The Importance of Failing Well

By Lance King

Abstract

Intellectually gifted students from 13-18 years at a New Zealand high school were investigated for any linkages between their academic achievement and their resilience orientations.

All students were analysed for measures of Locus of Control (LOC) and Learned Helplessness (LH) and these measures were combined into a new conceptual model of resilience called Gnostates.

All the students then sat a major end-of-year examination in all their school subjects and based on their results were classified as High Achievers, Achievers or Underachievers

Subsequent analysis revealed no correlation between any measures of the students' resilience and their academic success.

Resilience was then controlled for by forming pairs of students with identical resilience scores, with one of the pair from the High Achiever group and one from the Underachiever group. These pairs of students were then interviewed to gather their perceptions, reactions and considerations of success and failure within their own lives in order to look for commonalities and differences.

Phenomenographic analysis revealed a significant difference between the High Achievers and the Underachievers around their reactions to failure situations.

All the high achievers were found to be practicing strategies of (what was then called) *Failing Well* whereas all the underachievers were found to be *Failing Badly*.

This result was consistent across all the students interviewed. With these students there appears to be a very strong correlation between academic success and the strategies of *failing well* and academic failure and the strategies of *failing badly*.

The limitations of sample size and nature of this preliminary study are acknowledged but the results found are so conclusive that they may have implications and applications at all levels of education, in business and sports performance and in personal lives.

Results:

A) Measurement of Resilience

All students completed questionnaires to determine their Locus Of Control (LOC) and their Learned Helplessness (LH) orientations. Each questionnaire was modelled respectively on Rotter's (1966), and Seligman's (1975) original published questionnaires for these two attributes.

LOC
A complete lack of externality of LOC characterised all the gifted students in this study. All of the students registered LOC scores from neutral to highly internal.

Within the sample of students for this study were High Achievers, Achievers and Underachievers, as defined by their teachers based on their grades in recent examinations. Students in all three achievement categories were found with LOC scores ranging from neutral to highly internal. No link was able to be made between increasing internality and academic achievement.

This finding appears to be contradictory to that of Rotter, who found a correlation in school students between internality and grades achieved, and to Findley & Cooper's (1983) meta-analysis of 98 studies over 20 years, which found that internality and academic achievement were positively related. Kalechstein and Nowicki's (1997) survey 11 years later of 80 papers published since 1983, also found the strongest link between internal LOC and academic achievement in secondary students as did Twenge, Zhang, and Im's (2004) review of studies of students from elementary school to university.

LH
In the measurement of LH by questionnaire, a similar result was achieved. The students' scores of optimism and pessimism (as measures of LH), were distributed across the full range from highly optimistic to highly pessimistic. When academic performance was considered together with LH, both High Achievers and Underachievers were found at the highly optimistic and the highly pessimistic ends of the scale and many places in between. No link was able to be made between increasing helplessness and a decline in academic achievement.

This finding also appears to be contradictory to many studies. These have found a close connection between helplessness and inattention, difficulty in thinking, depression, giving up in the face of failure, the inability to persist or persevere, and an unwillingness to engage in new tasks (Seligman, 1975; Fincham et al. 1989; Seifert, 2004; and Firmin et al, 2004). All these characteristics would be expected to result in poor academic performance but even the students with the highest pessimism scores were not found to necessarily be academic underachievers. Of the two students in the study who scored both the highest levels of pessimism and the highest susceptibility to helplessness, one was a High Achiever and the other was an Underachiever.

Gnostates
The Gnostates analysis combined the results of both the LOC and the LH questionnaires into a graphical grid bound by those two scales. This created a conceptual space which revealed tendencies towards resilience or vulnerability. When all students' scores were viewed in this space and any trends which related to the academic achievement of the students were sought, no connection or correlation was found. Both High Achievers and Underachievers were found at all points of the Gnostates space.
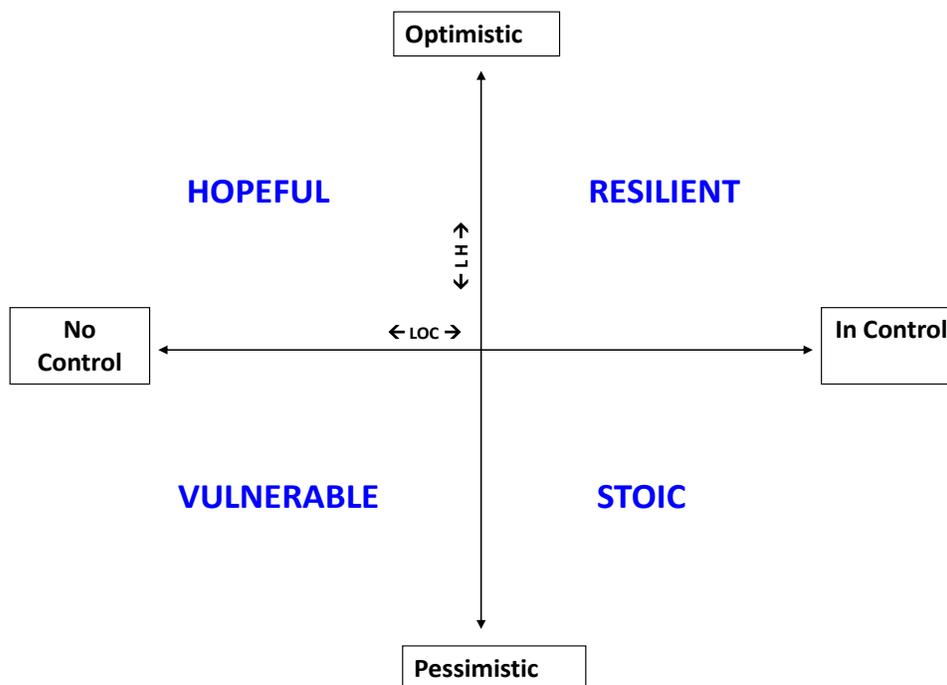
Some of the students surveyed were found to perform at a low academic level despite possessing the attributes of the resilient and successful learner (internal LOC + optimism). Delisle (1982) describes similar students as selective consumers who choose not to participate in assigned tasks or who choose to participate at a minimum level as an active strategy to help maintain healthy self concept and self esteem. Kanevsky and Keighley (2003) also found a strategy of disengagement used deliberately by some gifted students in response to an unstimulating and unchallenging curriculum. As described, this disengagement by volition may explain some of the underachievement observed but there is no similar mechanism to explain the high achievement by some of the more vulnerable students. These are the students with the highest susceptibility within the group to LH (highest pessimism scores) and the most external LOC scores (0-2 on the LOC scale), who still succeeded at the highest level. Part 2 sought to provide some answers to both these particular contradictions of characteristics and performance.

B) Interview Phase

As no relationship had been found between resilience and academic success the next step was to control for resilience and use an interview technique to elicit their responses to both success and failure within their own lives.

Failure was defined as not reaching a goal. Setting a goal, to win a game, to get a certain grade, outcome, performance and then not achieving that goal. Success was defined as the opposite – achieving a goal.

Pairs of students with identical coordinates in the Gnostates conceptual space were then formed with one member of each pair being from the High Achieving student group and one from the Underachieving student group. The Achieving group of students was taken out of the analysis to help make the extremes more explicit. Five pairs of students were so identified being ten students in total. All ten students were then interviewed.

Across all five pairs of students the practical strategies and internal characteristics of the High Achievers that were noticeably different from the Underachievers were:
- involvement in extra-curricular activities
- intense interests or passions
- intellectual curiosity, academic engagement, a drive for understanding

- gaining enjoyment from significant challenge
- an active and clear goal focus
- using active strategies to learn from failure
- choosing to succeed.

While both the High Achievers and the Underachievers all attributed failure to a lack of effort in both their questionnaire and interview data, a noticeable difference between them was elicited from the interview data. The High Achievers all reported actively applying long term effort-based strategies for academic achievement, whereas the Underachievers only reported applying effort in response to immediate deadlines. Similarly with procrastination, all interviewees reported procrastination to be a problem for them but whereas the High Achievers were actively taking steps to get on top of the problem, the Underachievers were succumbing to it and resorting to last minute urgency to get them through. The understanding and acceptance of failure was strongly exhibited by the High Achievers in their interviews in contrast to the Underachievers. The Underachievers tended to deny that failure existed for them or took steps to avoid the possibility of failure in their lives. The one Underachiever who acknowledged failure reported feeling completely overwhelmed by what he saw as the total failure of everything in his life and so rendered himself completely helpless.

The responses to failure reported across the five Underachievers were:
- denial that failure existed
- the use of ability attributions to explain any setbacks
- using no obvious strategies to reflect on and learn from mistakes
- eliminating any subject or task in which failure was experienced
- avoiding situations where failure was possible
- believing that every personal action resulted in failure and it was impossible to change
- denying any successes
- focusing on own short-comings
- disengaging from the subject matter
- being content with underachievement.

In comparison the responses reported by the five High Achievers in dealing with failure were:
- using effort based attributions for any failure
- a focus on learning from mistakes
- being adaptable and achieving to the level of personal best
- using hard work, talent and organisation to limit failure

- being prepared to try new strategies and apply more effort
- establishing absolute control in important areas
- using precise goal focus and the application of organisation and effort to minimise failure
- viewing failure as temporary and specific
- taking responsibility for own actions in any failure situation.

It was in the reactions to failure situations, whether real or hypothetical, that the most significant difference between the High Achievers and the Underachievers was found.

Taking a lead from the clinical practice of treating drug addiction (Dimeff, Linehan & Koerner, 2007, p152) one response to failure was termed *failing well* and the other response was termed *failing badly*.

Student responses to failure:

Failing Well	Failing Badly
Effort based attributions for failure	Ability based attributions for failure
Acceptance of failure as a normal process	Denial of failure
Using strategies to learn from mistakes	No strategies to learn from mistakes
Expecting to experience some failure in new situations or new learning	Believing that all personal action resulted in failure
Being adaptable and making changes where necessary	Focusing on own shortcomings and believing it was impossible to change
Using talent, organisation and hard work to minimise the possibility of failure	Eliminating any subject or task in which failure was experienced
Establishing complete control in some areas	Avoiding situations where failure was possible
Viewing failure as temporary and specific	Viewing failure as pervasive and permanent
Taking responsibility for own actions in failure situations	Being content with underachievement

The major distinction found between the Underachievers and the High Achievers in this sample of gifted secondary students, regardless of their LOC and LH scores, was that all the High Achievers were failing well and all the Underachievers were failing badly.

Recommendations:

The process described here as *failing well* is either explicitly referred to or implied in most theoretical approaches to motivation. The experience of overcoming failure successfully is also one which is basic to the development of resilience. To help develop the process skills of failing well, teachers can focus on the reactions students have to failure and design interventions that enable the student to reflect on strategies for failing well. Possible responses from the point of view of accepted theory are:

	Responses in Situations of Failure	
	Failing Well	*Failing Badly*
Resilience/Vulnerability (Benard, 1993)	Asking: What went right? What can be improved? Strength focused	Asking: What went wrong? What can be eliminated? Deficit focused
Locus of Control (Rotter, 1966)	Internal control – taking some responsibility for all failures	External control – taking no responsibility for any failure
Learned Helplessness (Seligman, 1975)	Optimistic thinking – failure is temporary and specific with quick recovery, tomorrow is another day	Pessimistic thinking – failure is permanent and pervasive with slow recovery, tomorrow will be worse
Attribution Theory (Weiner, 1973)	Failure is due to a lack of effort; focus on improving, challenge seeking; learning for understanding	Failure is due to lack of ability; focus on proving, challenge avoiding; learning for grade
Mindset Theory (Dweck, 2007)	Growth Mindset – failure is feedback, personality and intelligence can change and grow; focus on what you can control, continual improvement through active adaptation	Fixed Mindset – failure is judgement, personality and intelligence are fixed; focus on what you can't control, self defeating; repeating ineffective patterns

Behaviour Patterns (Seifert, 2004) (Martin and Marsh 2003)	Mastery – taking responsibility where appropriate; learning from mistakes; success and failure are internal, stable, controllable; no fear of failure	Failure Avoidance – taking no responsibility for failure; success and failure are internal, stable and uncontrollable, or external stable, and uncontrollable
		Failure Acceptance – taking responsibility for all failure; pessimistic; expecting failure; helplessness

For teachers in the classroom the greatest challenge may be in de-sensitising students to the word *failure* and helping them to understand that failure is a necessary part of growth and learning. If that idea can be understood well by students, then it is possible within the classroom to establish a climate where it is safe to fail. Only then will students be able to examine their own reactions to failure and try to build up the skills of failing well.

The main limitations of this study were the size and nature of the sample. Ten "gifted" students do not represent the whole student body. More work needs to be done to determine whether *failing well* is a necessary condition of academic success in all "gifted' students and in all students whether "gifted" or not.

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Short magazine article on this topic is available at

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