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# Risk types

Geoff Trickey

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**D**ISPOSITION towards risk; It's hard to think of anything more likely to have been responsible for the evolutionary success of our ancestors. Surely this has to be top of the list of survival characteristics for our species? Risk, insecurity and uncertainty stalked our ancestors throughout the millennia prior to the Civilising Process (Pinker, 2011). Driven by predation, hostile neighbours and the need for protein, the stakes in planning and decision-making were always high. And, as is the case with other characteristics, genetic diversity will have increased the chances of survival. There were certainly winners and losers in this particular game of chance; a real life or death version of today's Darwin Awards! So, well done our ancestors, each and every one – and thank you for having us!

## Risk and psychology

There are six reasons why occupational psychologists need to take an interest in the individual differences of risk-taking.

- Current assessment practices are chaotic. Although the Financial Services Authority requires financial advisors to assess appetite for risk in their investor clients, there is no consensus about how.
- Risk-taking, especially financial risk-taking, is a very hot topic.
- 'Risk' proves to be an extraordinary world of contradiction and dubious science that, in the apparent absence of any impact from individual psychology, supports a wide and varied range of risk professionals that has been described as 'the world's largest industry' (Adams, 1995).
- The popular view, that all risk can be eliminated is both impossible and dangerous.
- The notion that risk is 'a bad thing' is corrosive and destructive.
- Organisations and their managers have an urgent need to get a handle on human factor risk. The ineffectiveness of current regulatory strategies is surely self-evident.

## Nurture or nature?

Our review of the relevant literature presents us with two contradictory pictures. Firstly, the view of risk-taking as a relatively stable aspect of personality. Secondly and conversely, the view that risk-taking is inconsistent, situationally determined and inherently unpredictable.

In the first of these scenarios, research presents a consensual view about the scope and structure of personality assessments in the form of the Five Factor Model (FFM). This structure has been replicated across cultures, remains stable and consistent over an adult working life and has been shown to be a predictor of workplace behaviour and success, particularly over the long term. Additionally, twin studies and genome research support the view that personality has significant genetic roots. Also, the vocabulary associated with FFM personality is permeated throughout by risk related

themes; all encouraging signs for a personality based assessment of risk-taking.

On the other hand, observations about the apparent inconsistency of risk behaviour have provided a major argument in favour of a 'situationalist' view. This suggests that any variations in risk-taking are accounted for by circumstances and situations, rather than by personal variables.

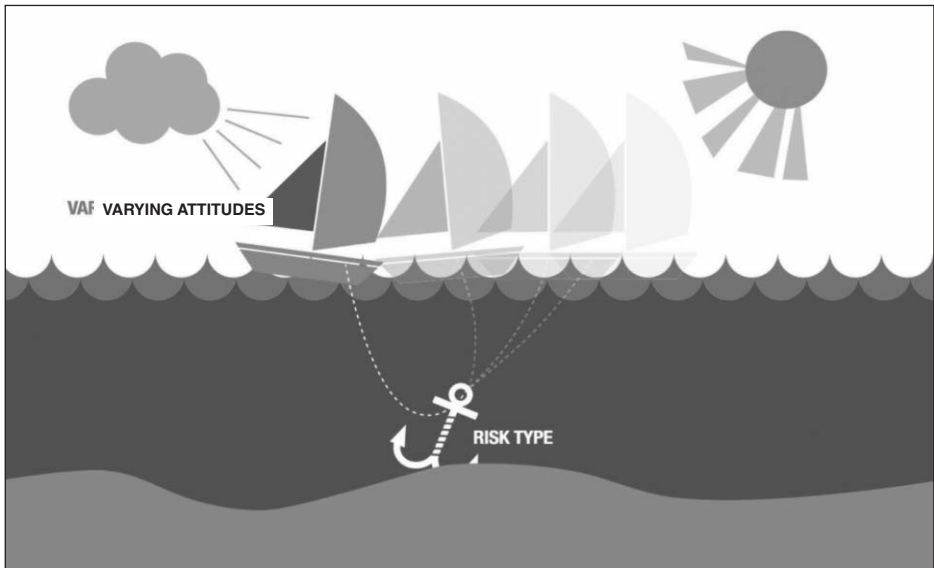
### So, is it possible to reconcile these two views?

Risk-taking has a lot to do with personality. Four out of five of the FFM personality factors have themes associated in some way with risk-taking and the jury is still out on the fifth. Given that estimates of the heritability of personality range around the 50 per cent level, and given the significance of risk-taking for survival, it seems that propensity for risk-taking must, at least to some extent, be defined genetically.

The results of several academic studies suggest that genetic differences are part of the reason people differ in their willingness to take risks. Identical and fraternal twin studies suggest that as much as 55 per cent of the difference between people in their willingness to take risks is genetic (Zypher, 2009). Molecular genetics research identifies several genes associated with risk-taking. Three genes are related in one way or another to the brain's feel-good chemical, dopamine. The physiology of risk is visceral; the flight and fight mechanisms. If you enjoy any kind of risk, this is what gives you the thrill; if you are overdosed with adrenalin even by minor upsets, that's your flight response kicking in. From tiddly-winks to roulette, from horror movies to roller coasters, from skiing to bungee jumping, we clearly enjoy toying with each of these physiological mechanisms.

But, whatever our genes, our nervous systems or our personality, we still have some free play. After all, introverts *can* engage with others, extraverts *can* be quiet, irritable people *can* seem understanding, eccentrics *can* put on formal suits and neurotic people *can* seem calm – but not for long. It doesn't come naturally, they will be exhausted by it

Figure 1: The analogy of a boat's anchor



and they will ultimately revert. Similarly with risk-taking; an Adventurous Type individual could be very careful with money, while a Wary Type may still have followed the herd in maxing their credit card limit, contributing to the record accumulation of national debt.

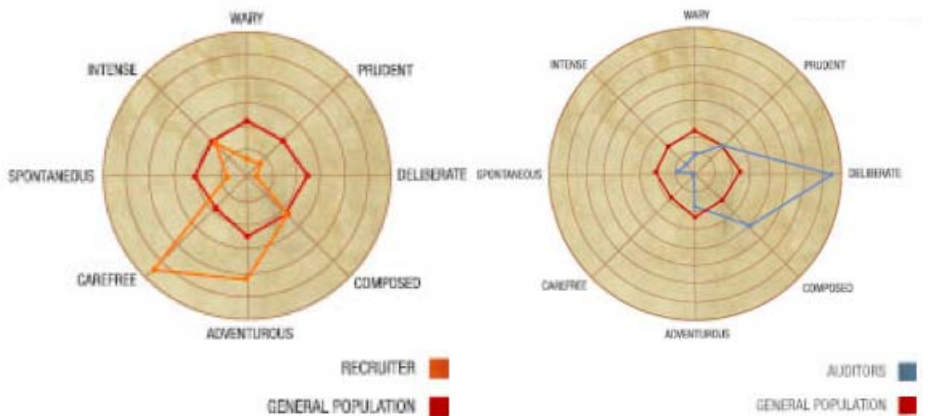
At the behavioural level, risk-taking is dynamic rather than constant. Your natural persona is often at odds with your nurtured persona. We are influenced by our situation, by our experience, by a variety of motives, by a kaleidoscopic range of incident, personal history, chance and circumstance that is idiosyncratic and beyond any known organising principle. Above all, we are influenced by each other. Yet, at a deeper level, we are still characterised by our temperament and our risk type. This is our centre of gravity, the point about which our behaviour may vary in different directions. The analogy of a boat's anchor, out of sight on the sea bed, captures this relationship. We can see the boat on the surface moving with the tides and with the winds. Only over time does the location of the anchor become discernable.

### The research

In spite of the varied and often unsystematic influences on risk-taking behaviour, the differentiation between occupational groups comes through in striking ways. We should not be surprised. Behaviours underpinned by the strongest and most basic instincts are far from uniform. 'It's the strong commonalities beneath the variations that are the fingerprints of an innate learning system' (Wade, 2009). Like personality, we should expect Risk Type to be a better predictor of long term performance than of short-term incident.

At PCL we deconstructed the FFM personality taxonomy to identify all the elements that might have implications for risk appetite and reaction to things going wrong. Our results identified four clear factors and these became the four poles of the Risk-Type Compass. The final version identifies eight Risk Types – four 'pure' types (the original poles) and four 'complex types' (falling at the quarter points between poles).

**Figure 2:** Contrasting differentiation of Risk Types amongst a sample of 141 recruiters and a sample of 198 auditors



At the RSA in November 2011 we reported research based on over 2000 assessments of people from a wide range of sectors and professions (Trickey & Yeung, 2011). The diagrams in figure 2 illustrate the contrasting differentiation of Risk Types amongst a sample of 141 recruiters and a sample of 198 auditors.

We have also researched Risk Type with IT professionals, recruiters, police officers, firefighters, engineers and skiers, and are now looking at mining and emergency rescue teams. This approach was originally designed for financial advisers to assess their client's propensity for risk (a FSA requirement) but we continue to discover a widening range of interesting new applications.

## The continuous spectrum of risk types

*Impulsive (previously Spontaneous)* – Uninhibited and unpredictable, they enjoy the elation of unplanned decisions, but are distraught when things go wrong. Their passion and imprudence make them exciting but unpredictable.

*Intense* – They are ardent, anxious and feel things deeply. Passionate and edgy by nature, they invest heavily in people and projects, but they are their own most severe critic and may take disappointments personally.

*Wary* – Self-disciplined, cautious and uneasy, they are organised and systematic but unadventurous. They will want to ensure that all bases are covered but will never quite dispel misgivings that it may all go wrong.

*Prudent* – Very self-controlled and detailed in their planning, this type is organised and methodical and work hard to eliminate uncertainty. Conforming and conventional, they are most comfortable with familiarity and continuity.

*Deliberate* – Analytic and compliant, this type never walk into anything unprepared. They experience little anxiety, plan things meticulously and manage their lives in a purposeful and business-like way.

*Composed* – This type is cool headed and self-contained. At the extreme they seem almost oblivious to risk and unaware of its effect on others. They take everything in their stride, seem imperturbable and manage stress well.

*Adventurous* – The Adventurous Type is uninhibited and fearless. At the extreme, they combine a deeply constitutional calmness with impetuosity and a willingness to challenge tradition and convention.

*Carefree* – Easy-going, daring and excitement seeking at the extreme, this type may appear either flexible or, at times, reckless. Through latitude or carelessness, they will sometimes make hasty or unwise decisions.

## Practical implications

So how does all this address the six points of concern about the world of risk raised above? Managers need to identify the risk-taking tendencies of individual members of staff rather than relying solely on regulation. They need to be able to evaluate the influence of those individual preferences on teams and the culture of the organisation. The probability and magnitude of risk may not be precisely knowable; one person's risk is another person's opportunity, excitement, responsibility or path of righteousness. But we do know, intuitively and objectively, that people differ in their temperament, and that such differences are deeply rooted. Personality research offers a point of entry into an understanding of human factor risk. The distinction between Risk Type and risk attitudes separates the *transient* influences of circumstances and experience, from the *persistent* influence of temperament.

The ability to 'capture' Risk Type makes an individual's propensity for risk visible and accessible for management and for strategic planning at all levels within the organisation. It allows the deployment of high and low risk-takers into appropriate roles and makes it possible to chart and monitor the human risk landscape in teams and organisations. It facilitates the self-awareness necessary for accurate evaluation of the risk propensity of others and it offers a taxonomy that will differentiate risk cultures. The dangers of miscalculated risk are probably greatest when people fall back on their instincts rather than using their heads. We each have a natural you and a nurtured self and the general rule seems to be that, with elevation within the organisational hierarchy, people become less likely to defer to expectations or to rein in their true nature. The risk of risk-taking is therefore likely to increase with promotion where the potential impact of poor judgement is more far reaching. Arguably, the greatest potential risk exposure for any organisation lies in a lack of risk self-awareness at the top; the risk of the risk manager. If this is correct, the implications for the boardroom are considerable. In short – awareness of Risk Type differences allows human factor risk to be managed.

***Managing Risk – The Human Factor* can be downloaded from the PCL website free of charge. Hard copies are available at £15.**

## The author

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## References

- Adams, J. (1995). *RISK*. London & New York: Routledge.
- Mischel, W. (1968). *Personality and assessment*. New York: Wiley.
- Pinker, S. (2011). *The Better Angels of our Nature: The Decline of Violence in History and its Causes*. New York: Viking.
- Trickey, G and Yeung, S. (2011). *Managing Risk, The Human Factor*. Tunbridge Wells, UK: Psychological Consultancy Limited.
- Wade, N. (2009). *The Faith Instinct*. New York: The Penguin Press.
- Zypher, M. et al (2009). The Genetics of Economic Risk Preferences. *Journal of Behavioral Decision Making*, 22.