The Intensities and Sensitivities of the Gifted – A Blessing or a Curse?

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The issues faced by many gifted children associated with their heightened sensitivities are well documented. However, to date, no unifying theoretical framework has emerged that both explains these challenges and offers concomitant mechanisms to respond positively to them. In this paper the authors present a new model of resilience development that has emerged from research and application of the principles across three countries over a 10-year period. This presentation has implications for parents, teachers, researchers, and gifted children themselves.

Introduction

In *Gifted Children* Ellen Winner (1996) identifies what she considers are the three primary characteristics of gifted children. First, they demonstrate *precocity,* mastering a domain significantly in advance of their age peers. Second, they *insist on marching to their own drummer*, learning in a qualitatively different way, requiring minimum support and frequently teaching themselves. Third, they have *a rage to master,* intrinsically motivated to make sense of their talent domain and exhibiting an intense and sometimes an obsessive focus.

These characteristics do not necessarily guarantee success for all gifted children. For some their gifted personality, the desire for perfection, pressure from parents and teachers, the envy, taunts, bullying and the isolation they may feel from their peers can combine to produce within them an emotionally fragile state.

The inability of some gifted children to master such emotional impulses can lead to neurosis – "a fixation on making mistakes, which resulted in a constant state of anxiety" (Schuler, 2000, p. 87), "an increased vulnerability to suicide ideation" (Hamilton & Schweitzer, 2000, p. 831), and can "block achievement, cause anxiety, or may even lead to thoughts of suicide due to perceived pressure to be perfect" (Neumeister, 2004, p. 262)

Of course, not all gifted children have such experiences and some have protective factors which support them. “These key protective factors are said to be located both externally in the social/environmental life space of the child and internally, as personal attributes and qualities of the individual” (Howard, Johnson & Oswald, 2003, p. 54). It is the development of this inner strength or *resiliency* and its specific applicability in the education of gifted children which is the focus of this study.

According to Benard (1991) resilience is a set of qualities, or protective mechanisms that results in successful adaptation even though the individual may be exposed to adverse circumstances (Benard, 1991). Haertel, Walberg & Wang (1990) see it as the capacity to overcome personal vulnerabilities and environmental adversities effectively or the ability to thrive, despite adverse circumstances.

Resilience is most clearly demonstrated in studies of students from impoverished backgrounds who achieve success despite the negative influences in their backgrounds and their environments. In a study of 3981 elementary students from minority and low-socioeconomic-status (SES) backgrounds those who achieved greater academic success (in Maths) also displayed greater resilience. “Greater engagement in academic activities, an internal locus of control, efficaciousness in math, a more positive outlook towards school and more positive self esteem were characteristic of all low-SES students who achieved resilient mathematics outcomes” (Borman & Overman, 2004, p. 180).

Support for these findings is seen in the learned helplessness paradigm (Seligman, 1975), which suggests that when people believe they are powerless to control what happens to them, they become passive and restrictive in coping abilities. On the other hand, when individuals believe that events and outcomes are controllable, learned helplessness is avoided, and instead, active attempts are made to overcome aversive situations (Luthar, 1991).

Resilience, Attribution and Goal Orientation

One of the major contributors over the last 30 years to understanding of the application of the learned helplessness model in an educational context has been Carol Dweck. Investigations by Dweck and Repucci (1973) found *helplessness* to be associated with a tendency to attribute failure to a lack of ability. This *helplessness* did not appear in children who attributed failure to a lack of effort. This led to the identification of two major patterns of behaviour: The 'helpless' pattern and the 'mastery-oriented' pattern. The *helpless* pattern is characterised by an avoidance of challenge, and reduced levels of performance in the face of obstacles. The *mastery-oriented* pattern is characterised by the seeking of challenging tasks and the persistence and perseverance in the face of failure (Diener & Dweck, 1978).

These two ideas came together into a framework of goal achievement orientation, which identified two distinct classes of goals: *performance goals* which were sought by students in order to gain approval or avoid disapproval, and *learning goals* where students sought to improve their knowledge, ability or competence. (Dweck & Elliot, 1983). Further work revealed that a focus on performance goals was linked to a *helpless* pattern of response behaviour, whereas the pursuit of learning goals in the same situation promoted the *mastery-oriented* pattern. Particularly striking was the way in which the performance goal orientation in students with low self-perceived ability resulted in the identical pattern of strategy deterioration, failure attribution and negative affect identified in naturally occurring learned helplessness (Dweck and Elliot, 1988).

Dweck then sought to discover if differences in self concept could account for an orientation towards helpless or towards resilient response behaviour. Her 1997 study demonstrated that resilience in the face of rejection was predicated upon an individual's belief about the flexibility of personality. Those who thought personality was malleable and could be changed or developed, were found to be more resilient and those who thought personality was fixed were found to be more helpless (Cain, Duma-Hines, Dweck, Endley & Loomis, 1997). Building on this idea, work was then undertaken examining the relationship to concepts of intelligence. A significant correlation was found between helpless and resilient responses and to what were then called the *entity*

and the *incremental* theories of intelligence. Students who believed that intelligence was a fixed attribute (*entity theorists*) were found to be less resilient and more helpless than students who believed intelligence was malleable and could be developed (*incremental theorists*). The *incremental theorists* were found to be more resilient and less helpless in the face of negative feedback (Chiu, Dweck, Hong, Lin & Wan, 1999)

In her 1999 book "Self-Theories: Their Role in Motivation, Personality and Development", Dweck put all her years' of research together and concluded that the characteristics of resilience comprise an orientation towards setting learning goals, adopting mastery behaviour and believing in the flexibility of intelligence and the primacy of effort. In contrast, the characteristics of helplessness comprise an orientation towards setting performance goals, adopting challenge avoidance behaviour and a belief in the fixedness of intelligence and the primacy of ability. One of the clearest differences between the two is seen in response to failure, where resilient individuals attribute failure to a lack of effort and take effective remedial action. In contrast, helpless individuals attribute failure to a lack of ability and tend to give up (Dweck, 1999).

Dweck's ideas are supported by Koestner and Zuckerman (1994) who studied the goal orientations of 60 college students and found that those who were performance-oriented often exhibited classic helpless behaviours, including making self-defeating performance attributions and negative self-evaluations. Conversely, those who were learning-oriented tended to exhibit more adaptive behaviours and were more mastery-oriented (Koestner & Zuckerman, 1994). In Australia, support for these ideas has come from a study of 893 college students, where the learning-oriented students showed a much more positive attitude towards their studies and were more likely to choose a difficult task to complete than their performance-oriented colleagues, who opted for easier tasks (Archer, 1994).

The relationship between a learning-orientated disposition and adaptive achievement-oriented behaviours was also confirmed by a study of 199 college students, who ranged in age from 17 to 59 years (Burley, Turner & Vitulli, 1999). As well as confirming the

findings noted above, these researchers also found that older students were more likely to be learning-oriented and younger students more performance-oriented.

Gifted and Resilient

Many of the characteristics described here as attributable to resilient children have also been noted as characteristics of gifted children. These include "task commitment, academic achievement, verbal ability, intelligence, the desire to learn, an internal locus of control, risk taking, high self-concept, good self-efficacy and self-understanding" (Bland and Sowa, 1994, p. 80). Gifted children as young as nine have been seen to spontaneously use cognitive appraisal strategies, including problem-focused strategies and emotion-focused strategies (only previously seen in adults) to deal with stress (Sowa, McIntire, May and Bland, 1994).

The development of resilience in gifted pre-adolescents differs, depending on the gender of the gifted child according to Kline and Short (1991). These researchers found that gifted boys showed a significantly higher level of discouragement and hopeless feeling at the junior high school level, then at the senior high school level, suggesting that the boys were developing resilience as they matured through the school system. However, levels of self-regard and self-confidence in gifted girls decreased as they progressed through the school system, and levels of perfectionism, hopelessness and discouragement increased during that period (Kline & Short 1991a, 1991b).

Gifted and Learning Disabled

The characteristics of helplessness are particularly noticeable in gifted students with learning disabilities, whose characteristics often include low self-concept, low self-efficacy, hypersensitivity, emotional lability, and high levels of frustration, anxiety and self criticism (Dole, 2000). Unfortunately, because of their giftedness, many of these students are unidentified as having a learning disability because their gifts disguise their disabilities and they are perceived as performing adequately. Dole reports that in a study

of adult rehabilitation clients with high intellectual ability and learning disabilities, 95% of the 80 participants had not been told of their exceptional abilities, either while in school or while receiving vocational services. Studies have shown that college students and adults with learning disabilities who are resilient are knowledgeable about their strengths as well as their weaknesses and so are more self accepting. According to Dole, this self-knowledge and self-acceptance not only helps these students develop realistic goals but to persevere towards realising them. These, he claims, are the primary characteristics of resilient individuals (Dole, 2000).

Gifted and Perfectionist

Burns (cited in Parker & Adkins, 1995, p-173) sees perfectionists as "people who strain compulsively and unremittingly toward impossible goals and who measure their own worth entirely in terms of productivity and accomplishment." Pacht (cited in Parker & Adkins, 1995, p. 173) sees perfectionism as "the striving for that nonexistent perfection that keeps people in turmoil and is associated with a significant number of psychological problems."

Other researchers see perfectionism differently. Hamachek (1978), described two types of perfectionism, the normal, those who derive a sense of pleasure from the labours of a painstaking effort and who feel free to be less precise in certain situations and the neurotic, those who are unable to feel satisfaction because, from their perspective, what they do is never good enough to warrant that feeling (Hamachek, 1978). In one study of the gifted adolescents in a rural middle school, 87.5% were found to be perfectionists and of those, 58% were found to display *healthy* perfectionism while 29.5% were in the *neurotic* range (Schuler, 2000). Gifted neurotic perfectionists would seem then to share some of the helplessness characteristics of gifted students with learning disabilities, and in particular, high levels of frustration, anxiety and self criticism (Dole, 2000).

Frost, Marten, Lahart and Rosenblate (1990) developed a scale of perfectionism called the *Multidimensional Perfectionism Scale* (MPS). The MPS is based on Hamachek's

(1978) perspective of perfectionism and expands that view to include three dimensions of perfectionism: *self-oriented*, *other-oriented* and *socially-prescribed* perfectionism (Siegle & Schuler, 2000; Flett, Hewitt, Blankstein & Dynin, 1994). The distinctions made between these three groups are described by Neumeister (2004):

> Self oriented perfectionists set high personal standards for themselves and evaluate their own performance against these standards, other-oriented perfectionists are individuals who impose excessively high standards on others in their lives (and) socially-prescribed perfectionists perceive that significant others in their lives hold excessively high standards for them" (p 260).

In the face of failure, self-oriented perfectionists are often highly critical of themselves, they tend to over-generalise the failure and perceive it as a characteristic of the entire self (Flett, Hewitt, Blankstein & O'Brien, 1991). In contrast, other-oriented perfectionists tend to blame other people for their failure and socially-prescribed perfectionists tend to blame factors such as luck and situational context. The common link between other-oriented and socially-prescribed perfectionists is a perceived lack of personal control and a tendency to attribute both positive and negative outcomes to external factors (Flett & Hewitt, 1998). Socially-prescribed perfectionism has also been found to correlate with depression and low self-esteem, whereas self-oriented perfectionism is associated positively with self control (Flett, Hewitt, Blankstein & O'Brien, 1991).

Neumeister (2004) investigated how these two dimensions of perfectionism, socially-prescribed and self-oriented, developed within gifted college students and influence their achievement motivation and their attributions for successes and failures. All the students studied, who scored high for perfectionism, attributed that tendency to a lack of experience with failure in their early school years and to actions of their parents. The main distinction came between the socially-prescribed perfectionists, who believed their perfectionism developed due to pressure they experienced from their perfectionist parents, and the self-oriented perfectionists, who attributed their perfectionism to social learning due to their parents modelling of perfectionist behaviours. When studying the students' goal setting behaviour and reactions to failure, Neumeister, using a qualitative

interview technique, discovered major distinctions between the two types of perfectionists. For the socially-prescribed perfectionists she found themes emerged of, "fearing failure, setting performance goals, and practising maladaptive achievement behaviours in addition to themes of minimising successes, over generalising failures, and making internal attributions for failures." In contrast, the self-oriented perfectionists evidenced, "a desire for self-improvement, setting both mastery and performance goals, and practicing adaptive achievement behaviours as well as tendencies to make healthy attributions for successes and failures, and frustration with coping with failures (Neumeister, 2004, p288)

Overall, the results obtained with socially-prescribed perfectionism reveal that a sense of personal helplessness is a core feature of this perfectionism dimension (Flett & Hewitt, 1998). Helplessness was also found to be a key feature of passive perfectionists, who procrastinate from fear of making mistakes and who are more likely to be preoccupied with suicide (Adkins & Parker, 1996).

Gifted and Underachieving

The possible causes of underachievement are many and varied but within this area of research there is some indication, particularly with gifted children, that the influence of intrinsic or personal factors is highly significant. Ford (1993) maintains that under-achievement in gifted children is characterised by disorganisation, lack of concentration, perfectionism, low self-esteem, an unwillingness to conform, anxiety, vulnerability to peer pressure, and an external locus of control. This view is confirmed by Fehrenbach (1993) who reports that characteristics frequently observed in gifted underachievers include low self-esteem, perfectionism, procrastination, self-criticism, a feeling of competition where none exists, and an unwillingness to take risks (Fehrenbach, 1993). One of the recurring themes in gifted underachievement seems to be the attribution of failure to external control, which in turn produces feelings of helplessness particularly in the face of failure. Larry Geffen (1991), in a study of gifted minority high school, students found that the high achievers saw high school as a means to get to college, they

were loyal to this goal ahead of peer relationships, and they placed causation for success or failure within themselves. In contrast, he found that the low achievers saw the purpose of going to school as being with their friends, and they placed causation for achievement or failure outside of themselves (Geffen, 1991).

Gifted and Failure

In all the studies reported here of gifted children, there seem to be common threads which link unfulfilled potential to attributions of helplessness and success to the attributions of resilience. For all gifted students at potential risk of underachieving, it would seem useful to teach them the attributes of resilience to assist them to build internal protective factors, which will help mitigate the possibility of failure. Herein lies the challenge, because in order to change attributions for success and failure one has to accept that such "beliefs" can be changed. As has been noted in the literature in this field, one of the characteristics of helplessness is the belief that personality and intelligence is fixed. For gifted students in particular, there are also a number of other barriers to change that must be addressed to install resilient beliefs. Gifted children, by virtue of their nature, have a vested interest in maintaining the primacy of their intelligence as possibly the mainstay of their self-esteem. The suggestion that intelligence is an aspect of themselves that can be developed may well conflict with a belief in the "concreteness" of their gift or talent. It may imply to them that their special abilities are not so special and also by implication, suggest that their talent may diminish or disappear.

One other related "problem" gifted children face is the issue of repeated success. Their precocious abilities may expose them to no or very limited experiences of failure. This can create problems in itself, as the development of resilience seems in many cases to be linked to the opportunity to practice appropriate or resilient responses in failure situations. If a student has never known failure, when faced with a failure situation he or she may few resources that they can call on to deal with the situation.

Control Orientations and Resilience

A consistent thread through the resilience and helplessness literature is the notion of control. If an individual is to overcome helplessness one of the essential precursors appears to be the belief that by their own actions they can alter their own outcomes. Gernigon, Fleurance & Reine showed that with junior high students learning a perceptual motor task, "only a controllable situation ending in success contributes to the development of learned competence, and only an uncontrollable situation ending in failure induces learned helplessness" (2000, p.53). According to Peterson "Experiences with uncontrollable events may lead to the expectation that future events will elude control, resulting in disruptions in motivation, emotion and learning – termed learned helplessness" (1995, p. 12). "The expectation of non-contingency (between acts and outcomes) is the crucial determinant of the symptoms of learned helplessness"(Valas, 2001, p. 72).

The conclusions drawn from these and other studies is that the control the individual can exert or believes he or she can exert over any given situation is a critical pre-disposing factor for an orientation towards helplessness or towards resilience.

Expectation, Attribution and Control

Firmin, Hwang, Copella and Clark (2004) found that 1st year psychology students (from a private mid-western US university) who started an examination by attempting difficult questions first, performed significantly poorer on the subsequent easy questions than their fellow students who started with the easy questions first, even though the results showed that both groups had achieved as well as each other on the difficult questions. This study highlights that it is the expectation of failure, not failure itself, which produced helplessness and the deterioration of academic performance.

Expectations of success or failure are related directly to attributions, that is, to the messages people give to themselves about the causes of events that they are involved in.

Attributions generally have three dimensions: locus (does the cause originate within the individual); stability (is the cause stable or changeable) and controllability (can the individual influence the cause). Students who attribute success and failure to internal, controllable causes are more likely to take action to produce positive outcomes and develop an expectation of success, whereas students who attribute both success and failure to causes outside themselves over which they have no control are likely to feel helpless and to develop expectations of failure (Seifert, 2004).

In a study of 1430 high school dropouts in the USA, Suh and Suh (2006) analysed the characteristics of those who went on to gain university degrees and found that the three most prominent factors associated with degree attainment were academic aspiration, organisational skill and (internal) locus of control. In research into distance education, Morris and Wu (2005) found that the combined presence of the two factors of available financial aid and an internal locus of control enabled them to predict completion likelihood (and consequently the likelihood of "dropping out") for individuals, with a 74.5% accuracy.

In an educational context, locus of control is revealed through the attributions students make for their successes and failures in learning-oriented tasks. If students believe that they have some control over their task outcomes, they are more likely to persevere, put in effort, learn from mistakes and take action to produce the result they want.

Success, Failure and Control

Interestingly, there is some research to suggest that, American students at least, believe that their lives are more and more controlled by outside forces. Twenge, Zhang and Im (2004) report that "the average college student in 2002 had a more external locus of control than 80% of college students in the early 1960s" (p. 308). Given the events of September 11 2001, it is may be not surprising that there have been generalisations in attributions made across the (USA) community, which have resulted in an increased belief that events are out of the control of the average person. Unfortunately, as Tweng et

al. report, “the implications are uniformly negative, as externality is correlated with poor school achievement, helplessness, ineffective stress management, decreased self-control, and depression” (p. 309).

“Internality” on the other hand seems to predispose students towards academic success. A study of Chinese and Korean students found “… students with higher academic grades scored higher on internality and lower on externality” (Park & Kim, 1998, p. 191). Honour students were found to be more likely to attribute their success to effort and were less likely to attribute any failure to a lack of ability than were the students on academic probation.

This idea is also supported by a United States’ study of first year university students which reported that those students “who entered university with lower scores on the locus of control scale (internals) obtained significantly higher GPAs than those who scored higher (externals) on the same scale” (Gifford, Briceno-Perriot & Mianzo, 2006, p. 19). *[GPA = students’ grade point averages across all subjects at the end of their first year of university study]*

The immersion of students in learning situations in which they have little or no control over their own learning has been shown to increase externality and decrease effectiveness as shown by Chaput De Saintongue & Dunn (1998). “Learning environments where adverse events are perceived as being pervasive and inalterable will prevent the development of the autonomous learner and impair student achievement” (p. 583).

These differences in academic success may be attributable to the different reactions to stress between internally and externally oriented students. Wolk and Bloom (1978) reported that more ‘internal’ students found high stress and time constraints facilitated their task performance, but the same pressures were debilitating effects for the more ‘external’ students A study of 144 ‘high-risk’ adolescents, showed that in comparison to children with an internal locus of control, those with an external-orientation showed greater declines in functioning with increasing stress levels (Luther, 1991).

These findings seem to be born out in the gifted community as well as with general students. Moore and Margison (2006) have showed that, "Underachieving-gifted students were more externally oriented than achieving-gifted students. There was also a significant difference in the locus of control between achieving-gifted and nongifted students; nongifted students were more externally controlled than achieving-gifted students" (p. 252).

Conclusion:

To summarise the findings presented here we have highlighted a dichotomy of belief orientation which seems to pre-dispose students to a more "helpless" or more "resilient" state of mind (see table below) and we have shown that the characteristics of gifted children for whom giftedness creates difficulties in their lives corresponds to the helpless model as described. We have also developed the idea that the experience of failure and the development of strategies to overcome failure situations is an important element in producing consistently resilient behaviour which may well help gifted students, and others, to develop more resilience.

Table 1.

	RESILIENT STUDENTS	**"HELPLESS" STUDENTS**
goals	**set learning goals – learn in order to understand**	**set performance goals – learn in order to get "excellence" or an A pass**
tasks	**to test themselves, to work towards mastery**	**to gain approval or avoid disapproval**
challenge	**seek out new challenges**	**avoid new challenges**
to achieve success	**believe effort is more important than ability**	**believe ability is more important than effort**

reaction to failure	**take full responsibility focus on the process, find the problem, change the process, learn from their mistakes, put in more effort**	**take no responsibility, repeat the same process or do even less, give up**
view of intelligence	**believe intelligence is flexible and can be developed and improved – "the more I learn, the smarter I get"**	**believe intelligence is fixed, unalterable with a definite limit – "I can learn new things but my intelligence stays the same"**
locus of control	**internal**	**external**
future expectations	**optimistic**	**pessimistic**

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