

**PERSONALITY DEVELOPMENT:
THE PURSUIT OF EXCELLENCE**

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ABSTRACT

Excellence requires the ability to envision what might be and the determination to make that vision a reality. A strong desire for perfection manifests itself early in the lives of many gifted individuals, oftentimes within the first three years. The question arises as to whether this trait is inborn or developed through parental intervention. Nature and nurture both appear to be critical factors in the development of excellence. According to Dabrowski's Theory of Emotional Development, a third factor also plays a critical role: the autonomous factor. This third factor emerges as an individual moves toward self-actualization and self-perfection. Dabrowski's theory is concerned with the replacement of "what is" with "what ought to be" in oneself. The relation of emotional development to the pursuit of excellence is explored within the framework of the theory.

*Talent is elusive, fragile, manifold, fast-moving,
luminous, tantalizing, and incredibly beautiful,
like aurora borealis on a cool September night.
Who would give a weatherman a bag of money
and tell him to go out and catch some northern lights?
— John Hersey*

Excellence may be a universal ideal, but it is a personal goal for only a few. The attainment of excellence begins with a vision—a vision of what is possible. The vision does not visit everyone; it selects the most fertile ground for its development. What criteria does it use? Inherent capability, surely. However, there must also be emotional receptivity, a willingness to embrace the vision and devote oneself to it. If the ability is there, but the receptivity is lacking, the vision will be fleeting. It only remains with those who are willing to work toward its fruition.

How do we determine who has achieved excellence? Is it only the individual whose superior achievements have been acknowledged by the world? Or can the flower born to blush unseen also claim rights to the title? "Eminence" and "excellence" have been used interchangeably for so long that we act as if one implies the other. But the world does

not always recognize outstanding quality; that which is overlooked is often superior to that which is rewarded. And popular acclaim can be won by appealing to pedestrian tastes, or by popularizing someone else's creative ideas. Ideas that are "too" original are often shunned; every society circumscribes what is to be valued.

Maslow (1962), in his study of self-actualizers, found that he had to discard all of his previous beliefs about creativity, genius, talent, and productivity.

. . . I soon discovered that I had, like most other people, been thinking of creativeness in terms of products, and secondly, I had unconsciously confined creativeness to certain conventional areas only of human endeavor. . . theorists, artists, scientists, inventors, writers. . .

But these expectations were broken up by various of my subjects. For instance, one woman, uneducated, poor, a full-time housewife and mother, did none of these conventionally creative things and yet was a marvellous cook, mother, wife and homemaker. . . . She was in all these areas original, novel, ingenious, unexpected, inventive. . . I learned from her that a first-rate soup is more creative than a second-rate painting, and that, generally, cooking or parenthood or making a home could be creative while poetry need not be. . . (pp. 133-136)

Where does excellence come from? How does it develop? Little is known about excellence per se. Gardner (1961) provided a powerful essay on the topic, but even here the term is not defined. Although the essence of genius, creativity, and giftedness, excellence is not wholly encompassed by any of these terms. We have only been able to study it indirectly, through its manifestations in gifted, creative, and eminent individuals.

Excellence: Born or Made

The desire for excellence manifests itself early in life, and characterizes the individual's approach to a wide range of endeavors. When Paul Robeson was a boy, a neighbor of his remarked that she knew he was destined for greatness by the way he mowed the lawn (Robeson, 1971). Case studies of young gifted children indicate that perfectionism becomes apparent while these children are still in diapers (Silverman, in preparation).

The early appearance and continuity of perfectionism in an individual's development has led many to contend that it is an innate characteristic. However, there is strong opposition to this view. The question of whether personality traits are inborn or the result of experience has been a source of debate for well over a century. The nature side of the nature-nurture controversy is perhaps best presented by its prime proponent, Sir Francis Galton. In 1869, Galton wrote:

By natural ability, I mean those qualities of intellect and disposition, which urge and qualify a man to perform acts that lead to reputation. . . . I

mean a nature which, when left to itself, will, urged by an inherent stimulus, climb the path that leads to eminence, and has strength to reach the summit—one which, if hindered or thwarted, will fret and strive until the hindrance is overcome, and it is again free to follow its labour-loving instinct (pp. 33-34).

Such men, biographies show to be haunted and driven by an incessant instinctive craving for intellectual work. If forcibly withdrawn from the path that leads toward eminence, they will find their way back to it, as surely as a lover to his mistress. They do not work for the sake of eminence, but to satisfy a natural craving for brain work, just as athletes cannot endure repose on account of their muscular irritability, which insists upon exercise. It is very unlikely that any conjunction of circumstances, should supply a stimulus to brain work, commensurate with what these men carry in their own constitutions. The action of external stimuli must be uncertain and intermittent, owing to their very nature; the disposition abides (p. 36).

Galton proposed that the motivation to achieve is inborn, and that genius will actualize itself despite adverse external circumstances. This position has led to the common myth that "the cream will rise to the top" regardless of the level of environmental support. It has been chronically used as an excuse for the neglect of talent development in the schools.

Others maintain that personality characteristics observed in exceptionally talented individuals are primarily the results of enriched home environments and training. Bloom (1982), a vocal advocate of this position, is currently conducting a study of the development of over 120 individuals who achieved excellence in artistic, psychomotor, and cognitive fields before the age of 35. The first reports, published after three years of investigation, focused on the special qualities of concert pianists, Olympic swimmers, and research mathematicians. Three characteristics were identified as critical to success in all of these fields:

- Unusual willingness to do great amounts of work (practice, time, and effort) to achieve at a high level or standard.
- Great competitiveness with other peers in the talent field and a determination to do their best at all costs.
- Ability to rapidly learn new techniques, ideas, or processes in the talent field (p. 512).

Bloom raises the question of whether these special attributes were inherent in the individuals or if they were created by unusually supportive learning conditions. He asserts that all three traits were considerably influenced by early socialization and training. Willingness to work was not strongly evident in his subjects before the age of eight; it seemed to manifest itself after several years of instruction. Competition appeared to emerge from sibling rivalry and from training to excel over others in public events.

Since an unusually rapid learning rate was generally limited to the individual's area of talent, its occurrence was also thought to be a product of training factors (e.g., exposure, practice, and greater mastery of prior related tasks) and socialization factors (e.g., high expectations of parents, encouragement, and high levels of motivation). While Bloom does not deny the possibility that learning rates may vary due to innate characteristics, his main contention is that favorable environmental influences during the early years can dramatically alter rapidity of learning.

According to Bloom, rapid learning ability, determination to do one's best, and willingness to work to achieve a high standard are perceived by parents and teachers as indications that the children have special talents worthy of further attention and cultivation. They are the "markers" parents use to determine the appropriateness of investing large sums of money in special programs and private instruction for their children. These criteria have also been used by teachers and programs to select candidates for intensive training.

Considerable weight is accorded by Bloom to the role of markers in the development of talent. If parents or teachers believe that a child possesses a unique characteristic, they will attempt to enhance its development in any way possible. Markers are selectively noted by parents and teachers; values and interests of the parents determine which qualities will be perceived as worthy of attention and cultivation. As an example, Bloom points out that girls who show an early interest in mathematics are rarely noted by their parents, whereas boys with similar interests are often encouraged to develop them.

In support of his premise that the markers of exceptional talent are environmentally induced, Bloom observes that training preceded the identification of talent in most of his subjects. The characteristics that marked these children as unique were not apparent to the parents before the initial training was procured; they surfaced after the youngsters had been exposed to instruction.

It was expected that the subjects would be initially identified as possessing special gifts or qualities and then provided with special instruction and encouragement. That is, it was assumed that the attribution of the special characteristics would be the "cause" of the initial instruction and support. In retrospect, it was found that these children received encouragement and instruction in a talent area FIRST and were later identified as having the unusual qualities noted by the parents and/or the teacher. The parents regarded it as important that all their children have certain kinds of experiences and learning opportunities. . . .

The child's progress in learning the talent field (during the early years of instruction) and the parents' and teachers' beliefs about the child's special qualities were mutually confirming. They led the child, his or her parents,

and the teacher to make special demands on each other (Bloom, 1982, p. 520).

Almost three decades ago, Pressey (1955) anticipated Bloom's findings. Surveying the literature on the development of musical and athletic precocity, Pressey concluded that genius was produced by providing precocious youngsters with expert, intensive instruction early in life; frequent opportunities to practice; continuous assessment of their progress and opportunities to advance as they were able; close association with others of similar ability; and cumulative success experiences. He emphasized the role of individualized guidance and instruction in the development of excellence. Like Bloom (Bloom & Sosniak, 1981), Pressey found the factors essential for the development of talent conspicuously absent in the schools.

The importance of individualized instruction of high quality is also confirmed in Feldman's research with prodigies in chess, music composition, natural science, and prose writing (Feldman, 1981). Paralleling Bloom, Feldman observes that enormous environmental resources are required to produce the outstanding achievements of prodigies. He reports that none of the precocious feats accomplished by his subjects could have been achieved without "intensive, prolonged educational assistance" (1979, p. 351). Each of his subjects worked closely with an extraordinary teacher. He concludes that early prodigious achievement is largely a function of outstanding education.

The strong environmental position on the attainment of excellence contains its own pitfalls. It makes questionable the practice of providing special opportunities for "children of promise." If talent is created entirely through environmental conditions, then ALL children are potentially talented, and all should receive equal stimulation. In addition, this philosophy leads some parents to maintain unrealistic expectations of their children, placing undue pressure where there is little evidence of high capability.

The nature/nurture controversy is unresolvable. It is generally agreed today that the two factors are inseparable; a heredity cannot exist without an environment, and an environment cannot be studied ignoring hereditary contributions. However, the relative degree of influence of each factor in the development of intelligence, personality, and talent still remains an open question. Bloom attributes most superior achievement to environmental factors, whereas Feldman and Pressey acknowledge the importance of innate predispositions and abilities.

Feldman (1979; 1982) proposes that the attainment of excellence is the result of the convergence of numerous hereditary, developmental, and environmental forces. He distinguishes between two domains of

development: universal and nonuniversal. In universal domains, such as physical, cognitive, and moral development, the environment plays a rather limited and passive role. The types of universal changes described by Piaget (1975) and Kohlberg (1964) must, of necessity, be extremely robust, able to emerge in the most disparate environments; otherwise there would be great variability, and their universality would be lost. However, in nonuniversal domains, such as music, physics, writing, etc., environmental forces play an active and critical role in development. In support of this thesis, Feldman notes that his child prodigies, who received abundant environmental stimulation, were remarkably advanced only in their specific areas of talent, not in the universal domains of cognition and moral reasoning.

According to Feldman (1982), extraordinary development within nonuniversal domains is incredibly delicate, dependent on the precise coordination of the following forces: the sophistication of the field itself (the existence of an economically communicable domain of knowledge); exposure to the field at the proper time and in appropriate ways; continuous, careful instructional assistance; and the "coincidence" of historical and cultural forces—the timing of the talent and the culture in which it occurs. The clearest sign that such a coincidence has occurred is the child's passionate pursuit of excellence.

Perhaps the most striking quality in the children in our study as well as other cases is the PASSION with which excellence is pursued. Commitment and tenacity and joy in achievement are perhaps the best signs that a coincidence has occurred among child, field, and moment in evolutionary time (Feldman, 1979, p. 351).

The Third Factor

Personality is a dynamic interaction between hereditary and environmental factors; the desire for excellence is shaped by both, but it is not readily explained by either, even in combination. A contemporary theory of personality development posits a third factor in addition to these first two—one that is directly concerned with the pursuit of excellence. This third factor, "the autonomous factor," is central to Dabrowski's Theory of Emotional Development. Dabrowski's theory provides a paradigm for the drive for self-perfection.

The third factor is an inner force operating in the service of self-actualization and self-perfection (Dabrowski, 1964). As a developmental agent, the autonomous factor enables the individual to transcend the limitations of both heredity and environment through self-determination.

The first factor is the constitutional endowment. The second factor is the social environment. The third factor is the dynamism of conscious choice

(valuation) by which one affirms or rejects certain qualities in oneself and in one's environment (Dabrowski, 1972, pp. 305-306).

The autonomous factor is a sense of inner-directedness, an inner drive to make conscious choices in accordance with those principles which are highest in oneself. It is a powerful internal force propelling development toward higher levels of integrity, authenticity, creativity, ethical responsibility, and compassion. It arises from the cross-influences of hereditary developmental potential and positive environmental conditions. However, it represents a new ability, irreducible to its sources (Dabrowski, Kawczak, & Piechowski, 1970). The third factor permits self-direction by enabling the individual to select elements of self and environment to embellish and to discard. The individual is no longer at the mercy of constitutional or environmental conditions; self-control becomes possible through conscious development (Dabrowski & Piechowski, 1977).

The third factor is akin to developmental and motivational concepts of individuation (Jung, 1933; Fromm, 1941); self-actualization (Maslow, 1962); self-realization (Horney, 1945); autonomy (Allport, 1955); integration (Loevinger, 1976); and personal growth toward a fully functioning personality (Rogers, 1963). Maslow (1971) contended that there is an inborn drive toward self-actualization, but that this goal is rarely achieved.

All the evidence that we have . . . indicates that it is reasonable to assume in practically every human being, and certainly in almost every newborn baby, that there is an active will toward health, an impulse toward growth, or toward the actualization of human potentialities. But at once we are confronted with the very saddening realization that so few people make it. Only a small proportion of the human population gets to the point of identity, or of selfhood, full humanness, self-actualization, etc., even in a society like ours which is relatively one of the most fortunate on the face of the earth. This is our great paradox (pp. 25-26).

Similarly, Dabrowski (1964) postulated a drive toward self-perfection; however, he did not believe that all individuals were born with this instinct. He maintained that the drive evolves as a person begins to progress to higher levels of development. In Dabrowski's paradigm, there are five levels of human functioning, ranging from egocentrism at Level I, through environmental domination at Level II, self-examination at Level III, self-actualization at Level IV, and attainment of the personality ideal at Level V. Like Maslow, Dabrowski found few individuals at the higher levels of development.

Self-Perfection and Creativity

The drive for self-perfection emerges at the transition into Level III, as the individual develops an inner hierarchy of values. The creative instinct appears at approximately the same time (Dabrowski, 1970). Both

Dabrowski and Maslow perceived a close relationship between higher level development and creativity, although Dabrowski did not equate the two. Higher level development tends to promote creativity, but creativity does not necessarily lead to higher level development.

[The] creative instinct . . . appears and grows at a relatively high level of development. . . . it is associated with . . . the third factor, the desire to transform oneself, prospection and authenticity. It is not necessarily associated with a global development of mental functions and structures (Dabrowski, 1970, p. 164).

[At Level III] Creativity comes to express the drama and tragedy, even the agony, of human existence—on the one hand, the inexorable power of fate, humiliation, absence of grace. . . , on the other hand, longing for the ideal, inspiration, and a heroic struggle. The tensions of subjective experience express themselves in a need to find objective criteria for high human values (Dabrowski & Piechowski, 1977, p. 46).

. . . the concept of creativeness and the concept of the healthy, self-actualizing, fully human person seem to be coming closer and closer together, and may perhaps turn out to be the same thing (Maslow, 1971, p. 57).

. . . the problem of creativeness is the problem of the creative person . . . what you are confronted with is the whole problem of transformation of human nature, the transformation of the character, the full development of the whole person (Maslow, 1971, pp. 73-74).

Many of the traits of the creative individual, as summarized by Torrance (1962), are indicative of higher level development, in the Dabrowskian or Maslovian sense: altruism, awareness of others, deep and conscientious convictions, curiosity, desire to excel, differentiated value-hierarchies, emotional sensitivity, independence in judgment, nonconformity, preoccupation with problems to be solved, sensitivity to beauty, sincerity, visionary qualities, and willingness to take risks (pp. 66-67). These traits are strongly correlated with the characteristics of self-actualizing individuals described by Maslow (1970; 1971).

This is most likely an idealized picture of the creative person, since there have most certainly been creative individuals who were egocentric and lacking in higher human values. Nevertheless, the appearance of these characteristics in several studies of creative personalities would indicate that a number of creative people are also self-actualizing.

Dabrowski's Theory of Emotional Development

Dabrowski's Theory is particularly pertinent to the psychology of individual excellence, since it originated with the study of gifted, creative, and eminent individuals (Dabrowski, 1967, 1972). In the biographies of geniuses and saints, Dabrowski found emotional depth and richness, "psychoneurotic" symptoms combined with the highest levels of human experience. He studied artists, actors, dancers, and intellectually

gifted children and youth in schools and academies. As a psychiatrist and psychologist, he did therapy with highly creative individuals in clinics and hospitals.

The most creative of Dabrowski's clients and subjects suffered from excessive sensitivity, existential anxiety, and attachment to their ideals. In their struggle to attain something nobler in themselves, these clients displayed emotional richness similar to that which he had observed in his biographical studies of the eminent. They could not reconcile themselves to concrete reality; instead they clung to their creative visions of what ought to be. They searched for "a reality of a higher level, and often they were able to find it unaided" (Dabrowski, in Piechowski, 1975, p. 236).

From his research, clinical observations, and personal experiences, Dabrowski conceived "The Theory of Positive Disintegration," a paradigm in which higher level development takes place through the dissolution of less evolved psychological structures. Contrary to the views and practices of the medical community, Dabrowski contended that disintegrative processes are often in the service of mental growth and development, enabling a reorganization of the personality on a higher level (Dabrowski, Kawczak, & Piechowski, 1970). Since Dabrowski's death in 1980, the paradigm has been frequently referred to as "Dabrowski's Theory of Emotional Development."

Within Dabrowski's framework, the pursuit of excellence is a by-product of the drive for self-perfection. It is a function of all three factors—heredity, environment, and the autonomous factor. Heredity determines the developmental potential of the individual. The actualization of that potential is dependent upon environmental support and activation of the autonomous factor. Developmental potential is defined by the presence and extent of "overexcitabilities," heightened sensitivities to various types of stimuli that create psychic tension. Psychic tension is a developmental necessity, the main source of the motivation to grow and change.

There are five types of overexcitability (oe): psychomotor, sensual, intellectual, imaginal, and emotional. Psychomotor oe involves high degrees of energy and physical activity; sensual oe is the capacity for pleasure derived from any of the senses; intellectual oe includes tendencies toward theoretical thinking and analysis, and the capacity for sustained intellectual effort; imaginal oe manifests itself in vivid imagery, invention, and creative imagination; emotional oe is expressed as intense feelings, strong attachments to others, self-evaluation, and inhibition (Piechowski, 1979).

Overexcitabilities and Excellence

A series of studies of the developmental potential of gifted youth and adults has recently been conducted at the University of Denver, Northwestern University, and the University of Iowa. The most salient finding of these studies is the apparent link between giftedness and emotional endowment. High levels of emotional and intellectual overexcitabilities were consistently found in gifted individuals of all ages. In a study of gifted adults, emotional oe approximated intellectual oe in strength, and both overexcitabilities were significantly higher than those found in a population of college graduates (Silverman & Ellsworth, 1981). Similar results were obtained in studies of gifted adolescents and pre-adolescents (Piechowski & Colangelo, 1982; Piechowski, in preparation). Artists were also found to have high emotional and intellectual oe, as well as high imaginal oe (Piechowski, Silverman, Falk, & Cunningham, 1982).

According to Dabrowski's theory, high levels of emotional, imaginal, and intellectual oe are indicative of high developmental potential. Recent analysis reveals that the combination of high degrees of emotional and intellectual overexcitability accounts for approximately 48 percent of the variance in developmental level (Lysy & Piechowski, in press).

The richer and more complex are these expressions of overexcitability, the stronger is the potential for development. The main idea of Dabrowski's theory is this: it is emotional life that empowers and guides an individual toward a higher level, because it is passionate involvement that makes us capable of empathy, understanding, caring, and finding a goal beyond self that gives our lives meaning and direction (Lysy & Piechowski, in press, p. 6).

There have been some indications that the overexcitabilities are inherent characteristics. Briskin (1973) and Piechowski (1978) have found high degrees of emotional sensitivity and compassion in children as young as four years of age. Cox (1926) reports that Thomas Carlyle's first words, at the age of eleven months, were in response to another child's tears: "What ails wee Jock?" (p. 466).

In my own investigations with parents of gifted children, sensitivity and compassion were commonly reported traits in very young children. The following is a typical example (M was 3 years, 9 months at the time of the report):

M is a very loving and compassionate child. He cannot stand to hear a baby crying. He puts his hands over his ears if he hears anything too loud or too violent. His feelings are hurt in an instant. He is concerned about the welfare of others; very giving (Silverman, in preparation—a).

In a study of parents of children in a private school for the gifted, 12 of 16 parents recalled incidents of compassion before their children

were of school-age. Ten parents reported incidents when their children were under four; 8, prior to three years of age; 6, prior to two years of age; and 1, before the age of one. In the same study, 13 parents reported that their children had intense reactions to criticism; 13 recorded evidence of perfectionism; 12 listed signs of creativity; and 11 reported heightened sensitivity (Silverman, in preparation—a).

In another study of 40 gifted children brought for testing, ages 3 through 15, 39 of 40 parental reports cited evidence of emotional overexcitability. The most frequently mentioned characteristic was "sensitivity" (Silverman, in preparation—b). In a third study, parent questionnaires were analyzed for 80 gifted children, ages 2 through 15 (90% between 3 and 9). Parents of 25 children used the term "sensitive" to describe their children, and 20 others used terms that would imply emotional sensitivity, such as "compassion," "intensity," "frustration," "emotional," "cries easily," and "despondent." Parents of 18 children described signs of perfectionism (Silverman, in preparation—a).

Early indications of intellectual overexcitability were also cited in these studies. In the third study, parents of 19 children described incidents indicating long attention span and the capacity for intense concentration, most of them before the children were two years of age, and several before the children were one year old. Extreme curiosity and creativity were two other characteristics noted by parents as early indications of their children's special abilities.

The Crucible of Excellence

Both Dabrowski (Dabrowski, Kawczak, & Piechowski, 1970) and Maslow (1970) asserted that, at the higher levels of development, the individual becomes much less dependent upon the environment and resistant to enculturation. Dabrowski believed that the stronger the developmental potential, the less significant is the influence of environment. However, if the developmental potential is weak, or indistinct, if it does not propel development in a given direction, environmental influences may prove decisive (Dabrowski, Kawczak, & Piechowski, 1970).

The theorists part company in their views about the necessity of the satisfaction of basic needs for optimal development. Whereas Maslow (1970) maintained that self-actualization was predicated upon the satisfaction of basic needs, Dabrowski believed just the opposite (Dabrowski, Kawczak, & Piechowski, 1970).

... such transformations cannot take place when there is complete security, and when all basic needs have been satisfied. For the development of

higher needs and higher emotions, it is necessary to have partial frustrations, some inner conflicts, some deficits in basic needs. . . . (p. 35).

It is also necessary to have some sadness and grief, depressions, hesitations, loneliness, awareness of death and various other painful experiences which lead us to replace our bonds to what is common, sensual, easy to replace, superficial but direct us to that which is individual, exclusive, lasting, etc. (p. 36).

Studies of the family backgrounds of eminent individuals summarized by Albert (1978) would appear to confirm Dabrowski's position. Creative persons tend to come from disharmonious home environments, with a great deal of tension and disturbance—which Albert terms "wobble." Goertzel and Goertzel (1962) indicate that homes which cradle eminence are not congenial.

Parents and children are irritable, explosive, changeable, experimental. They are prone to depression and exaltation. They make terrible mistakes and win wonderful victories (p. 130).

Albert (1978) reports that many creative individuals suffered the loss of a parent early in life. Painful experiences such as these carve deeply into the child's psyche, creating psychic tension and also inner strength. High degrees of psychic tension frequently have been noted among the creative. In his famous study of creative talent, MacKinnon (1962) writes:

. . . as we have seen more than most they will be experiencing large quantities of tension produced in them by the richness of their experience and the strong opposites of their nature. In struggling to reconcile these opposites and in striving to achieve creative solutions to the difficult problems which they have set themselves they will often show that psychic turbulence which is so characteristic of the creative person (p. 494).

Rarely are the inner processes of the creative individual understood. High levels of sensitivity and strong inner conflict are not recognized as potent indicators of the potential for excellence. They represent not only the striving for achievement, but also the drive toward inner transformation and higher level development. Although it is possible to attain eminence without higher level emotional development, I would propose that the pursuit of excellence is an outgrowth of this developmental process.

The attainment of excellence demands the recognition of "what ought to be" in oneself, the often painful striving for self-actualization and self-perfection. It is an emotional commitment to being the best that one can be. In the words of Gardner (1961):

What we must reach for is a conception of perpetual self-discovery, perpetual reshaping to realize one's best self, to be the person one could be (p. 162).

The pursuit of excellence is not a competition with others, nor is it fueled by desire for recognition. It is a personal journey into higher

realms of existence, a journey that enriches the self and the world through its bounty. It is the crucible that purifies the spirit—the manifestation of life's longing for evolution.

REFERENCES

- Albert, R. S. Observations and suggestions regarding giftedness, familial influence and the achievement of eminence. *The Gifted Child Quarterly*, 1978, 22, 201-211.
- Allport, G. *Becoming: Basic considerations for a psychology of personality*. New Haven: Yale University Press, 1955.
- Bloom, B. S. The role of gifts and markers in the development of talent. *Exceptional Children*, 1982, 48, 510-521.
- Bloom, B. S., & Sosniak, L. A. Talent development vs. schooling. *Educational Leadership*, 1981, 39 (2), 86-94.
- Briskin, A. S. Developmental potential in children. Paper presented at the American Psychological Association 81st Annual Convention, Montreal, 1973.
- Cox, C. *The early mental traits of three hundred geniuses*. L. M. Terman (Ed.), *Genetic studies of genius* (Vol. 2). Stanford, Calif.: Stanford University Press, 1926.
- Dabrowski, K. *Positive disintegration*. Boston: Little, Brown, & Co., 1964.
- Dabrowski, K. *Personality-shaping through positive disintegration*. Boston: Little, Brown, & Co., 1967.
- Dabrowski, K. *Psychoneurosis is not an illness*. London: Gryf, 1972.
- Dabrowski, K., Kawczak, A., & Piechowski, M. M. *Mental growth through positive disintegration*. London: Gryf, 1970.
- Dabrowski, K., & Piechowski, M. M. *Theory of levels of emotional development* (Vol. 1). Occanside, N.Y.: Dabor Science, 1977.
- Feldman, D. H. The mysterious case of extreme giftedness. In A. H. Passow (Ed.), *The gifted and the talented: Their education and development*. The seventy-eighth yearbook of The National Society for the Study of Education (Part 1). Chicago: University of Chicago Press, 1979.
- Feldman, D. H. A developmental framework for research with gifted children. In D. H. Feldman (Ed.), *New directions for child development: Developmental approaches to giftedness and creativity*. San Francisco: Jossey-Bass, 1982.
- Fromm, E. *Escape from freedom*. New York: Avon Books, 1941.

- Galton, F. *Hereditary genius: An inquiry into its laws and consequences*. London: 1869 (New York: Appleton, 1870).
- Gardner, J. W. *Excellence: Can we be equal and excellent too?* New York: Harper & Row, 1961.
- Goertzel, V., & Goertzel, M. G. *Cradles of eminence*. Boston: Little, Brown & Co., 1962.
- Horney, K. *Our inner conflicts: A constructive theory of neurosis*. New York: W. W. Norton, 1945.
- Jung, C. G. *Modern man in search of a soul*. New York: Harcourt, 1933.
- Kohlberg, L. Development of moral character and moral ideology. In M. L. Hoffman & L. W. Hoffman (Eds.), *Review of child development research* (Vol. 1). New York: Russell Sage Foundation, 1964.
- Loevinger, J. *Ego development*. San Francisco: Jossey-Bass, 1976.
- Lysy, K. Z., & Piechowski, M. M. Personal growth: An empirical study using Jungian and Dabrowskian measures. *Genetic Psychology Monographs* (in press).
- MacKinnon, D. The nature and nurture of creative talent. *American Psychologist*, 1962, 17, 484-495.
- Maslow, A. H. *Toward a psychology of being*. Princeton, N. J.: D. Van Nostrand, 1962.
- Maslow, A. H. *Motivation and personality* (2nd ed.). New York: Harper & Row, 1970.
- Maslow, A. H. *The farther reaches of human nature*. New York: The Viking Press, 1971.
- Piaget, J. *The development of thought: Equilibration of cognitive structures*. New York: Viking, 1975.
- Piechowski, M. M. A theoretical and empirical approach to the study of development. *Genetic Psychology Monographs*, 1975, 92, 231-297 (Foreword by K. Dabrowski).
- Piechowski, M. M. Self-actualization as a developmental structure: A profile of Antoine de Saint-Exupery. *Genetic Psychology Monographs*, 1978, 97, 181-242.
- Piechowski, M. M. Developmental potential. In N. Colangelo & R. T. Zaffran (Eds.), *New voices in counseling the gifted*. Dubuque, Iowa: Kendall/Hunt, 1979.
- Piechowski, M. M. Developmental potential of gifted nine-, eleven-, and thirteen-year-olds (in preparation).
- Piechowski, M. M., & Colangelo, N. Developmental potential of gifted adolescents. Paper presented at the National Association for Gifted Children Conference, New Orleans, October 22, 1982.

- Piechowski, M. M., Silverman, L. K., Falk, R. F., & Cunningham, K. A comparison of gifted and artists on five dimensions of mental function. Paper presented at the American Educational Research Association, New York, March, 1982.
- Pressey, S. L. Concerning the nature and nurture of genius. *Scientific Monthly*, 1955, 81, 123-128.
- Robeson, P. *Here I stand*. Boston: Beacon Press, 1971.
- Rogers, C. R. *Freedom to learn*. Columbus: Charles E. Merrill, 1963.
- Silverman, L. K. Emotional development of gifted children. (in preparation). (a)
- Silverman, L. K. *Gifted education*. St. Louis: Mosby (in preparation). (b)
- Silverman, L. K., & Ellsworth, B. The theory of positive disintegration and its implications for giftedness. *Proceedings of the Third International Conference on the Theory of Positive Disintegration*. Miami, Florida, November, 1980.
- Torrance, E. P. *Guiding creative talent*. New York: Prentice-Hall, 1962.

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