Erdwins, 1981; Tidwell, 1980), the common finding that gifted children have a higher global self-concept than average children was demonstrated in the present study as well. In addition the excluded children showed a similar if slightly lower superiority in global self-worth compared to average children. The findings of Bracken (1980), Ringness (1961), and Ross and Parker (1980) were also replicated, in that in this study high ability children (both gifted and excluded) rated themselves as more competent than average children in the academic area, but not in the area of friendships with peers. As with the Austin and Draper study (1981), the high ability gifted and excluded children appeared to think that they enjoyed social acceptance by their peers to the same extent as the average children in this study. There was a similarity to the results found in the Lehman and Erdwins

study (1981) in which gifted children saw themselves as more skilled in social relations than average children; in my study, high ability children saw themselves as better behaved (which is interpreted by me as having skills in knowing and obeying rules of social conduct).

Comparisons with studies that looked at gender differences between gifted and average boys and girls were more difficult to make since there was no interaction effect of gender by ability in the current study. Ringness (1961) reported that bright boys scored higher than bright girls on his measure of athletic competence and Harter found that average boys score higher than average girls in athletic competence. In the present study all the boys (gifted, excluded and average) scored themselves significantly higher in athletics than did all the girls; excluded and gifted girls scored themselves higher on behavioral measures than did average and excluded boys, but the gifted boys and the average girls were very close in their scores. Harter (1985) has also reported a similar difference between average girls and boys in the behavioral domain. Like Loeb and Jay (1987), the current study found no significant difference between the global self-concept scores of gifted girls and gifted boys. This is in contrast to the findings by Coleman and Fults (1982, 1983) which, however, were weak as the difference only approached significance in these studies. In the current study a significant

difference appeared when all boys were compared against all girls with boys enjoying higher global self-worth scores compared to girls. This trend agrees with Rosenberg's (1986) summation on gender differences, namely, that boys do enjoy a small advantage over girls in positive self-concepts.

The current study has demonstrated the usefulness of looking at self-concept from a domain-specific point of view. It cannot be assumed that gifted children or excluded children feel more confident than average children in every domain. Indeed the current study brings some reality to the "myth" of the superior social and emotional adjustment of gifted children which was started by Terman in 1925 (Whitmore, 1980) and perpetrated by studies reporting only on global self-esteem scores (e.g., O'Such et al., 1979). Bracken's (1980) conclusions based on a study which looked at self-concepts in the domains of peer relations, academics, and global self-concept were that "the attitudes developed through academic success are not necessarily generalized to other nonacademic areas" (p. 717). Based on the results of my study, one could generalize that gifted children and excluded children make reasonable associations, linking superior ability with academic competence and good behavior, but not with other domains such as athletics and physical appearance where superior intelligence would have less impact on competence and acceptance. The cognitive

component in behavioral conduct is clear; hence, a superior ability to understand explict rules of conduct, to infer implicit rules, and to anticipate consequences should lead to more socially acceptable behavior more frequently.

Why gifted children do not also see themselves as superior in social acceptance is less clear, since social relations also require similar abilities to understand and infer rules of social intercourse which are more subtle than rules of behavioral conduct. A possible explanation is that gifted children's ability to "read" social situations better is counteracted by their feelings that average children don't accept them as well simply because they are "different', i.e., gifted. Janos, Fung, and Robinson (1985) examined the self-concepts of gifted children and found that the almost 40 % of the sample who thought of themselves as "different" also reported more difficulties with peer relations in contrast to those gifted children who did not see themselves as "different". Another possible explanation is that children in the late elementary grades continue to make the same strong connection between athletic ability and popularity which is evident in earlier grades (Harter, 1986). The gifted children in this sample saw themselves as less competent in athletics than the excluded and average children did. If this was an accurate perception, it is possible that the relative lack of athletic ability on the part of gifted children has also depressed their popularity.

One point mentioned by Bracken (1980) might clarify conflicting reports about the social adjustment of gifted children. Bracken found that most of the studies he reviewed made use of teacher, parent, and peer reports about gifted children, rather than reports by gifted children themselves. Perhaps gifted children are too modest in their appraisal of their social success; however, that is an empirical issue for another study.

The current study added little to the already complicated picture of gender differences which was presented in the review of literature. The comparisons in the research literature have been mainly concerned with differences between gifted boys and girls or between gifted boys and average boys or gifted girls and average girls. The sample sizes of the corresponding four groups in this study (gifted boys, gifted girls, average boys, and average girls) were perhaps too small to show significant differences. Gender did not seem to have a significant association with scholastic matters in the elementary school.

The one significant difference in referent groups is one of the most interesting results of the study. This question has not been explicitly researched in studies about gifted students before this study (as far as I am aware), but assumptions have been made about implicit reference groups (Coleman & Fults, 1982, 1983, 1985), namely, that

some gifted children use other gifted children for comparisons, at least while they are in a gifted program. The present study indicates this not always to be the case. The gifted children were tested with their gifted peers, so it might be supposed that the environment of testing would maximize the salience of the gifted group for comparisons. Nevertheless, there was no greater tendency among gifted children to choose gifted peers as a comparison group than among average children. However, these gifted boys and girls were transported from different schools to participate in a gifted program only one afternoon (two hours) a week. It might be possible that this contact is too slight for significant bonds to form.

Another reason for the failure of gifted children to report the use of other gifted children as a reference group may be that the work in gifted pull-out programs tends to be more individualized, atypical of classroom work, and not graded. Under these these conditions, gifted children might well continue to use the regular classrooom where evaluation is more visible (grades), more competitive (report cards), and more rewarding (gifted children get higher grades and better report cards). There is another possible explanation of the fact that gifted children used average children as their reference group in opposition to the prediction of the life-span model of Suls and Muller (1982) which states that the use of dissimilar others is at its lowest during the age

8 to 40 period. That explanation draws on the insights of Tesser and Campbell (1983) and their self-esteem maintenance model. If the gifted children compare themselves to other competent gifted children (the most similar others) in a domain that is highly relevant to them because they have demonstrated high ability and have been labeled "gifted" in confirmation of their ability, then they will run the risk of the "pain of comparison". However, some writers (Hyman & Singer, 1971; Rosenberg, 1969) have emphasized the choice aspect concerning reference groups). By choosing dissimilar others, the gifted children enhance their self-esteem rather than risk a possible diminishment of self-esteem.

Why, then, do some excluded children perversely insist on comparing themselves to gifted children? The excluded children were tested in small groups with other excluded children, usually with a few at their own grade level and a few at other grade levels. Nevertheless, in contrast to the gifted children's choices, the excluded children made a higher proportion of choices in favor of the gifted children as a reference group in the scholastic domain, the difference in the proportion of choices being significant, $z = 2.36$, $p < .02$. Here, Festinger's (1954) approach to social comparison may provide some insight. The excluded children know that they have been judged "not good enough" in their ability to be included in the gifted program. They might be wondering, "How good is good enough?" How can they

get clarification on this issue? They can do so by carefully observing the children who were good enough to be accepted into the gifted program who also happen to be in their own classroom. Now, not every excluded child had a gifted classmate in his regular classroom, although many did because of the tendency of the schools to do ability grouping. Unfortunately, no data were gathered on this point, so it remains a conjecture that the proportion of excluded children who chose gifted children as their reference group in the scholastic domain might well have been higher if every excluded child had had a gifted child in his or her class. There is a point about reference groups which should not be overlooked: the fact that there were no significant differences in the use of reference groups in the other domains is in itself a significant fact. Gifted children are average children with one gift (high ability made salient by identification) and that gift is not relevant to the other domains.

Limitations

The study is limited by the use of intact classes rather than a random sampling procedure. However, there is no reason to suppose that the intact samples chosen were not representative of gifted, average, and excluded boys and girls in this Canadian school system. There was, however, a difference in sampling procedures. Samples for gifted and excluded children came from 13 schools throughout the

district, but the average groups all came from one school. The sample sizes are rather small which limited the interpretation which can be made of results of the two 2 x 3 (Sex x Ability) MANOVA analyses with 5 and 6 dependent variables. In addition, the excluded children were not chosen randomly, but were selected on the basis on matching (by sex and grade) the other two already chosen samples. Furthermore, the excluded children were told that they were chosen "by the central school district office" for the study on the basis of their good performance on standardized tests. This may have had the effect of inflating their own reports of their competence as students and thus obscuring real differences in perceptions of scholastic competence between gifted and excluded children.

Another limitation may have been introduced by the psychometric properties of the scales. Each item was phrased in a bipolar way: "Some kids do very well at their schoolwork BUT Other kids don't do very well at their schoolwork" (Harter, 1985, Appendix p. 3). First, the child has to choose the positive or negative pole of the sentence. Then, she or he has to make a decision about the "strength" of the match between the positive or negative statement and her or his perception of herself or himself with regard to this particular item. For example, if the child chooses the positive side of the sentence, she or he then has to check "sort of true for me" (which is later scored as a 3) or

"really true for me" (which is later scored as a 4). If he or she choses the negative side of the sentence, "sort of true for me" gets a score of 2, or "really true for me" gets a score of 1.

A question arises about the validity of the assumption of equal intervals. The distance between 1 and 2 and 3 and 4 may be smaller than the distance between 2 and 3 (crossing the BUT to the other pole). However, Harter (1985) has analyzed her scores as if they were interval data; consequently, I did the same. Perhaps it would have been more appropriate to use the Spearman rank-order correlation coefficient in place of the Pearson product-moment correlation coefficient. Harter (1985, 1986) does not indicate which index of correlation she used in her studies. The use of a series of nonparametric Kruskal-Wallis one-way ANOVA of ranks tests (Huck, Cormier, & Bounds, 1974) for the dependent variables would have been inappropriate because it would have inflated the Type I error.

Other data could have been obtained which would provide information for more secure interpretations. For example, the information as to which excluded and average children actually had students from the gifted program in their regular classrooms would have allowed more accuracy as to the interpretations using reference group theories.

Applications and Implications for Further Research

This study contributes to the growing awareness that gifted children have needs and vulnerabilities in some of the same areas as average children, e.g., in the areas of friendships with peers and athletic competence. Following the advice that gifted children should be regarded as average children with domain-specific gifts, and not globally superior children with faults, would result in the curtailment of unrealistic expectations for superior attributes and performance in every domain. This advice should be taken to heart not only by significant adults in the children's lives, but also by the children's peers and, especially, by gifted children themselves. Such problems as perfectionism could perhaps be mitigated by a more realistic view of the domain-specific nature of giftedness. Therefore, designers of gifted programs should anticipate the counseling and emotional needs of gifted children, especially when they are identified as gifted and removed for periods of time from the regular classroom to attend gifted programs. In addition, research into the effects on the self-concept of children when children are labeled as gifted, particularly in the less stable period of late childhood and early adolescence, could compare different approaches to the delivery of gifted programming and their impact on domain-specific aspects of self-concept.

Extensions of the present inquiry which are suggested by the background theme of self-concept and achievement could follow up more work done by Harter and her associates (1984). Another of the powerful influences on achievement behavior besides feelings of self-worth is perceptions of control over academic outcomes. It would be useful to investigate how the three different samples in this study (gifted, excluded, and average) vary in their attributions of responsibility for successes and failures in the scholastic domain. Another useful way to approach the data is to examine profiles of individuals rather than groups. Harter has described two major types of children: the "academic super-star" and the "bright-anxious child". Harter believes that achievement behavior can best be predicted by understanding the pattern of relationships among the constructs of perceived control, perceived competence, motivational orientation (perceptions of control over outcomes), and, perhaps, anxiety. Super-stars are characterized by feeling good about their scholastic ability, by worrying very little about their school performance, by being intrinsically interested in learning, and by feeling that they are primarily responsible for their successes in the classroom. Bright-anxious children, on the other hand, feel relatively competent with schoolwork, are intrinsically motivated to perform, worry about their performance a great deal, and take personal responsibility

for successes and failures, often to an excessive degree. It would be useful to be able to examine the profiles of gifted and excluded children to determine if one type or the other predominates in each group.

Another area of investigation suggested by the results of this study would be to explore different Canadian school populations (e.g., native peoples, new Canadian children from Hong Kong, urban and rural children, etc.) with a new and promising instrument for measuring self-concept. This instrument appears to "travel well" as evidenced in the study by Stigler, Smith, and Rogers (1978) who replicated the sturdiness of Harter's factors and found the instrument useful for describing the facets of the self-concepts of Chinese children in Taiwan. Although a comparison of Canadian and American responses was outside the scope of this study, an inspection of differences of means of the respective American and Canadian samples indicated some interesting cross-cultural differences, (for example, the difference in importance scores in the scholastic domain reported between the American normative group and my Canadian sample). These differences could be further investigated to see if they represent random variation or robust differences in self-concepts of children from somewhat different cultures.

Other areas of research suggested by this study include a more precise attempt to discover the reference groups used

by different populations of children as has already been suggested and to explore changes over time in reference groups, using research designs that permit the investigator to uncover causal relationships, as children experience acceptance or rejection from special programs such as gifted or French immersion programs. Another contribution to precision could be obtained by examining the accuracy of children as self-raters. I speculated that perhaps boys were less accurate in their perceptions of themselves than girls. One way of checking this for the scholastic domain would be to correlate teachers' ratings or scores from standardized achievement tests with children's self-perceptions.

The subject of this study was the self-concept considered in isolation. A broader perspective might include an examination of relationships among self-concepts of the three ability groups and attitudes towards school, for example, difficulty of subject matter, liking for teachers, interest in school, vocational aspirations, and beliefs in the usefulness of particular subjects or learning in general.

The extension of the study to include younger and older children in a longitudinal design with gifted and average children could be important to improve our understanding of how self-concept evolves as the child's cognitive stucture evolves. In what ways does giftedness with its implication

of superior and more rapid progress through the stages of cognitive development impact on the evolution of self-concept? How is the evolution of self-concept impacted by identification and labeling as a result of being placed in a gifted program? What are the implications for change in the self-concept when a child is nominated, assessed, and then not accepted into a gifted program? These are a few of the important questions which could be investigated by Harter's new instrument with its capacity to explore the important distinctions which children make in their lives.

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APPENDIX A

Letter to Parents of Excluded Students

L. PHILLIPS 721-8606 EDUCATION

UNIVERSITY OF VICTORIA VICTORIA, BC V8W 3A4

Dear Parents,

We would like to invite your child to participate in a study on self-concept sponsored by the University of Victoria. The purpose of the study is to find out how children of differing abilities in different educational settings feel about themselves. Your child has been selected because he or she is a capable student who has shown ability to perform well on achievement tests.

Your child will be asked to fill out a questionnaire which is designed to obtain children's self-perceptions in terms of scholastic, social, and athletic competence as well as physical appearance and behavioral conduct. The questions will be in this form: Some kids feel that they are very good at their school work BUT other kids worry about whether they can do the school work assigned to them. Your child will be asked to check which half of the sentence is "Really True for me" or "Sort of True for me".

NO NAMES WILL BE PUT ON THE QUESTIONNAIRES. YOUR CHILD WILL BE IDENTIFIED BY GRADE, DIVISION AND SCHOOL ONLY.

The children will also fill out two more short questionnaires which ask them to state how important school,

athletics, etc. is to them. The second questionnaire asks the children to indicate who they usually compare themselves to when making judgements about competence. We expect the questionnaires to take **no more than 30 minutes.** RESPONSES WILL BE CONFIDENTIAL, BECAUSE THE REPLIES WILL BE ANONYMOUS.

The children will be asked to voluntarily fill out the questionnaire. The questionnaire will be administered in small groups in a separate room within the school. The purpose of the study will be explained briefly, as will the nature of the questionnaire (no right or wrong answers, but an opportunity for each child to engage in self-discovery). There will be a discussion and question time after they have completed the questionnaire.

Your cooperation in giving permission for your child to participate will benefit the Sooke School District, because it will provide information about the impact that various educational settings may have on students' self-concept or motivation for academic success. This knowledge can be used to improve instruction for all children. **If you have any questions, please don't hesitate to phone me (721-8606).**

Thank you in anticipation of your cooperation,

Mrs. L. Phillips

cut here_____cut here

PLEASE RETURN TO YOUR PRINCIPAL ON OR BEFORE MAY_____

Child's Name_____ School_____

Division_____ Grade _____

I have read the explanation and give consent for my child to participate in the Self-Concept Study by answering the questionnaire. I understand that confidentiallity is assured by the anonymous responses.

Parent's Signature_____ Date_____

APPENDIX B

Letter to Parents of Gifted and Average Pupils

LYNNE PHILLIPS 721-9502
PSYCHOLOGICAL FOUNDATIONS, EDUCATION
UNIVERSITY OF VICTORIA VICTORIA, BC V8W 3A4

Dear Parents, [sent to parents of gifted and average pupils]

We would like to invite your child to participate in a study on self-concept sponsored by the University of Victoria. The purpose of the study is to find out how children in different educational settings and programs feel about themselves.

Your child will be asked to fill out a questionnaire which is designed to obtain children's self-perceptions in terms of scholastic, social, and athletic competence as well as physical appearance and behavioral conduct. The questions will be in this form: Some kids feel that they are very good at their school work BUT other kids worry about whether they can do the school work assigned to them. Your child will be asked to check which half of the sentence is "Really True for me" or "Sort of True for me".

NO NAMES WILL BE PUT ON THE QUESTIONNAIRES. YOUR CHILD WILL BE IDENTIFIED BY GRADE, DIVISION AND SCHOOL ONLY.

The children will also fill out two more short questionnaires which ask them to state how important school,

athletics, physical appearance, behavior, and social acceptance is to them in terms of determining self-concept. The second questionnaire asks the children to check the group (children in the classroom, P.A.C.E. program, etc.) that they used for comparison purposes.

We expect the questionnaires to take **no more than 30 minutes.** RESPONSES WILL BE CONFIDENTIAL, BECAUSE THE REPLIES WILL BE ANONYMOUS.

The children will be asked to voluntarily fill out the questionnaire. Where possible, the questionnaire will be administered in the regular classroom to an entire class or in small groups in a separate room within the school. The purpose of the study will be explained briefly, as will the nature of the questionnaire (no right or wrong answers, but an opportunity for each child to engage in self-discovery). There will be a discussion and question time after they have completed the questionnaire.

Your cooperation in giving permission for your child to participate will benefit the Sooke School District, because it will provide information about the impact that various educational settings may have on students' self-concept or motivation for academic success. This knowledge can be used to improve instruction for all children. **If you have questions, please don't hesitate to phone me (721-9502).**

Thank you in anticipation of your cooperation,

Mrs. L. Phillips

cut here_____cut here

Child's Name_____ School_____

Division_____ Grade _____

I have read the explanation and give consent for my child to participate in the Self-Concept Study by answering the questionnaire. I understand that confidentiallity is assured by the anonymous responses.

Parent's Signature_____ Date_____

APPENDIX C

Verbatim Script for Introduction and Administration of Questionnaire

Introduction (5 minutes)

(This paragraph was used with gifted groups and average groups in their classrooms. I was introduced by their teacher). Hello, boys and girls. I would like to thank you and your teacher for allowing me to take some of your class time to introduce myself and tell you about my project here in the Sooke schools. My name is Lynne Phillips and I am a graduate student at the University of Victoria. I am working on my Master's Degree in Education. I am also a teacher on educational leave from the Trail school district. Do any of you know where Trail is?

(This next paragraph was said only to the excluded children who were summoned from their classrooms to the staffroom, library, or office by the principal who would introduce me.) Hello, boys and girls. I would like to say right away that you're not in trouble! I have an invitation for you to participate in a special opportunity. You might be wondering why just a few of you have been asked to meet with me. I am doing a study with different kinds of students in the Sooke school district. Your names were given to me from records at the central school board office, because you represent children in the district who are

capable students. Specifically, you have done well in the past on standardized tests like the Canada Achievement Tests that you have just finished taking this/last week.

(For all subjects) I would like to tell you a bit about the research I have been doing in the Sooke school district and then to invite you to participate in the study if you would like to. The purpose of the study is to help the teachers in this district learn about how students in different grades, classes, and programs feel about themselves and their schoolwork. Other children in the district are participating in this study. This information will help teachers and administrators to decide how to make school the best place for children to work and learn.

There is another way that this questionnaire will help **you.** As you fill it out, you will probably learn some things about yourself that you didn't know before. There is nothing scarey about the questionnaire. To begin with, it is completely anonymous. Does anyone know what that means?... Yes, you don't have to put your name on the questionnaire. This means that you can be completely honest in your answers without anyone knowing who said what. The questionnaire asks you to think about yourself and how you feel about how well you do in school, how well you get along with your friends, what you think about yourself as an athlete, how you feel about your behavior, and how you feel about your physical appearance. None of the kids that I

have tested so far has found it difficult to answer, and most of them have found it interesting. If you decide that you would like to take part in this study by answering the questionnaire, and let me say, it is completely voluntary on your part, you can take this letter home to your parents. The letter explains to your parents what I have already told you, who I am and what the study is all about. If they have any questions, my name and phone number is on the top of the letter. They should feel free to phone me if they want to know more about what you will be doing. If you decide that you want to participate in this study, you need to take a letter home to your parents and get one of them to sign the consent form. You must bring the form back and give it to your teacher by____. That's the day that I will return and give you the questionnaire. Remember, no one does the questionnaire unless they want to and their parents give permission.

Administration of the questionnaire

Hello and thank you for allowing me to borrow some of your class time in order to administer this questionnaire. You remember taking home a letter to your parents about this study. The letter explained the purpose of the study and asked your parents to sign a consent form giving their permission for you to participate in this study. [To be said if not all consent forms are returned.] Your teacher has a list of those not returning their consent forms. If

you did not return a form, your teacher will give you an alternate activity [do a brain teaser, read a library book, work on unfinished assignments--whatever the classroom teacher preferred] which you do while the rest of the class fills out the questionnaire.

In addition, I want you all to understand that participation in this study is voluntary. If you don't want to fill out the questionnaire, you may also have the alternate activity to do. As your teacher comes around with the questionnaires and the activity, you can chose which one you would like to do today. The important thing is that all children should be quiet and busy, so that the questionnaires can be filled out as quickly as possible.

I explained last time why you might like to participate in this survey. Does anyone know what a survey is? [Probably one will get examples from the children of surveys about toothpaste, soft drinks or political polls.] That's right, a survey asks people their opinion about matters. In a survey there are no right or wrong answers. You just put down what you think, your own opinion.

This survey will be asking you to give your opinion about three things. First, it wants to know how you feel about yourself as a person, how well you think you do in school, with your friends, what kind of an athlete you think you are, what you think about your appearance. Second, it asks how important you think these things are to how you

feel about yourself as a person. Maybe you don't care about being a good athlete, a good student, whatever, or maybe you care very much. Everyone will have different answers, because everyone is a different person. The third thing it asks is: who you compare yourself to? If you think that you are good in school or a good athlete, it probably is because you think you do well compared to some kids in this class, or maybe in another class.

I will give you the instructions about how to fill out the three parts of the questionnaire now, so that when you get it, you can do the whole thing without being interrupted. This questionnaire looks somewhat different from others that you may have seen. I have prepared some charts, so that you can see what the questions look like. Look at this first question. [read question aloud] The first thing you have to do is to decide which side of the sentence best describes you. Are you most like a kid who likes to watch TV or to play outdoors? After you decide which kind of kid you are, then you have to decide how strongly you feel about this choice. Do you feel it's "really true" for you, or do you feel that it is just "sort of true" for you? Remember, you read both sides of the sentence and then choose one side which best describes the kind of kid you are, and then you choose one box to check on that side of the sentence-really true if you feel strongly about it (or do it a lot), or sort of true, if you feel not

so strongly about it, or don't do it very much. The important thing is: read both sides of the sentence, but check only one box for each sentence.

On the second part of the questionnaire, you will be asked to decide how important the things are that you rated in part one. For example, how important is it to you to do well in school? Some kids think it is really important. Others might think it is only sort of important, or not important. You also have to decide how important it is to be a good athlete or how important it is to look good, or be well behaved. (Rest of instructions about format are similar to instructions on part one.)

The third part of the questionnaire is the shortest part. Here, you will be asked to decide who you compared yourself to when you made decisions in part one about how you felt about yourself. If I were to ask you if you are good in math, you might say "yes". I might ask: How do you know that you are good in math? You could say: I am always finished first in my work; I don't have to ask for help from the teacher; I get good grades in my class and do well on the tests; I don't have homework to take home. Your reasons indicate that you are comparing yourself to other kids, maybe kids in your class, or your brother or sister, or your best friend or a friend in the [gifted] program. The third part of the questionnaire has three choices. If you compared yourself to kids in your class when you answered

the questions about schoolwork, then you check this choice, kids in my class. If you compared yourself to a kid in the [gifted] program, you check kids in [gifted program]. If the kid in the [gifted program] is also in your class, you don't check both. You check only kids in [gifted program]. If you compared yourself to someone else who is not in the [gifted program] or in your class, say, your next door neighbor, your cousin, kids on your hockey team, or in your Girl Guide group, you check other. The important thing to remember is that you can only choose one person or group as the person or group that you used in comparing yourself when you had to decide how well you did in school, as an athlete, or whatever you answered in part one.

This sounds like a lot to do, but don't worry. There are not as many questions as it sounds! Please write your age and birthday on the questionnaire and circle whether you are a boy or a girl but DO NOT PUT YOUR NAME ON THE QUESTIONNAIRE. These questionnaires are anonymous, which means that when I take them away from here, neither I nor anyone else will know who filled it out. In this way you can be honest and not worry about hurting anyone's feelings. When you have finished the questionnaire, you can take out a library book and read quietly until everyone is finished. When everyone is finished, I will be glad to answer any questions you might have or listen to your comments about this experience.

APPENDIX D

Questionnaire Used in Study

The first two parts of the questionnaire were taken from the Manual for the Self-Perception Profile for Children (Revision of the Perceived Competence Scale for Children), 1985, by Susan Harter. Due to copyright restrictions, these first two parts cannot be reproduced here. Readers may obtain a copy of the Manual which includes the first part of the questionnaire, What I Am Like, on pages 1 to 4 of the APPENDIX and the second part of the questionnaire, How Important Are These Things to How You Feel About Yourself as a Person, unpaged. The Manual may be obtained from Dr. Susan Harter, University of Denver, University Park, Denver, Colorado, U.S.A., 80208. Cost, approximately $14 U.S.

The third part of the questionnaire was written by the author of the present study and is reproduced on the following pages.

WHO WERE YOU COMPARING YOURSELF TO?

WHAT GROUP OF KIDS WERE YOU THINKING ABOUT WHEN YOU ANSWERED THE RIGHT OR LEFT HALF OF THESE QUESTIONS WITH "Really True for me" OR "Sort of true for me." **Check only one for each question.**

1. "Some kids do very well at all kinds of sports BUT Other kids don't feel that they are very good when it comes to sports."

Were you comparing yourself to

_____ kids in the P.A.C.E. program

_____ kids in your class

_____ other kids not in PACE or in your class

2. "Some kids usually act the way they know they are supposed to BUT Other kids often don't act the way they are supposed to."

Were you comparing yourself to

_____ kids in the P.A.C.E. program

_____ kids in your class

_____ other kids not in PACE or in your class

3. "Some kids do very well at their classwork BUT Other kids don't do very well at their classwork."

Were you comparing yourself to

_____ kids in the P.A.C.E. program

_____ kids in your class

_____ other kids not in PACE or in your class

4. "Some kids are very happy being the way they are BUT Other kids wish they were different."

Were you comparing yourself to

_____ kids in the P.A.C.E. program

_____ kids in your class

_____ other kids not in PACE or in your class

5. "Some kids think that they are good looking BUT Other kids think that they are not very good looking.

Were you comparing yourself to

_____ kids in the P.A.C.E. program

_____ kids in your class

_____ other kids not in PACE or in your class

APPENDIX E

Information on Discrepancy Scores

Sample and Subsamples	Number of Subjects in Each Sample	Number Used in Calculating Discrepancy Scores and Regression Coefficients
TOTAL	170	165
Gifted	59	56
Average	55	54
Excluded	56	55
Boys	75	71
Girls	95	94
Grade 5	35	34
Grade 6	62	60
Grade 7	73	71

Number of Comparisons (Competence Minus Importance) Used in Calculating Discrepancy Scores for Total Sample

Number of Comparisons[a]	Frequency of Occurence
0	9
1	27
2	40
3	46
4	37
5	10

Note: aThis is also a measure of the number of domains rated as important or very important by the children. For example, 46 children in the total sample rated 3 domains as important or very important. Therefore, 3 comparisons were also made wherein the importance score was subtracted from the corresponding competence score for each domain.

Number of Discrepancy Scores (Competence Minus Importance) Based on an Average of Positive and Negative Differences, Negative Differences Only, Positive Differences Only, or Zero for Total Sample

Type of Differences	Frequency Count
+ and -	58
- only	94
+ only	8
0	9

Note: This means, for example, that 58 children rated themselves as more competent in one or more domains which they valued as less important. In one or more other

domains, they valued the domain as more important, but felt less competent in that domain.

There were 135 negative mean discrepancy scores. The number of positive mean discrepancy scores was 21 and the number of zero mean discrepancy scores was 9.

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Title of Thesis

DOMAIN-SPECIFIC SELF-CONCEPTS OF ELEMENTARY SCHOOL CHILDREN RELATED TO PLACEMENT OR NONPLACEMENT IN A GIFTED PROGRAM

Author [redacted]

Lynne B. W. Phillips

July, 1987