

Middle School: Alternatives for Meeting Student Needs

Creative Personality Characteristics and Dimensions of Mental Functioning in Gifted Adolescents

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The intent of this study was to discover what relationship, if any, exists between creative personality characteristics and psychic overexcitabilities (OEs), as defined by Dabrowski's Theory of Emotional Development. Twenty-one gifted seventh and eighth grade students were given the Something About Myself (SAM) portion of the Khatena-Torrance Creative Perception Inventory and the Overexcitabilities Questionnaire. The seven subjects with the highest SAM scores were designated as the High Creative, the seven lowest as the Low Creative group. A t test was performed on the group means of the two groups on the five dimensions of overexcitability. Differences between the High Creative and Low Creative groups were significant ($p < .025$) for imaginal and intellectual OE and ($p < .05$) for emotional OE. Differences between the groups on psychomotor and sensual OE were nonsignificant. These findings have implications for parents, teachers, and counselors of creatively gifted students.

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Society overlooks unusual behavior from the creative person who achieves eminence; it is less forgiving of such actions in those who have not achieved renown. Accounts of the creative personality and the creative process reveal basic disparities between these people and others. The creative are subject to greater intensity of feeling and they react more strongly to stimuli (Bachtold, 1980; Goertzel, Goertzel, and Goertzel, 1978) with seemingly unusual responses.

The creative, indeed, march to a different drummer. They experience unique stresses and they respond to these stresses and to their environment in ways that are dissimilar to the responses of others. The expression of creative needs leads to loneliness, conflicts, and alienation. Those who think of a new idea are in the very beginning a minority of one. This leaves them few anchors in reality or guides to behavior (through association with like personalities or true peers). Many highly creative students suffer from inadequate self-concept, learning difficulties, behavior problems, neurotic distortions, or even psychotic breakdowns (Torrance, 1965). Counselors, teachers, and parents of the creatively gifted need a theoretical framework to enable them to provide understanding, support, and appropriate educational experiences for these young people.

Kazimierz Dabrowski (1902-1980), a Polish psychiatrist and psychologist, formulated a theory of emotional development based on his studies of gifted and creative individuals that provides a theoretical framework to those who are concerned with the gifted and the creative. A key component of the theory is the concept of psychic overexcitabilities (OEs), which, along with special talents and gifts, constitute the potential for emotional development (Dabrowski and Piechowski, 1977).

There are five types of OE: psychomotor, sensual, imaginal, intellectual, and emotional. They are dimensions of mental functioning or modes of expressing tension, which are innate and measurable (Piechowski, 1979). The term overexcitability comes from the Polish, and the intended meaning is of a robust surplus and abundance (Piechowski, Silverman, and Falk, 1983). This surplus and abundance is of sensory awarenesses, sensory input and nervous tension. These heightened responses to stimuli exceed the value of an average response in intensity, frequency, or duration; hence "over" excitability. OEs have the effect of making concrete stimuli more complex, enhancing emotional content, and amplifying every experience. "Enhanced excitability . . . allows for a broader, richer, multi-level, and multidimensional perception of reality. The reality of the external and inner world is conceived in multiple aspects" (Dabrowski & Piechowski, 1977, p. 113).

The input of the OEs provides an overabundance of information and becomes a source of internal conflict. Inner conflict, the capacity to be disturbed by perceived contradictions, and sensitivity to the environment are elements of the creative personality, as evidenced by studies of poets and other creative persons as well as eminent individuals (Barron, 1981; Schactel, 1981; Witty & Lehman, 1965).

The Problem

The relationship of the OEs to the creative personality needs exploration. The development of OE profiles for gifted students who have characteristics of the creative personality may shed light on stresses they experience related to their heightened awarenesses. Insight into the perceptions of this population may help to provide direction for parents, teachers, and counselors as they seek to provide support for the developing personality. If the creatively gifted perceive their envi-

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ronment differently and are subject to novel stresses, their emotional development may be sufficiently different as to require specialized knowledge and techniques from those who deal with them.

The purpose of this study is to gather and examine OE profiles of students in a gifted program and to compare these with some measure of the creative personality. The questions under consideration are the following: What differences, if any, are there in levels of OE within this population? What relationship, if any, exists between OE profiles and creative personality characteristics?

Review of the Literature

The literature abounds with accounts of the elements of the creative personality — a high degree of sensitivity, a capacity to be disturbed, and divergent thinking capabilities (Torrance, 1961). Schactel (1981) believes that perceptions of the creative are "characterized by the increasing amount, variety, and enrichment of sensory experiences" (p. 154), and Barron (1981) sees the creative person as being particularly observant, seeing things in unusual ways and being extremely curious. Frustration with the self and the banalities and stupidities of life (Witty and Lehman, 1965) results from the perception of "what is" versus "what should be" (Dabrowski & Piechowski, 1977); all imaginative work may be the result of attempts to compensate for this perceived maladjustment to life (Witty & Lehman, 1965). In addition, high creativity may cause nervous strain and tension, and the supersensitivity of the nervous system contributes to inner conflict (Cruickshank in Whitmore, 1980). Samuel Taylor Coleridge (1981) spoke of "that synthetic and magical power . . . imagination" (p. 62) which is the soul of genius. However, imagination and the resultant divergent thinking leads to being in a minority, which brings its own set of stresses and conflicts, stemming from feelings of alienation and isolation.

Considering the ramifications of these elements of the creative personality, it seems possible that the extreme sensitivity, inner conflict, and divergent thinking may precipitate unique psychic tensions and internal dynamisms.

Characteristics of the creatively gifted (Clark, 1979; Ellison, Abe, Fox, Coray, & Taylor, 1981; Renzulli & Hartman, 1981; Silverman & Ellsworth,

Figure 1
Overexcitabilities and Characteristics of Creatively Gifted

Overexcitability	Characteristic Behaviors
Psychomotor	high level of energy and enthusiasm; exceptional psychomotor abilities; high-spiritedness; restlessness; tendency to become physically involved in activities
Sensual	heightened awareness of and sensitivity to the environment; sensitivity to beauty; seeing more, getting more out of stories, films, and poems; perceptiveness and openness to experiences of the inner and outer world
Imaginational	sense of humor; playfulness; intuitiveness; imaginativeness; fantasizes, daydreams, has freeflowing imagination
Intellectual	rapid insight into cause-effect relationships; capacity to be puzzled; ability to concentrate; curious
Emotional	unusual sensitivity to others; unusual emotional depth and intensity; advanced affective capacity; high degree of empathy

1980; Wallach & Kogan, 1965), when matched with Dabrowski's concept of psychic overexcitabilities, produce an overlap of behaviors. In general terms, psychomotor OE is marked by a surplus of energy, sensual by extreme pleasure in sensory pleasures, intellectual by intensified and accelerated activity of the mind, imaginational by vivid imagining, and emotional by intensified "relationship feelings" (Piechowski, 1979). The specific behaviors typifying overexcitabilities are closely related to characteristics of the gifted and creative. (See Figure 1)

The literature appears to support a relation between characteristics of the creative personality and Dabrowski's theoretical construct of overexcitability. Empirical support of this relationship is needed.

Methods

Subjects

The subjects for this study were enrolled in a resource program for gifted students in southwestern United States. From a possible *N* of 24 seventh and eighth grade students in the gifted program, parent permission for the use of data was obtained for 21 subjects, 8 females and 13 males. The subjects ranged in age from 12 years 3 months to 14 years 1 month, with a mean age of 12 years 10 months; individual IQ scores ranged from 127 to 142, with a mean of 132.9.

Instruments

The instruments used were the following: *Something About Myself* (SAM) portion of the *Khatena Torrance Creative Perception Inventory* and the *Overexcitabilities Questionnaire* (OEQ).

The SAM is based on the rationale that creativity is reflected in person-

ality characteristics of the individual, and that these characteristics can be measured and assessed through the use of the test. It consists of 50 statements; the individual places a check mark beside those statements that describe him/her. Internal consistency, determined by the split-half and equivalence methods had been found to range from *r*s of .68 to .95 for adolescent and adult groups. Criterion-related validity is reported between .39 and .79, and test-retest reliability coefficients for one day and four weeks are .98 and .77, respectively (Khatena and Torrance, 1976).

The OEQ is designed to determine the presence and intensity of the five forms of psychic overexcitability. It consists of 21 free-response questions; responses to these questions are examined by two independent raters for evidence of OE. Differences between raters are resolved by arriving at a consensus. If consensus cannot be reached, the item in question is submitted to a third rater for arbitration and three-way consensus. The inter-rater reliability (Pearson's *r*) ranges from .60 to .95, the most common being .70 to .80 (Piechowski, Silverman, Cunningham, & Falk, 1982). The inter-rater reliability in this study was .75 prior to consensus. Four protocols were audited by a third rater, with a correlation coefficient of .87. A modified version of the OEQ was used in this study. The wording of some questions was slightly different than in the original OEQ, to make the meaning clear to pre- and early adolescent subjects.

Both instruments in this study use self-report, but they are markedly different. The OEQ is an open-ended, free-response questionnaire, while the SAM is fixed by having its items written out to be responded to by a check indicating "yes" or a blank

indicating "no." The SAM is designed to measure six factors of the creative personality — environmental sensitivity, initiative, self-strength, intellectuality, individuality, and artistry, while the OEQ measures five dimensions of mental functioning or modes of processing. Environmental sensitivity may be similar to emotional OE, artistry might relate to imaginal OE, and intellectuality to intellectual OE; however, initiative, self-strength, and individuality do not have any OE counterpart (M. M. Piechowski, personal communication, January 13, 1984). Seventeen of the SAM questions hint at OE-like characteristics, but a "yes" response to the SAM merely indicates the presence of a given single trait, whereas responses on the OEQ may not only contain evidence of multiple OEs, but a given question may evoke responses indicating any mode or multiple modes of OE.

Procedure

Each student in the resource program completed the SAM and the OEQ; data were used only from those subjects whose parents had granted permission. Both instruments were administered by the resource teacher for the gifted program.

The OEQ was treated as a descriptive writing endeavor that had no time limitation, that would not be graded, for which there were no wrong answers, and which required thought and reflection to complete. For one week, part of each class period was available for responding to the OEQ.

The seven subjects with the greatest number of creative personality characteristics and the seven with the least were determined by using the scores from the SAM, which ranged from 14 to 40. Those with the higher scores were designated the High Creative group, and their SAM scores ranged from 32 to 40, with a mean of 35.86. The group with the lowest scores were designated as Low Creative, and their SAM scores ranged from 14 to 27, with a mean of 22.45. A group mean was calculated on each dimension of OE for each of the groups and a *t* test was performed on the difference between these means.

Results

The High Creative group showed higher levels of imaginal, emotional, and intellectual OE than the Low Creative group. The differences were found to be significant at the following levels: imaginal and intellectual $p < .025$, and emotional $p < .05$. The differences in psychomo-

Overexcitability	Low Creative Mean	SD	High Creative Mean	SD	<i>t</i>
Psychomotor	4.86	3.44	4.71	3.37	NS
Sensual	1.86	2.03	2.86	2.23	NS
Imaginational	5.29	2.25	10.14	3.83	2.68**
Intellectual	7.14	2.59	13.0	5.1	2.5**
Emotional	4.71	3.81	9.14	3.68	2.05*
** $p < .025$ (df=12)					
* $p < .05$ (df=12)					

tor and sensory OE were nonsignificant (See Table 1).

Discussion

Three types of OE appear to be related to creative personality characteristics within this gifted population: imaginal, emotional, and intellectual. Students with a higher number of creative personality characteristics experience and respond to their environment with a greater intensity than do those with fewer such characteristics, as indicated by a comparison of the marked difference between imaginal, emotional, and intellectual OE levels of the two groups. These three dimensions are those which differentiate the gifted from the average population (Gallagher, 1983; Piechowski & Colangelo, 1984; Piechowski et al., 1982; Silverman & Ellsworth, 1980). However, it seems noteworthy that within an intellectually gifted group, these same three dimensions appear to be related to a difference in number of creative personality characteristics. The difference in intellectual OE between the High and Low Creative groups is consistent with Gallagher's finding (1983) that intellectual OE was significantly different for high and low scorers on the *Torrance Test of Creative Thinking*. This may reflect the relationship between the questioning and questing attitude of the creative (Piechowski et al., 1982) and intellectual overexcitability, which is characterized by, among other things, curiosity, questioning, and problem solving.

Implications

Practical application of the information from this study is the most important aspect of the work. The apparent difference between subgroups of a gifted population in emotional and imaginal perceptions and functions, as well as in their intellectual processes, requires consideration. If we are to serve the crea-

tively gifted, their modes of processing and expressing perceptions and tensions must be considered and responded to through counseling provisions, parent information and training, and curriculum modifications.

School personnel, especially those who work with the gifted, need to be aware of these dimensions of the creative personality in order to provide for them. Hopefully gifted programs are providing for the love of truth, excitement with learning, intellectual curiosity, and questioning attitude which mark intellectual OE. What is needed is provision for nurturing and managing imaginal and emotional OE. This should include building an awareness in the students themselves as well as in others of the positive aspects of OE, as well as curricular modifications to develop these positive aspects.

Perhaps the most exciting promise of OEs lies in the realization that here is a way to conceptualize, to measure, and to describe the qualitative differentness of the gifted. Educators of the gifted have long believed that this population processes information in ways and through dimensions that others do not comprehend; here is a means of conceptualizing and, through the OEQ, examining these dimensions. The term qualitatively different has been bandied about freely, but heretofore there has been no instrument to assess the quality or intensity of the perceptions and responses which differentiate the gifted. Those who are concerned with the academic, social, or affective needs of the gifted may be helped to define and to deal with those needs through measuring the presence, type, and intensity of OE.

Dabrowski's Theory is a relatively recent one; many possibilities for future research exist. Further investigation might pursue the relationship between OE levels and personality, achievement, and abilities; age-related

changes in individual OE profiles; or whether OEs can be enhanced or developed by certain types of experiences or environmental conditions. Neurological and other physical bases for and links to OE need to be explored, and developing OE profiles for those with varying types of creativity offers interesting possibilities.

In conclusion, the level of OE is a promising indicator of creative ability. Imaginational, emotional, and intellectual OE appear to be related to the creative personality and need to be recognized and provided for to offer the creatively gifted opportunities for maximum development. OEQ responses indicate the extent to which giftedness permeates every fiber of the gifted person's being. It is not merely a matter of being smart, learning quickly, or of being able to create ideas or objects. Rather it is a qualitative difference in perceptions, reactions, and modes of processing. The gifted are unique in ways and dimensions that we have only begun to discover. Recognizing and measuring overexcitabilities may be one key to learning about and providing for these differences.

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Achieving Excellence through the International Baccalaureate Program: A Case Study of University-School District Cooperation

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Interest in the development of a higher quality academic program at a South Carolina high school in cooperation with the College of Education at the University of South Carolina has brought about the introduction of the International Baccalaureate in secondary school. The introduction of the IB program is a cooperative undertaking between two institutions with a long history of cooperation. This article traces the developmental stages of the program result in the first year of program for rising eleventh graders in August, 1985.

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