

ADHD or Latent Entrepreneur Personality Type?

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Prepared by:

Dr Dai Gilbertson, Victoria University of Wellington

Ph +64 4 589 5145, Fax +64 4 589 5088, Email dai.gilbertson@vuw.ac.nz

Deb Gilbertson, Innovative Processes Ltd

Ph +64 4 589 5011; Fax +64 4 589 5088, E-mail: deb.gilbertson@paradise.net.nz

Table of Contents

1	EXCEPTIONAL QUALITIES OF ADHD PEOPLE	3
1.1	What is ADHD?.....	3
1.2	The Hunter Genes and Entrepreneurs	4
1.3	Hunters and Peasant Farmers	5
1.4	New Zealanders.....	6
2	BRAIN FUNCTION.....	7
2.1	Judgement.....	7
2.2	Adrenalin	7
2.3	IQ, EQ and SQ	8
3	ACTIONS TO SUPPORT ADHD PEOPLE.....	10
3.1	Latent Entrepreneur Personality Type.....	10
3.2	Learning Styles.....	10
3.3	Measures of Holistic Education	12
3.4	Learned Optimism	14
3.5	Support Qualities	15
3.6	Supportive Environment	15
3.7	Drugs	15
3.8	Good Parenting, CO2 and Other Remedies	16
	REFERENCES	18
	APPENDIX I - FAMOUS PEOPLE WITH ADHD	20

1 EXCEPTIONAL QUALITIES OF ADHD PEOPLE

ADHD adults are nearly four times as likely to be entrepreneurs than their non-ADHD counterparts (Mannuzza et. al., 1993). It is also thought that many great people such as Winston Churchill, Leonardo Da Vinci, Edison, Einstein, and Benjamin Franklin had the classic characteristics of ADHD. This suggests ADHD people have some exceptional qualities with exhausting side effects. This paper explores ADHD as a quality and how parents, teachers and society can support the flourishing of those qualities.

1.1 WHAT IS ADHD?

The letters ADHD stand for Attention Deficit Hyperactivity Disorder. The condition is characterised by impulsive and poorly managed behaviour, and problems in attention, short-term memory and classroom learning. ADHD people typically act before they think and under-perform for their intellect in the classroom. Barkley (1988) notes that ADHD children can concentrate intently on something that interests them or provides immediate feedback and reinforcement. He concludes it is not attention that is the problem, but a disability in rule following.

It is a highly hereditary endowment with some slight differences in those parts of the brain that are responsible for self-monitoring (Green, 1997). There is also a correlation with very low birth weights, parent smoking and other factors that may cause some brain damage during the foetal and infant stages. The condition is not caused by diet, parenting or environment (Muir, 2000). These factors affect behaviour in the same way as other people, although ADHD children can make good parents look like poor parents. Nor is the condition more common than in previous years, it has simply been labelled as ADHD rather than being described as naughty behaviour.

ADHD is considered to be present in two to five percent of the population and is identified six times more often in boys than girls (Goodyear and Hynd, 1992).

Between ages 10 to 13 the frontal lobes in the brain that control self-management rapidly mature, although the process is not completed until adulthood (Healy, 1990). This enables some ADHD children to mature sufficiently that they can manage their behaviour as teenagers well enough that they are no longer regarded as ADHD.

However the genetic endowment is life long. In adults it is characterised by restless energy, rapid onset of boredom and deficient short-term memory. It is also characterised by passion, utter commitment to areas of interest, creativity, resilience to setbacks, willingness to engage in moderate risk taking, slightly maverick behaviour, eclectic experiences and high energy.

ADHD shares many of the characteristics of giftedness as shown in the parallel lists below:

Behaviours Associated With ADHD (Barkley, 1990)

Poorly sustained attention in almost all situations
Diminished persistence on tasks not having immediate consequences
Impulsivity, poor delay of gratification
Impaired adherence to commands to regulate or inhibit behaviour in social contexts
More active, restless than normal children
Difficulty adhering to rules and regulations

Behaviours Associated with Giftedness (Webb, 1993)

Poor attention, boredom, daydreaming in specific situations
Low tolerance for persistence on tasks that seem irrelevant
Judgment lags behind development of intellect
Intensity may lead to power struggles with authorities
High activity level; may need less sleep
Questions rules, customs and traditions

1.2 THE HUNTER GENES AND ENTREPRENEURS

Hartmann (1999) in his book 'Attention Deficit Disorder – A Different Perspective' argued that ADHD is the original hunter genes. He reframes the characteristics of ADHD as positive qualities for hunting. 'Attention deficit' he redefines as 'noticing everything'. As a hunter heads off across the savannah, he is constantly scans for what might eat him and what he could catch and eat. In the classroom this is seen as being distracted by noises and activities instead of focussing on the student's own work.

When the hunter sees prey, they become single minded, focussed on pursuit and capture. This characteristic in ADHD people shows up in their mono-focus on those things that interest them. In adults this is the characteristic that drives entrepreneurs to pursue their business when others would have given up.

Hunters will take some personal risks to catch their prey, while those with peasant farmer genes would prefer to stop for a strategic plan. This behaviour is seen as impulsiveness and risk taking. These are both qualities that lead to successful entrepreneurship. Too much focus on business planning actually reduces the likelihood of business success. Instead successful entrepreneurs iterate between doing a little planning and then taking action in a constant process of learning while doing.

The hunter may get hurt when they pull down the prey, yet the next day they will do it again. Consequences lead to awareness of the risks but do little to stop them from taking those risks. For ADHD children this means that the normal behavioural modification technique of applying natural and logical consequences has little effect. This characteristic can also be seen as resilience to setbacks, a critical quality in entrepreneurship. Highly successful entrepreneurs will typically have a string of failures behind them, but they won't perceive them as failures. Instead they will see these as a series of learning experiences.

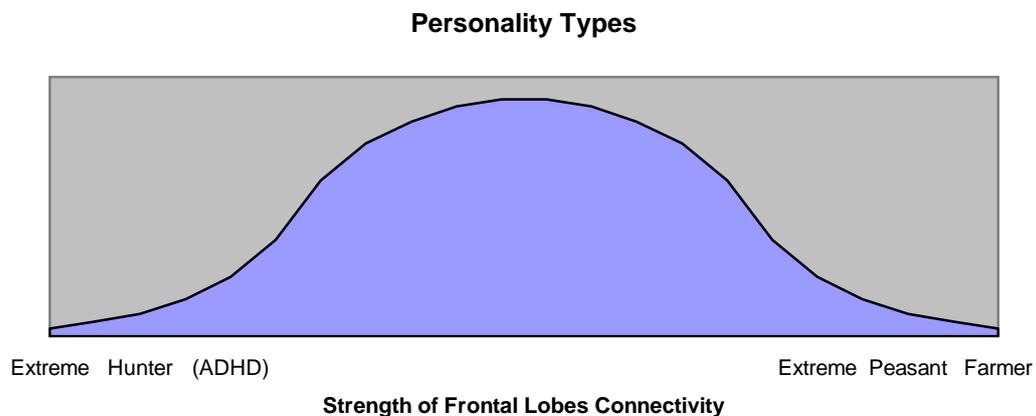
Hunters need high levels of energy for the hunt. This is seen in the classroom as hyperactivity, with energetic children struggling to sit quietly. For the entrepreneur high energy is an essential quality for business success.

The ADHD literature makes frequent reference to the high percentage of entrepreneurs who appear to be ADHD. Hartmann says, “When writing my first book, I heard from a psychologist who specializes in ADD that perhaps as many as half of all entrepreneurs have ADD. Now, a few years later and after conversations with thousands of entrepreneurs around the country, I’ve come to the conclusion that nearly all entrepreneurs have ADD, to one extent or another. I’m speaking here of those individuals who create or participate in dynamic, thriving, ever-growing, ever-changing companies.” The entrepreneurship literature (eg Green 2002; National Commission on Entrepreneurship, 2001; Caird, 1993; Martin, 1996) describes the traits and behaviours of entrepreneurs in words that closely match the qualities of ADHD. In our work with several hundred leading entrepreneurs in New Zealand, we observed behaviours and attitudes that were in the ADHD spectrum. Many also described life stories of apparent failure or being in constant trouble in the school system despite their evident abilities. Sadly many also described the misery of being sent to boarding school because their parents could not cope, or they believed the rigid structure of the school would help them settle.

Entrepreneurs are not the only group who display behaviours in the ADHD spectrum. Intrapreneurs are entrepreneurs inside organisations who commit their efforts to making new ideas happen. They are similar to entrepreneurs, and although they seek autonomy they have less need to be their own boss. Many in the creative sector such as artists, musicians, comedians and actors have ADHD characteristics, as do many sales representatives, competitive sports players and politicians.

1.3 HUNTERS AND PEASANT FARMERS

People exhibit degrees of ADHD (or hunter) characteristics. Hartman (1999) argues that at the other end of the spectrum are those who exhibit peasant farmer characteristics. These could be described as people who are orderly, cautious, focussed and obedient. The peasant farmer description comes from the idea of peasants obediently planting rice in rows, watering it, tending it, harvesting it, then eking out the rice till the following harvest. The distribution of these characteristics could look like the graph below:



Bradshaw (2002) described a man in his 60s who had been the archetypal accountant all of his life; orderly, cautious, precise and calm. However his personality had

undergone a radical change. He had become a highly creative artist, painting in bright reds and oranges. He had also acquired the artist's temperament; volatile, excitable, passionate and creative. A brain scan showed that he had a disease that was eating into the frontal lobes of his brain. The doctors concluded that he had always had strong creative abilities but the frontal lobes of the brain that provide self-management had been so strong that it had suppressed the creative side of his personality.

This correlates closely with ADHD. The connectivity in the executive management zone in the frontal lobes of the brain is weak or immature, such that their spontaneous behaviour bubbles out like Mount Vesuvius. Ritalin is a drug that assists ADHD people to manage their behaviour by speeding up the functioning in the frontal lobes. We have spoken with three ADHD adults who say they choose to take Ritalin when they need to concentrate on a task, but do not take it when they choose to be spontaneous and creative. They feel the Ritalin suppresses their creative abilities.

1.4 NEW ZEALANDERS

There is some evidence to show that ADHD is more common in new world countries like New Zealand, Australia, Brazil and the United States (Green, 1997; Hartmann 1999). This would be consistent with a gene pool of people who chose to take their chances in a foreign land. The entrepreneurship literature shows that immigrants in all countries are much more likely to be entrepreneurs, although this is likely to reflect more factors than just personality type.

New Zealanders have a high level of ADHD characteristics. They come from a gene pool of explorers who uprooted their lives to explore new places to live. New Zealand is full of people who chose to come to the most distant country, half way to the penguins, to start a new life. None of them had to come here. It shows up in our national characteristics – the big OE (NZ has the highest number of passport entries per capita in the world, 20 times that of the United States), 'Jack's as good as his master', the number eight fencing wire trait, winners each year of the international Young Enterprise competition, more than twice as many winners as any other country or state in the annual international school creative problem solving competition, refusing to be a small cog in a big wheel (92% of NZ firms have fewer than 10 staff) - and so on. There is a strong willingness to act, undeterred by the possible negative consequences.

2 BRAIN FUNCTION

This section touches on how brain function differs in ADHD people, with some implications for successful management.

2.1 JUDGEMENT

What happens when the brain receives a stimulus? For example when the brain hears a loud bang, the sound comes in through the ears to the hearing part of the brain that acknowledges sounds. The information is then split for processing. About 10% of the signal goes to the amygdala in the limbic system, and 90% to the cerebral cortex. The limbic system is the primitive processing part of the brain that holds some memories and assesses threats. The bang may trigger the amygdala to send a signal to the neighbouring cells to release adrenalin for fight or flight. This process is very fast.

The remaining 90% of the signal is working its way around the cerebral cortex, the brain's grey matter, which provides more complex information about what the bang could be. This information is then relayed to the frontal lobes. This is the executive management part of the brain that forms a judgement from all of the information that has been sent from around the brain. The frontal lobes may decide that the bang was just the gate swinging in the wind. It would send a message to the amygdala that says, "No worries. It was just a bang caused by the gate. Please put the adrenalin away again." This process occurs about half a second after the amygdala has released the adrenalin.

The system enables instant readiness in the event of a threat, which can be modified as more information is assessed.

In ADHD people and young children, the frontal lobes are immature or sluggish, so they appear to act without thinking. The judgement and control of their actions is seen as limited, much like a child half their age.

2.2 ADRENALIN

This inability to put adrenalin away again leads to high levels of adrenalin in the system. In our view this explains some of the hyperactivity in ADHD people. At very high levels of adrenalin it can also lead to anxiety, in a constant search for threats.

Research has shown that children from difficult homes and Vietnam veterans both have 40% less of the chemical that puts adrenalin away again (Goleman, 1991). This is a survival mechanism that maintains heightened levels of awareness. In our view, ADHD people are probably initially endowed with the same level of this chemical as other people, but it can be eroded if their exhausting behaviours lead them into constant trouble with parents and authorities. Constantly being on the receiving end of anger, abuse and punishment leads to a genuine need to look out for threats, as their lives lurch from one threat to the next.

Constantly high levels of adrenalin have other consequences. Firstly it reduces the immune system and can lead to an undue level of illnesses. Secondly it releases endorphins that are a natural pain balm and create feelings of euphoria, but also hamper attention (Goleman, 1997). Many ADHD people have a heightened ability to ignore pain. In our view, endorphins are a factor leading to attention deficit, and have a greater impact the more the ADHD person is under adrenalin producing stress.

2.3 IQ, EQ AND SQ

One way of categorising brain function is IQ, EQ and SQ ways of thinking (Zohar and Marshall, 2000).

The IQ form of thinking is undertaken by neurons firing in sequence. Each neuron needs to fire much like the way Christmas lights set each other off in sequence. This thinking enables us to follow rules in ways that are rational and logical such as following mathematical steps or applying a research process. IQ thinking is accurate, precise, measurable, repeatable, reliable and within rules, which makes it very suitable for exam-based assessment. Academics tend to be very high in IQ, and create processes that foster high levels of IQ thinking in their students.

A second type of thinking involves neural networks with up to 100,000 neurons in bundles. Our experiences create pathways through the neurons. To illustrate this phenomenon it is like when the settlers first arrived. They formed multiple tracks through the bush, but after a while a few routes became favoured and turned into highways while the rest of the tracks were gradually overgrown. Our brain makes highways through the bundles of neurons when we have repeating experiences. We also get lazy, choosing the tried and true way of doing things rather than crafting new experiences.

This type of thinking is sometimes called EQ for emotional quotient. The learning is associative, habit bound, and a conditioned response. It enables us to learn pattern recognition and to acquire tacit learning. But it is difficult to explain what we have learnt. For example as you notice the moods that sweep over a person's face you are confident that you can read their feelings, but would find it difficult to explain in words how you do it.

The third type of learning has been labelled as SQ for spiritual intelligence or sensemaking intelligence (Zohar and Marshall, 2000). This is the ability to oscillate cells in different parts of the brain to link ideas together, usually between 35Hz and 45Hz.

What if two very different ideas are linked together? The result is creativity. This typically occurs in the shower, while jogging, when drifting to sleep or in other moments of musing at relatively slow neural oscillations. However it also occurs in a state of flow when people are fully engaged and challenged by a task as described by Csikszentmihaly in his numerous publications.

What if forty or fifty ideas are linked together at once? This is characteristic of how insightful people get a sense of where the market is going, or develop a clear sense of what a project might look like in the future.

These qualities of being creative, insightful, breaking rules, making rules, reframing issues, and gaining meaning are characteristic of entrepreneurs, intrapreneurs and creative people. They also a signature of ADHD.

Our contention is that ADHD people have the usual range of IQ ability, but have high levels of SQ ability. So when faced with an issue they prefer to create a solution in their own way, rather than follow the rules to do it somebody else's way. Many ADHD students leave formal education as they struggle to sit quietly learning other people's ideas in other people's ways. This explains why Einstein's high school teacher told him he was not very bright because he did not learn the material in the way given by the teacher.

One way that people develop intrinsic motivation is to have their creative input into finding a solution. Strong intrinsic motivation is characteristic of entrepreneurs developing their own business, parents raising their own children, and students working on projects they created themselves. ADHD people derive little motivation from extrinsic rewards unless they are immediate, but they can concentrate intently on activities from which they derive intrinsic motivation.

3 ACTIONS TO SUPPORT ADHD PEOPLE

Actions can seek to minimise negative behaviours or maximise the expression of the abundant qualities of ADHD people. This section provides a new perspective on what can be done.

3.1 *LATENT ENTREPRENEUR PERSONALITY TYPE*

Let's change the name! ADHD is about deficit and disorder. Our reading of ADHD related articles had a ratio of over 500 articles on research into negative aspects of ADHD for every one article that had a positive focus.

We suggest ADHD should instead be called *Latent Entrepreneur Personality Type* (LEPT) and for the rest of this article we will refer to ADHD people as LEPTs.

This name focuses on the qualities inherent in LEPTs, such as:

- Insatiable curiosity, bored by mundane tasks but enthusiastic to explore new ideas.
- Moderate risk taking, disregarding the obstacles that prevent others from starting.
- Adaptability, learning as they go to overcome difficulties.
- Strong intrinsic motivation
- Intense bursts of energy
- Impatient for early results, acutely aware of whether the goal is getting closer, *now*.
- Independent - needing autonomy and often preferring to be a leader or a loner than a cog in a large wheel.
- Action orientation
- Abundant character

The name LEPT also conveys the idea that this is a normal personality type at one end of a spectrum rather than a brain disorder.

The LEPT label will make it easier to celebrate the exceptional qualities of LEPTs, bring joy to those who are currently negatively labelled, and find constructive ways of helping them to express their best qualities.

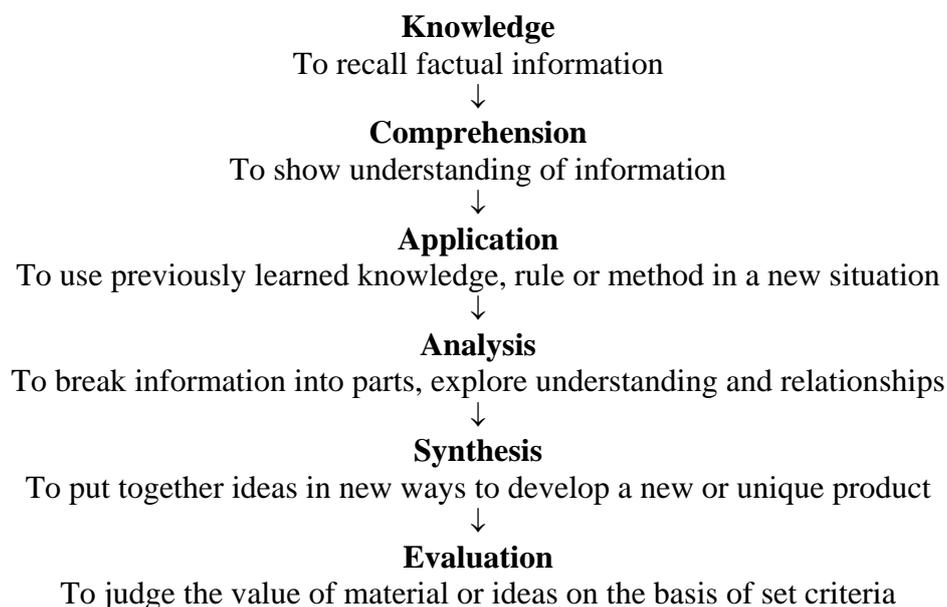
3.2 *LEARNING STYLES*

Academic versus applied study is sometimes presented as though they are nearly mutually exclusive. Research shows students can recall and apply academic material better when they learnt it in an experiential way. In one study, a group of people were asked to determine what was the best value for money for some cans of product on supermarket shelves. Ninety-eight percent of the participants were able to arrive at the correct conclusion. However only 42% of the same participants got the right answer when given the identical mathematical challenge - but this time presented in the mathematical format that they had been taught at school to solve this kind of

problem! This implies that people learn best in context, perform best in context, and are best able to apply what they have learnt if it is learnt in the same format that the knowledge needs to be applied. This principle is especially true for LEPTs who use their SQ thinking styles to evoke context and meaning.

LEPTs also perform better when there is experiential learning and discovery learning because of their high levels of intrinsic motivation, exploration, and disregard for consequences. This style of learning is akin to a jazz band with the maxim ‘there are no mistakes in jazz, just some unexpected notes’.

The way we traditionally teach many academic subjects with an emphasis on knowledge and comprehension is at the lowest level of education attainment. Bloom (1974) set out a taxonomy of educational objectives:



This taxonomy suggests students should be put into situations where they use, apply, evaluate and synthesise information. A review of the objectives in most university course outlines begin with the words ‘to know ...’ or ‘to understand....’ Learning and assessment are then geared to these outcomes.

New layers are being added to Bloom’s taxonomy to account for the ability to create sense and meaning from a myriad of data sources and on affective learning.

LEPTs do better at higher order learning objectives. They are not necessarily more likely to be ‘right’ but are more likely to choose to explore possibilities when given the freedom to think in their own way. Lower order learning objectives leave LEPT students bored and disinterested.

LEPTs prefer intrinsic motivation, although can be motivated extrinsically if the consequences are frequent and immediate. Intrinsic motivation is fostered by three states: choice, collaboration and context.

Theresa Amabile conducted a study on intrinsic motivation. She got volunteers who said they enjoyed writing poetry. They were asked to each write a poem that was

assessed for poetic quality by a group of experts. The group was then divided into three. The first group was given a lecture designed to provide extrinsic motivation. They were told about how much money successful poets could earn, the esteem they are held in by others, and so on. The second group was given an intrinsic motivation lecture, covering topics like the joy of expressing oneself, delight in a well turned phrase and so on. The third group was a control group and not given any lecture. The volunteers were then asked to write another poem. The control group remained at the same level of poetic quality, the intrinsically motivated group improved, but the extrinsically motivate group performed significantly worse than on their first poem.

Educators can only require the minimum but need to excite their students to achieve the maximum. For example rules can be set that would require trampers to get to the base camp, but only intrinsically motivated mountaineers will climb Everest. Entrepreneurs often face their own Everest when they overcome the challenges in starting and growing their businesses.

Parents and teachers are able to create opportunities for intrinsic motivation to flourish. They can provide a child with the opportunity to choose what they work on or how they do it. They can add the stimulation of working with others, although LEPTs often struggle to use appropriate social skills. And they can put the learning into context by making it real, applied, experiential, important or exploratory.

3.3 MEASURES OF HOLISTIC EDUCATION

Measurements are important – you get what you measure! Many years ago the Russians sought help from the American Environmental Protection Agency on how they could reduce pollution. The advice was to require that firms publish data monthly in the local newspaper of their emission levels and to foster an active environmental movement. Then stand back. They claimed a fascinating dynamic would occur as the measurements drove what people focused on. It worked.

So what are the subtle drivers of education buried in our measures and how does this affect LEPTs? There are two types of measures – those of the schools (and other teaching organisations), and those of the children.

Looking firstly at the schools, the Education Review Office (ERO) until recently has focussed on checking whether school systems are in place. One outstanding decile one school had three complaints from ERO about their performance; firstly the swimming pool door opened the wrong way in the event of a fire in the pool, secondly Aviation Authority approval was not received for the hot air balloon flown at their gala, and thirdly there was no written policy for the safety of the rat in Room 2 in the event of an earthquake. Little notice was given to the outstanding achievements of their at-risk children.

Sadly, this is not an isolated story. Worse still, teachers and administrators say the changes that were introduced to keep ERO happy were damaging to the success of the organisation. One principal in research on the ability of New Zealand schools to be learning organizations commented that “Performance in our school drops in the six

months prior to an ERO visit and then we can get back to being a great school again” (Addison, 2001).

Fortunately ERO is now taking a more holistic approach and looking at areas that the school seeks to develop. Even so the damage has been done, and their attitudes, expectations and systems are still trapped in a straight jacket that limit the ability of schools to apply passion, flexibility and thoughtfulness in how they educate their children.

This straight jacket is damaging to LEPTs. They need teachers filled with passion to achieve the most from their students. But teachers complain they are burdened with paperwork that adds nothing to their teaching, but plenty to their hours of work. LEPTs need individual thought and attention to match their learning style and needs in a classroom setting, and creative solutions found. Addison’s (2001) thesis on “Are Schools Learning Organisations” reported that a decile ten school had gained its greatest organisational learning from meeting the challenges posed by one of their extreme LEPT students.

LEPTs also need to be assessed on their ability to function as successful citizens, but the focus by ERO on measured performance leads to a narrowing of educational objectives. This problem is compounded in later years at school and university when qualifications are based on pen and paper assessment. The very worst of these assessments are exams, especially the kind that require one right answer as in multi-choice questioning. Below is a table that outlines the measurement issues for holistic education, showing that the areas of strength in LEPTs are hardest to measure.

Qualities	Intelligence	Measurement Challenge for Educators
Evaluation, synthesis, judgement, insight, creativity, problem solving, intuition, breakthrough thinking, inspiration, vision, commitment, resilience, self belief, enjoyment, flow	SQ	Imprecise, many right answers, possibilities, many paths, uncertain outcome, inconsistent standards, hard to measure
Teamwork, leadership, awareness, action, relationship management, emotional wellbeing, physical wellbeing, optimism, skills, experience	EQ	↑
Knowledge, understanding, application, analysis, planning	IQ	Precise, measurable, right answers, within rules, deterministic, know that you know, consistent standards, easy to measure

Our contention is that education has focused on IQ intelligence as it is easiest to teach and measure. We would like to see more effort put into EQ and SQ intelligences. In particular, SQ learning enables students to create their own meaning that in turn motivates students to acquire their own learning. While this is of particular importance to LEPTs, it is also important for all children.

To be fair, New Zealand is less bad than perhaps any other country, especially at the primary level. The Asian students who come to this country are testimony to the differences in their school education values. They are able to pass rote learning exams easily but struggle when it comes to problem solving, presenting, creativity, judgement, insight and the other higher order learning objectives. We believe New Zealand could do much better, indeed cement its ability to be the world leader in educating 'can do' students. Such a change would springboard off the challenges and opportunities offered by LEPTs with their untapped latent potential.

3.4 LEARNED OPTIMISM

Seligman (1997) found that optimists are happier, healthier, live longer, are less likely to divorce, earn more, are more successful at sports, politics, sales, and business, but are less accurate. Pessimists are more accurate but die younger, are poorer, and more miserable. Optimism can be learned. Martin Seligman's work has spawned nearly 1000 world studies on learned optimism.

Seligman has found that the difference between optimists and pessimists can be measured by three simple language patterns that they use. For example, if an optimist did well in a maths exam they might say, "I'm good at exams." This implies that they are good at all sorts of exams not just maths (non specific), good now and in the future (permanent), and they take the credit. A pessimist might say, "I had a great maths teacher." This implies they are only good at maths (specific), now (temporary) and the teacher takes the credit.

If instead they did poorly in a maths exam, the optimist might say, "My teacher is hopeless but if I swot I'll do well." This implies that the failure is just maths (specific) can be improved (temporary) and there is a tendency to blame others. A pessimist might say, "I'm never any good at exams." In this case the problem is all exams (non-specific), always (permanent) and the pessimist takes the blame.

LEPTs naturally have high levels of optimism. This is partly because the executive function in the frontal lobes fails to analyse the facts and warn them of the risks, and partly because consequences have little sway on their thinking. Perhaps it may also reflect their strong visualisation skills that enable them to focus on their own goals but ignore the obstacles. LEPTs are sometimes described like a jack in a box, no matter how hard you crush them back into the box, they bounce back. However optimism can be eroded through parenting and schooling as children are constantly fed negative and cautionary messages.

All children need to learn optimism. For LEPTs it is an essential life skill that enables them to combat the difficulties they face in their everyday lives.

3.5 SUPPORT QUALITIES

LEPTs have strong qualities that can be encouraged and celebrated. As Greenspan (1993) put it, “Parents and educators often concentrate so hard on a child’s learning ‘problems’ that they ignore or downplay the child’s many strengths. Imagine what would happen if you were to spend 90% of your time doing tasks that were difficult for you. What if you had to play tennis left handed?”

Positive Psychology is an emerging field pioneered by Martin Seligman, drawing on groundbreaking psychological research. It is steering the profession away from its narrow-minded focus on pathology, victimology and mental illness to positive emotion, virtue and strength. Seligman’s latest book, *Authentic Happiness* (2002), enables people to identify their signature strengths and concludes that to gain authentic happiness people should use their signature strengths in their daily activities. This enriches the experience and acts as a buffer against their weaknesses.

LEPTs have striking signature strengths that can be drawn on for success and happiness.

3.6 SUPPORTIVE ENVIRONMENT

LEPTs during their school years typically have poor social skills so are more likely to be the victims of bullying and exclusion than other children. The focus of efforts to reduce bullying is often directed at either the bully or the victim. Both strategies have poor success rates. Bullies are often popular children at the centre of social networks with a need to sustain their social position, or ‘wanabes’ seeking to become part of the in-group. They engage in acts of bullying or exclusion of social misfits to maintain their central position and status, or to be accepted by the in-group.

Social misfits such as LEPTs are already the subject of intense effort to help them develop social skills. While these efforts need to continue it is not sufficient to prevent bullying.

Better results are achieved through creating a social system that makes bullying unacceptable and acceptance of difference laudable. These efforts are directed at everybody, especially the bystanders. Even one person can turn the tide on bullying behaviour, but when whole groups of people act on a set of values then they will change the group’s actions and culture. Unlike the bullies, the bystanders have less emotional commitment to their social standing which frees them to act on conscience or principles.

There are some good programmes available in New Zealand some aimed solely at bullying and others at more general social skills such as the Virtues Programme.

3.7 DRUGS

The media and literature express loud criticisms directed at parents who subject their child to drugs, supposedly to just make the child easier to manage. We wonder if

their attitude would change if they spent 24 hours in the shoes of our son, a child with extreme attention deficit and hyperactivity. Without Ritalin his life is characterised by anger, put down, inability to focus long enough to learn prescribed work, frustration, no friends, punishment and tension despite having teachers and parents committed to positive management. Ritalin is indeed a miracle drug that has transformed his life into one that is manageable, albeit at the outer margins. In our view, Ritalin and other stimulant medications, have a significant role in assisting LEPTs meet life's challenges.

Stimulant medication has been used since 1938 and evidence to date suggests that it is a very safe drug with few side effects when used appropriately. High consumption of coca-cola probably has more serious health effects, and has been banned in our household! The decision maker needs to balance the known dangers of a dysfunctional life with the possible dangers not yet discovered with the drugs. By all means avoid drugs if the child can manage without them, but otherwise carefully balance the pros and cons.

3.8 GOOD PARENTING, CO₂ AND OTHER REMEDIES

Good parenting and teaching are essential for LEPTs, although they need to be applied more rigorously than for average children. We have simply listed some of them below without discussion, as they are the standard tools of good parenting and teaching:

- Be loving
- Express often how much you value the child
- Notice and value their qualities
- Celebrate success
- Offer project learning
- Allow the child to make choices between acceptable alternatives
- Actively listen
- Take issues and concerns seriously
- Provide frequent feedback
- Provide immediate feedback
- Give larger and more powerful natural and logical consequences
- Use incentives before punishment
- Break tasks into smaller more manageable chunks
- Provide a visible timer than can help the child keep on track with tasks that need to be finished within time
- Tell children what to do, not what not to do
- Give very clear guidelines
- Set clear boundaries
- Be consistent
- Create routines where possible
- Act don't yak
- Avoid smoking – second hand smoke stimulates adrenalin
- Create opportunities for the child to learn through play
- Create opportunities of big and small motor activities
- Match expectations to the child's likely level of performance

- Ignore undesirable behaviour where possible to eliminate it through extinction
- Compliment good behaviour
- Provide thoughtful rewards
- Use time out, stand and think or similar punishment tools that minimise the chance of escalating the problem or role modelling inappropriate behaviours yourself
- Role model desired behaviour
- Apologise when you behave badly
- Avoid or plan for problem situations where possible
- Provide opportunities for one on one play time with other children
- Use visualisation techniques of ideal outcomes
- Offer alternatives in how work is presented such as videoed, acted out, written as a booklet, danced, mimed, written in poetry, models and displays

CO₂ is a useful strategy for reducing hyperactivity. Breathing normally into cupped hands for 10 seconds raises the level of CO₂. This has the effect of rapidly reducing adrenalin levels. It is a simple strategy to use in the classroom or home.

Diet is often pointed to as the culprit. The research does not support the idea that LEPTs have any more difficulties with diet than other children (Green 1997). There may be a very small group of people who are allergic to salicylates, the natural preservative in plants, and show some LEPT type symptoms but this is unproven.

Most vitamin additives that have been claimed to help have been shown to have no effect when researched (Green, 1997). There may be a case for providing additives of omega 3 and some of the sugars that are not present in our normal foods. Both of these are important in the development of neural pathways. This theory suggests that the caveman diet was high in these foods but is lacking in our modern diet. Horrobin's research (2001) showed that providing omega 3 to borstal inmates in a three month double blind trial reduced the number of reported incidents of violence by 50% in the group receiving the omega 3.

The results from natural remedies have been disappointing or the research is still lacking to support the case either way.

Until there is a better answer we must love our characterful children while we celebrate and support their exceptional qualities.

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APPENDIX I - FAMOUS PEOPLE WITH ADHD

Source: Guyer, B P (1999) *ADHD: Achieving Success in School and in Life* Pearson

Actors / Actresses

Bill Cosby	Actor
Danny Glover	Actor
Dustin Hoffman	Actor
George Burns	Actor
George C.Scott	Actor
Henry Winkler	Actor
James Stewart	Actor
Jim Carrey	Actor
Kirk Douglas	Actor
Robin Williams	Actor
Steve McQueen	Actor
Sylvester Stallone	Actor
Harry Anderson	Actor/Magician
Will Smith	Actor/Musician/Entertainer
Tom Smothers	Actor/Singer/Entertainer
Harry Belafonte	Actor/Vocalist
Ann Bancroft	Actress
Suzanne Somers	Actress
Tracey Gold	Actress
Whoopi Goldberg	Actress
Lindsay Wagner	Actress-BionicWoman
Cher	Actress/Singer

Artists

Pablo Picasso	Artist
Vincent van Gogh	Artist
Ansel Adams	Artist/Photographer

Athletes

Bruce Jenner	Athlete – Olympic Gold Medallist
Jackie Stewart	Athlete- Auto Racing
Nolan Ryan	Athlete - Baseball
Pete Rose	Athlete - Baseball
Babe Ruth	Athlete – Baseball Legend
Jason Kidd	Athlete - Basketball
Magic Johnson	Athlete - Basketball
Michael Jordan	Athlete - Basketball
Frederick Carl Lewis	Athlete – Olympic Gold Medallist
Greg Louganis	Athlete – Olympic Gold Medallist

Authors

Leo Tolstoy	Author Flunked out of College
Edgar Allan Poe	Author

Ernest Hemingway	Author
F.Scott Fitzgerald	Author
George Bernard Shaw	Author
Hans Christian Anderson	Author
Henry David Thoreau	Author
Jules Verne	Author
Lewis Carroll	Author – Alice in Wonderland
Agatha Christie	Author – Murder Mysteries

Composers

Ludwig van Beethoven	Composer
Wolfgang Amadeus Mozart	Composer
Georg Frideric Handel	Composer – Handels Messiah

Entrepreneurs

Walt Disney	Entrepreneur - Disney
Henry Ford	Entrepreneur - Automobile
F.W.Woolworth	Entrepreneur – Department Store While working in a dry goods store at 21 his employers wouldn't let him wait on a customer Because he "Didn't have enough sense."
Malcolm Forbes	Entrepreneur – Forbes Magazine
Andrew Carnegie	Entrepreneur - Industrialist
William Randolph Hearst	Entrepreneur - Newspapers
John D.Rockefeller	Entrepreneur - Standard Oil Company

Inventors

Leonardo da Vinci	Inventor
Thomas Edison	Inventor - His teachers told him he was too stupid to learn anything
Orville Wright	Inventor - Airplane
Wilber Wright	Inventor - Airplane
William Wrigley	Inventor - Chewing Gum
Benjamin Franklin	Inventor - Electricity and Bifocals
Alexander Graham Bell	Inventor - Telephone

Military Leaders

General George Patton	Military Leader
Gen. William C. Westmoreland	Military Leader – Vietnam Era
Eddie Rickenbacker	Military Leader – WWI Flying Ace
Col. Gregory "Pappy" Boyington	Military Leader – WWII Flying Ace

Musicians

John Lennon	Musician
Stevie Wonder	Musician

Scholars

Albert Einstein

Scholar - Mathematician. Was four years old before he could speak and seven before he could read

Galileo (Galilei)

Scholar - Mathematician/Astronomer

Socrates

Scholar - Philosopher

Sir Issac Newton

Scholar - Scientist and Mathematician. Did very poorly in grade school

Statesmen

Muhammad Anwaral Sadat

Statesman – Egyptian President Nobel Peace Prize Winner (1976)

Napoleon Bonaparte

Statesman – Emperor (France)

Prince Charles

Statesman – Future King of England

Winston Churchill

Statesman - Prime Minister, UK. Failed the sixth grade

Robert F. Kennedy

Statesman - U.S. Attorney General

Abraham Lincoln

Statesman - U.S. President Entered The Black Hawk War as a Captain and came out a Private

Woodrow Wilson

Statesman - U.S. President

Dwight D. Eisenhower

Statesman - U.S. President/Military General

Nelson Rockefeller

Statesman - U.S. Vice - President

John F. Kennedy

Statesman - U.S. President