



Managing
RISK
The Human Factor



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& SO YI YEUNG

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SYNOPSIS

WHAT ARE WE MEASURING?

1. Managers need to identify the risk taking tendencies of individual members of staff and the influence of those preferences on teams and the culture of the organisation.
2. The probability and magnitude of risk are not precisely knowable. One person's risk is another person's opportunity, excitement, responsibility or path of righteousness.
3. We do know, however, 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.
4. The distinction between Risk Type and Risk Attitude separates the transient influences of circumstances and experience, from the persistent influence of temperament.

HOW ARE WE MEASURING IT?

5. The PCL research reported here builds on consensus personality psychology, accessing decades of research into the roots of our nature and common heritage.
6. The Risk-Type Compass™ focuses on risk related themes extracted from the taxonomy of the whole personality, placing individuals within a continuous spectrum of eight Risk Types.
7. Our research demonstrates reliable measurement and excellent differentiation across roles, teams, professions and organisations.

WHY ARE WE MEASURING IT?

8. The Risk-Type Compass™ makes an individual's propensity for risk visible and accessible for management and for strategic planning at all levels within the organisation.
9. It allows the deployment of high and low Risk Types into appropriate roles and makes it possible to chart and monitor the Risk Type landscape of teams and organisations.
10. It facilitates the self-awareness necessary for accurate evaluation of risk propensity of others. Arguably, the greatest potential risk exposure for an organisation lies in a lack of risk self-awareness at the top.

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INTRODUCTION

This report describes some important findings from PCL's three year research program into the assessment of individual propensity for risk; an agenda that is ongoing and open ended. Current projects involve groups as diverse as fire fighters, auditors and extreme sport enthusiasts.

By focusing on the well researched area of personality assessment, we have found an entry point into the complexities of risk that is itself robust and informative, but which also provides a platform to support future progress.

Whether or not someone is comfortable with risk will be one of their most distinctive characteristics. This is significant because any job involves risk of some kind. Any creative, enterprising or entrepreneurial role, or any role that seeks to influence or compete with others, exposes that individual to the risk of failure, as well as the possibility of success.

The difficulty for managers and recruiters is that appetite for risk is not visible. Furthermore, risk taking may appear inconsistent from one situation to another and over time, sometimes varying quite dramatically. How can we make sense of all this?

The task of defining risk in any objective, scientific and measurable way has perplexed many talented people. But, while risk is a topic of labyrinthine complexity, our fears and anxieties about risk are all too tangible and distressing to those left exposed by them. However, as John Adams (1995) points out, what we broadly define as risk in everyday life is unquantifiable; probability and magnitude are not precisely knowable. One therefore has to find "useful aids for navigating the sea of uncertainty".

The management of risk has tended to emphasise processes, procedures, regulation and legislation on the one hand, and accident statistics and probabilities on the other. Any questions about the personalities of risk takers seem to have been rapidly assigned to the 'too difficult' basket.

Our research suggests that, at the level of personality, individual propensity for risk is knowable. People can be managed in ways that maximise their contributions, whether as adventurous or cautious risk takers. Teams can be balanced appropriately. Awareness of, and appreciation for, these individual differences can inform decisions at the individual, team and corporate levels.

Those at the top of the corporate pyramid have the privileges of leadership and the responsibilities of influence. The proper management of risk is ultimately a matter of corporate governance. Any misunderstandings about individual propensity for risk taking will have their greatest impact at board and senior management levels and this is where advances in the understanding of human risk will yield their greatest return.



Part 1:

**THE
RISK-TYPE
COMPASS™**

“ The policy
of being too
cautious is
the greatest
risk of all

JAWAHARLAL NEHRU

ABOUT THE RISK-TYPE COMPASS™

The Risk-Type Compass™ explores an individual's predisposition to risk and their capacity to manage it.

RISK TYPE

Firstly, the Risk-Type Compass™ assessment places individuals in to one of eight Risk Types. Their Risk Type reflects their temperament and natural disposition towards risk – the extent to which they are, for example, naturally adventurous and optimistic as opposed to being cautious and anxious about uncertainty, or to what extent they plan things carefully, seek excitement or act on impulse. Temperament is deeply rooted and will influence how much risk an individual is able to take, how much uncertainty they can cope with and how they react when things go wrong.

RISK ATTITUDE

Secondly, an individual's Risk Attitude will typically vary from situation to situation due to personal experience and circumstances. The Risk-Type Compass™ uses ipsative assessment to identify individual differences in risk attitude across five important risk domains: ethical, financial, health and safety, recreational and social.

RISK TOLERANCE

Thirdly, Risk Tolerance, is determined mainly by natural temperament, which establishes a baseline for reactivity to any kind of risk or uncertainty. Experience and personal circumstances also influence behaviour, but in less predictable ways. The RTi (Risk Tolerance Index) is a single numeric score that takes both factors into account.

CHART 1: Risk Attitudes

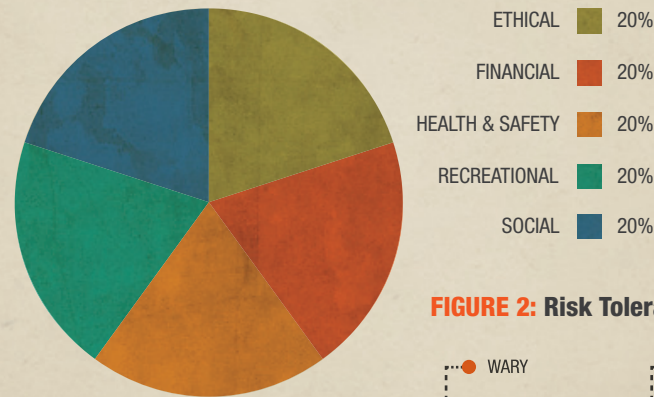


FIGURE 1: The Risk-Type Compass™

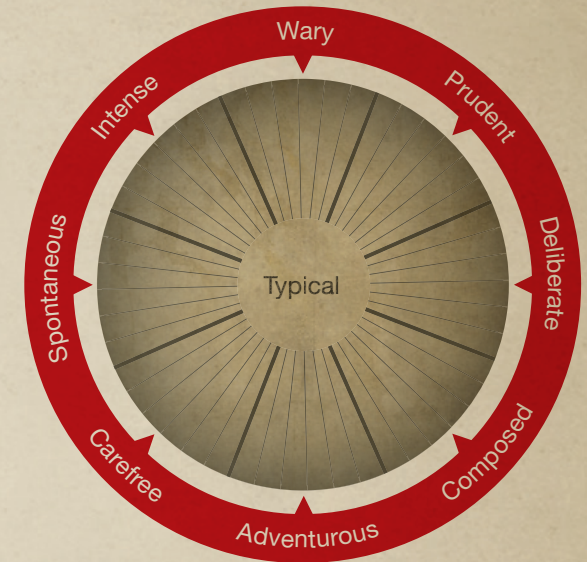
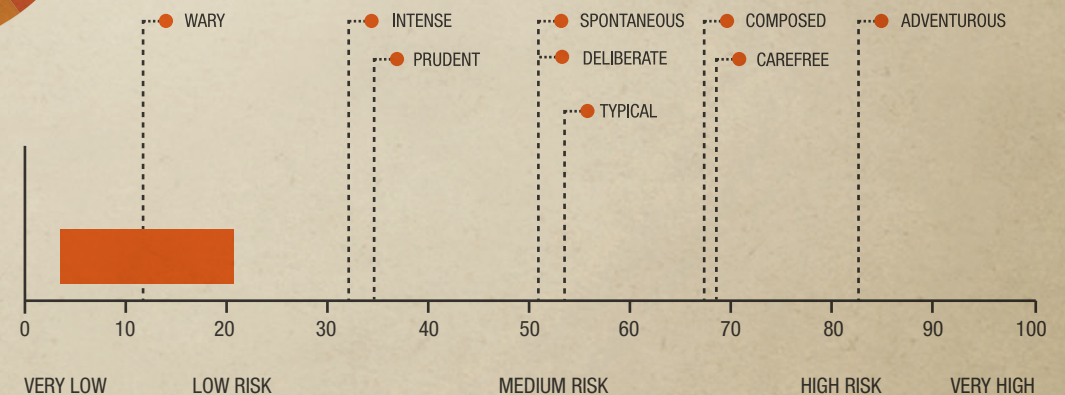


FIGURE 2: Risk Tolerance Index (RTi)



COMFORT ZONE

RISK TYPES

WARY (Very Low Risk Tolerance)

The Wary Type is cautious, vigilant and pessimistic, and security is always high on their agenda. They will be alert to the risk element of any idea or innovation and dubious about the benefits. Such people have a need for certainty and like to know precisely what they can expect. Fearful of failure, they protect themselves by being conservative, prudent and organised. They should have a respect for convention and tradition and prefer change to be gradual.

PRUDENT (Low Risk Tolerance)

The Prudent Type will be conservative and conventional in their approach, people that prefer predictability and continuity to change or variety. They are most comfortable 'doing things by the book' and operating within established and familiar procedures. Such people prefer change to be gradual and evolutionary rather than radical. Comparatively resilient and unsentimental, this type is careful and provident.

DELIBERATE (Average Risk Tolerance)

This type will be self-assured and even-tempered. However, because they are highly organised, compliant and well informed about what is going on, they are unlikely to walk into anything unprepared. Any aversion to risk will be practical rather than emotional, a desire to do things in a balanced, sensible and systematic way. This type is not unnerved by radical or extreme proposals, but evaluates them precisely before giving their view.

COMPOSED (High Risk Tolerance)

This type will always be relatively untroubled, and more even-tempered than most. They seem to take whatever life throws at them and maintain a positive outlook. The Composed Type manages stress well, rides out any turbulence and stays on-task. Not reckless, but not averse to risk either, this type keep their nerve and see things through.

ADVENTUROUS (Very High Risk Tolerance)

This type is resilient and attracted by excitement. They will be open to new experiences and will deal unemotionally with disappointments and unexpected turns of event. Their positive, upbeat outlook, and desire for stimulating challenges allows them to pursue their adventures with equanimity. Not particularly well organised or prudent, their decision-making is likely to be influenced by both lack of anxiety and impulsiveness.

CAREFREE (High Risk Tolerance)

The Carefree type welcome variety and value their independence and personal autonomy. Not highly methodical but easily diverted to new interests they may not always seem very focused. They are at their best in fast moving situations or when on personal missions that provide a clear sense of direction. Although not naturally methodical or attentive to detail, this type will provide a challenge to dogma and relish opportunities to break new ground.

SPONTANEOUS (Average Risk Tolerance)

The Spontaneous Type is emotionally expressive and reacts strongly to events. The spontaneity of 'on the fly' decisions will always appeal to the excitable side of their nature, but they are also prone to anxiety if things go wrong. High hopes and expectations, combined with a tendency to act hastily risk a cycle of highs and lows in which disappointing outcomes lead to remorse and self-criticism.

INTENSE (Low Risk Tolerance)

The Intense Type wear their hearts on their sleeves; they are enthusiastic, sincere and involved with people and projects at a personal level. Self-doubt makes them their own most unforgiving critic but it often fuels their drive and determination to succeed. Neither particularly cautious nor impulsive, this type will be less resilient than most but generous in their passion and their commitment.

RISK TYPE & RISK ATTITUDE

THE ESSENTIAL DISTINCTION

Making the distinction between deeply rooted personality characteristics (Risk Type) and the many transient influences on risk taking (Risk Attitude) has been a major step in our understanding of human factor risk and the development of the Risk-Type Compass™ rationale.

An extensive review of the relevant literature presented 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.

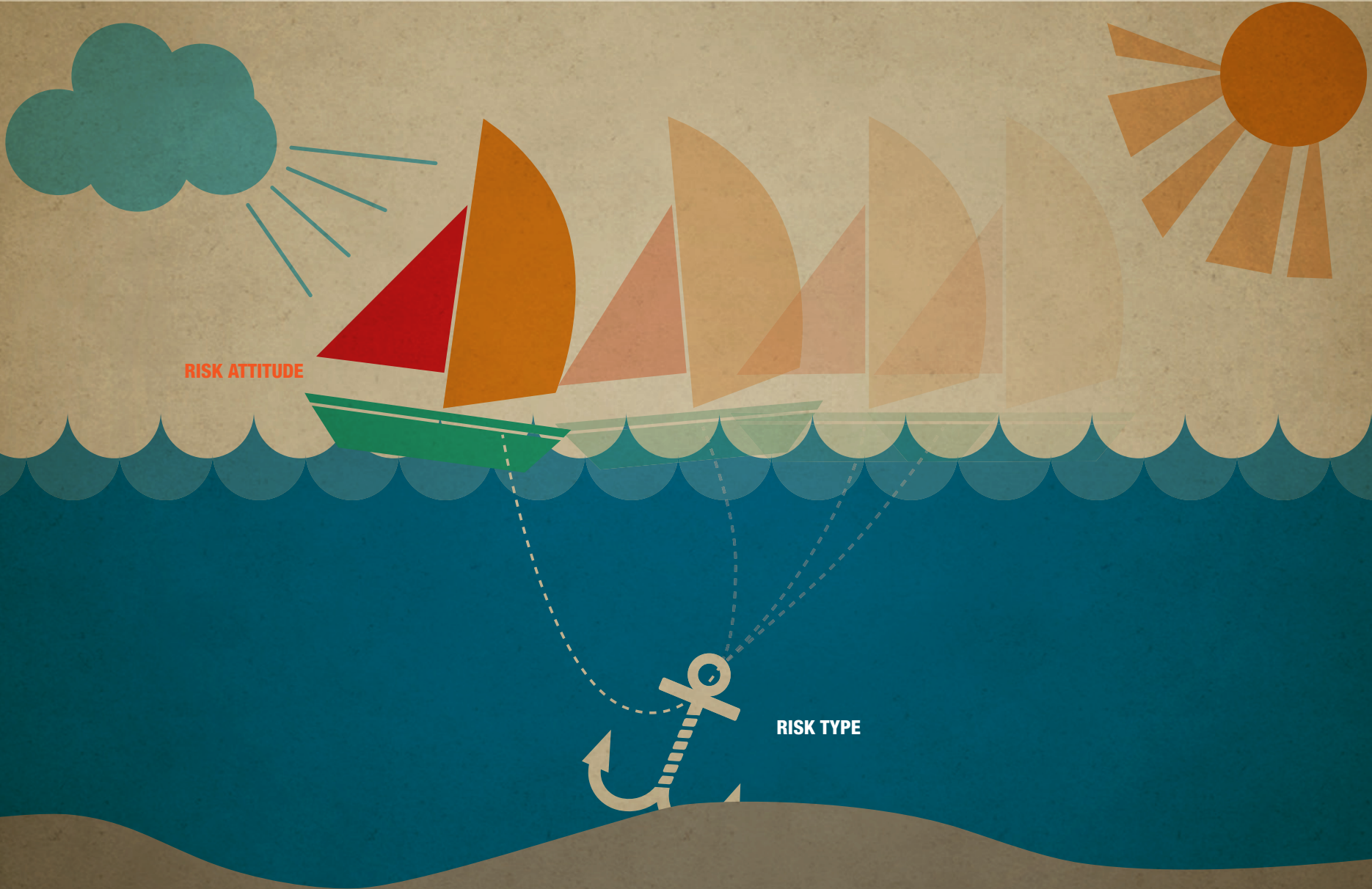
In the first of these scenarios, research presents a consensual view about the scope and structure of personality assessments in the form of the Five Factor Model (FFM). This structure has been replicated across cultures, remains stable and consistent over an adult working life and has been shown to be a predictor of work place 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 elements or 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?

The diagram opposite accepts both views and illustrates our understanding of the relationship between personality (Risk Type) and more transient influences (Risk Attitude). Personality establishes the reference point around which the variability of day-to-day behaviour is anchored. The boat in our analogy may be blown one way or another by the wind, may rise and fall with the tide, may be pitched and tossed by the waves but there is a defined point around which these variations are constrained. Similarly, circumstances, experience and the behaviour of others all influence one's decisions and actions, typically on an immediate and short-term basis, but always under the persistent influence of personality.

In distinguishing a clearly defined concept of Risk Type from the uncertainties of Risk Attitude we have been able to isolate something measurable and predictable from the complex totality of risk taking. However, there is a level of influence on behaviour that may be unknowable. Attitudes to risk will be influenced by a kaleidoscopic range of incident, personal history, chance and circumstance that is highly individual, idiosyncratic and beyond any known organising principle. It is not very surprising then if there are still some things that we cannot know about risk taking. But it is very encouraging that some things can be known. In our view, this is an essential distinction.



Part 2:

RESEARCH FINDINGS

“ Only those
who will risk
going too far
can possibly
find out how
far one can go

T. S. ELLIOT



RESEARCH FINDINGS

This report discusses the results from studies within occupations and professions in which issues of risk and risk management are a defining feature, whether in terms of the need to be comfortable with, or wary, of risk. Twenty such surveys have been completed, involving almost 2,000 individual assessments across four continents, with data on a wide range of occupations. Global studies of fire fighters, miners and auditors are in progress.

In this section of the report we present our findings of Risk Types within the UK workforce, amongst different sectors, across generations and job levels. In addition, we summarise findings of four contrasting studies: Engineering, Information Technology, Auditing and Recruitment. Our purpose is to illustrate the effectiveness of the Risk-Type Compass™ in differentiating between sectors or industries and, at the survey level, capturing distinctive features that will contribute to the risk climate of those organisations.

INDUSTRY SECTOR



- Accountancy
- Auditing
- Banking & Financial Services
- Charity & Not for Profit
- Commercial
- Construction & Property
- Design & Creative
- Education
- Engineering
- Executive Search & Interim Management
- Healthcare & Medical
- Hospitality & Leisure
- Human Resources & Personnel
- Information Technology & Telecommunications
- Legal
- Manufacturing
- Marketing & Sales
- Public Sector
- Recruitment
- Retail
- Social Care
- Training, Learning & Development
- Utilities & Energy

THE UK WORKFORCE

Our UK working population sample included individuals across various industries and age groups, and at a variety of levels of seniority and expertise.

DIFFERENTIATION

The specific studies described in this report demonstrate that the Risk-Type Compass™ is able to differentiate very clearly between the risk characteristics of individuals as well as between teams, professions, organisations and sectors and even generations.

The technical blue-print for the Risk-Type Compass™, the definitions, the scaling and the normative approach, all enshrine the ideal of an equal prevalence of each of the eight Risk Types across the population as a whole. A number of statistical factors could potentially have undermined this intention but the analysis of the total sample presented in Charts 2 and 3 show how far our results support our expectation of Risk Type equality. The variation from the ideal ranges are between -2.7 and +0.3 percentage points. Our total sample of 2000 administrations of the Risk-Type Compass™ therefore provides a sound basis for Risk Type comparisons at many levels.

DISTRIBUTION

The distribution of Risk-Type Compass™ scores across the workforce (the proportion of scores that are high, average or low) is particularly important when interpreting test scores. The bell shaped curve of the 'normal distribution' is typical of the variation of many natural phenomena and is commonly the presumed ideal distribution in this kind of investigation.

Figures 3 and 4 show the distribution of scores for the two underpinning scales obtained from our original research – extended to include the total sample. Our data for both scales conforms well to the normal curve and satisfies all statistical requirements in this respect.

GENDER

The gender differences demonstrated here (Chart 4) are significant and appear to amplify gender differences already familiar in personality research. Since, for the development of the Risk-Type Compass™, we trawled the total personality domain to extract all the risk related themes, this suggests that differences in risk taking may be a distinctive feature of gender. In itself, this is an interesting finding that may contribute to more focused discussions about gender and occupational or cultural preferences.

THE 'TYPICAL' GROUP

Throughout our sample data there are cases of individuals who show none of the Risk Type characteristics sufficiently to characterise them specifically as one Risk Type or another. These are people who fall close to the mean score on both of the underlying measurement scales. In terms of their location on the compass, they are clustered within the centre circle. We refer to this group as 'Typical' rather than any particular type. 10.6% of our sample are categorised as Typical, as shown in Chart 3.

The most distinctive feature of the Typical group is that they show none of the extremes that characterise other Risk Types. So far as personality and risk tolerance are concerned, they are unexceptional and similar to most other people - neither exceptionally well organised or unusually excitement seeking, nor particularly fearful or imperturbable.

For this reason, the RTi (Risk Tolerance Index) of the Typical group will always be in the mid-range.

THE RESULTS

Analysis revealed that there is a fairly even spread of Risk Types across the general population.

CHART 2: Risk Types in the total sample

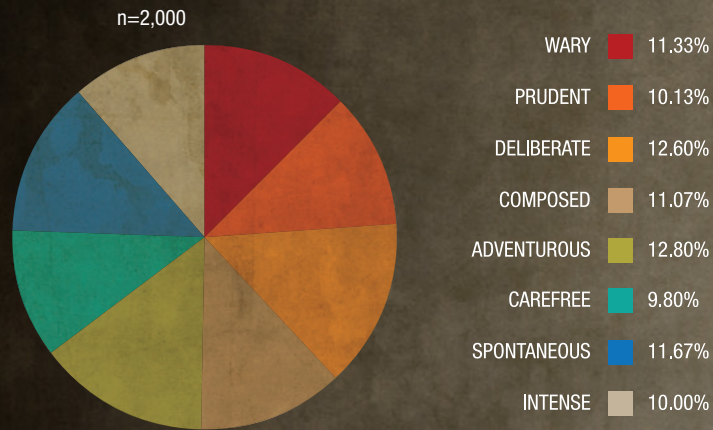


FIGURE 3: Histogram showing distribution of the Calm: Emotional scale

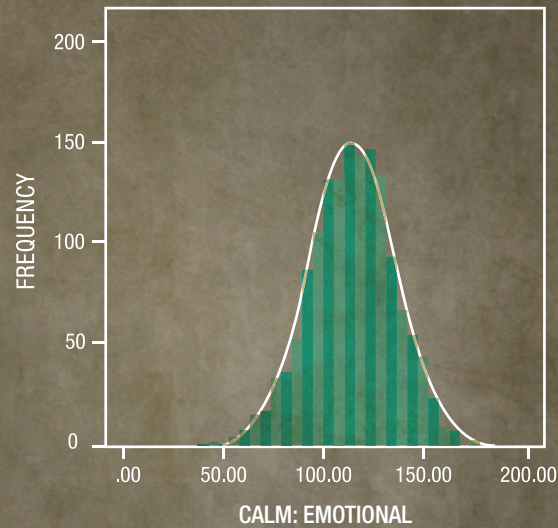


FIGURE 4: Histogram showing distribution of the Daring: Measured scale

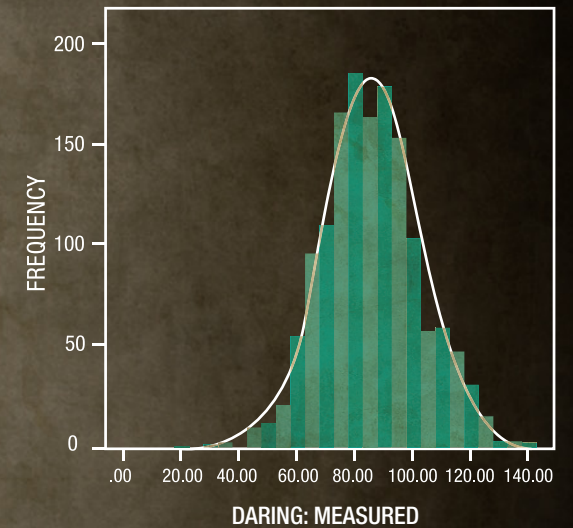


CHART 3: Risk Types in the total sample

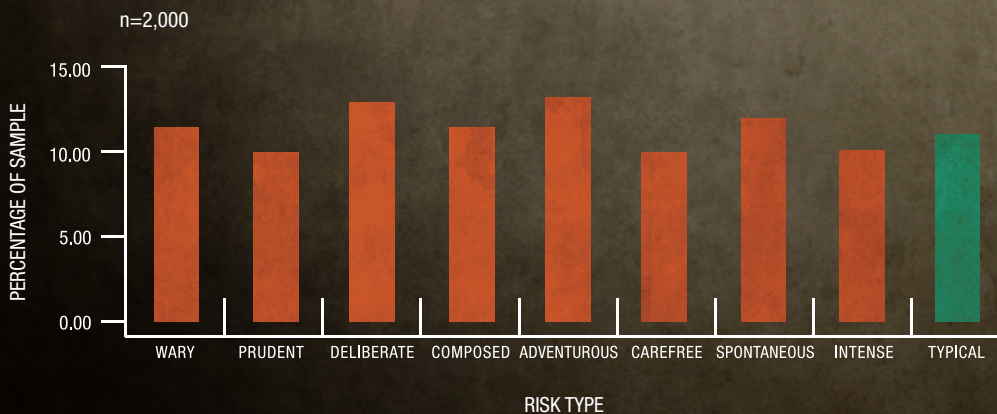
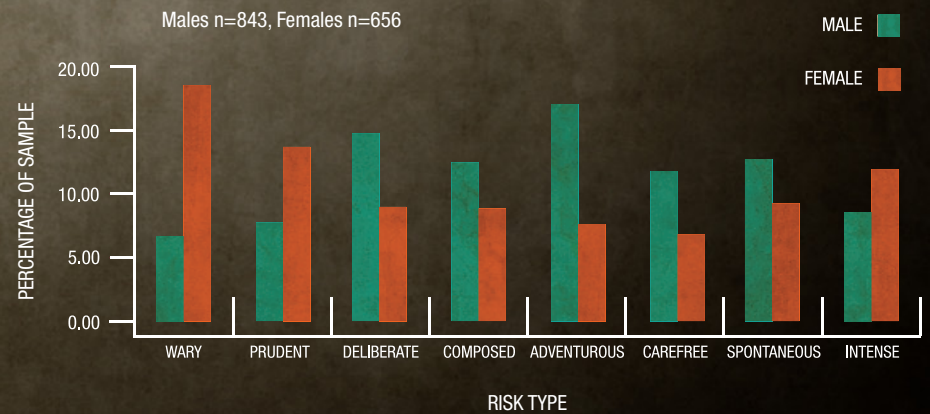


CHART 4: Risk Types of males and females



The different personality elements present in the Risk-Type Compass™ are grouped into two conceptually orthogonal scales, informing the structure of the tool. The properties of these two scales meet the distribution requirements for normality, as demonstrated by the symmetrical bell shaped curve.

RISK TYPES ACROSS THE GENERATIONS

THE RESULTS

We examined the risk taking propensity and attitudes towards risk in three different generations.

Baby Boomers: Born 1943-1960

Generation X: Born 1961-1981

Generation Y: Born 1982-2001

GENERATION Y

Three neighbouring Risk Types; Prudent, Deliberate and Composed, account for the highest proportion of Risk Types in Generation Y and give a very distinctive shape to their data. These neighbouring Risk Types seem to define the 'centre of gravity' of risk taking for people of this generation. The most prevalent is the Deliberate Type. These are people who are not unnerved about risk taking but have a very careful and measured approach. They combine a calm self-confidence with being thorough, systematic and organised, characteristics that are represented separately by the Prudent Type and the Composed Type. These too are prevalent amongst the Y generation. The Adventurous Type is also well represented.

Least frequent in Generation Y are the Spontaneous, Carefree and Intense Risk Types, with a much lower incidence than either Generation X or the Baby Boomers. This suggests that fewer in the Generation Y sample are likely to make hasty, unplanned decisions, and fewer are likely to be emotional in their decision-making or to be 'edgy', anxious, pessimistic or self-doubting. As in our previous survey research (Trickey & Hyde, 2009), it is Generation Y data that has the most distinctive shape.

GENERATION X

Our Generation X sample is more evenly spread across Risk Types than Generation Y or the Baby Boomers, and is also generally less extreme. The only Risk Type in which there is a higher proportion of Generation X than the other two generations is the Adventurous Risk Type. This Risk Type is enthusiastic, unflappable and intrepid. They enjoy being on the leading edge and they keep their nerve.

BABY BOOMERS

The highest proportion of the Baby Boomers fall into the Wary and Spontaneous Risk Types. These two types overwhelm the Adventurous and Deliberate Types, their respective opposites on the compass. The Baby Boomers also have a greater overall representation of these two types than either of the other two generations, so these will be qualities that characterise them most distinctly. As a group then, Baby Boomers are most likely to be cautious. Anxious about risk and having a strong need for security, they will be methodical in their approach and display a shrewd and persistent scepticism. Apart from these distinctions, each Risk Type is fairly evenly balanced with its opposite; Prudent with Carefree and Intense with Composed.

DISCUSSION

In our earlier research into generational differences looking at a much broader sweep of personality characteristics (Trickey & Hyde, 2009), we characterised Generation Y as less confident and less assertive than either Generation X or the Baby Boomers, but cooperative and eager to please. Generation X we described as at the peak of their social skills, competitiveness and drive and the Baby Boomers as being more easy going, generous and comfortable in their skin.

This report taps into somewhat different territory and should be considered as complimentary rather than as providing a contrary perspective. The three generations still show quite distinctive differences from each other and, once again, it is the Generation Y sample that has the most distinctive pattern. Optimistic and compliant at the beginning of their careers, their risk profile seems to map quite neatly into the earlier findings. Generation X seem to fall between the two and to be the least differentiated. The Baby Boomer sample is an interesting combination of Spontaneous and Wary Risk Types, perhaps polarising towards the end of their careers as increasingly apprehensive and anxious about the state of the world, but also more impulsive – the ‘shoot from the hip’ combination of Larry David in ‘Curb Your Enthusiasm’ and the notorious grumpy old men and women of UK media fame?

CHART 5: Risk Types across the generations

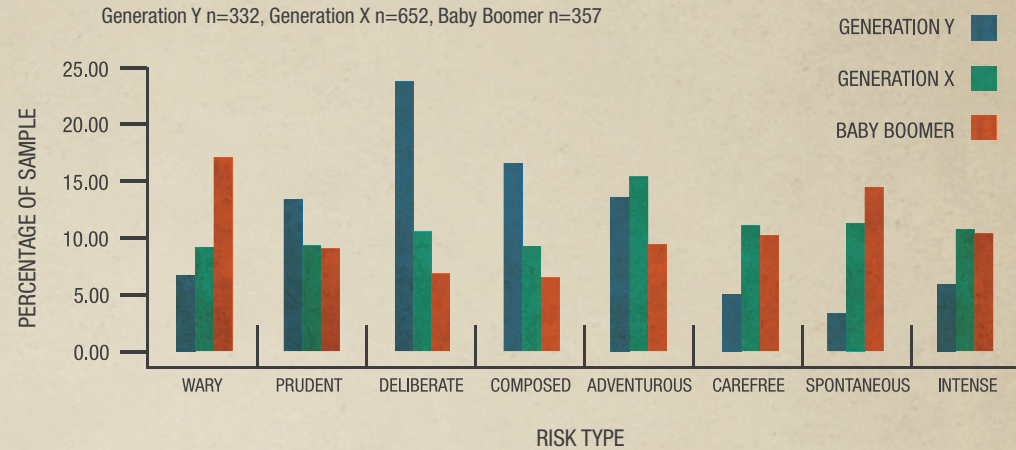
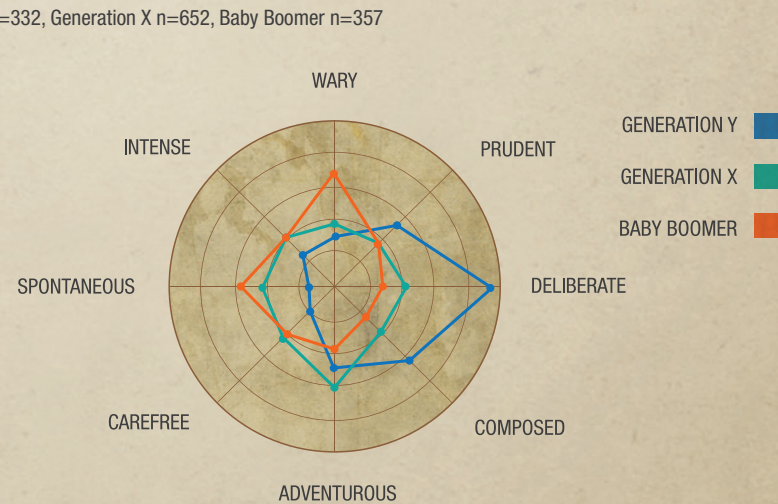


CHART 6: Risk Types across the generations



COMPARING PRIVATE AND PUBLIC SECTORS

The public sector faces redundancies of around 7.8% according to Labour Market Outlook (CIPD). Any business recovery over the next few years has to be offset by the 600,000 public sector job losses predicted by the Office for Budget Responsibility - the onus being on the private sector to create the vacancies needed. But the tendency to classify employees from the two sectors very differently questions the feasibility of such a trade off.

The typical perspective of the public sector implies a higher degree of formalism and bureaucracy leading to the perceived expectation that any opportunity for risk taking is restrained by 'red tape'. When asked to describe each other, over two-thirds of staff working in the public sector agreed with the stereotypical view, concurring that they could be described as risk averse.

A study by Van Keer and Bogaert (2009) involving 1,000 senior leaders in the public and private sectors in Europe, confirmed that differences between private and public sectors do exist. Public sector leaders were more focused on long-term strategy. They were more inclined to "control" than to trust, less optimistic, and more thoughtful and risk-averse in their approach. Private sector leaders had short-term objectives and were prepared to take risks looking for quick results. They showed more belief and trust in their management style, and offered younger managers more opportunities.

Numerous other studies have confirmed that those less willing to take risks were more likely to be found in the public, than private sector (Bellante & Link, 1981; Luechinger et al, 2007; Pfeifer, 2008).

The issue of risk taking is central to these discussions, and it seems reasonable to question how well suited public sector employees will be to fill jobs becoming available through private sector growth.

PCL research, published in 2009, found that private sector employees were more likely to have fresh ideas and suggest innovative solutions to problems than their public sector counterparts.

Attitudes to risk and to security in these two sectors were very different; the private sector seeing a need to take greater risk whilst the public sector needed to be more prudent and conservative to ensure that public affairs were managed responsibly.

THE RESULTS

Our results show distinct differences between the public and private sectors. The first distinction is that there is considerable variation of Risk Types within the public sector, while the private sector data shows a relatively even distribution across all the Risk Types.

PUBLIC SECTOR

The first distinction between sectors is that there is a very clear differentiation of Risk Types in the public sector, from a small percentage of the Carefree Type (2.2%) to a high percentage of the Deliberate Type (23.3%). This differentiation is highly systematic, with the Prudent and Deliberate Types pulling the distribution in that direction.

These results suggest that public sector employees are more likely to be conventional, less flexible and to prefer working within familiar, established procedures. They are likely to be highly compliant and approach risk in a cautious and calculated manner. Significantly, all three of the most risk tolerant Risk Types are under-represented in the public sector.

PRIVATE SECTOR

The data also revealed a higher incidence of the Carefree Risk Type in the private sector sample compared with public sector employees. At the root of this Risk Type are high levels of spontaneity, challenge to convention and a preference for novelty and excitement over routine. These individuals are likely to favour variety over consistency, excitement over caution, action over planning and individuality over conformity, and may easily feel constrained by rules, traditions or micro-management.

The private sector also has a higher incidence of the Adventurous Type than the public sector. This suggests that they are more optimistic, impulsive and fearless and excited by new experiences, but less likely to favour custom, tradition or convention.

CHART 7: Risk Types in private sector and public sector employees

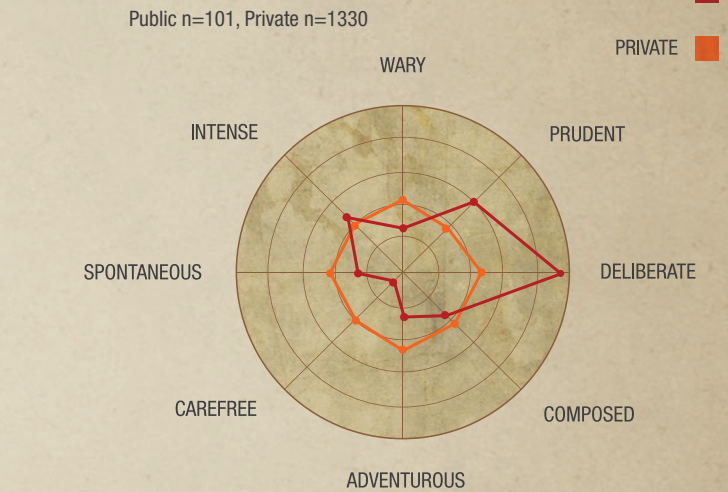
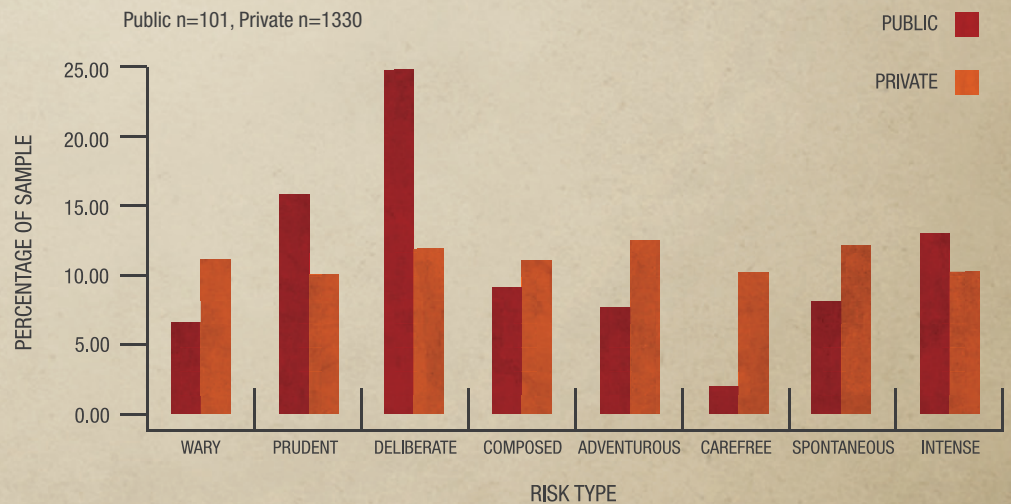


CHART 8: Risk Types in private sector and public sector employees



JOB LEVEL – MOVERS AND SHAKERS

Those at the top of the organisational hierarchy would have the greatest influence on the general culture, and that of course will include culture of risk. Whether or not such people can be described as leaders or entrepreneurs is debatable. This is dependent on why they are now in a prominent position and how they got there. In our consulting experience, in some very conservative organisations, seniority still rules, often to the frustration of younger talent whose prospects of advancement may seem dauntingly distant! Nevertheless, whatever their route to success, we compare here a group of entrepreneurs with a group of company directors.

The greatest discrepancy in these results is in the incidence of the Intense Risk Type, of which there are no entrepreneur examples at all in our small sample. This disparity is largely also responsible for differences in the incidents of Composed Type - a trade off between opposite sides of the compass. Perhaps the most unexpected finding is that, as a group, the entrepreneurs buck their popular stereotype, appearing to be significantly more careful and organised (Prudent Type) as well as being less gung-ho in their willingness to embrace new opportunities fearlessly (Adventurous Type).

The points of greatest convergence between directors and entrepreneurs are reflected in a similar incidence of the Deliberate Type and the Spontaneous Type. These are opposite Risk Types that, overall, seem to balance each other out. This is also where both groups are least differentiated from the wider population.

This, of course, is not a definitive study of either directors or entrepreneurs. We justify its inclusion here because, on a 'within organisation' basis, any development work at board or senior manager level would be dealing with small numbers. The ability of the Risk-Type Compass™ to point out the kinds of distinction alluded to above are very valuable in terms of self-awareness and team development. As a further example, Figure 5 shows the positions of a small group of directors on the Risk-Type Compass™. The clustering and dispersal of individuals illustrates the kind of issues that might be experienced in terms of interpersonal frustration. The alternative being that, properly addressed, a more productive mutual respect and understanding of these alternative perspectives can be facilitated.

FIGURE 5: Risk Type distribution of Directors on the Risk-Type Compass™

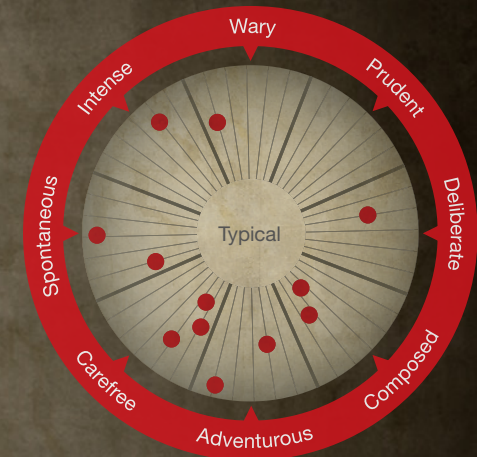
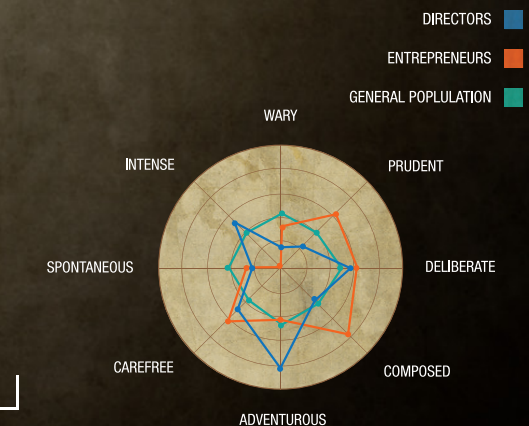
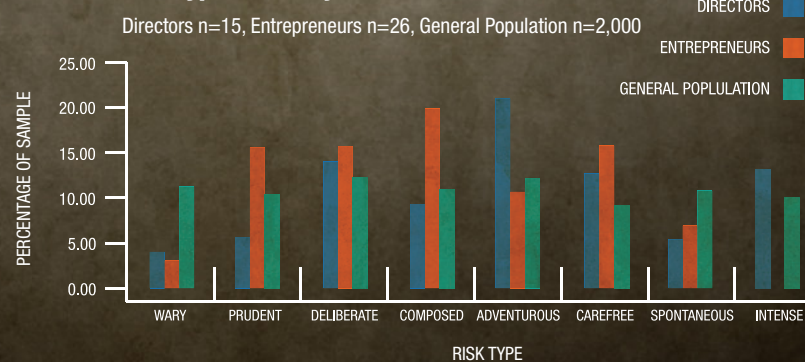


CHART 10: Risk Types across job levels

Directors n=15, Entrepreneurs n=26, General Population n=2,000

CHART 9: Risk Types across job levels



IT SAMPLE

“Our clients are driven by improving efficiencies and driving down costs. Innovation is the thing that’s making the difference. With innovation comes taking risks. Clients are now hiring people who are expected to take risks,” reports Rob Grimsey, group marketing director at Harvey Nash.

Other research (e.g Lounsbury et al., 2009) also suggests that there is a greater prevalence of more risk tolerant individuals in the IT profession. This would reflect the requirement of IT roles to cope in a continuously changing industry and a sector that is characterised by new ideas, less structured work environments and unconventionality.

On the other hand, minimising IT risk in today’s cyber economy is also a high priority. In their Harvard Business Review article ‘Why Your IT Project May Be Riskier Than You Thought’, Bent Flyvbjerg and Alexander Budzier (2011) report recent research showing high numbers of out-of-control IT projects that sink entire companies and careers.

New standards and regulations focus on operational risk management – weighing risk against reward and building systems and procedures designed to reduce or eliminate risk. Thus, regulation and best practice frameworks are also obviously important moderating influences. The dilemma then, is that total elimination of risk could also stifle innovation. It may therefore be of critical importance to ascertain the optimal balance of Risk Types amongst IT professionals.

Computer Weekly teamed up with Psychological Consultancy Ltd to research IT professionals’ propensity for risk taking and the online assessment was completed by 264 Computer Weekly readers.

The balance in our sample was clearly towards greater risk taking. 21% are characterised as the Adventurous Type and both the Carefree and Composed Risk Types were also strongly represented – all three types being associated with high levels of risk tolerance and an appetite for risk taking. These results characterise the IT profession as being both impulsive, excitement seeking and daring but also as calm, optimistic and resilient. Nevertheless, the more cautious Risk Types are also in evidence, but below their prevalence in the wider population. These participants, who would probably come across as more edgy, intense and pessimistic, are the worriers who would always stress the need for caution. The question for hiring managers is whether the right Risk Types are in the right IT jobs!

CHART 11: Risk Types in an IT sample and general population

IT Professionals n=264, General Population n=2,000

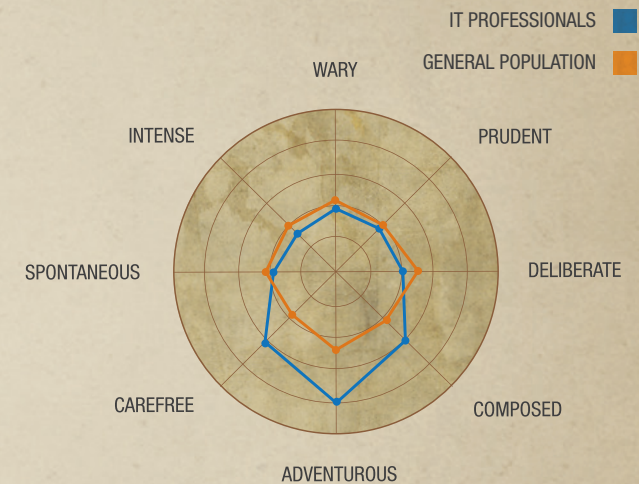
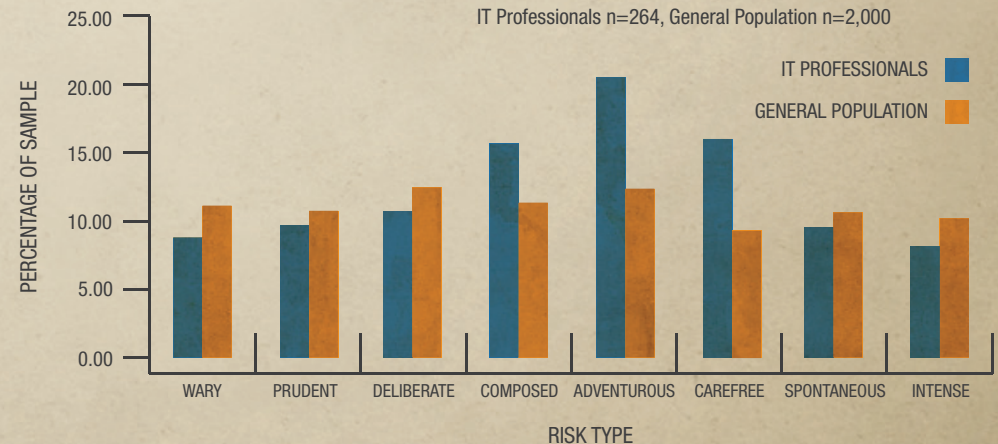


CHART 12: Risk Types in an IT sample and general population

IT Professionals n=264, General Population n=2,000



ENGINEER SAMPLE

The engineering profession recognises that risk is inherent in the activities undertaken by its members. Engineers are tasked with solving real world problems as they arise and the solution to these problems must often satisfy conflicting requirements; efficiency and improved performance might come at a greater cost; safety might add to complexity and take up more time. The optimal engineering solution is the one that considers all such conflicting requirements and this will largely depend on the engineer's analysis of the level of risk involved.

The sheer scope and diversity of engineering makes generalisation about Risk Type difficult. It is a profession in which challenges range from the nuclear industry to ship building and from aerospace to road construction. Nevertheless, all of the engineering specialisms have to deal with risk and to make decisions about tolerances and safety margins. Failures do happen and, when engineers fail, the social and economic costs can be very high.

“There will always be failures or disasters as engineers and designers push the boundaries by building taller buildings, longer bridges, or by reaching further into space. Each time there is a failure or disaster, changes are made and regulations introduced only to be outstripped by further developments.” (Nick Spurrier, 2009)

Our study of Risk Type in the engineering profession shows a clear preference towards the Composed and Deliberate Risk Types, combining to account for 37% of the engineering sample. These Risk Types are associated with a self-assured and relatively untroubled approach to risk. The Composed Type made up the majority of the sample (21%) and is associated with high levels of risk tolerance, whereby individuals tend to maintain a calm and positive outlook despite difficulties and setbacks. The Deliberate Type (16%) differentiates from the Composed Type particularly in their focus on being thorough, prepared and well organised in their investigations and problem solving. The least prevalent Risk Types found amongst the engineering sample were the Carefree and Spontaneous Risk Types, which may be more unpredictable, unconventional and inclined to act on impulse. They may be considered either creative and ingenious or challenging and unconventional, depending on their suitability for their role.

These results are generally in line with the assumption that engineers need the ‘can do’ temperament to confront and deal with the challenges that arise, whilst needing to be systematic in the search for optimal solutions. From the personality point of view, these findings emphasise the value of engineers being calm, methodical and resilient decision makers.

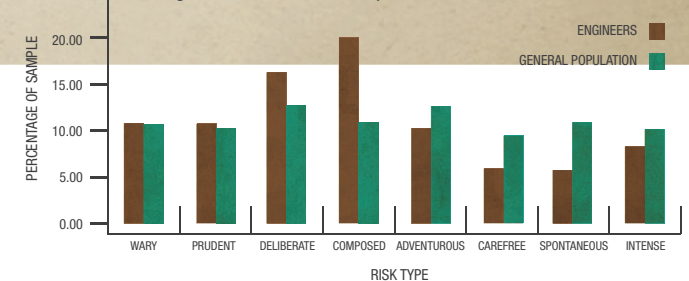
CHART 13: Risk Types in an engineering sample and general population

Engineers n=92, General Population n=2,000



CHART 14: Risk Types in an engineering sample and general population

Engineers n=92, General Population n=2,000



RECRUITER SAMPLE

The role of the recruiter has become increasingly complex. There is a requirement to develop expertise across the many facets of recruitment, such as the high technology of IT or the sophistication of the Finance sector, as well as the dramatic impact of internet based innovation on recruitment practices.

Recruitment requires the ability to be proactive, resilient and to persevere despite the frequent setbacks. While the core element of the recruitment industry is sales and profit, the industry deviates from traditional sales roles in terms of the amount of risk involved. While traditional sales roles involve finding a match between a customer and a product, the need for the recruitment consultant to establish a match acceptable to both parties effectively doubles the risk of failing to secure a placement.

We anticipated that recruiters would have a distinctive risk profile, with a higher proportion of recruiters compared to the general population being in the higher risk tolerant types such as Adventurous, Composed and Carefree. Results indicate that this was the case. The most frequently occurring Risk Types amongst the recruiter sample are at the most risk tolerant side of the Risk-Type Compass™. The proportion of these Risk Types compared to the general population is striking. The epicentre of the approach to risk amongst our sample of recruiters is captured by the following Carefree Risk Type description:

At the root of this Risk Type are high levels of spontaneity, challenge to convention and a preference for novelty and excitement over routine. The most extreme examples are likely to opt for variety over consistency, excitement over caution, action over planning and individuality over conformity. They feel constrained by petty rules, traditions or being micro-managed. Although not naturally methodical or attentive to detail, this type will provide a challenge to dogma and relish opportunities to break new ground.

In fact this picture has to be moderated by a strong Adventurous Type influence, which implies high levels of composure, resilience and optimism. Of course, in a sample that has many different levels and specialisms, this will be something of a caricature. All of the Risk Types are in fact represented to some degree but the overall results of this survey are nevertheless very distinctive.

CHART 15: Risk Types in a recruiter sample and general population

Recruiter n=141, General Population n=2,000

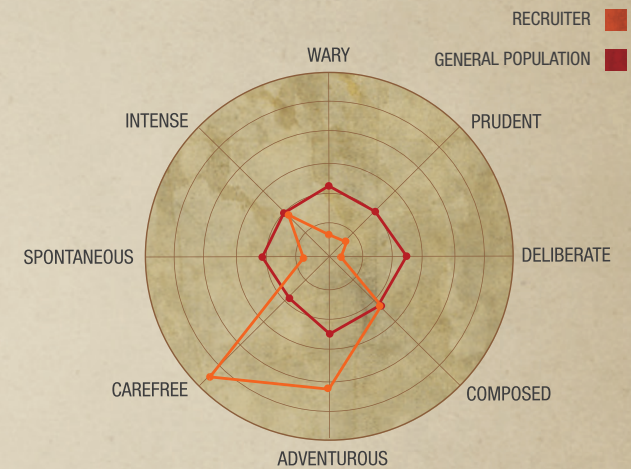
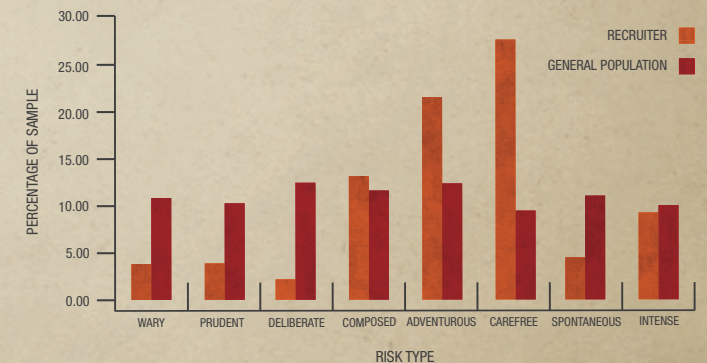


CHART 16: Risk Types in a recruiter sample and general population

Recruiter n=141, General Population n=2,000



AUDITOR SAMPLE

This survey was carried out in conjunction with RABQSA, sampling auditors in Canada, the USA and Australia. RABQSA is an internationally recognised personnel and training certification body for auditors in a range of disciplines and industries, including Quality, Environment, Occupational Health and Safety, and Food Safety. Here we aimed to identify any systematic patterns in the risk disposition of survey participants. Although there are many specialisms across the auditing professions, we hypothesised that a common need for care and vigilance would generalise throughout the group.

Auditors are required to look for risks, assess their likelihood of occurrence and the severity of the risk, in the event that the risk is realised (Holtmann, 2011). The main risk for individuals in this sector is that an incorrect or incomplete audit has a direct impact on the audited organisation. It can result in financial mismanagement, breaches in health and safety regulations or costly product recalls. The emphasis on prudence and attention to detail suggested that, for those working in audit roles, the more apprehensive, careful and cautious Risk Types would be most prevalent.

The data shows a very distinctive distribution of Risk Types in the research sample. 69% of the participating auditors grouped in a cluster of three Risk Types. The highest proportion of individuals are designated as the Deliberate type (37%), described as being **“rooted in a high level of calm self-confidence combined with detailed preparation and planning”**, with the second most common being the Composed Type (22%) having **“high levels of poise, self-belief, optimism and resilience and being imperturbable and even-tempered”**. There are far fewer individuals at the Intense and Spontaneous Risk Types end of the spectrum, and a mere 1% designated as the Carefree Risk Type.

Chart 17 illustrates the strong ‘pull’ of the calm and organised side of the compass in our auditor sample. The difference in prevalence between the Deliberate Risk Types in the sample in comparison to the general population (almost x 4) is quite remarkable, as is the greater proportion of the Composed Type. Taken alongside the lower incidence of the Wary, Carefree, Spontaneous and Intense Types, this is a very distinctive professional profile.

CHART 17: Risk Types in an auditor sample and general population

Auditors n=198, General Population n=2,000

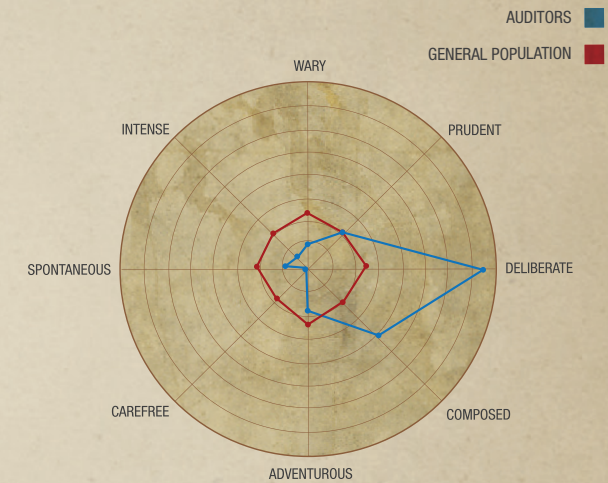


CHART 18: Risk Types in an auditor sample and general population

Auditors n=198, General Population n=2,000



“ Great deeds
are usually
wrought at
great risks

HERODOTUS

Part 3:

USE OF THE
RISK-TYPE
COMPASS™



USE OF THE RISK-TYPE COMPASS™

The Risk-Type Compass™ can be utilised throughout an organisation, from individual to team level, concerning surveys of organisational risk landscape and organisational culture.

INDIVIDUAL LEVEL

Selection

Different Risk Types will have implications for different job roles within an organisation. The Risk-Type Compass™ adds a further dimension to existing selection procedures, better informing vital employee appointment decisions. For example, compliance officers will require a very different approach to risk taking than traders.

Re-deployment

This psychometric tool can be used to inform staff retention; valued employees can be re-deployed into roles better suited to their risk taking disposition.

Personal development

An individual's awareness and knowledge of their own disposition towards risk can provide a basis for personal development. Coaching can help an individual to better understand their own propensity towards risk and its implications for behaviour, management style and impact on the expectations of others.

Advising in financial services

In the financial adviser context, the Risk-Type Compass™ may be used to assess a client's propensity for risk. It offers a truly tailored and professional approach to discussion about the levels of risk individuals are able to cope with, providing a basis of trust on which to build longstanding and fruitful client relationships.

TEAM LEVEL

The Risk-Type Compass™ can increase understanding of team dynamics through awareness of one's own propensity for risk and that of other team members. This can shed light on previously misunderstood differences and enhance team decision-making, team development processes, and increase cohesion and effectiveness. It can also highlight the composition of teams and aid the development of a suitable balance in the risk taking tendencies of team members.

ORGANISATION LEVEL

In survey mode, the Risk-Type Compass™ provides an overview of the risk landscape of an organisation and the prevailing risk culture.

Risk culture

The risk culture of an organisation reflects the human values, style and behaviours prominent amongst current staff (particularly of senior staff) and the legacy of their predecessors. Survey data from the Risk-Type Compass™ provides objective measures through which to shape, foster and monitor the risk culture and manage change.

Risk landscape

What risk taking tendencies are most prevalent in a department? Where are there concentrations of particular Risk Types? Are they appropriate for the functioning of that department? Is there a balance between risk takers and more reticent and considered decision makers? The Risk-Type Compass™ illuminates such distinctions and makes them manageable.

Part 4:

CONCLUSION

Human Factor Risk has attracted a lot of thought and speculation, (a) because the human and financial costs of unmanaged risk are considerable and solutions are desperately needed, and (b) because answers so far have been largely unconvincing.

The conceptual territory surrounding Human Factor Risk has become very confused. As a consequence there has been little consensus about assessment and no consistency in professional practice. The task, as we see it, is to progressively disentangle the many elements that can influence risk taking.

A major difficulty arises from the use of poorly defined lay terminology that creates more confusion than clarity. Terms such as 'attitudes', 'beliefs', 'preferences', 'motives', 'drives', 'dispositions', 'needs', 'values', 'interests' are all complex, nuanced and open to a wide range of interpretation. Unless carefully qualified, such distinctions are largely a matter of semantics and personal choice, creating a conceptual and semantic fog around Human Factor Risk.

In contrast, there is a very extensive history of scientific personality research, culminating in a consensual and clearly defined model. The Five Factor Model (FFM) is the essential paradigm for current mainstream personality research.

Since the tendency to be, for example, fearful, cautious, excitement seeking or impulsive are all understood personality characteristics, it is clear that personality has a crucial influence on how much risk we take, how we perceive risk, how we cope with uncertainty and how we react to threat or disappointment.

Freud described human behaviour as 'over determined': influenced by many factors. Similarly, risk taking may be influenced by more or less random complexities. So, there will always be things that we might not know for certain about a particular risk incident. However, we can know to what extent someone's personality would influence their readiness to take risks. This will have an important and pervasive influence on their behaviour and, cumulatively, on the culture of groups and organisations.

This is what the Risk-Type Compass™ is designed to assess.

“ *No noble thing
can be done
without risks*

MICHEL DE MONTAIGNE



ABOUT PCL

Since 1992, PCL has provided an energetic and revitalising influence in the business psychology sector. Impatient to see the clear messages from research impact on the often dated and unduly conservative practices then prevalent, PCL has been enthusiastically 'rattling the cage' with world class ideas and innovations, seeking to change the agenda and to establish a new and purposeful edge in terms of professional practices and the tools needed to implement them.

In 1992, none of the top five most popular assessment tools used to assess personality in the UK bore any relationship to contemporary personality research. Dr. Robert Hogan's mission, to reunite assessment practices with personality research, still underpins PCL's professional vision.

PCL's publication of the UK's first FFM personality questionnaire in 1997 in the form of the UK edition of the Hogan Personality Inventory (HPI) triggered an exciting period of innovation. Our UK editions of the Motives, Values and Preferences Inventory (MVPI) and the Hogan Development Survey (HDS) followed in 1998. In 1999, PCL was the first UK test publisher to take the initiative by putting personality questionnaires online through the original PsyKey platform.

Having been developed from the challenges faced by our clients, Columbus Wealth Management, the Risk-Type Compass™ is in line with other tools initiated directly through our consultancy work across different industries and sectors. Now, based on the fourth iteration of the PsyKey platform, PROFILE: **MATCH**® and the Risk-Type Compass™ continue the PCL tradition of well researched, high utility online assessment tools.



RISK TYPES

PLEASE LIFT FLAP FOR BRIEF RISK TYPE DEFINITIONS

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WARY (Very Low Risk Tolerance)

Self-disciplined, and cautious, they are highly organised. They are anxious about securing their future but fearful that things are bound to go wrong.

PRUDENT (Low Risk Tolerance)

Self-controlled and detailed in their planning, this type is organised and systematic. Conforming and conventional, they are most comfortable with continuity and familiarity.

DELIBERATE (Average Risk Tolerance)

Systematic and compliant, they tend to be calm, optimistic and self-confident. They experience little anxiety but never walk into anything unprepared.

COMPOSED (High Risk Tolerance)

The Composed Type is cool headed and optimistic. Seemingly almost oblivious to risk they take everything in their stride and bounce back from disaster.

ADVENTUROUS (Very High Risk Tolerance)

The Adventurous Type is both impulsive and fearless. They combine a deeply constitutional calmness with impulsivity and a willingness to challenge convention.

CAREFREE (High Risk Tolerance)

Spontaneous and unconventional, they are daring, excitement seeking and sometimes reckless. Their impatience and imprudence make life exciting.

SPONTANEOUS (Average Risk Tolerance)

Uninhibited and excitable, they enjoy spontaneity, but are distraught when things go wrong. Passion and imprudence make them exciting but unpredictable.

INTENSE (Low Risk Tolerance)

Highly strung, pessimistic and self-critical, they take things personally and feel defeated when things go wrong.

**FOR FULL DESCRIPTIONS
OF EACH RISK TYPE
PLEASE REFER TO P7**



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