

- Maloney, M. P. and Ward, M. P. Psychological assessment: A conceptual approach. New York: Oxford, 1976.
- Perrone, P. A. The relationship of creativity, goal orientation, adherence to conventional values, intelligence, and the occupational choices of high school seniors. Unpublished dissertation, Syracuse University, 1962.
- Perrone, P. A., Chan, F., Pribyl, J. H. Differential characteristics of gifted and talented elementary pupils. *Journal of Educational Research*, (in press).
- Perrone, P. A. and Chan, F. Toward the development of an identification instrument for the gifted. *Roeper Review*, 5 (1), 1982, p. 45-48.
- Renzulli, J. S. *The enrichment triad model: a guide for developing defensible programs for the gifted and talented*. Mansfield Center, Connecticut: Creative Learning Press, 1977.
- Whelan, H. A. et al. Educational implications of cognitive style. *Review of educational research*, 47 (1), 1977, p. 1-64.

Social-Emotional Development of Gifted Children and Adolescents: A Research Model

Reuben Altman

This article summarizes the contradictory evidence regarding the social and emotional stability of gifted youngsters. While the research literature tends to support a view of equal or superior adjustment, an increasing concern for the mental health of gifted students is emerging among professionals and in the media. Six factors are discussed which suggest particular sources of stress for the gifted. Finally, a research model capable of both generating empirical studies and integrating the results from diverse investigators is suggested.

Reuben Altman is Professor of Special Education at the University of Missouri-Columbia. Dr. Altman is widely published and lectures and consults with school districts and agencies serving the gifted.

The literature in gifted education, (e.g. Lehman and Erdwins, 1981) including the major introductory textbooks, (e.g. Gallagher, 1975) traditionally maintained that gifted children and youth are characterized by superior emotional and social adjustment in comparison to their non-gifted peers. In

fact, the classic longitudinal investigations of Lewis Terman and his associates (Terman, et. al., 1930; Terman and Oden, 1947; 1959) not only nurtured this point of view but evidenced maintenance of better adjustment into the adult years. These investigators pointed to such indices of adult adjustment as fewer contacts with social agencies, more stable personal relationships and greater educational achievement to support this contention. In her review of the Terman studies, Hildreth (1966) reported that as late as 1959, the great majority of the original subjects continued to be well adjusted and the rate of antisocial behavior was far below that of the general population.

Notwithstanding some theoretical and methodological criticisms of this early research, these observations dominated the professional literature on the social and emotional characteristics of gifted children and youth. That is, despite the recognition of confounding socio-economic factors in the Terman studies (the subject sample was disproportionately representative of the higher socioeconomic classes), follow-up publications (Sears, 1977; Sears and Barbee, 1977) generally assert a positive correlation between intellectual ability and psychosocial adjustment. In fact, a common component of both preservice and inservice training efforts as well as most public awareness efforts include dispelling such myths as the assumed high frequency of social and emotional difficulties among gifted persons.

Historically, while professionals in gifted education promulgated the advanced psychosocial attributes of this population, the public at large has harbored more suspect views of their intellectually superior peers. Even teachers and other school personnel often associate giftedness with a variety of peculiarities including social isolation, effeminacy in boys, aggressiveness in girls, and generally high strung behavior, i.e., nervousness or an overly sensitive temperament.

More recently there appears to be a shift, or at least a reevaluation of thinking among professionals in gifted education and related disciplines are expressing concerns about the particular psychosocial problems faced by gifted youngsters (Webb, Tolan & Mickstroth, 1982; Lajoie and Shore, 1981). A small but increasing number of journal articles are expressing concern about the particular emotional difficulties presumably experienced by gifted children and adolescents (Schauer, 1976). Similarly, a growing number of speakers at professional meetings are focusing on the social and emotional difficulties of

being young and gifted. Delisle (1982) identifies such factors as perfectionism, fear of success and fear of failure, and social isolation as possible precipitating factors leading to adolescent suicide among gifted youth.

This increase in concern regarding the mental health of gifted youngsters has not been limited to professional communication. Newspaper articles, films and television shows suggest that the increased incidence of adolescent suicide is a particular crisis among the nation's gifted and talented youth. Not surprisingly, there has been a concomitant growth of interest in counseling and guidance for the gifted (Cohn and Finlay, 1982; Perrone and Male, 1981). Furthermore, the comprehensive survey of assessment instruments for gifted and talented students compiled by Karnes and Collins (1981) includes 26 specific to personality and self-concept.

It should be emphasized that despite these trends in thought among both the public and professional communities, one is still unable to present any conclusive evidence confirming negative psychosocial consequences to giftedness. The limited number of contemporary research investigations are generally equivocal and inconclusive, tending to support the long-standing Terman data. For example, Benbow (1982) used the Scholastic Aptitude Test as a screening measure for highly achieving gifted junior high school students and reported superior academic and social development for this group. In contrast, Killian (1983) reported that sex was more significant than intelligence in differentiating personality characteristics among secondary level gifted and non-gifted students. Nevertheless, if there are predisposing factors toward social or emotional instability among students identified as gifted, they must be identified as early in the child's development as possible. The recently reported longitudinal investigation by Sameroff, et. al. (1982) suggests that the etiology of psychopathology in children is a complex interaction of constitutional and environmental factors. By identifying early marker variables associated with later problems, interventions can be designed to offset difficulties which may vary from underachievement in school to life threatening self-destructive behaviors.

Certainly gifted children are subject to the same anxieties and sources of stress that are experienced by all children. In this sense, concerns about their social and emotional well being parallel mental health efforts in behalf of all children. The goal here is to delineate those problems that may be

unique to gifted youngsters or pose particular difficulty for children with advanced intellect or talent.

As a point of departure it seems useful to first clarify those phenomena which may in fact differentiate the gifted youngster's life experience and thus indicate possibly unique sources of stress. There are at least six concepts which clearly differentiate the gifted child's functioning in this regard:

Advanced cognitive functioning

The common aphorism that states *ignorance is bliss* may indeed accurately imply that *intelligence is stressful*. Among the cognitive traits frequently associated with advanced intellect are more divergent thinking, a more analytical cognitive style, and a tendency toward more judgmental and critical thinking. There is no reason to assume that gifted children would not subject themselves and their own efforts to these same high critical standards. Certainly, high standards imposed on oneself, particularly if excessive or unrealistic, may constitute a source of chronic stress leading to frustration, guilt and self-debasement.

Older peer contacts

Because of the greater maturity frequently characterizing the interests and personality of gifted students, these youngsters may more likely engage and maintain relationships with children older than themselves and with adults. Sometimes these adult relationships are nurtured in the school program through early admission to coursework with older students and through mentor programs with adult tutors. Thus, it is more likely for gifted children to be exposed to adult problems and concerns and, as a result, to experience sources of stress more common to older individuals.

Early language competence

Gifted children frequently evidence precocious language behavior. In addition to early command of language, the level of language competence typically reflects more advanced vocabulary and a greater flexibility in communication. This agility with language and abstract thinking may trigger early mature thought on questions of values, personal philosophy, and individual identity. Such self evaluation is often associated with periods of stress for adults and is likely to create similar discomfort among children who have fewer resources to use in resolving personal conflicts.

Earlier onset of developmental stages

The process of change and personal growth is to some extent stressful for everyone. To the degree that the progression through developmental stages

are predictable and follow orderly patterns, the associated stress is reduced. For children, the tendency to be grouped chronologically in school further minimizes this stress, as most peer groups are experiencing similar changes simultaneously. However, the gifted child may achieve stages of emotional and physical development in alternative patterns and/or at varying times chronologically. Thus, the child's experiences and perceptions are less predictable and may occur without the empathic support of a chronologically matched peer group.

Rapid progress through developmental stages

The gifted child may also progress through each developmental stage more rapidly. The stress associated with developmental stages is usually lessened by the intervals of relative stability within stages and between periods of change. Thus, another potential source of emotional trauma is the relative instability experienced with a more rapid progression through phases in development.

Awareness of being different

The gifted child, in particular the child identified for special school services, is officially labeled. The field of special education has wrestled strenuously with the stigmatizing effects of labels and their impact on the child's self-concept, behavior, and peer relationships. While the *gifted* label lacks the negative impact of such descriptive labels as *mentally retarded* or *emotionally disturbed*, it nonetheless communicates a *difference*. This very suggestion of difference will influence how children perceive themselves and others, and consequently influence their interpersonal experiences and such indices of self-image as achievement motivation, personal confidence, risk taking behavior, and conformity needs.

These six factors certainly support the systematic investigation of social and emotional development among students identified for placement in programs for the gifted and talented. Singly and in combination, they suggest some unique forces operating in the psychosocial development of the gifted which do not impact in the same way and/or to the same degree in the general student population.

The Research Model

The research model suggested in this article comprises an empirically based systematic and comprehensive investigation of the social and emotional

characteristics of gifted children and adolescents. The proposed research is **empirical** in that it relies on data derived from a variety of instruments (both test instruments and rating scales) specifically developed to objectify relevant social and emotional traits. The research is **systematic** in that it constitutes a programmatic series of studies derived from a model designed to generate research in this area. In addition, the research is **comprehensive** in that it endeavors to encompass a broad range of research subjects, a broad range of target characteristics in the social-emotional domain, and a broad range of demographic variables descriptive of the children and their environment.

There are three major categories of variables which define this model: the sources of the research data; the social-emotional traits to be investigated; and the demographic variables selected for examination.

The first of the three major dimensions of the research model is labeled *Sources of Data*. This dimension refers to the individual child and four significant others who can contribute their respective views relative to the social and emotional well-being of the gifted student. Thus, these five sources of data are: the child or adolescent; the teacher; the parent(s); siblings; and peer group members. (see Figure 1)

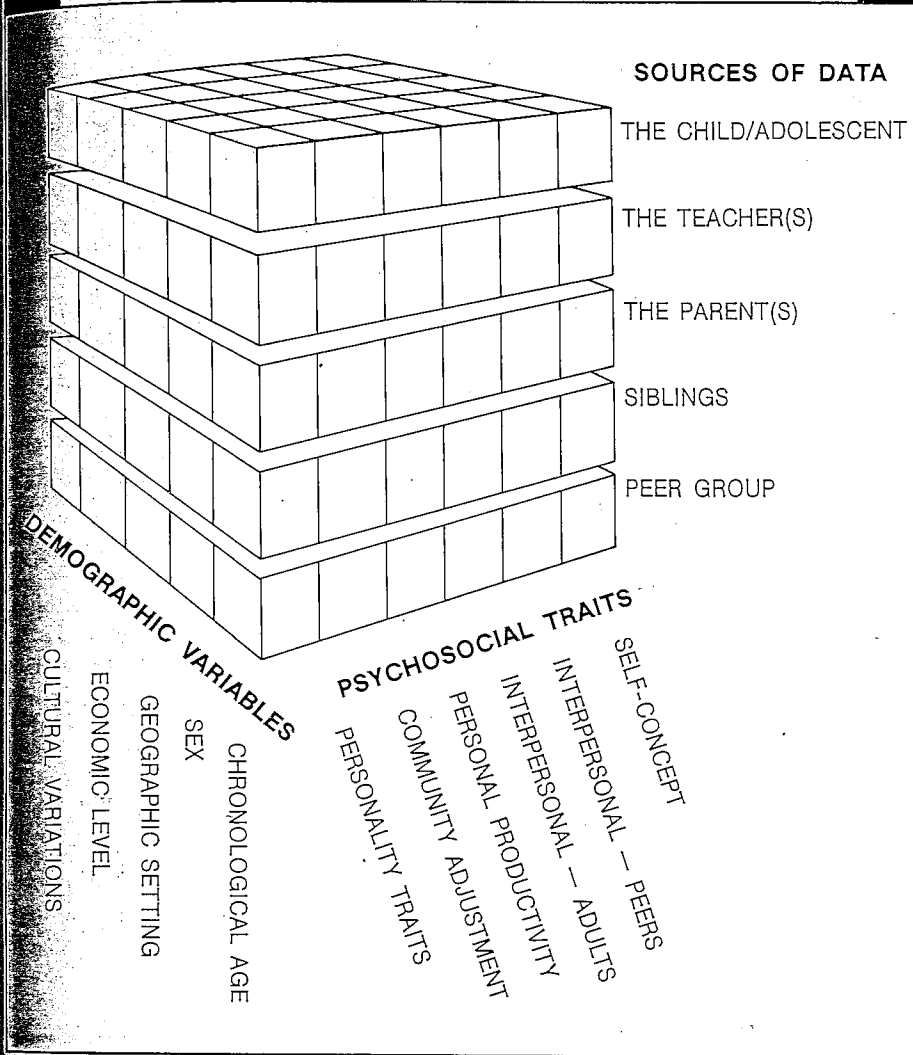
Certainly the child is a principal source of information regarding feelings of emotional well-being and social experience. At the same time, such data are limited by the methodological problems associated with research employing self disclosure, such as personal inhibitions and lack of objectivity. Thus, it is particularly important that data derived directly from children be supplemented with information contributed by a variety of others most familiar with them.

Teachers who routinely interact with youngsters offer an ideal vantage from which to view many pervasive aspects of psychosocial development and school related behavior in particular. The teacher as a source of data offers the distinct advantage of interacting with and observing a large number of peers which provides a sound comparative base from which to judge relative degrees of deviance or commonality.

Parents offer another view of the child in yet another context, though perhaps relatively limited in their objectivity. One particular advantage to the parental perception is its longitudinal nature providing an in-depth view of the individual child over a longer period of time.

Similarly, siblings and peers have

Figure 1: A Model for Generating and Integrating Research on the Social and Emotional Development of the Gifted



both distinct and overlapping perspectives which can shed light on overt as well as more subtle emotional and social indicators. A child's relationship with peers or friends varies in some predictable ways from relationship and interactions with siblings. For example, the selection of friends entails a degree of choice while sibling relationships are a function of fate. Utilizing this broad spectrum of data sources as opposed to only one or two increases the likelihood of compiling a more thorough and accurate picture of the social and emotional characteristics of gifted children and youth.

The second major dimension of the research model, entitled Psychosocial Traits, delineates six individual aspects of psychosocial development for particular attention. These six variables are: self-concept; interpersonal relationships - peers; interpersonal relationships - adults; personal productivity; community adjustment; and personality traits. These six factors comprising the psychosocial domain of the model are neither all en-

compassing nor truly independent variables. Nevertheless, they demarcate and predetermine six broad aspects of psychosocial development for detailed investigation.

Few if any psychosocial variables can be investigated nor can data be meaningfully interpreted independent of relevant demographic variables. Clearly, the nature of interpersonal relationships and manifestations of self-concept will vary as a function of such variables as chronological age, sex and socioeconomic background. Thus the third dimension of this model, referred to as Demographic Variables, integrates five major demographic features which appear to have particular relevance to social and emotional development. These are: chronological age; sex; geographic setting; economic level; and cultural variations. It is not assumed that these five demographic variables are comprehensive in encompassing those to ultimately be investigated. A host of demographic considerations may ultimately be examined in relationship to

the psychosocial variables identified. For example, birth order, physical characteristics, intactness of the family unit, and availability of special education services all appear promising as variables which may influence psychosocial adjustment.

However, as a point of departure, this three-dimensional model theoretically suggests at least 30 independent research studies with at least 5 potential sources of data bearing on each investigation. It should be emphasized that the dimensions of the research model are continuously open to further development and redefinition. It is quite likely that as individual studies progress, the results themselves will cue additional variables and combinations of variables that demand further investigation. A particular advantage of such an organizing model for inquiry is the opportunity for diverse investigators to individually contribute in a cumulative fashion to a common body of knowledge.

In addition, knowing as we do the social and economic limitations involved in generalizing the Terman studies to the broader student population served in gifted programs today, it is incumbent to reexamine these variables at this time. Over the past two decades, educators have become particularly sensitive to the inadequacies of traditional intellectual and academic criteria in identifying gifted children among lower socioeconomic groups and minority cultures. This sensitivity has led to alternative and more flexible selection criteria and it is likely that the gifted student population served today is more heterogeneous in most respects than those selected for the original Terman sample.

Of course, there is probably as broad a variation of mental health characteristics among the gifted as among the population in general. However, as the particular difficulties experienced by gifted students and the specific conditions that determine the development of adaptive as opposed to maladaptive coping strategies are identified, progress toward ameliorating interventions can be achieved.

REFERENCES

- Benbow, C. P. *Consequences in high school of being bright and of being a boy or girl.* Paper presented at the 29th Annual Meeting of the National Association for Gifted Children, New Orleans, Louisiana, October 19-23, 1982.
- Cohn, S. J. and Finlay, P. M. *Counseling the intellectually gifted child: A bi-modal strategy.* Paper presented at the 29th Annual Meeting of the National Association for Gifted Children, New Orleans, Louisiana, October 19-23, 1982.
- Delisle, J. R. *Striking out: Suicide and the gifted adolescent.* Paper presented at the 29th Annual Meeting of the National Association for Gifted Children, New Orleans, Louisiana, October 19-23, 1982.

Gallagher, J. J. *Teaching the gifted child* (2nd ed.). Boston: Allyn and Bacon, 1975.

Hildreth, G. H. *Introduction to the gifted*. New York: McGraw-Hill, 1966.

Karnes, F. A. and Collins, E. C. *Assessment in gifted education*. Springfield, Illinois: Charles C. Thomas, 1981.

Killion, J. Personality characteristics of intellectually gifted secondary students. *Roeper Review*, 1983, 5, 39-42.

Lajoie, S. and Shore, B. Three myths? The overrepresentation of the gifted among dropouts, delinquents, and suicides. *Gifted Child Quarterly*, 1981, 25, 138-143.

Lehman, E. B. and Erdwins, C. J. The social and emotional adjustment of young intellectually gifted children. *Gifted Child Quarterly*, 1981,

25, 134-137.

Perrone, P. A. and Male, R. A. *The developmental education and guidance of talented learners*. Rockville, Maryland, Aspen, 1981.

Sameroff, A. J., Seifer, R., and Zax, M. Early development of children at risk for emotional disorder. *Monographs of the Society for Research in Child Development*, 1982, 47 (7, Serial No. 199).

Schauer, G. Emotional disturbance and giftedness. *Gifted Child Quarterly*, 1976, 20, 470-477.

Sears, P. S. and Barbee, A. H. Career and life satisfaction among Terman's gifted women. In J. C. Stanley, et al. (eds.) *The gifted and the creative: Fifty year perspective*. Baltimore, Maryland: John Hopkins University Press, 1977.

Sears, R. R. Sources of life satisfactions of the Terman gifted men. *American Psychologist*,

1977, 32, 119-128.

Terman, L. Mental and Physical traits of a thousand gifted children. In L. Terman (ed.), *Genetic studies of genius* (Vol. 1). Stanford: Stanford University Press, 1925.

Terman, L. and Oden, M. The gifted child grows up. In L. Terman (ed.), *Genetic studies of genius* (Vol. IV). Stanford: Stanford University Press, 1947.

Terman, L. and Oden, M. The gifted group at mid-life: Thirty-five years' follow-up of the superior child. In L. Terman (ed.), *Genetic studies of genius* (Vol. V). Stanford: Stanford University Press, 1959.

Webb, J. T., Tolan, S., and Meckstroth, B. *Guiding the gifted child*. Columbus, Ohio: Ohio Psychology Publishing, 1982.

Anxiety in the Gifted: Pluses and Minuses

M. Ann Dirkes

The many correlates of anxiety suggest that appropriate levels of stress can have a positive influence on the gifted as well as a variety of negative effects.

When gifted individuals learn to use anxiety to advantage and to respond to conflict with problem solving and relaxation strategies, they are able to integrate their uniqueness into home and school environments. This ability fosters a healthy self-image and contributes to their own development.

M. Ann Dirkes is an Associate Professor of Education at Indiana University-Purdue University at Fort Wayne. Dr. Dirkes teaches graduate courses on education for the gifted and mathematics education.

Whatever is said here about anxiety, it should be remembered that many children are relatively free of its negative effects (Clark, 1979). That the gifted meet conflict does not infer necessarily that stressful anxiety accompanies it. Many gifted individuals explore the world and adapt to it in ways that avoid unhealthy levels of anxiety regardless of the friction that they encounter.

This review of anxiety deals with general circumstances met by the gifted and with the active-coping abilities at their disposal. The study is complicated by the many ways in which gifted

youth differ from their age peers and by the ways in which the gifted differ among themselves (Saftner and Bruch, 1981).

Conditions and Symptoms

That the condition of giftedness is fertile ground for anxiety cannot be denied. Whether giftedness is demonstrated through academics, creative thinking, artistry, or leadership, it challenges the social structure of many cultures. The conflict that ensues is unique to persons with outstanding abilities (Torrance, 1960).

Since the abilities of the gifted are out-of-step with age peers and often surpass their elders, they upset customary relationships and invite ambiguous expectations for performance. At the same time, an awareness of new possibilities often prompts gifted persons to assume unusual responsibility for themselves. The anxiety that results is proportional, first to the support or rejection that they experience in response to their uniqueness and initiative, and secondly to the problem solving abilities that they can effectively use.

Another condition of giftedness is that its occurrence is not the ordinary and unprepared adults and peers often respond inappropriately. Lacking an understanding of giftedness, they may fail to recognize and accept individuals whose abilities surpass and differ from their own. Consequently, they are often unaware of the pressures that they create.

For many gifted students, the greatest pressures and consequent anxiety occur in school. In most classrooms the gifted are likely to sense little control over their actions and see someone else as the cause of their accomplishments. As locus of control begins to affect achievement (Stipek & Weisz, 1981), children with high intelligence develop

lower self-concepts than their average intelligence counterparts, at least in environments outside the home (Trotter, 1971).

Whatever the source, loss of control and a sense of inadequacy create a cyclical exchange between anxiety and its effects. The following patterns could be symptoms of undesirable levels of anxiety: decreased performance; expressed desire to be like age-peers; reluctance to work in a team; expressions of low self-concept; excessive sadness or rebellion; repetition of rules and directions to make sure that they can be followed; reluctance to make choices or suggestions; avoidance of new ventures unless certain of the outcome; extremes of activity or inactivity, noise or quietude; and other marked changes in personality.

Negative Correlates of Anxiety

Negative correlates of anxiety are probably recognized more widely in the gifted than positive ones (Newland, 1976; Roeper, 1982). For example, parents and teachers who seek fulfillment through children anticipate that the young benefit from their good wishes. The result is that young children, especially, want to please and then are expected to live up to former successes. At adolescence, however, many of these gifted students relieve pressures through withdrawal or through overt rejection of adult values.

When *nothing but the best* is good enough, the highest of goals is established whether or not it is appropriate for individuals: the need to be class valedictorian, and perceived entrance requirements at the *only* college acceptable. Even gifted children and youth who value competition often feel guilty or impatient over their presumed failure to reach such goals.

As external goals increase in number and importance, they dominate intrinsic