Family Systems Characteristics and Underachieving Gifted Adolescent Males

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Abstract

The family systems of 45 underachieving and 45 achieving gifted male adolescents were compared on the variables of family functionality, family satisfaction, family environment (conflict, achievement orientation, independence, and expressiveness), and achievement satisfaction. Families with achieving and underachieving gifted students did not differ on the measure of family functionality. Achievement satisfaction and family satisfaction differentiated families on the basis of the status of their gifted student; achievement satisfaction differentiated functional from dysfunctional families. Families with achieving gifted students expressed higher achievement satisfaction than families with underachieving gifted students, and dysfunctional families with an underachieving adolescent were less satisfied with their child's achievement than were functional families with an underachieving student.

During the past 20 years, the underachieving youngster has been a major concern of the community and the schools. It is estimated that 15% of the gifted students in our schools are underachievers with underachieving boys outnumbering underachieving girls by a ratio of 2:1 (Gowan, 1955). The problematic nature of underachievement for the child, the parents, and many school personnel has prompted a broad range of research. Concern with underachieving gifted has focused on relationships between home and school (Yates, 1975; Zilli, 1971), personality characteristics of gifted underachievers (Bledsoe & Garrison, 1962; Perkins, 1965; Roth & Puri, 1967; Taylor, 1964; Terman & Oden, 1947; Zilli, 1971), characteristics of the parents of underachieving gifted (Fine, 1977; Fine & Pitts, 1980; Newman, Dember & Krug, 1973) and problems in the home (Dur & Collier, 1960; Ross, 1964; Zilli, 1971).

Early studies of underachieving gifted students concentrated on the students' ability to cope with the environment and to excel (Conklin, 1940, Musselman, 1942). Research then moved to studies of the affective consequences of giftedness and underachievement. Emotional tensions (Terman & Oden, 1947) and interpersonal relationships (Fliegler & Bish, 1959) of gifted students were the subjects of study. In the 1960s, descriptive studies that compared achieving and underachieving gifted students were emphasized. It was also during this period that counseling and other therapeutic techniques were advocated as intervention strategies for underachieving gifted students. However, evaluations of these strategies were neither abundant nor encouraging (Gallagher & Rogge, 1966). Research in the 1970s indicated that underachievement among gifted students was pervasive. Underachievement tended to increase at each grade level, and adjustment difficulties also tended to increase (Guy, 1975; Newman, Dember, & Krug, 1973; Schauer, 1976). The 1980s have brought increased interest in using family systems concepts to study underachievement among gifted students.

Until recently, dyadic relations in the family and individual characteristics of family members have been stressed rather than a broader and more systematic view of families of underachieving gifted students. These attempts to understand or to define underachievement as a problem residing with the child, or with the child and one other person, a parent or a teacher, have more often led to blaming the child, the parent, or the school than to productive attempts to increase achievement. Current research has emphasized the relationship between underachievement and overall family functioning (Thiel & Thiel, 1977), and investigated such variables as family stress (Ross, 1964), parental conflict (Esterson et al., 1975), family structure (enmeshed/disengaged) (Bricklin & Bricklin, 1965), family communication patterns (Combs, 1964; Dur & Collier, 1960; Gurman, 1970), family perceptions (Tabackman, 1977), independence (Gowan, 1955; 1957; Newman et al., 1973; Zilli, 1971), and attitudes toward education (Zilli, 1971). Underachievement is currently seen as a complex phenomenon that is a manifestation of the interaction among family members and situational demands. By viewing underachievement of the gifted child within...
in a family systems context, professionals can avoid blaming the child or the parent and instead focus on finding ways to produce meaningful and lasting changes.

From a family systems perspective, behavior needs to be understood contextually in terms of its effects on interrelationships. The following example contrasts more traditional, linear thinking with systemic thinking. A bright 10-year-old is falling down in class work because he does not complete study assignments. The teacher is concerned, and so are the parents. The child is defined as “a lazy boy who is developing poor work habits.” A systemic view would consider the reciprocal impact of the child’s behavior on a broader set of relationships in the family. The underachievement could be a reflection of some dysfunctionality within the family; but as the child manifests the “problem,” the family may also mobilize itself so that it appears to be healthier and more functional as the “problem” is being addressed. In this sense, the child’s problem (underachievement) may mask more basic family issues.

Although there has been increased recognition that children function within a family system and that underachievement may contribute to or maintain family dysfunctionality, relatively little research has compared the family systems of underachieving and achieving gifted students using objective measures of family functionality and family satisfaction. An important research question from a family systems approach is: “What are the interactional relationships within families of gifted students?” This study formulated and tested two research questions to address this broader question.

1. Is there a difference in the proportion of families of achieving and underachieving gifted that are classified as functional and dysfunctional?

2. Do family members having achieving or underachieving gifted students differ in their satisfaction with their family? Do they differ in their levels of perceived conflict, achievement orientation, independence, and expressiveness? Do they differ in their satisfaction with the academic achievement of their adolescent family member?

Method

Subjects

Forty-five underachieving and 45 achieving gifted male adolescents and their parents participated in the study. The sample included 270 persons, 180 adults, the parents, and 90 male adolescents. The students in the sample ranged in age from 13 to 15 years and were enrolled in public school systems in Eastern Pennsylvania.

Students had been identified as gifted by their school districts using a two-step identification process. The first step was a screening that included any or all of the following: inspection of group and individual achievement test scores to identify high achievers, inspection of transcripts to identify students with high grades, teacher nominations for the gifted program, parent nominations for the program, and preliminary screening with the Slosson Intelligence Test. The second step was administration of either the Stanford-Binet Intelligence Test or the Wechsler Intelligence Test for Children-R. Students earning scores that placed them in the top 2% of the norm group for their age group were identified as gifted. The definition of giftedness was the criterion for inclusion in the gifted education programs in the schools in which the subjects were enrolled.

Three criteria were used to identify underachievers: (a) earning a “C” or below in one or more major academic subjects, (b) having at least a one year difference between expected and actual performance on a standardized achievement test, or (c) failing to complete work or submitting incomplete work at least 25% of the time as indicated by teacher records. A gifted student exhibiting at least one of these characteristics was classified as an underachiever.

Male students meeting the criteria for underachievement were identified by a review of the cumulative records of students enrolled in public schools in 16 school districts in one county in Eastern Pennsylvania. Males were selected for study because there are about twice as many gifted boys as gifted girls classified as underachievers. The sample was further restricted to underachieving gifted males from two parent families with middle to upper-middle socioeconomic status. These additional criteria were imposed to limit the possible impact of extraneous factors (i.e., single parent, poverty, need for the child to assume an adult role) on the measures of family functionality. Socioeconomic status of the family was determined by the categories of parent’s occupation used in the standardization of the WISC-R and McCarthy Scales of Children’s Abilities.

Once the eligible sample was identified, parents were contacted by mail and asked to participate in the study. The sample from which family functionality measures were collected was a highly homogeneous group of white, middle to upper-middle SES families with an adolescent male identified as gifted by the school district he attended and as an underachiever by the criteria used in this study.

Instruments

Four measures of family functioning were used. The measures were selected to meet three criteria: (a) they had established psychometric properties (i.e., reliability and validity data); (b) they had vocabulary, reading level, and length suitable for young adolescents and adults; and (c) they represented instruments commonly used in research on families.

Family functionality. The Family Adaptability and Cohesion Evaluation Scales (FACES II) (Olson, Bell, & Portner, 1982) measure family functionality. FACES II is a 30-item, self-report instrument designed to measure individual family members’ perceptions of family cohesion (emotional bonding and individual autonomy) and adaptability (ability of the family to change) based on the Circumplex Model of Marital and Family Systems. Internal consistency (co-efficient alpha) reliabilities were .87 for cohesion, .78 for adaptability; and
.90 for the total scale. Test-retest reliability with four to five weeks intervening between test administrations yielded stability coefficients of .84 for total scale, .83 for cohesion, and .80 for adaptability.

Family satisfaction. Family satisfaction was measured by the Family Satisfaction Scale (Olson, McCubbin, Barnes, Larsen, Muxen, & Lollison, 1983). It is a 14-item scale measuring cohesion and adaptability. Respondents indicated their degree of satisfaction using a five-point rating scale (1 = dissatisfied to 5 = extremely satisfied). Factor analysis showed that all of the 14 items had factor loadings greater than .50 on the first principle component. Internal consistency reliability (coefficient alpha) is .93 for the total scale and .85 and .84 for the cohesion and adaptability scales, respectively. A coefficient of stability of .75 for the total score was obtained using a five-week interval between retesting.

Family environment. Four subscales from the family environment scale (Moos, 1981) were also used as measures of family functioning: expressiveness, conflict, independence, and achievement orientation. This 90-item self-report instrument is designed to measure individual family members' perceptions of their family environments. Respondents indicated whether descriptive statements were true or false for their families. Internal consistency reliability (coefficients alpha) for each of the subscales was reported to be within an acceptable range (Moos, 1981) and test-retest reliabilities with an eight-week interval between testing varied from .68 to .86. The mean four-month profile stability was reported to be .78.

Achievement satisfaction. Satisfaction with the academic achievement of the adolescent in the family was measured by the question: "How satisfied are you with your child's academic achievement in school?" The response scale ranged from "1", dissatisfied to "5", "extremely satisfied."

Procedures

Families of underachieving and achieving male adolescents in the sample were tested individually with all family members tested in the same session. The rating assigned to the achievement satisfaction question was the respondent's score for achievement satisfaction.

Results

The data permitted three classification variables: respondent (mother, father, student), family status (achieving, underachieving), and family functionality (functional, dysfunctional). The concept of functionality was taken from Olsen et al. (1982), who incorporated the concepts of family cohesion and family adaptability into a Circumplex Model. The model classifies families as either functional (the four central family types: flexibly separated, flexibly connected, structurally connected, and structurally separated) or dysfunctional (the four extreme family types: chaotically disengaged, chaotically enmeshed, rigidly enmeshed, and rigidly disengaged). Using Olsen's definitions, families were classified as dysfunctional if one or more family members earned scores within the range for dysfunctionality. Using this criteria, eight families with an achieving gifted student were classified as functional and 37 as dysfunctional. For families with an underachieving gifted student, 10 were classified as functional and 35 as dysfunctional.

Adolescence is often a time of increased discontent and dissatisfaction with the family. Olson and McCubbin's (1983) study of "normal" families indicated that adolescents, as a group, viewed their families as more dysfunctional than functional; 73% of the families in their study were classified as dysfunctional. The proportion of families classified as dysfunctional in this study is similar to the proportion found in the earlier study of Olson and McCubbin and suggests that the perceptions of families in this study were similar to those of the families studied by Olson and McCubbin.

The classification variables were paired (i.e., family status and respondent and functionality and respondent) and used in subsequent factorial analyses of variance. These analyses permitted the dependent variables of family satisfaction, family environment, and achievement satisfaction to be compared across different levels of family status and family functionality.

Family functionality. Chi square analysis was used to test for differences in the proportion of families with achieving or underachieving gifted adolescents who were classified as functional or dysfunctional. Dysfunctional was defined as having one or more family members earning scores within the ranges for dysfunctionality on both the adaptability and cohesion scales of FACES II. No significant difference in proportions was found ($x^2[1, 90] = .20$, $p > .05$).

Family satisfaction. A 2x3 analysis of variance with repeated measures (ANOVA) was performed on family satisfaction scores. The independent variables were family status (achieving or underachieving) and respondent (mother, father, or adolescent). The main effect for status was significant ($F[2, 264] = 16.118$, $p < .05$). Families of underachieving gifted boys were less satisfied with their families than were the families of achieving gifted boys.

A second ANOVA was conducted on the family satisfaction scores. The independent variables in this analysis were functionality (functional and dysfunctional) and status (achieving gifted and underachieving gifted). This analysis yielded a significant interaction between functionality and status ($F[1,266] = 7.992$, $p < .05$). This interaction is presented in Figure 1. Dysfunctional families with underachieving gifted students had a lower mean family satisfaction score than did the other family groups.
Figure 1
Mean family satisfaction scores for the families of achieving and underachieving gifted adolescents as a function of family functioning.

Family environment. A multivariate analysis of variance (MANOVA) was performed on the conflict, achievement orientation, independence, and expressiveness scores using the variables of family status and respondent as independent variables. The main effect for respondent was significant (Wilks $\lambda = 0.84775$, $p < .05$). Group differences were observed for achievement orientation ($F[2,264] = 3.54635$, $p < .05$) and expressiveness ($F[2,264] = 16.83325$, $p < .05$). Table 1 presents the mean scores for the three respondent groups.

Table 1
Scheffe A Posteriori Tests for Means for Pairs of Respondents

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Mothers-Fathers</th>
<th>Mothers-Adolescents</th>
<th>Fathers-Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement</td>
<td>5.61</td>
<td>*5.61</td>
<td>5.78</td>
</tr>
<tr>
<td>Orientation</td>
<td>5.78</td>
<td>6.30</td>
<td>6.30</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>5.59</td>
<td>*5.59</td>
<td>5.41</td>
</tr>
<tr>
<td>Independence</td>
<td>5.41</td>
<td>4.03</td>
<td>4.03</td>
</tr>
<tr>
<td></td>
<td>6.48</td>
<td>6.48</td>
<td>6.30</td>
</tr>
<tr>
<td></td>
<td>6.30</td>
<td>5.90</td>
<td>5.90</td>
</tr>
</tbody>
</table>

Scheffe’s a posteriori tests showed that adolescents scored significantly higher on achievement orientation than did mothers. There were no significant differences in the mean scores of fathers and adolescents and fathers and mothers. Both mothers and fathers earned significantly higher mean scores than did adolescents on expressiveness; mean scores of fathers and mothers were not significantly different. To summarize, fathers and mothers perceived the same level of achievement orientation and expressiveness within the family, but adolescents perceived a greater degree of achievement orientation than did mothers. Both mothers and fathers perceived a greater degree of expressiveness within the family than did adolescents.

Achievement satisfaction. A 2x3 ANOVA with repeated measures was conducted on the achievement satisfaction scores. The independent variables in this analysis were status and respondent. A significant main effect was found for status ($F[2,264] = 195.436$, $p < .05$). Families with achieving gifted students were more satisfied with the academic achievement of their child than were the families with underachieving gifted students.

A second ANOVA was conducted using family status (achieving gifted and underachieving gifted) and functionality (functional and dysfunctional) as independent variables. This analysis revealed significant main effects for status ($F[1,266] = 213.315$, $p < .05$), as before, and functionality ($F[1,266] = 13.150$, $p < .05$). Functional families were more satisfied with the academic achievement of the student member than were dysfunctional families.

In family systems research it is important to consider the congruence between family members’ perceptions of their relationships and interactions (Olson & McCubbin, 1983). For this reason, agreement between family members’ perceptions of the degree of cohesion and adaptability (the two measures that were used to classify families as functional or dysfunctional), family satisfaction, and achievement satisfaction were assessed using correlational procedure. The correlations between scores on all pairs of family members are presented in Table 2.

Table 2
Correlation Between Pairs of Family Members for Selected Family Variables

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mother-Father</th>
<th>Mother-Adolescent</th>
<th>Father-Adolescent</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACES II</td>
<td>.47*</td>
<td>.50*</td>
<td>.43*</td>
</tr>
<tr>
<td>Cohesion</td>
<td>.35*</td>
<td>.34*</td>
<td>.35*</td>
</tr>
<tr>
<td>Adaptability</td>
<td>.35*</td>
<td>.49*</td>
<td>.37*</td>
</tr>
<tr>
<td>Family Satisfaction</td>
<td>.64*</td>
<td>.48*</td>
<td>.48*</td>
</tr>
<tr>
<td>Achievement Satisfaction</td>
<td>.64*</td>
<td>.48*</td>
<td>.48*</td>
</tr>
</tbody>
</table>

*p < .05

Correlations among scores of family members, while statistically significant, were moderate. They explained, on average, 10% to 15% of the variance in scores. Tests for differences between dependent correlations indicated that mothers...
and fathers had a higher level of agreement about achievement satisfaction in the family than did mothers and adolescents ($Z = 1.540, p < .05$) or fathers and adolescents ($Z = 1.540, p < .05$).

**Discussion**

This study investigated differences in family characteristics of achieving and underachieving gifted adolescents. The speculation that underachievement might be more characteristic of families identified as dysfunctional than of families identified as functional was not supported. Families with underachieving gifted students were not classified as dysfunctional any more frequently than families with achieving gifted students. The prediction that underachievement of gifted adolescents is symptomatic behavior suggestive of family conflicts and disturbance (Buxbaum, 1964; Christensen, 1972; Esterson et al., 1975; Friedman, 1969; Miller & Westman, 1964; Newman et al., 1973) was not directly supported by the present research. However, the thinking that generated the prediction did not consider the ways that a family “problem” could serve to mask dysfunctionality. That is, as described earlier, the family’s response to the underachievement might create the impression of greater functionality than really exists. When the child with the “problem” improves, other problem situations might occur within the family. Yet the dimensions measured as indicative of dysfunctionality might still be expected to reveal entrenched family patterns.

There were other findings that did discriminate between functional and dysfunctional families. Functional families of achieving and underachieving gifted students reported satisfaction with their families; however, dysfunctional families with achieving gifted students reported greater satisfaction with their families than did dysfunctional families with underachieving gifted adolescents. Furthermore, functional families were more satisfied with the academic achievement of their adolescent than were dysfunctional families regardless of status. Families with achieving gifted students saw themselves as more satisfied with their families and with the academic achievement of their adolescent member than did families of underachieving gifted students.

Family satisfaction, the variable that differentiated dysfunctional families with achieving and underachieving gifted students, is viewed as “reflecting the mood and happiness with the overall functioning of the family” (Olson & McCubbin, 1983, p. 71). Patterns over the life span of families indicate increasing discontent and dissatisfaction with the family during Stage 4 (families with an adolescent member). The situational stress of adolescence during this stage thrusts the family into a transitional state. Well-functioning families are able to change their levels of adaptability and cohesion as a response to situational stress, whereas pathological family functioning is characterized by an increase in rigidity (Barnhill & Longo, 1978; Olson & McCubbin, 1983). Extreme patterns can be temporarily experienced by balanced families, but extreme patterns of functioning that do not change over time are characteristic of dysfunctional families.

Dysfunctional families with underachieving gifted students may represent a problematic type of family that is relatively stable in its dysfunctionality. Dysfunctional families with achieving gifted students may represent well-functioning families engaged in a temporary, adaptive response to stress, related to the more general issue of adolescence. Future studies need to take a longitudinal view of functional and dysfunctional families with achieving and underachieving students.

Adolescents and their parents differed on the variables of achievement orientation and expressiveness. Adolescents perceived achievement orientation to be significantly higher than did their mothers, while mothers and fathers perceived a significantly greater degree of expressiveness in the family system than did adolescents. These results suggest that both underachieving and achieving gifted adolescents may perceive difficulty communicating with their parents. Differences in expressiveness probably reflect the developmental stage of the student rather than their achievement patterns.

Research using objective instruments runs the risk of missing the dynamic flow of family events that might be revealed in a series of family interviews. Furthermore, the presence of a “problem” might mask the extent of family dysfunctionality. Finally, the criteria used to define underachievement in this study were fairly soft, and, as a group, underachieving students ranged from those who were failing most of their classes to those who were achieving a “C” in one class and performing considerably stronger in other classes. We would anticipate different family reactions to a child who was generally rejecting school and to a child who was excelling in numerous areas but having difficulty in one class. For example, the type of child described by Fine & Pitts (1980) and Newman et al. (1973) is more seriously underachieving, has a pervasive and long standing pattern of underachievement, and has psychological discomfort with high achievement. This child seems to be more enmeshed within his/her family than the child with mild or selective underachievement. The parents of seriously underachieving students in the studies mentioned expressed a great deal of concern. The parents of the underachieving students in this study may have varied considerably in their perceptions of the student. Given the “softness” of the definition of underachievement, it might be expected that a number of parents were essentially unconcerned. In other words, the identified underachievement was not seen as a problem and was unconnected to family dysfunctionality or family systems maintenance dynamics.

A family system framework for understanding underachieving gifted children is still a potentially productive endeavor despite measurement issues. Future research might consider studying more homogenous groups of underachieving students, ranging from those with mild to serve underachievement. A longitudinal research design over a period of family life-stage development would seem to be a highly useful ap-
proach to studying the complex interaction between underachievement, family functioning, and family satisfaction.

References


