



ALEX DAY

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**Risk Types and Attitudes amongst Leaders
in Sixth Form Colleges – A case study**

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Director of Adult & Higher Education

Alex Day has led the adult and higher education division of Peter Symonds College in Winchester for seven years – a period during which funding has been consistently cut and institutions have been under significant pressure to diversify sources of funding. The experience has sharpened her interest in risk and led her to develop a Fellowship proposal to explore attitudes to risk among leaders in sixth-form colleges, particularly in relation to the diversification of income streams. Her work seeks to identify the barriers to risk-taking and the interventions that might support planning and risk calculation when considering diversification. This is something Alex knows a great deal about. She has been awarded an MBE for her work in diversifying funding for her own division, developing higher education so that, uniquely, her college writes its own degrees. Her work, which has involved both ingenuity and the careful assessment of risk, has resulted in a 25 per cent increase in income for the division.

Abstract

The effective management of any organisation requires good decision making. For leaders, risk and uncertainty play a role in almost every decision made. There is considerable documentation regarding risk management and the processes attached to it. However, risk behaviour and its component parts, risk type and risk attitude have yet to be explored in the educational setting. A better understanding of the concept of risk and how to manage risk attitudes should, in theory, help leaders make better decisions. This research explores the attitude to risk of sixth form college leaders, exploring three key research questions:

What are the risk behaviours of leaders in sixth form colleges?

What are the barriers to risk taking and,

What interventions might help planning and risk calculation when considering risky projects?

The views of leaders were investigated through responses to the risk type compass survey and a series of interview questions. Whilst few concrete conclusions could be drawn about typical risk types of college leaders, the research attempts to clarify terminology surrounding the concept of risk, distinguishes between risk type and risk attitude, identifies a series of tools which could be utilised to manage attitudes to risk and makes recommendations about the adoption of risk management processes which incorporate opportunities as well as threats.

Introduction

This research has been funded by the Further Education Trust for Leadership (FETL) and supported by the Sixth Form College Association.

The theme of the research is centred on exploring the risk behaviour of leaders in sixth form colleges. The research questions are: "What are the risk behaviours of leaders in sixth form colleges? What are the barriers to risk taking, and what interventions might help planning and risk calculation when considering risky projects?"

The research topic is particularly pertinent to the sixth form college sector as the funding for 16-18 year olds is now being squeezed by cuts. In addition, other factors such as raising of the age of participation in education or training to 18 years, changes in demographics and the freeing up of the higher education market is leading colleges to consider what strategies and additional educational markets they might develop in response

to uncertain and challenging times. Furthermore, amongst other factors, the raising of the age of participation in education or training to 18 years, changes in demographics and the freeing up of the higher education market are creating a much more dynamic world in education.

Carrying out research in this area is particularly interesting from my perspective because I have spent seven years leading what was the adult continuing education division of our college and is now the adult & higher education division during which time funding has been consistently cut. My remit has been to find a way of ensuring the Division continued to be viable. This has involved a lot of strategic thinking and ingenuity as well as assessing risks and then making decisions to steer the Division in a specific direction. This whole process has resulted in having to calculate risk and seek to minimise it where possible. I have been afforded a significant amount of autonomy in this role and fortunately our initiatives have been successful and income for the Division has grown by more than thirty -five per cent with a surplus being generated every year.

Risk and uncertainty play a role in almost every decision. There is considerable documentation regarding risk management and the processes attached to it. However, risk behaviours have yet to be explored in the educational setting. A better understanding of the concept of risk and how to manage risk attitudes should, in theory, help leaders make better decisions.

The aim of this research is to identify the factors which influence risk behaviour and then use this information to explore approaches to risk in sixth form college leaders. It will also attempt to identify some tools to help manage risk behaviour and ensure objectives are not compromised by inappropriate risk attitude.

What is risk and why is it important?

The effective management of any organisation requires good decision making. How decisions are made and the rules which drive it are often nebulous making them "difficult to define and replicate" (Atkinson 2013, p.11). As leaders, risk and uncertainty play a role in almost every decision we make and so understanding more about how individuals respond to risk will arguably improve decision making.

Atkinson (2013) argues that whilst there is a temptation to say that decision making is a logical process and taken for granted, it can in fact be quite arbitrary; influenced by chance, guesswork or preferences of key players. In this context, a greater understanding of individual and group responses to risk can provide illumination and deeper understanding of our own unique decision making processes alongside the impact of a particular group dynamic, allowing more rational decisions to be made with greater insight and consideration. There is, of course, an assumption here that increased knowledge about the drivers and concept of risk has a positive correlation with increasingly effective decision making. However discussion of this assumption is beyond the scope of this paper. A further assumption made in this paper is that leaders actually care about the outcome: if they do not then they can do anything and it doesn't matter, and risk or calculations of risk cease to have any influence on decision making.

Kaplan and Garrick defined risk as "probability and consequence" (1981, p.13). Their study associated the following questions to risk:

- (1) What can happen?
- (2) What are the consequences of risk happening?
- (3) What is the likelihood of risk taking place?
- (4) What is the certainty of the likelihood?

Although not overt, their risk related questions do encourage the individual to consider how they feel about a particular risk through consideration of the consequences. Hillson & Murray Webster (2007) concur with Kaplan and Garrick in stating that all definitions of risk agree that risk has two characteristics; it is related to uncertainty and it has consequences, and in its broadest sense, risk can be defined as "any uncertainty that matters" (2007, p.5). By 'uncertainty that matters' Hillson and Murray Webster (2007) mean uncertainty which impacts on the achievement of objectives.

For the purposes of this study the accepted definition of risk is "an uncertainty that could affect one or more objectives" (2007, p.5)

It is significant, however, to consider how the definition of risk has developed, as this provides an explanation as to why the concept of risk opportunities as well as threat has still not pervaded management psyche. In the private sector pre-1997 risk almost always had a negative definition, thereafter a more neutral definition evolved and later still, from 2000 onwards, risk was treated more explicitly as having both negative and positive effects; risks could present opportunities as well as threats.

Leitch (2010) suggests that whilst the use of the concepts such as risk and uncertainty can be used to gain understanding of the limitations of our knowledge some of the best ways to make decisions under limited knowledge do not involve using a concept called 'risk' and it is more helpful to use the terms 'probability' and 'value' instead. To an extent, I would agree, talking about risk is not always helpful due to its association with the negative, and utilising terms such as probability and value distance us from this.

However, many organisations including those in the educational sector are still steeped in a risk management process which has a strong emphasis on threats rather than opportunities. It is possible to see how the risk management process, where organisations seek to manage risk through assessing what risks might occur in their organisation and then assigning a value to the likelihood of their happening and the severity of the consequences, has evolved from the work of Kaplan and Garrick (1981). This is a rather pseudo-scientific approach as the process involved in getting to the values we are assigning to risk is based entirely on perception. Furthermore, where the risk management process is carried out within a group the group dynamics will influence the outcome of the risk management process. The

whole process of assigning some kind of probability and impact to a specific risk creates an illusion of integrity and robustness whereas in reality the whole risk management process is highly dependent on individual and group perspective. This view is endorsed by Hillson and Murray-Walker (2012, p.467) who argue that risk should not be defined as a function of probability because by so doing "very little is made of the complex aspects which lie behind the risk management process which are a subtle mix of group dynamics, individual perception and organisational culture."

There is a multitude of terminology centred around risk. Attempting to define risk one is like peeling the layers of an onion and it is necessary to investigate the definitions of other risk concepts including: risk appetite, risk type, risk perception, risk attitude, risk seeking, risk averse, risk tolerance, risk acceptance, risk capacity, risk polarisation, risk return, risk communication. This range of definitions is interesting in itself – and revealing in terms of showing that thinking about risk is still evolving and dynamic. Making sense of this plethora of risk concepts which confuses the landscape is not straightforward, however, for the purposes of this research I have attempted to group and categorise some key risk terminology.

Table 1: Risk terminology which broadly has the same meaning

Risk tolerance and risk acceptance, risk capacity	<p>These terms relate to the amount of risk an individual or an organisation is prepared or able to take in a given situation. There are subtle differences between the terms, for example an individual's <i>tolerance</i> for risk is seen as a psychological trait, Harlow, W. and Brown, K (1990, p.52) making it closer to risk <i>type</i> in terms of definition.</p> <p>Risk <i>capacity</i> is defined as how much risk an individual or organisation can afford to take given their finite resources and so relates to their ability to withstand losses, making it more to do with objective circumstances and less to do with choices and preferences Leitch (2010). Leitch also provides a helpful insight in to the term risk tolerance, explaining that to some people it means the same as 'risk appetite' but is used in situations where it is harder to see the positive reward associated with the risk. Others use this phrase to refer to tolerable deviations from a target.</p> <p>However, all these terms would result in placing an individual or organisation somewhere on the risk averse and risk seeking/taking continuum on which risk tolerance / risk acceptance lie at opposite ends.</p>
Risk threshold	The degree of risk an individual or organisation is prepared to take as a whole and for each project.
Risk type, Risk appetite	<p>According to Trickey, risk <i>type</i> is deeply rooted and unlikely to change, it is "concerned with personality based dispositions that remain relatively stable over a working life" (2014, p.6). Risk type operates largely at subconscious level and has a continuous and pervasive influence.</p> <p>There is agreement that no one single definition of risk appetite exists (Leitch 2010), and sometimes the term 'risk appetite' is sometimes used synonymously with '<i>risk attitude</i>' and according to Aven (2013), most definitions of risk appetite have a link to risk acceptability, but</p> <p><i>Continued...</i></p>

Table 1: Risk terminology which broadly has the same meaning

also values and goals. Hillson & Murray Webber (2012) are rather clearer about the meaning of risk appetite placing it closer to Trickey's term "risk type" in that risk appetite is the underlying tendency to take risk in a given situation. Furthermore, they make a clear distinction between risk appetite which is the underlying tendency to take risks based on personality which is stable and essentially does not change over time and risk attitude which can change from consideration of one risk to another depending on group dynamics, life experience, specific circumstances of a particular risk and current frame of mind etc.

Risk polarisation and risky shift

According to Trickey (2014) *risky shift* or risk *polarisation* occurs as a result of group dynamics, and occurs when distortions are created that present a threat to controlled decision making. 'Groupthink' can lead to individuals making collectively poor or ineffective decisions, due to the unconscious desire to conform with others.

Risk attitude and risk perception/risk perspective

Risk *attitude* characterises the variations that arise from day to day events and experiences such as economic instability, changes in personal circumstances or personal accidents etc. According to Trickey, risk attitude "reflects the sentient characteristics of our species, higher cognitive levels, freedom of thought. It is influenced by a kaleidoscope of incidental, situational, contextual influences encountered in everyday life and is very changeable" (2014, p.6). Hillson & Murray Webber choose to define risk appetite in very precise but encompassing way as "a *chosen* response to uncertainty that matters" (2007, p.33).

Risk *perception* is, according to Brown "a highly personal process of decision making based on an individual's frame of reference developed over a lifetime. The influences on this personal process are connected to the hardwiring of the human brain to react quickly and defensively to perceived threats of any kind, and heuristics". (2014, p.277)

Both risk attitude and risk perception can be changed and both are influenced by events situations and circumstances as well as personality.

Different attitudes can be expected in different situations, indicating that measuring risk perception and risk behaviour is domain-specific. People are not consistently risk-averse or consistently risk-seeking across all content domains including monetary, health/safety, recreational, ethical and social decisions and not even within one domain. Two separate psychological variables influence this inconsistency – risk perception and attitude towards perceived risk. As Weber et al. (2002) have argued, risk perception has more influence than attitude towards perceived risk on actual risk taking.

Risk Intelligence

Evans (2012) defines it as "a special kind of intelligence for thinking about risk and uncertainty", at the core of which is the ability to estimate probabilities accurately. Training and experience can moderate risk perception/risk attitude, encourage more rational behaviour and considered approaches to risk and so result in enhanced decision making.

Risk behaviour/risk preference

Is the sum of risk type / risk appetite and risk attitude / risk perception.

Risk culture

An organisation's risk culture, according to Atkinson, is "reflected in the attitudes, behavioural and managerial norms within an organisation that determine the way in which they identify, assess and act on challenges and risks confronted" (2014, p.9).

The leadership of any organisation involves some degree of risk. Ideally leaders should seek to develop a balanced 'risk appetite'.

Returning to the layered onion concept, this approach has been used by Trickey (2014) to reflect thinking about the relationship between risk type, risk attitude, risk behaviour and risk culture. Risk type is seen at the core of risk culture with risk attitude growing and developing from this through exposure and experience. Together these combine to produce an individual's visible risk behaviour, which along with others in the organisation, will contribute to the risk culture.



Figure 1: Risk type, attitude, behaviour and culture layers

There have been two main approaches to analysing individual attitudes to risk. Often the instruments used to measure attitude to risk, such as Choice Dilemma (Kogan and Wallach 1964), Prospect Theory (Kahneman and Tversky 1979) and the subsequent Cumulative Prospect Theory (Weber and Milliman 1997), have been based on asking an individual to make a choice based on probability. These studies have limited use in helping us to understand the complexity of the decision a leader of an organisation might make, as they require individuals to make decisions about which choice to adopt in isolation without

considering the wider picture. The information gathered from these responses and used to assess risk attitude has been effectively collected in a clinical vortex, a metaphorical artificial laboratory, and consequently does not reflect the diversity of influences and pressures affecting a leader in the work place, which are further complicated by the fact that situations are constantly changing and dynamic. Human brains are very clever in summing this up through heuristics, which is the largely unconscious use of mental short cuts to quickly make sense of partial information. Furthermore, according to Trickey, (2014) experience of and exposure to a particular risk changes the subjective appraisal of that risk and the level of anxiety and resistance associated with it. Another factor influencing behaviour towards risk is genetics, which is estimated to account for as much as 20% of the behavioural variation in risk taking (Cessarini et al 2009).

Personality is therefore highly likely to impact decision making in uncertainty and arguably a far more significant factor than the focus of Choice Dilemma and Prospect Theory approaches. Personality has become even more relevant since the 2007 recession which precipitated wealth management companies to start gauging the willingness of clients to take risk. This led to the development of risk personality psychological profiling tools one of which, the Risk Type Compass, has been utilised in this study. Information about the reliability and validity of this tool, which has been used extensively across industry, but not previously in education, can be found in appendix 2.

The Risk Type compass tool works on the premise that risk behaviour is constructed by the combination of *Risk Type* (which does not change significantly over an individual's life time and is an individual's natural disposition to risk, it is based on personality and *Risk Attitude* (the chosen response to a given risky situation, which can change according to circumstances, experiences and day to day events).

Table 2: Comparison of the terms Risk Appetite/Risk Type and Risk Attitude as applied in this research.

Risk Appetite/Risk Type	Similarities	Risk Attitude
	Internal factors which exist inside people	
How "hungry" you are for risk	Both are invisible	Chosen response or positioning of a person in relation to a reference point
Determined by inherent personality characteristics	Neither exist in a vacuum	The position we adopt in relation to a particular risky situation
Stable	Both only exist in relation to an external situation which is perceived as risky or important	Can be different in different situations
"Just is"		Can be chosen by the individual

Given it is possible to change risk attitude it is useful to understand a little more about the influences on perception and risk attitude. The diagram below adapted from Hillson and Murray-Webster (2008) identifies three strands of influences which impact risk attitude.

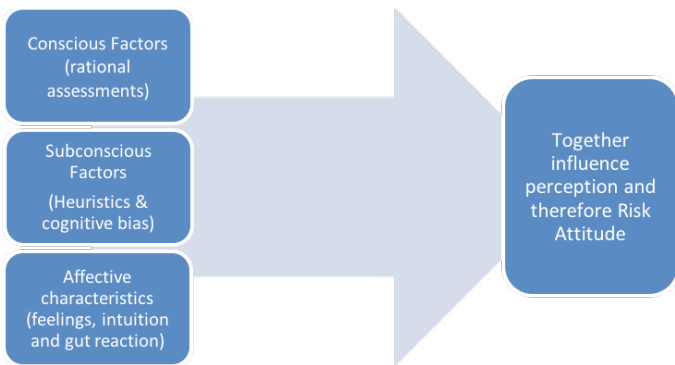


Figure 2: Risk attitude - the “triple” strand of influences on perception and risk attitude

Arguably once we can, as individuals or groups, identify the factors influencing how we respond to risk and bring that awareness fully into our consciousness, we can begin to explore which of the three influence strands above is more significant in a particular situation, why this is, and then, crucially, ask ourselves - is this appropriate?

Together, risk appetite/risk type and risk attitude determine an individual’s risk behaviour. If you then consider the impact of group dynamics on the risk management process, finding out more about individual and the senior management team’s risk type structure and recognising its implications for group dynamics can help make better decisions. Making sound decisions, which are carefully thought through, is central to the effective of management change and the creation of good leadership. In addition, through developing a better understanding of the underlying risk type of senior colleagues involved in the decision making process, a greater insight will be provided into what ‘angle they are coming from’ and potentially, where there is conflict, enable more intelligent decision making as those perspectives are better understood. Furthermore, understanding of the effect on group dynamics of each individual’s risk type and risk attitude could ensure that dangerous risky shifts do not arise.

Method

A case study approach was adopted because of its flexibility in design, allowing a mixed methods approach and because of its appropriateness in enabling “investigation into a particular contemporary phenomenon with in its real life context” (Yin 2009, p.18). The phenomenon in this instance is risk behaviour,

the context is sixth form colleges and the research comprises a set of individual case studies where “a small number of individuals with some common features are studied” (Robson 2011, p.138). In this research each leader is a case.

Since this case study is based on real individuals it was particularly important to consider the ethical implications of the study (e.g. the risk of inadvertently breaching anonymity or confidentiality) and to ensure that potential participants were provided with appropriate information in order to make an informed choice about joining the study (see appendix 6).

Since risk behaviour is a combination of an individual’s risk type and risk attitude, an online psychometric assessment tool called the Risk Type Compass was used which aims to capture the distinguishing ways in which we behave in risk orientated situations.

A total of ten sixth form College Principals were interviewed and completed the Risk Type Compass assessment along with one chair of Governors and nine other senior managers. There are 93 sixth form colleges in total so this research covers about 10% of colleges and therefore further completion of the Risk Type compass assessments would be needed before any statistical significance can be attached to the results. It was possible in one college to obtain Risk Type Compass results for all members of the senior management team.

In addition to completing the Risk Type Compass assessment each Principal was interviewed using a semi-structured approach. The questions were designed in discussion with Dr David Hillson, a recognised global authority on risk. The participants were provided with feedback on the Risk Type Compass Survey and a personal report on the interviewees risk type and current risk attitude was shared with them.

Selection & requirements of participants

Initial participants were selected using a purposive sampling approach so as to reflect the diversity of colleges in the Sixth Form sector. In order to get a cross sample of ‘typical’ colleges in the sector leaders were identified by the Sixth Form College Association (SFCA) taking into account the following:

- additional revenue streams,
- collaboration/innovative projects,
- internal changes e.g. workforce structure, curriculum,
- regional spread,
- length of duration of being a Principal and
- Ofsted grade.

Using convenience sampling, additional senior college managers (nine in total) completed the Risk Type Compass assessment in order to obtain wider information about the risk behaviour across the senior managers in the sector.

Results

The Risk Type Compass provides a taxonomy and vocabulary with which to navigate the complexities of human factor risk, and identifies the potential benefits and challenges faced by different Risk Types in different roles and situations (Trickey 2014). Consequently, there is no 'ideal' risk type, however, cognisance of risk type has implications for self-awareness and personal effectiveness. It may be particularly useful to get the each member of a college's senior management team to carry out the assessment as groups maybe dysfunctional by virtue of extreme homogeneity and the absence of a balance across risk types. Team effectiveness can be enhanced by an appreciation of its risk type structure and recognition of the implications for group dynamics.

Presented with the same data, individuals will reach different conclusions about potential risks and will come to different conclusions resulting in differing but legitimate viewpoints. This can have implications for how groups such as a senior management team or governor's committee function, greater understanding and appreciation of individual members risk disposition and their perception of risk can promote harmony and optimise the quality of decision making.

All colleges sampled had a risk management process which involves mapping of probability against impact. Currently risk registers seem to be solely focussed on the impact of negative events or threats. The corollary, which would reflect opportunities and positive impact, is not accounted for in the risk management process. One could argue that this creates a risk averse culture amongst college leaders as their focus with regard to risk is consistently about safeguarding against harm, however in answer to question 5 none of the college leaders placed themselves on the risk averse part of the continuum. This is generally consistent with the results from the Risk Type Compass Profile where only one leader fell into a risk averse type and the individual themselves would not have placed themselves in this category so there may have been an anomaly in this result.

Sixth Form Colleges (Principals and Chair of Governor) interviewed did not categorise themselves as risk averse and all bar two had risk taking types and one of these participants was the only person not to agree with their risk type. The most frequent risk type identified amongst college leaders was "composed" and virtually all College leaders had a risk type in the deliberate, adventurous, composed and carefree sections

which puts them in the bottom two quadrants which are more risk taking types.

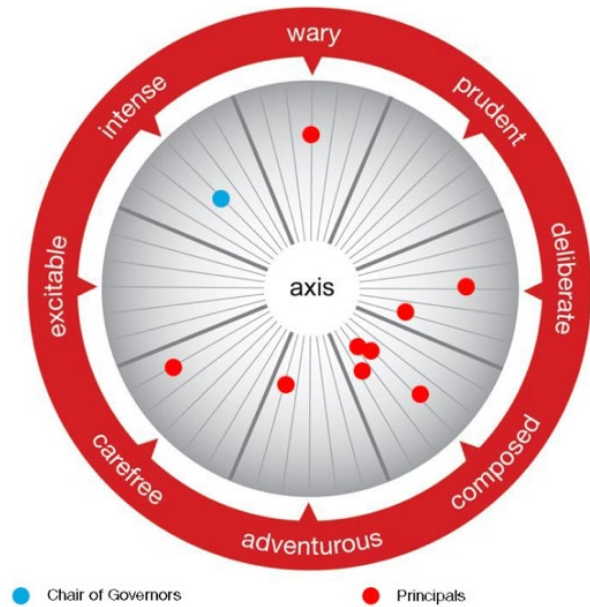


Figure 3: Risk Type Compass analysis diagram for Principals and Governors

The majority of senior leaders who participated in the survey fell into the top two quadrants of risk types (intense, wary, intense, prudent and excitable), which are more risk averse types. There was not an apparent most common risk type amongst those the senior leaders fell into.

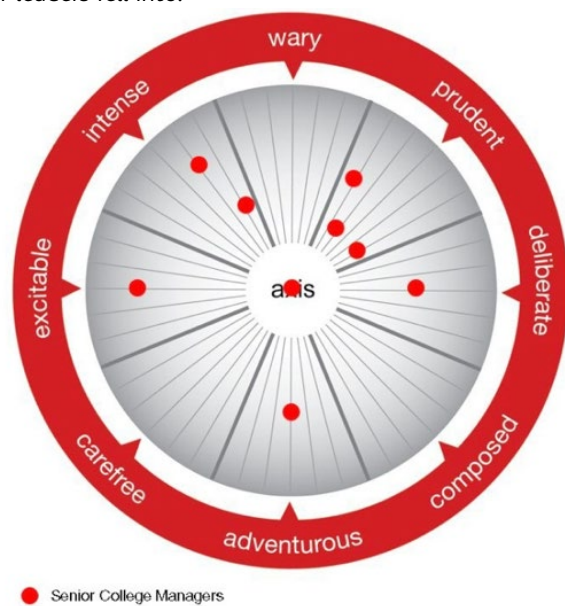


Figure 4: Risk Type Compass analysis diagram for Senior College Managers

Considering all respondents in this sample there is no indication that college leaders as a whole fall into particular risk types, although there is some apparent grouping for principals as opposed to senior college managers with principals evidencing an inclination to be in more risk taking categories and senior leaders indicating they are in more risk averse categories.

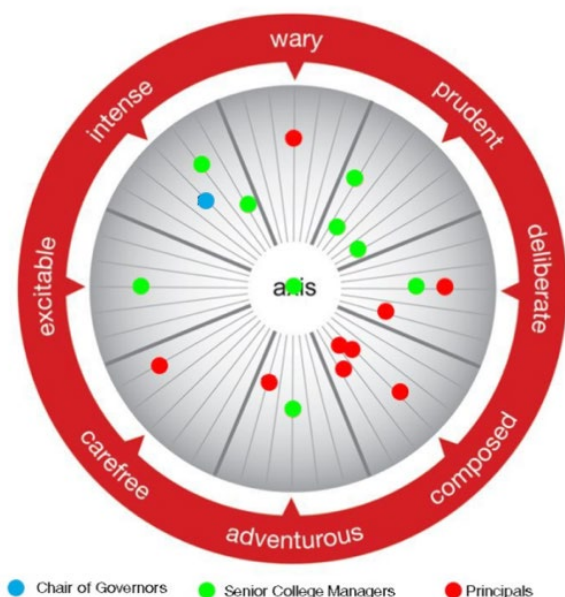


Figure 5: Risk Type Compass analysis diagram for all participants

This indicates that there tends to be a mix of risk taking types amongst college leaders. It may be that this results in a group dynamic which places the group on the central axis area. This was the case where, in one college, all the senior managers for one college completed the survey. Their collective result placed the group in the axis area, which indicates that members of the group tend to complement each other in terms of their reaction to risk and the overall disposition of the group towards risk-taking is well moderated.

Responses to Questions about Risk

Of the leaders interviewed, none selected the definition of risk as “a potential problem”, one third (3/9) agreed that risk was “any uncertainty that matters”, and the majority (6/9) agreed with the definition of risk as “threats or opportunities to the achievement of objectives”. This suggests that the majority of leaders do agree with a concept of risk that includes opportunities and well as threats. Almost all the leaders interviewed had a positive view of risk, seeing risk on the whole as a good thing, a catalyst for having to re-evaluate and re-think things and also a powerful motivator. Although viewing risk as a good thing, leaders continued to use traditional risk management methods which tend to focus on the negative impact of risks.

The following were the factors **most likely to prevent** leaders from pursuing a risky project:

- financial implications of the project;
- impact on the college reputation if the project failed, and
- governor reaction/backing.

The factors which were **least likely to prevent** leaders from taking a risk were:

- impact on personal reputation if the project failed and
- impact on staff morale if the project failed.

It is interesting to see the juxtaposition of the importance assigned to college reputation versus the lack of importance assigned to personal reputation. Does this just reflect the selfless nature of the group of principals interviewed, or is it something that a leader accepts when they take on the role (a willingness to metaphorically fall on their sword if they fail?). Similarly the importance of college reputation is interesting, and opens up the possibility for further investigation into the benefits to colleges and staff of a positive reputation.

The factors which were most and least likely to encourage a leader to decide on a risky course of action are identified below:

Most likely to encourage:	Least likely to encourage:
The value of the outcome, if successful, is high to the college	You feel that the project is essential if you are to achieve your appraisal targets
You believe you will be able to control the outcome to ensure it is positive	The consequences of the project failing are small.
You believe the project will be successful or that you can make it successful	
If you do nothing the college's survival is at stake	
You have contingency plans in place in case the project starts to fail	
The rest of the senior management are positive about the project	

The results indicate that leaders are more likely to take risks where:

- they believe the value to the college is high,
- if they do nothing, the college will fail to survive, and
- they think they can influence the outcome.

This implies that college leaders have confidence in their own ability and a degree of self-belief.

Conclusions

If we accept the definition of risk as being decision making under uncertainty then risk plays a fundamental role in the decision making process.

Some colleges have defined their approach to risk or risk appetite in a risk management policy. All colleges have a risk management process which involves some measurement of event probability and impact, and are arguably quite good at minimising the downside risk factors (threats). However, they are less focussed on maximising the likelihood of upside risk events (opportunities) happening. If it were possible to manage all the downside risk factors then in theory you would be automatically successful, however, this is not possible therefore it is necessary to manage upside risk too as a counter to downside risk. Attaching the risk management process to threats and not opportunities raises the question “are we encouraging educational organisations that are risk averse and lacking in entrepreneurial endeavour?”. This also opens the discussion of whether colleges’ failure to consider opportunities within their risk management process creates a less entrepreneurial culture and hinders the creation of a more entrepreneurial society. Colleges could utilise a standard risk management approach to incorporate opportunities (Hillson 2003). However, as previously argued, this approach on its own has flaws, as it is clear that consideration of probability and impact alone do not adequately reflect the knowledge dimension.

Very few leaders would be prevented from taking a risk due to concern about their personal reputation if taking the risk failed. They are more likely to be prevented from taking a risk if by the financial implications or impact on the college’s reputation. Where significant risks are being taken they are very thoroughly researched, even by the most adventurous risk takers, using an academic approach which incorporates international evidence when available.

Although risk type is relatively stable over a lifetime the fact that risk attitude can be managed is of particular interest in terms of leadership because it provides illumination of how decisions are made and an opportunity to proactively manage decision making in uncertainty through a structured framework .

No single risk type emerged amongst the college leaders interviewed. There were no principals in the excitable, intense or prudent risk types although given the size of the sample it is difficult to know whether this was by chance or whether it holds true across the sector.

Recommendations

Organisations need reliable decision making, emotions affect perception and perception affects risk attitude which in turn affects actions. For decision making to be more reliable it needs “emotional” management, which means self-awareness about how do I / we feel about the risk, why do I / we feel that?, is it appropriate? What am I / we going to do about it? One model which forces us to consciously think through these questions and proactively manage risk attitude is the Six A’s Model.

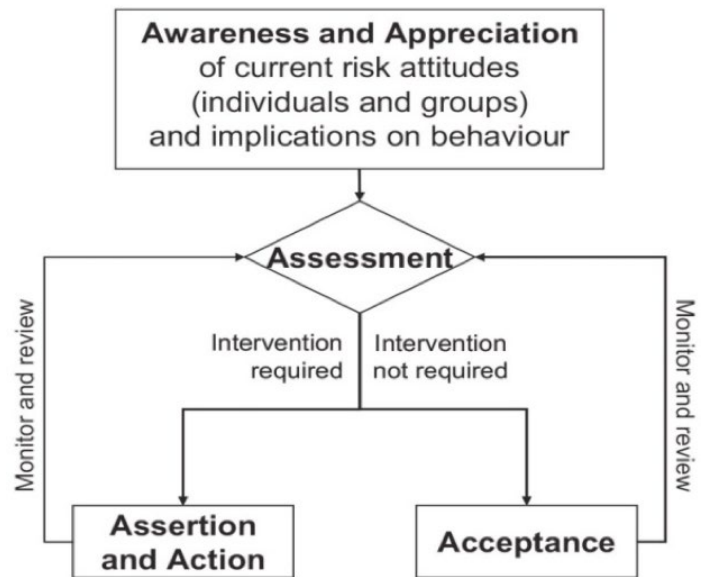


Figure 6: The Six A's model for managing risk attitude (based on Hillson & Murray-Webster, 2008)

This model, including the triple strand influence and the development of it into the RARA model (see appendix 4) represents a very useful way of ensuring greater awareness and appreciation of current risk attitudes both of individuals and groups and provides a tool to proactively manage risk attitude. The main improvements will come from getting people to think about risk and uncertainty in a structured, effective way and in so doing raising their awareness of both subconscious and conscious factors which impact risky decisions.

A further advantage of using a structured approach like the Six A's model could be to reduce cognitive overload. This is where the risk or decision to be taken is not simple or the individual / group does not have experience of taking a particular kind of risk which increases the cognitive load and reduces an individual's ability to exert will power over the more impulsive self. This in turn can result in abnormal behaviour.

1. The current risk management process means that even where leaders accept that risk management is about the threats and opportunities they maintain a focus on the threats and could overlook opportunities. Colleges should adopt a risk and opportunity management process as suggested by Hillson (2003), which incorporates opportunities as well as threats. This could ultimately help drive forward a more entrepreneurial culture in the UK.
2. To compensate for the current risk management process, which relies on probability and impact estimates, senior management teams could utilise appropriate models (such as the Six A's model) alongside this process.
3. Colleges should define their risk appetite i.e. agree what level of risk is generally acceptable. They should be aware that there is no single "right risk appetite". The Board and Senior Management Team must make careful choices in setting risk appetite which centre around understanding the trade-offs between defining high or low risk appetites, and this will depend significantly on the college, its history and culture.
4. A risk appetite which is too low will result in the college foregoing profitable opportunities because they are too risk averse and a risk appetite which is too high may put the college at serious reputational risk and even threaten its continuance. Overall, colleges need to work towards a balanced portfolio of upside and downside risks.
5. Senior management teams and boards of governors could utilise the Risk Type Compass Survey to explore the underlying risk type of individuals and utilise the group report option to gain insight into how individual risk types interact in their senior management team or board of governors.

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Appendix 1

Aven, T. (2013). *On the Meaning and Use of the Risk Appetite Concept*. Risk Analysis, Vol. 33, No. 3, 2013

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Table I. A List of Definitions of the Term "Risk Appetite" Found in the Literature. Source Definition of "Risk Appetite"	
ISO (1, 2)	Amount and type of risk that an organization is prepared to pursue or retain
COSO (3)	The amount of risk an entity is willing to accept in pursuit of value (it also refers to the degree of risk, on a broad-based level, that a company or other entity is willing to accept in pursuit of its goals)
HM Treasury's Orange Book (15)	The amount of risk that is judged to be tolerable and justifiable
Institute of Internal Auditors, from its glossary (16)	The level of risk that an organization is willing to accept
Dupoy (17)	The investor's willingness to buy risky assets
Office Government Commerce U.K. (18)	The amount of risk the organization, or a subset of it, is willing to accept
Towers Watson (19)	The total risk that an organization is willing to take to achieve its strategic objectives and meet its obligations to stakeholders

Table I. A List of Definitions of the Term "Risk Appetite" Found in the Literature. Source Definition of "Risk Appetite"	
IRMI (20)	The degree to which an organization's management is willing to accept the uncertainty of loss for a given risk when it has the option to pay a fixed sum to transfer that risk to an insurer
BS (21)	Total amount of risk that an organization is prepared to accept, tolerate, or be exposed to at any point in time
BCI (22)	Willingness of an organization to accept a defined level of risk
KMPG (23)	The amount of risk, on a broad level, that an organization is willing to take on, in pursuit of value (or in other words: the total impact of risk an organization is prepared to accept in pursuit of its strategic objectives)
PWC (24)	The quantum of risk that the firm is willing to accept within its overall capacity
Fxtimes (25)	The willingness to take certain risks for a potential gain (13)

Appendix 2 – The Risk Type Compass Tool

- A personality profile based on the same psychology as instruments such as Myers Brigg and 16PF etc.
- It addresses those dimensions of personality correlate with risk taking, with the consequences of risky decisions.
- The diagnostic has solid credentials in terms of rigour of the development & testing of the instrument.
- The compass is a continuous spectrum so each "type" shares things in common with bordering types.
- The diagnostic determines the strength of your preferences on two dimensions (daring/impulsive vs methodical/organised and emotional/passionate vs. calm / resilient and your-risk type is label as a result of where your answers sit.
- It is not a value laden output - if you are thinking some types are generally more useful than others these are your preferences and prejudices, not anything which is true. There are strengths and weaknesses within all risk types. The tool measures the risk type or the underlying propensity of an individual to take risk which is part of their stable personality trait and also measure their current risk attitude, does change over time across a number of domains.

Appendix 3

Questions to kick start thinking and discussion about risk

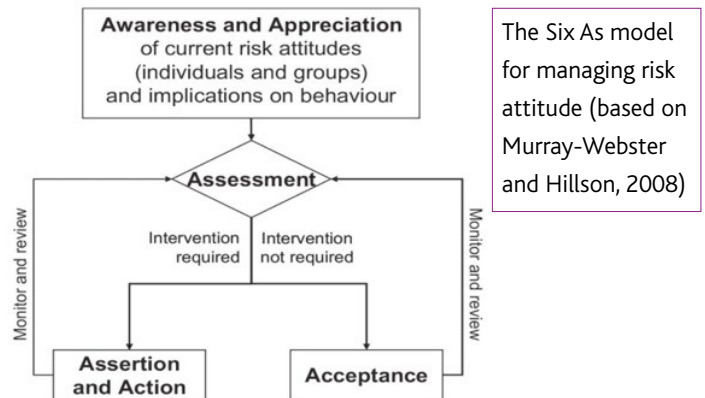
- How much risk do we usually like to take? (risk propensity / risk culture)
- How much risk do we want to take? (risk appetite)
- How much risk can we take? (risk capacity)
- How much risk do we think we are taking? (risk perception)
- How much risk do we think we should take? (risk attitude)
- How much risk are we taking? (risk exposure)

These could be used as a starting point for conversations with the senior Management Team or Governors and have been taken from Hillson & Murray Webster (2012, p.138). I would suggest that these questions were complemented with some kind of internal and external audit utilising SWOT or combination of SWOT and PEST analysis so that these questions are firmly contextualised in the current environment.

Appendix 4

Using the 6 A's and RARA Model To Help Manage Risk

Proactively managing risk attitude – the Six A's Model



Given that the drivers of risk appetite are all internal and unchosen – unmanaged risk appetite may produce inappropriate risk thresholds. Risk attitude is situational – based on the triple strand /perception – so can change and be managed to change risk thresholds.

You can proactively manage risk attitude through the Six A's model

Awareness and Appreciation of the current risk attitude adopted by an individual or a group including the triple strand influences.

Assessment to determine whether the unmanaged risk attitude is likely to lead to an acceptable outcome or not.

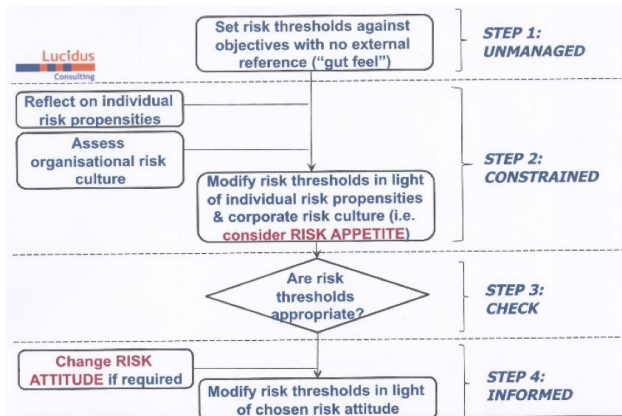
Where the assessment step indicates that intervention is required to modify the prevailing risk attitude, Assertion and Action are employed to make the necessary change.

If on the other hand assessment shows that the existing risk attitude is appropriate, the current risk attitude can be accepted.

Whether the unmanaged risk attitude is accepted or modified, the ongoing situation must be monitored and reassessed periodically to determine whether intervention maybe required at a later time.

1. Awareness – know what is going on
2. Appreciation – understand why it is happening
3. Assessment – determine whether this is appropriate
4. Assertion – communicate the need for change
5. Action – make the necessary change
6. Acceptance

Hillson & Murray Webster (2012, p. 117)



Step 1 Unmanaged – decision makers produce and record risk thresholds without reference to any factors other than what can be described and measured. This can be encouraged by getting individuals to express their personal perspective on how much risk can be taken in a given situation. Effectively being asked to express their "gut feel" for how much risk can be taken with no criticism or qualification and no need to explain the reasons behind their views. The idea is to try to reach a consensus on risk thresholds – which without awareness of risk appetite/risk type might be difficult!

Step 2 Constrained - the initial risk thresholds recorded in Step 1 are then modified to take account of the risk appetite of the organisation and key stakeholders. At this stage the decision makers are asked to reflect on two factors:

1. Their individual risk propensities (would suggest use of Risk type compass to identify)
2. The underlying organisational risk culture

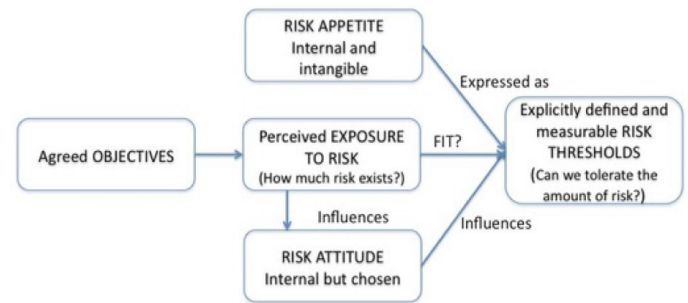
The initial risk thresholds can now be adjusted to take explicit account of these influences.

Step 3 Check - the risk thresholds defined in step 2 now need to be validated to determine whether they are appropriate to do this

1. Compare the risk thresholds with the overall organisation's risk capacity
2. Consider whether the risk thresholds that have emerged from step 2 will help achieve our chosen objectives within a given risky situation – this is where we answer the question – are we taking too much risk – or too little?

If the checks indicate that appropriate risk thresholds have been set. But if we feel the risk thresholds are not right we need to make a conscious and intentional change to them – leads on to.

Stage 4 Informed – a different risk attitude can be adopted to help modify the decision on how much risk to take in a given situation. The RARA model shows the key role of risk attitude as a control point in the process of setting risk thresholds since this is where individuals and groups can intentionally choose a different risk attitude.



Appendix 5 Ethics

Ethical approval for the research project was obtained in March 2014 through the official channels of the Institute of Education (IOE). This included submission of the following:

- a) Information letter for participants
- b) Interview protocol
- c) A research ethics consent form

Test for Information Letter

Dear xxxxxxxxxxxx,

Thank you for agreeing to participate in this piece of research. This research is funded by the Further Education Trust for Leadership (FETL) and supported by the Sixth Form College Association.

The theme of the research is centred on exploring the attitude to risk of leaders in sixth form colleges particularly in relation to diversification of income streams. The research questions are: "What is the attitude to risk of leaders in sixth form colleges? What are the barriers to risk taking and what interventions might help planning and risk calculation when considering diversification?"

The research topic is particularly pertinent to the sixth form college sector as the funding for 16-18 year olds is now being squeezed by cuts and Colleges are beginning to consider what other educational markets they might develop. In addition amongst other factors, the raising of the age of participation in education or training to 18 years, changes in demographics and

the freeing up of the higher education market are creating a much more dynamic world in education.

Risk and uncertainty play a role in almost every decision. Much has been made of risk management and the processes attached to it. However risk attitudes have yet to be explored in the educational setting, hence better understanding of the concept and how to manage risk attitudes should, in theory, help leaders make better decisions.

The aim of the research is to identify/measure the factors which influence risk behaviour and then use this information to explore attitudes to risk in sixth form college leaders. It will also aim to identify some tools to help manage risk attitude and ensure objectives are not compromised by an inappropriate risk attitude.

Initial research has indicated that risk behaviour is a combination of an individual's risk type and risk attitude. Therefore a tool called the Risk Type Compass, an online psychometric assessment is being used which aims to capture the distinguishing ways in which we behave in risk orientated situations.

Selection & Requirements of Participants

Participants have been selected so that the whole spectrum of levels of diversification is included.

Online Risk Type Compass Survey

Participants will be asked to complete this online assessment which takes about 20 minutes. Once you have consented to participate I will email you the login details. This survey should be completed about a week before we meet. I will then receive the reports generated from each individual and share that with you. The Risk Type Compass provides a taxonomy and a vocabulary with which to navigate the complexities of human factor risk and identifies the potential benefits and challenges faces by different Risk Types in different roles and situations. There is no "ideal risk type" however, awareness of your risk type has implications for self-awareness and personal effectiveness. It may be particularly useful to get each member of the senior management team to carry out the assessment as groups maybe dysfunctional by virtue of extreme homogeneity and the absence of a balance across risk types. Team effectiveness can be enhanced by an appreciation of its risk type structure and recognition of the implications for group dynamics.

Follow Up Meetings

Interviews will take place with the selected sixth-form college leaders who complete the Risk Type Compass Survey. The purpose of the meeting is twofold; the first half of the meeting will allow a more in-depth conversations based on a series of questions relating to risk in the context of the college environment and diversification of income streams into other educational markets; the second half of the meeting will consist of feedback on the outcomes from the Risk Type Compass survey and each participant will be provided with a personal report will based on their responses to the survey. This meeting should not last more than an hour.

Confidentiality

All data will be held securely and not shared with anyone.

Data from the Risk Type Compass survey and interview will only be shared as theme - there will be no attribution of data to any specific person.

Data from the interviews can only be quoted as anonymised if the participant has given permission to do so on the consent form.

Participants have the right to withdraw at any point in the research and can do so by contacting myself, on the contact details below.

How the Data Will Be Used

The data will be used to respond to the research questions identified on page 1 of this letter.

Consent

If having read this letter, you are still happy to participate please complete the attached consent form and return to me electronically.

Yours sincerely,

Alex Day
Director of Adult & Higher Education
Peter Symonds College
aday@psc.ac.uk

7. Which of the following factors are most likely/least likely to encourage you to pursue a risky diversification project – rank in order of most likely to least likely?

Most likely to encourage Least likely to encourage


The size of the risk in the context of the organisation as a whole is small.

You know if you do nothing the College's survival is at stake.

The value of the outcome, if successful, is high to the College.

You believe you will be able to control the outcome to ensure it is positive.

You feel that doing the project is essential if you are to achieve your appraisal targets.

The consequences of the project failing are small.

Your past experience indicates this project will be successful.

You have contingency plans in case the project starts to fail.

You have governor backing for the project.

You believe the project will be successful or that you can make it successful.

The rest of the senior management are positive about the project.

Second part of the interview – this will focus on the individual's Risk Type Compass Results. The interviewer has been on a training course with PCL (Psychological Consultancy Ltd) who developed the Risk Type Compass Survey and is a qualified Risk Type Compass Practitioner.

The second half of the interview will follow the format below:

Introduction to the background of the instrument - The Risk Type Compass provides a taxonomy and a vocabulary with which to navigate the complexities of human factor risk and identifies the potential benefits and challenges faces by different Risk Types in different roles and situations. There is no "ideal risk type" however, awareness of your risk type has implications for self-awareness and personal effectiveness. Explanation of Risk Type v Risk Attitude and the reliability and validity of the instrument will also be explained.

Explanation of how the results will be used in the project – i.e. any results will be used anonymously and collectively.

Opening questions

1. How did you feel about completing the questions – were there any you found more difficult than others? Why?
2. Where do you think you might be on the risk compass?

Page by page discussion of results with interviewee and gathering of feedback as to whether the interviewee feels the results resonate or not with them. If the interview does not agree with the results the reasons why will be explored.

Participants have the right to withdraw at any point during the research by contacting the researcher.

Research ethics: consent form

“What is the attitude to risk of leaders in sixth form colleges? What are the barriers to risk taking and what interventions might help planning and risk calculation when considering diversification?”

Alex Day Director of Adult & Higher Education

**Peter Symonds Adult & Higher Education Division
Stoney Lane Winchester SO22 6DR**

Tel 01962 889531 email aday@psc.ac.uk

Please Initial Box

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason.

I agree to take part in the above study.

I agree to the use of anonymised quotes in publications

Name of Participant

Date

Signature

Name of Researcher

Date

Signature

FETL would like to thank the 2015 Fellows, their sponsoring organisations and our academic partner, University College London Institute of Education.

Website: www.fetl.org.uk

Email: enquiries@fetl.org.uk

 [@FETforL](https://twitter.com/FETforL)

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The Further Education Trust for Leadership

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