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Review Article

The evolution of the term of giftedness & theories to explain gifted characteristics[1]

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Abstract

The term giftedness has been interpreted in many different ways throughout history depending on the area(s) of expertise of a researcher, the focus of a study, and the current trends of time. Each new definition has introduced a different dimension of giftedness to produce better representations for the gifted population and it's diversity. The first portion of this paper summarizes the most common definitions of giftedness in education research and examines the evolution of the term giftedness in the classroom. The second portion of this paper highlights how researchers have characterized general traits of gifted students. Rather, during the course of this research a new definition emerged that considered diversity and uniqueness of the gifted students and of the environments that support their special talents. This definition asserts that there are two type of giftedness: active and dormant. Active giftedness manifests as outstanding potential in a defined area, influences others, promotes productivity, and active gifted students need differentiated services to maximize their potential. Dormant giftedness manifests when natural abilities shine through when its time to solve problems, produce ideas, or to be a leader. Dormant gifted students need rich, supportive learning environments to be motivated to bring forth their giftedness.

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Introduction

Currently, there is no widely accepted definition of giftedness and the various definitions available range in level of restrictiveness and what characteristics define a gifted student. One such example is the differences in the percentages of the population estimated to be gifted. Terman (1926) opined that only 1% of the entire population is gifted which contradicts the 2% reported by Stanford-Binet Intelligence Scale results (Binet & Simon, 1911). These contradictions make estimates today more difficult and the estimates researchers make depend on what assessment measures they use.

Another common metric to define a gifted student is by observing their behavior. Passow (1955) defined intelligence as a tool to have success in any socially distinguished area of human endeavor, but his areas only include a few academic fields, such as languages, social sciences, natural sciences, and mathematics. Witty (1958) was more inclusive than Passow in his definition of giftedness. Witty (1958) mentioned that outstanding potential in any area could be recognized by performance. Witty's giftedness standard is performance-oriented meaning that if a child demonstrates outstanding performance in an area, differentiated educational programs and services, beyond regular school programs, are required in order to realize and discover the gifted student's potential and contribution to self and society. For both Passow and Witty a differentiated curriculum is vital to a gifted student achieving their maximum potential.

Other researchers observe behavior with specific "gifted" criteria sourced from gifted studies in the past. For example, in 1972 the U.S. Office of Education's (USOE) defined criteria for gifted students as those who demonstrate high levels of aptitude in the following areas: 1) general intellectual ability, 2) specific academic aptitude, 3) creative or

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productive thinking, 4) leadership ability, 5) visual and performing arts aptitude, 6) psychomotor ability (Marland Report, 1972). These criteria have evolved over time, but affected and continue to affect U.S. policy toward gifted education.

In 1983, Gardner brought a new concept to the study of giftedness. Gardner proposed the Theory of Multiple Intelligence. In this theory, he proposed that there are seven separate, and somewhat independent, intellectual domains. Each of Gardner's domains were chosen because they represent a culturally valuable and relatively autonomous set of problem-solving skills. These intelligences are linguistic, musical, logical-mathematical, spiritual, kinesthetic, intrapersonal and interpersonal (1983). In 1996, Gardner added naturalistic intelligence in his list. The aim of his work was to bring a different point of view to who and what behavior is considered gifted.

While Gardner was studying multiple intelligences, Tannenbaum (1983) created the Talent Concept which proposed that developed talent only exists in adults and he defined giftedness as the potential to become critically acclaimed performers or producers of ideas in spheres of activities that enhance the moral, physical, emotional, social, intellectual or aesthetic life of humanity. Tannenbaum (1983) also mentioned that there are several factors that serve to link childhood promise with adult fulfillment. These factors included superior general intelligence, exceptional special aptitudes, non-intellective facilitators, environmental influences and finally, chance or luck.

Gagne (1985) defined giftedness as the possession and use of untrained and spontaneously expressed natural abilities in at least one ability domain to a degree that places a child among the top 10% of his or her age peers. This is in direct opposition to the work by Terman (1926) and the Stanford-Binet Intelligence Scale (Binet & Simon, 1911). As previously mentioned, which makes this idea of estimating percentages of the total gifted population contentious.

At the same time Renzulli created giftedness models and theories that continue to be applied in different countries around the world today. Renzulli's (1986) work recognizes gifted as two broad categories: school-house giftedness and creative-productive giftedness, which necessitated a new set of metrics to measure student's abilities. His distinction revolved around the environment where students demonstrated gifted abilities. According to Renzulli, school-house gifted students demonstrated high aptitude in test taking and lesson learning, while creative-productive gifted students focused on the development of original material and products.

While school-house giftedness and creative-product differ in location, all gifted students, according to Renzulli's (1986) theory, possess a well-defined set of three interlocking clusters of traits. These clusters consist of: above-average ability, task commitment, and creativity (see Figure 1). Giftedness is found in the interaction among these three clusters of traits.

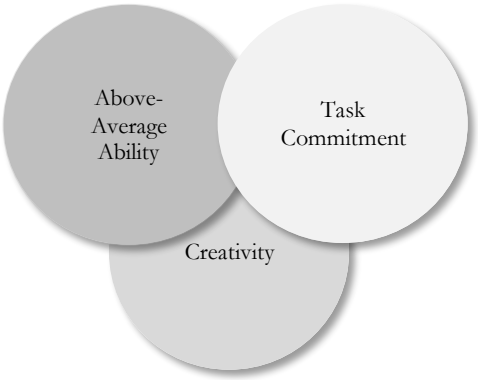

Figure 1.
The Ingredients of Giftedness.
(Reprinted from "Renzulli, J. S. (1986). The three-ring conception of giftedness. A developmental model for creative productivity. In R. J. Sternberg & J. E. Davidson (Eds.), Conceptions of giftedness (pp. 53-92). Cambridge, MA: Cambridge University Press.)

In 2011, Renzulli reexamined his definition by considering existing research and the common use of the term of giftedness in education. For example, Renzulli pointed out that the USOE 1972 definition does not take motivational factors in its' giftedness definition and limited giftedness to abilities that can be measured by objectives tests (2011). Additionally, Renzulli opined that non-intellectual factors should also be used to identify giftedness (2011). Renzulli continued to assert that giftedness is the interaction among above-average ability, task commitment, and creativity (1986, 2011). Furthermore, Renzulli pointed out that there is a very little relationship between test scores and real-world accomplishments and therefore intelligence alone cannot identify giftedness (2011). Renzulli (2011) stressed the importance of the task commitment component of his three-ring definition, where task commitment is the energy

brought to bear on a particular problem or specific performance area. Renzulli mentioned that task commitment is vital to highly productive people. From this research Renzulli re-examined and expanded his previous giftedness definition. Renzulli's 2011 definition of giftedness reads as: "Giftedness consists of an interaction among three basic clusters of human traits - these clusters being above-average general abilities, high levels of task commitment, and high levels of creativity. Gifted and talented children are those possessing or capable of developing this composite set of traits and applying them to any potentially valuable area of human performance. Children who manifest or are capable of developing an interaction among the three clusters require a wide variety of educational Opportunities and services that are not ordinarily provided through regular instructional programs" (pg. 7).

Table 1.
Review of Selected Definitions of Giftedness Over Time (1926 to Present)

Source	Definition
Terman (1926)	High IQ; only 1% of the population is gifted as opposed to 2% from Stanford-Binet (Binet & Simon, 1911)
Passow (1955)	A tool to achieve success in any socially distinguished area of human endeavor
Witty (1958)	Outstanding potential in any area as recognized by performance; giftedness as performance-oriented
Marland (1972) (U.S. Department of Education)	Gifted and talented children are those identified by professionally qualified persons, who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society. Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas singly or in combination: 1. General Intellectual Ability; 2. Specific Academic Aptitude; 3. Creative or Productive Thinking; 4. Leadership Ability; 5. Visual and Performing Arts; 6. Psychomotor ability
United States Congress (1978)	Children and, whenever applicable, youth who are identified at the pre-school, elementary, or secondary level as possessing demonstrated or potential abilities that give evidence of high performance capability in areas such as intellectual, creative, specific academic or leadership ability or in the performing and visual arts, and who by reason thereof require services or activities not ordinarily provided by school.
Tannenbaum (1983)	Talent that only exists in adults; giftedness as the potential to become critically acclaimed performers or producers of ideas in spheres of activities that enhance the moral, physical, emotional, social, intellectual or aesthetic life of humanity
Gagne (1985)	Untrained and spontaneously expressed natural abilities (called aptitudes or gifts) in at least one ability domain; to the degree that places a child among the top 10% of his or her age peers
Renzulli (1986)	Divides giftedness into two broad categories: schoolhouse giftedness and creative-productive giftedness. Gifted behavior occurs when there is an interaction among three basic clusters of human traits: Above-average general and/or specific abilities; High levels of task commitment (motivation); High levels of creativity
U.S. Department of Education (1993)	Children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor.
NAGC (2014)	Those who demonstrate outstanding levels of aptitude or competence; domains include any structured area of activity with its own symbol system (e.g., mathematics, music, language) and/or set of sensorimotor skills (e.g., painting, dance, sports)

The National Association for Gifted Children (NAGC) in the U.S. examines and analyzes giftedness definitions for educational policy purposes. According to NAGC (2014), "gifted individuals are those who demonstrate outstanding levels of aptitude (defined as an exceptional ability to reason and learn) or competence (documented performance or achievement in top 10% or rarer) in one or more domains. Domains include any structured area of activity with its own symbol system (e.g., mathematics, music, language) and/or set of sensorimotor skills (e.g., painting, dance, sports)" (NAGC.org).

The Characteristics of Gifted

As the first section outlined, the terminology and definitions of giftedness are vital in educational research even if contradictory. In order to provide better insight about the concept of the giftedness, this section gives details about different theories of the characteristics of gifted students. By examining the characteristics of students who have been identified as gifted, researchers aimed to find commonalities among their behavior in hopes that gifted students shared some the same behaviors and therefore those behaviors can be used to identify future gifted students.

According to Silverman (1998) gifted students created their own organization. Silverman described an aspect of the gifted self as a place where impossible dreams are realized, unrealistic goals achieved, and that gifted students' vision is more powerful than the constraints of reality (1998). While Silverman's wanderlust description of gifted students is compelling, it is important to consider that possibility/impossibility, realistic/unrealistic, and a sense of hopeful vision are luxuries afforded by supportive environments. That is to say that what is reality for a student with a stable, encouraging home and school is markedly different than the reality of a student who lives in poverty in an underfunded school. Furthermore, those realities and those experiences influences personalities and behaviors. Betts and Neihart (1988) said that personality is the result of life experiences and genetic makeup. In other words, all gifted students are not affected by their giftedness in the same way. There is interaction between the environment and the ability of the student that shape personal development (Betts & Neihart, 1998).

Strang (1958) pointed out that the interaction between the environment and the student is the reason that gifted students cannot be seen as a single group. Rather, culture, family, genetics, etc. play a role in a gifted student's development and capabilities. Betts and Neihart (1988) opined that there has not been much effort in the research community to distinguish among groups of gifted children. However, researchers have taken different approaches to investigate and explain gifted student's development with behavior and researches have made distinguishing comments among different groups of gifted students. The following section outlines the theoretical background of the characteristics of gifted students as indicators of gifted potential.

Attachment Style of Gifted

According to the attachment style approach, child development is affected by sensitive-responsive or insensitive-unresponsive parents (Belsky & Pleuss, 2009). According to Belsky and Pleuss insensitive parenting and poor quality non-maternal care are main factors for difficult temperaments in children (2009). On the other hand, sensitive parenting and high-quality caregiving positively affected children personalities.

Csikszentmihalyi, a creativity scholar, explained that parental attachment is an important factor in gifted children's development (1993). According to Csikszentmihalyi's (1993) study early disruptions in gifted children's lives shape their future and he found that highly creative individuals (e.g. scientists, artists, musicians) often have had traumatic experiences in their early life. Csikszentmihalyi (1993) described another type of giftedness who is highly intelligent, effective and successful, coming from warm, supportive families. These two cases illustrate insecure and secure attachment styles respectively.

The concept of being introverted or extraverted can also explained as a product of attachment by many researchers. Silverman (2002) pointed out that coming from an insecure attachment environment could lead to a gifted student being perceived as introverted. A more recent study by Wellisch, Brown, & Knight (2011) found that the opposite was true when gifted students came from responsive and secure family environments. Their study found that gifted students from these secure family environments demonstrated extraverted personalities.

Additionally, Wellisch and Brown (2013) showed that curiosity and persistence in gifted children is linked to secure attachment. According to Joseph (1999) humans and animals displayed less curios and exploratory behavior in deprived environments. Blair (2002) also mentioned that secure attachment is necessary for persistence. Aforementioned, task commitment is an essential feature to define giftedness according to Renzulli (2005). Therefore, it is possible to make a direct connection between secure attachment and Renzulli's giftedness model. In the Wellich and Brown (2013) study underachievement in gifted students was linked to insecure attachment their early life.

Attachment also plays a role in the drive for perfectionism experienced by many gifted students. Speirs, Neumeister

and Finch (2006) found two different types of perfectionism: adaptive and maladaptive. Adaptive perfectionism has been linked to secure attachment and involves the commitment to continue for betterment. Maslow (1970) opined that perfectionism was a component of the drive for self-actualization. Parker (1977) found a significant correlation between perfectionism and conscientiousness. On the other hand, maladaptive perfectionism has been linked to insecure attachment involves in setting unrealistically high standards. Maladaptive perfectionism can be seen in habitual procrastination and the destruction of work that is not deemed as perfect (Speirs Neumeister and Finch, 2006). This maladaptive perfectionism contributes to a lack of production and ultimately underachievement.

In summary, according to attachment style theories family environments uniquely shape gifted student's development and characteristics. A responsive family and sensitive environment can promote extraverted, adaptive perfectionist, curios, self-confident, and emotionally well-balanced characteristics. Whereas, an unresponsive family and insensitive environment can manifest in maladaptive perfectionism, lack of self-confidence, anxiety and depression, reluctance to attempt new experiences, and poor peer relations.

Theory of Positive Disintegration

The Theory of Positive Disintegration (TPD) was developed to explain people's responses, reactions, and behaviors according to five over-excitability forms (Dabrowski, 1964). TPD has been applied to gifted individuals for decades (Mendaglio & Tiller, 2006). Central to TPD, as used in gifted research, is that gifted students possess an increased sensitivity of neurons. TPD has been applied to examine gifted student's reaction to over-excitability.

The TPD's five forms of over-excitabilities have also been used to predict developmental potential (Wellich & Brown, 2013). Dabrowski's (1972) TPD included: psychomotor over-excitability (heightened excitability of the neuromuscular system), sensual over-excitability (heightened experience of sensual pleasure or displeasure), imaginational over-excitability (heightened play of the imagination), intellectual over-excitability (heightened effort to understand truth, to gain knowledge, and to analyze and synthesize), and emotional over-excitability (heightened, intense feelings, extremes of complex emotions).

Over-excitabilities (OEs) have been linked to giftedness. In particular, the Imaginational, Intellectual and Emotional OEs have been thought to be pertinent to gifted children, as these OEs are described by a heightened awareness and passion (Wellich & Brown, 2013). For example, Intellectual OE includes love of solving problems, a need to search for truth, and Imaginational OE includes a strong, vivid imagination and inventiveness, which are both examples observed in many gifted students (Wellich & Brown, 2013).

In the past many instruments were developed by researchers who thought that OEs could be good indicators of giftedness and potential. However, empirically the results showed that these instruments were only able to identify 70.9 percent of gifted participants (Ackerman, 1997).

Nurture Theory

According to nurture theories, giftedness is a product of a rich learning environment, intensive training, overambitious parents, and high expectations (Winner, 2000). Csikszentmihalyi and Csikszentmihalyi (1993) described a gifted student's parent(s) role to model hard work and hold high expectations. Additionally, Winner (2000) opined that intense training is necessary for excellence in a domain, which is only possible with parental support.

Additionally, gifted children's parents tend to provide more opportunities for their children to be independent (Colangelo & Dettman, 1983). It is not clear that whether granting independence leads high achievement or rather it is the recognition of the child abilities that leads to granting more independence (Winner, 2000), but it is important for gifted children to have these opportunities for independence.

According to the Csikszentmihalyi and Csikszentmihalyi (1993) study, gifted students whose family structures combined both stimulation and nurturance were happier, more alert, engaged, and goal directed than gifted students whose families did not have stimulation and/or nurturance.

Alternate Approaches

There have been other approaches to identify gifted student by behavior. These studies tend to be outside of school and thus the identification is of gifted children, not gifted students. These alternate approaches offer another viewpoint of giftedness and how those outside of the classroom can identify potential in gifted children. Silverman (1993) opined that parents were excellent identifiers of giftedness in their own children. Rogers and Silverman (1997) found that parents of highly gifted children tend to show an overlap about the selection of their children's characteristics. Additionally, parents have been shown to be the only source to identify gifted children in their early ages before formal schooling (Betts & Neihart, 1988).

Rogers (1986) compared approximately 100 developmental traits in gifted and average children by using a parent questionnaire and found these following characteristics that differentiated 38 gifted and 42 average children: Rapid learning ability; Extensive vocabulary; Good Memory; Long attention span; Perfectionism; Preference for older companions; Sophisticated sense of humor; Early interest in books; Ability in puzzles and mazes; Maturity; Curiosity; Perseverance; Keen powers of observation.

For those that work with gifted students, Rogers (1986) list is not surprising. Researchers continue to study parental identification of gifted children's characteristics. The following characteristics were endorsed by 90% of the parents of 241 exceptionally gifted children and this data were reported at the 1997 National Association for Gifted Children (NAGC) Conference: Learns rapidly; Extensive vocabulary; Excellent memory; Reasons well; Curiosity Mature for age; Sense of humor; Keen observation; Compassion for others; Vivid imagination; Long attention span; Ability with numbers; Concern with justice, fairness; Sensitivity; Wide range of interests.

The following characteristics were endorsed by 80% of the parents: Ability with puzzles; High energy level; Perfectionism; Perseverance in interests; Questions authority; Avid reader; Prefers older companions.

In 1982, Roeper suggested five types of gifted children based on gifted children's emotional needs. Roeper's types included: The perfectionist; The child/adult; The winner of the competition; The self-critic; and The well-integrated child.

Betts and Neihart (1988) suggested six types profiles that focused on behavior, feelings, and needs. Recently updated in 2010 their six profiles are: The Successful; The creative; The underground; The at-risk, The twice/multi exceptional; The autonomous learner.

In order to study giftedness from diverse populations, Fraiser and Passow (1994) identified these following 10 core characteristics: Motivation; Intense unusual interest; Highly expressive communication skill, Effective problem solving ability; Excellent memory, Inquiry (curiosity), Quick grasp or insight, Uses logic and reasoning, Imagination or creativity; Being able to convey and pick up humor.

Conclusion

Understanding the general characteristics of gifted students and their expectations can help educators understand their instruction needs. Additionally, identification can help parents better support their gifted children. So in order to maximize gifted students' potential teacher, parents, and administrators must consider the use of appropriate criteria and tools to identify students, as well as knowing general characteristics, while attending to their individual needs as well.

Gifted students often ask questions, are highly curious, and enjoy being mentally and physically involved. Often they have wild, silly ideas and play around; yet test well. They prefer discussions in detail, elaborate beyond the group, to show their feelings, and often show intense opinions. They prefer the company of adults and draw inferences, constructs and abstractions. Seen as the initiators of projects, gifted students enjoy learning, easily manipulate information, and thrive on complexity. While these characteristics are attractive to educators, it is important to note that gifted children are also highly self-critical and will strive to perfection.

Using the idea of active and dormant giftedness offers the potential to address the needs of different kinds of gifted students. This model brings together parents and educators to identify and support gifted children as they become gifted students. It was from these studies of characteristics of behavior that the active/dormant faces of giftedness emerged. For example, when evaluating student on the characteristics of other gifted students, teachers often have an immediate "yes" reaction to identify some students as gifted (i.e. the active gifted), while other students require some thought before the teacher can recommend them as gifted (i.e dormant gifted). Active and dormant giftedness requires researchers to use the previous work as outlined in this paper to create new models of assessment, new metrics, and new ways to offer support.

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References

Ackerman, C. M. (1997). Identifying gifted adolescents using personality characteristics: Dabrowski's overexcitabilities. *Roeper Review, 19,* 229–236.

Belsky, J. (2005). Differential susceptibility to rearing influence. *Origins of the social mind: Evolutionary psychology and child development*, 139-163.

Belsky, J., & Pleuss, M. (2009). Differential susceptibility to rearing experience: The case of childcare. *The Journal of Child Psychology and Psychiatry, 50,* 396–404.

Betts, G. T., & Neihart, M. (1988). Profiles of gifted and talented. *Gifted Child Quarterly, 32*, 248-253.

Betts, G. T., & Neihart, M. (2010). Revised profiles of the gifted and talented. *Retrieved October*, *19*, 2012.

Binet, A., & Simon, T. (1911). *A method of measuring the development of the intelligence of young children*. Lincoln, IL: Courier.

Blair, C. (2002). School readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American Psychologist, 57*, 111–127.

Colangelo, N., & Dettman, D. G. (1983). A review of research on parents and families of gifted children. *Exceptional Children, 50*, 20-27.

Csikszentmihalyi, M., & Csikszentmihalyi, I. S. (1993). Family influences on the development of giftedness. *The origins and development of high ability*, 187-206.

Dabrowski, K. (1964). *Positive disintegration*. London: Little, Brown.

Dabrowski, K. (1972). *Psychoneurosis is not an illness*. London, England: Gryf.

Frasier, M. M., & Passow, A. H. (1994). Towards a New Paradigm for Identifying Talent Potential. Research Monograph 94112.

Gagne, F. (1985). Giftedness and talent: Reexamining a reexamination of the definition. *Gifted Child Quarterly, 29,* 103-112.

Gardner, H. (1983). *Frames of Mind.* New York: Basic Book Inc.

Gardner, H. (1996). Probing more deeply into the theory of multiple intelligences. *NaSSP Bulletin*, *80*(583), 1-7.

Joseph, R. (1999). Environmental influences on neural plasticity, the limbic system, emotional development and attachment: A review. *Child Psychiatry and Human Development, 29*, 189–208.

Marland Jr, S. P. (1971). Education of the Gifted and Talented-Volume 2: Report to the Congress of the United States by the US Commissioner of Education

Maslow, A. H. (1970). *Motivation and personality*. New York: Harper & Row.

Mendaglio, S., & Tillier, W. (2006). Dabrowski's theory of positive disintegration and giftedness overexcitability research findings. *Journal for the Education of The Gifted, 30*, 68-87.

National Association for Gifted Children. (2014). *Definitions of giftedness.*

Parker, C. A. (1977). On modeling reality. *Journal of College Student Personnel, 18,* 419-425.

Passow, A. H. (1955). *Planning for talented youth: Consideration for public schools*. New York: Bureau of Publications, Teachers College, Columbia.

Renzulli, J. S. (1986). The three-ring conception of giftedness. A developmental model for creative productivity. In R. J. Sternberg & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 53-92). Cambridge, MA: Cambridge University Press.

Renzulli, J. S. (2005). The Three-Ring Conception of Giftedness. In R. J. Sternberg & J. E. Davison (Eds.), *Conceptions of Giftedness* (2nd ed., pp. 246–279). New York: Cambridge University Press.

Renzulli, J. S. (2011). Theories, actions, and change: An academic journey in search of finding and developing high potential in young people. *Gifted Child Quarterly, 55,* 305-308.

Rogers, K. B. (1986). Do the gifted think and learn differently'? A review 1080 October 1997. American Psychologist of recent research and its implications for instruction. *Journal for the Education of the Gifted, 10*, 17-39.

Rogers, K. B., & Silverman, L. K. (1997). Personal, medical, social and psychological factors in 160+ IQ children. Paper presented at the National Association for Gifted Children 44th Annual Convention, Little Rock, Arkansas.

Ryckman, R. (2004). *Theories of Personality*. Belmont, CA: Thomson/Wadsworth.

Silverman, L. K. (1993). A developmental model for counseling the gifted. In L. K. Silverman (Ed.), *Counseling the gifted and talented* (pp. 51-78). Denver: Love

Silverman, L. K. (1998). Developmental Stages of Giftedness: Infancy through adulthood. In J. VanTassel-Baska (Ed.), *Excellence in educating gifted & talented learners* 3rd Edition (pp.145-166). Denver: Love.

Silverman, L. K. (2002). *Upside-down brilliance: The visual-spatial learner.* Denver, Colorado: DeLeon Publishing.

Speirs Neumeister, K. L., & Finch, H. (2006). Perfectionism in high-ability students: relational precursors and ınfluences on achievement motivation. *Gifted Child Quarterly, 50,* 238–251.

Strang, R. (1958). The nature of giftedness. In N. B. Henry (Ed). Education for the gifted (pp. 64-86). The fifty-seventh yearbook of the National Society for the Study of Education, Part II. Chicago: The University of Chicago Press.

Tannenbaum, A. J. (1983) *Gifted children: Psychological and educational perspectives.* New York: Macmillan.

Terman, L. M. (1926). *Children's reading: A guide for parents and teachers.*

United States Congress, Educational Amendment of 1978 [P.L. 95-561, IX (A)]. United States Congress, Javits Gifted and Talented Students Education Act of 1988 (P.L. 100-297, Sec. 4130).

United States Department of Education. (1973). *National excellence: A case for developing America's talent.* Washington, DC: Office of Educational Research and Improvement.

Wellisch, M., Brown, J., & Knight, R. (2012). Gifted and misunderstood: Mothers' narratives of their gifted children's socio-emotional adjustment and educational challenge. *Australasian Journal of Gifted Education*, *21*(2), 5.

Wellisch, M., & Brown, J. (2013). Many faces of a gifted personality: Characteristics along a complex gifted spectrum. *Talent Development and Excellence, 5,* 43–58.

Winner, E. (2000). The origins and ends of giftedness. *American psychologist, 55,* 159–169.

Witty, P. A. (1958). Who are the gifted? In N. B. Henry (Ed.), *Education for the gifted*, (pp. 42-63). The fifty-seventh yearbook of the National Society for the Study of Education, Part II. Chicago: The University of Chicago Press.