

Future Skills and Current Realities

How the psychological (Jungian) type of European business leaders relates to the needs of the Future

1. Introduction

The workplace is changing, and business leaders need to meet the challenges that the future will bring. There is some evidence that where business leaders are meeting these challenges well, their organisations perform better [1]; effective and inspiring leadership does seem to have a real impact on the bottom line. The way in which leadership is conceived seems to be changing with more focus on the way in which leaders themselves behave, rather than focussing on the role that they play in the organisation. Goleman's [2] theory of EQ (emotional intelligence), Mintzberg & Goslings' [3] writing on educating managers beyond borders, and Curtin's [4] scenarios of future leadership, for example, all move the leadership debate on from the transactional and transformational planes.

This paper compares and contrasts the results of two separate data sets to:

- Define the skills and attributes that will be needed by tomorrow's business leaders
- Reveal the typical personality types of today's business leaders and, in the light of this, discuss the challenges they must face in order to meet the needs of the future
- Discuss the ways in which organisational psychologists and HR practitioners can help business leaders meet this challenge

Ashridge Management College has collected psychological type results for a number of years for over 8,000 participants from all around the world [5]. The type patterns emerging from this sample are then compared with data collected as part of a study at Cranfield School of Management [6] which sought to determine if people felt that the skills needed in the future would differ from the skills needed today.

The two sets of data are described and then used together to look at how business leaders are likely to cope with the challenges of the future, and at which areas may be the most problematic for them; the ways in which organisational psychologists and HR practitioners can employ psychological type to help them meet these challenges are also briefly discussed.

2. Methodology

2.1 Ashridge Management College Data on Psychological Type

For a number of years, Ashridge Management College has been using the Myers-Briggs Type Indicator® (MBTI®) instrument [7] with participants on a range of development programmes. A total sample size of over 8,000 has been collected, 57% from the UK and the remainder from a wide range of countries around the world. More details on the sample are given in Appendix 1. Given that Ashridge only provides management and leadership development, the sample can be taken as representative of those in management and leadership positions who wish to continue in that type of role in the future (as otherwise they would be unlikely to be seeking development experience in this area, and their organisations would not be willing to fund such development).

The MBTI instrument is a self-report questionnaire with (in the European Step I version) 88 forced choice questions. It is used (alongside other psychometrics) at Ashridge on a number of different courses and development programmes and completed either before the programme commences or during the programme. As part of the use of the questionnaire, participants were given feedback on their results. The data used in this study comprises the

reported type¹ of 8,039 managers attending executive education programmes from 2002 to 2004. When the data was collected, permission was sought to use the findings for research purposes, and all data was anonymous.

2.2 Future Skills Audit

The ‘future skills audit’ was undertaken as a web-based questionnaire which was live on the internet for 2 months in 2003. The audit listed a large number of personal skills and attributes, work-related abilities, and subject and knowledge bases; respondents were asked to indicate whether each would be more important, less important or of the same importance in 10 years time. This list was compiled from all the skills and attributes drawn from an extensive literature review of over 160 sources focussing on future management issues, careers, management development and leadership. The list was checked by an occupational psychologist and an HR specialist from their particular perspectives, and amendments and omissions were made where it was felt that items were either compound or too ambiguous in their naming. Some items were also given bracketed explanations to ensure that they were not misinterpreted. Items were listed alphabetically under each of the three headings to try avoid leading the respondents down a certain path of answers.

To help put respondents in the right frame of mind for the survey, a number of open questions were presented first, asking for words to describe both the current and the future workplaces. Once these questions had been answered, the sample were asked to consider each item on the list and score it from 1 to 5, where:

1 = this will be essential in 10 years time

2 = this will be more important in 10 years time

¹ “Reported type” is based solely on the scores from the MBTI instrument. “Best fit” or “validated” type is based on the consensus reached by the type practitioner and the client following a feedback session.

3 = this will as important as it is today in 10 years time

4 = this will be of less importance in 10 years time

5 = this will be of no importance in 10 years time

The results do not give an indication of how important someone thinks something is now, so there is no base line measure to weight each of the items against. However, it is the *relative* changes between items that are of interest. For the purposes of presenting the results, categories 1 and 2 were merged to indicate a general result of an item being more important in the future, and categories 4 and 5 were merged to indicate a general result of an item being less important in the future. Mean, median, mode and standard deviation were calculated and a complete table of all results can be found in Appendix 2.

The sample was an open access survey launched on the world wide web, and as such was open for anyone anywhere to complete at any time. A number of futurist networks advertised the survey, including the listserv of the United Nations Millennium Project, the Centre for Future Studies, the Global Futures Forum, and Futurescope. In addition, e-mails were sent to some of the special interest groups at the Academy of Management. The survey was also advertised in a number of management publications including People Management (the CIPD) and in one of the Accounting Management publications. A total of 340 useable responses were received, 59% of which stemmed from the UK with the other 41% being international (11% rest of Europe, 19% Australasia, 6% North or South America, 3% Far or Middle East, 1.5% Africa, 1.5% Indian subcontinent). 66% of respondents were male, and 34% female; all were over 20 years of age (7% 20 to 30; 24% 31 to 40; 34% 41 to 50; 26% 51 to 60; 9% over 60)

3. Results

3.1 Ashridge Management College Data on Psychological Type

Table 1 on the next page presents a type table showing the frequency of each type within the Ashridge group. For each of the 16 different types, the number of cases, the percentage of the total that this represents, and the Self Selection Ratio (SSR) is shown. The SSR [7] is a way of demonstrating whether a given type appears more or less often in a particular group than would be expected compared to a reference group. An SSR greater than 1 indicates that a type is over-represented, and an SSR of less than 1 that it is under-represented. Here, the SSR has been calculated in comparison to the UK general population² [8]. Also shown are the number of cases with a preference for each type dichotomy (E or I, S or N, T or F, J or P), the percentage of the total that this represents and the equivalent percentages from the UK general population.

INSERT TABLE 1

Within this group, there are many more people with a preference for Thinking than for Feeling, and somewhat more with a preference for Extraversion (versus Introversion) and Judging (versus Perceiving). The most common whole type preferences are ESTJ, ENTJ, ISTJ and ENTP.

Compared to the general population, the Ashridge group contains a larger proportion of people with preferences for Extraversion, Intuition, Thinking and Judging, with the difference

² The UK general population has been chosen as a useful general population reference group; a “pan-European” general population type table does not currently exist. Other evidence (e.g. Hackston and Kendall, 2004; Quenk et al, 2004) does however suggest that although behaviour varies greatly from culture to culture, the frequencies of underlying psychological types do not. In the case of the Ashridge sample, the UK subgroup has a very similar type distribution to the remainder of the sample.

being particularly marked for Intuition and for Thinking. A number of individual types are over-represented, including INTJ, ENTJ, ENTP, INTP and ESTJ; others are under-represented, most notably ISFP, ISFJ, ESFP and ESFJ, and to a lesser extent INFP. Analysis of the proportions of each type, and of how these relate to the typical characteristics shown by people of each preference when working in organisations [9] has a number of implications for how European business leaders may cope with the challenges of the future.

Those with a preference for ESTJ were the biggest single group in the Ashridge sample (and the fourth largest in the general population). They can make very effective managers, providing clear direction via a task-orientated, direct style. They may, however, find it difficult to see the need for change, to look beyond the present to the future, or to take a “holistic” view, and they can neglect the “people side” of things, factors which are likely to be important for tomorrow’s business leaders. Those with a preference for ISTJ are the third largest in the Ashridge group (and the fourth largest in the general population). They enjoy structure, building their leadership style on past experiences, and a respect for the rules. Like the ESTJ leader, they may neglect interpersonal niceties, and they may overlook long-range implications in favour of day to day actions. While psychological type is of course about preference, rather than ability, ESTJ and ISTJ managers may not naturally take a strategic view, tending to act as managers rather than leaders; they may, if they are not aware of this, find that they become less effective when an organisation needs to regenerate and reinvent itself.

Although the most common single type in the Ashridge group has a preference for Sensing, overall there is a higher percentage of people with a preference for Intuition (53%), much more so than in the general population (24%). Analysis of other managerial groups from the UK [8, 10] shows that a larger percentage of top and senior managers have a preference for Intuition than do upper middle managers, who in turn are more likely to be Intuitive than middle managers. Similar findings have been reported elsewhere [11]. This may suggest that

as a group, leaders are more ready to embrace change, and spend time generating new ideas than less senior managers or other people in the organisation. NT types represent over 40% of the Ashridge group, and in particular those with a preference for ENTJ and ENTP together represent over a quarter of the total. ENTJ leaders are often described as “visionary”, and ENTP leaders as “entrepreneurial”, qualities that are likely to be useful for the future. However, to be at their most effective, ENT leaders may need to work alongside those with more of an interest in implementing the details of the project, and they may not always find it easy to communicate their vision; as the majority of the UK population have a preference for Sensing, it is important that visionary leaders recognise this and use different ways to put the vision across.

The Ashridge group have, overwhelmingly, a preference for Thinking (85%) rather than Feeling; in particular, only 6% of the Ashridge group have preference for Sensing and Feeling (ISFJ, ISFP, ESFP, ESFJ) compared to 40% of the UK general population. People with these preferences are often very conscious of the need to help and support others, and are keen to bring people together and encourage them to co-operate with each other. Neglect of these areas, or their absence from higher level management, may mean that business leaders fail to empower people in their organisations, and that the values behind corporate decisions are not fully explored or communicated [12]. ESTJ, ENTJ or ENTP managers (together almost half the Ashridge group) can, if they neglect their non-preferred Feeling function, appear overly competitive, unappreciative or neglectful of others’ views and input, or even domineering.

The question arises as to whether it is important to have a range of different types represented at the higher levels of an organisation. As no one type is theoretically ‘better’ than any other type, and each type brings something different to the table, there is a logic to the argument that says each type should be represented in senior management. Those who have a more visionary approach, for example, may be most effective if they can work alongside those with more of an interest in implementing the details of a project. However, it may be that this can

be achieved either by each type being represented at senior levels, or by ensuring that those preferences that are not directly represented are amongst senior managers' direct reports. For example, a Thinking senior manager could, if sufficiently self-aware, delegate communication of a vision to a Feeling middle manager. While the nature of leadership may be changing, there are still certain behaviours that are required of senior managers and leaders that may be more natural to certain type preferences than others, and hence these type combinations are overrepresented in these roles. Bayne [13] claims that 'organizations are seen as likely to be at their best with a blend and balance of the four temperaments if this can be achieved.'

Taking into account the preferences of others is also extremely important if the vision of the leadership is to be effectively communicated to the rest of the organisation. As the majority of the UK population have a preference for sensing, for example, it is important that visionary leaders recognise this and use different ways to put the vision across. Hammer and Kummerow [14], for example, found evidence to support the notion that E and N correlated with 'leading by delegating' and 'taking charge' (E and N predominate in the Ashridge sample), while I and S correlate with 'leading by example' which may be a more appropriate leadership model for the future. Walck [15] argues that different types perform better in different situations, and therefore you cannot claim that any one type is 'the best leader', nor is there any one best 'leadership type'. Such a situational approach to type theory is in line with situational leadership theories. The argument presented next is that the situation of leadership is changing and hence the future leader may be better represented by different type profiles to those currently represented at Ashridge.

3.2 Future Skills Audit

The future skills audit encompassed 52 skills and personal attributes, 43 work-related abilities, and 43 subjects and knowledge bases. Full results for all the items in the audit are given in Appendix 1, with, for each item, the percentage of respondents who had suggested that this item would increase, stay the same or decrease in importance, along with the mean, median, mode and standard deviation (these statistics being based on the original 1-5 scale). The main findings are described below. While there was general agreement that most elements would be more important in the future, there were differing degrees to which these convictions were expressed.

With regard to personal skills and attributes, the following are those that over 70% of the sample agreed would be more important in 10 years time:

- Ability to empower others
- Ability to learn
- Commitment to lifelong learning
- Creativity (generation of ideas)
- Flexibility (willingness to change)
- Foresight (ability to predict future occurrences)
- Holistic thinking abilities (ability to see the whole situation and its consequences)
- Initiative (ability to start things themselves)
- Integrative thinking abilities (thinking outside of functional areas)
- Visionary (knowing where you are going)

This list includes most of the broad elements that would lead to strategic thinking (holistic, integrative and foresight), and the continual development elements (learning, creativity, initiative and visionary). The depth of this list takes it beyond the individual being concerned about themselves, to a focus on a more universal vision for an organisation.

Those elements that 60% to 70% of the sample agreed would be more important in 10 years time reflect the ability to manage yourself and your relationships with others. These elements include:

- Ability to empathise
- Ability to manage their own career
- Ability to manage work-life balance
- Abstract thinking (connectivity)
- Cultural awareness and understanding (multicultural)
- Leadership (ability to gain followers)
- Openness to feedback (willingness to change)
- Perseverance (ability to keep going)
- Resilience
- Self confidence
- Self discipline
- Self motivation
- Stress management
- Time management

There is a certain ‘toughness’ to this list. It could be described as the essential management survival tool kit. While the ‘over 70%’ list had the broad, strategic thinking elements, the 60

to 70% list focuses on the individual, and on what they need in terms of their personal skills development in order to remain functional in the future. Looked at in terms of leadership theory, the first list is more purely *transformational* in nature, while the second contains a mixture of both *transactional* and *transformational* elements [16].

With regard to work related abilities, only four were highlighted as more important by over 70% of the sample. These were “ability to make decisions with multiple sources of information”; “adaptability (ability to change)”; “computer literacy” and “developing networks (build beneficial relationships within and between industries)”. These highlight a need for leaders in the future to be able to leverage information to their advantage, whether it be derived from the internet, intranet or some network they are a member of. The list which categorises those abilities that 60 to 70% of the sample believe will be more important in 10 years time is much more focussed on the interpersonal elements of management and leadership and is more outcome focussed. It includes:

- Ability to balance differing stakeholder needs
- Ability to establish trust relationships
- Ability to make decisions under time pressure
- Being inspirational to others
- Coaching skills
- Communication skills using IT media
- Effective listening skills
- Entrepreneurial ability
- Influencing skills
- Oral communication skills
- Risk management (understanding probabilities and making informed judgements).

It is interesting that “ability to make decisions with multiple sources of information” had a rating of over 70%, and “ability to make decisions under time pressure” had a rating of 60-70%, while “ability to make decisions with incomplete information” did not feature in either of these categories. This suggests that the sample feels the future will require decisions to be made faster, and that information will be easily accessible. Even if it is supplied in overload, it will be supplied rather than not be available.

“Change management” was the only subject and knowledge base that over 70% of the sample agree would be more important in 10 years time. Between 60% and 70% agreed that the following subjects would be more important:

- Business ethics/corporate responsibility
- Diversity management
- E-commerce
- Environmental awareness
- Information analysis skills
- Knowledge management
- Managing across cultures
- Managing risk
- Technology management
- Understanding ethical issues
- Understanding business culture
- Understanding organisations as open systems

This is not the typical list of subject areas that one would expect to see in a management qualification prospectus. It is much less functionally based and more to do with the issues that underpin how a business operates rather than the operation of the business itself. This

may indicate a need for a shift in the business/management school curriculum if colleges are to help their participants maintain their employability.

There were four items which had a mode of 3 and a negative skew. “Acting in accordance with religious beliefs” was felt to be less important in 10 years time by 49% of the population. This is interesting given the rise in concern with elements relating ethics and corporate responsibility. Clearly there seems to be a break in the linkage between corporate ethics and personal ethics and religion. Whether this is symptomatic of a move away from an organised “church” or recognised label of religion of some form, or whether it signals a decline in personal beliefs, is unclear. Alternatively it may be indicative of people not wanting to associate themselves with ‘religion’ as religious fundamentalists are increasingly hitting the news as terrorists.

“Face-saving (deflecting blame)” had a mode of 4 and 57% of the sample agreed that it would be less important in 10 years time. This is one of the elements that is particularly culturally sensitive, and the decrease could either reflect the majority of the sample being from western capitalist democracies, or could suggest a shift away from this practice generally. Equally, it is not a trait that many people aspire to, so again this may have skewed its popularity.

“Conformity to organisational culture” was another of the elements to have negative skew, with 49% of the sample believing it would be less important in 10 years time. This probably reflects the increased initiative, creativity and flexibility trend, in that the vision of the future is one of “shaking out of the mould” rather than “falling into it”.

The final element with a negative skew was “managing trade union relations”, with 46% of the sample agreeing it would be less important in 10 years time. This probably reflects the general decline in trade union membership and powers in the UK, and the move towards shorter contracts and self-employment generally. The element “maintenance of harmony in

the workplace (conflict avoidance)” only had a 32% predictive increase, with 24% predicting a decline. Taken with the trade union result this suggests that either the future holds a more harmonious workplace per se (so avoiding conflict is not an issue), or that conflict will be acceptable within the workplace, and that ways of resolving it will be found, rather than means of avoidance.

Other elements that had notable results that were include “self confidence”, which had the lowest predicted decline in importance, with only 6% believing it will be less important in 10 years time. This may signal a need for greater stress management provision or self-esteem building courses, as the predictions of increasing change and less security do little to support the development of self confidence being as necessary as it would appear to be.

“Detachment (managing your personal emotions)” had a 38% prediction of increasing importance, 15% of decreasing importance and 47% predicting it to be of the same importance. This is a little contradictory in light of the growing importance of work/life balance, and the personal development elements (which had over 60% predicted increases), as the ability to manage personal emotions and keep work and home separate co-exist more happily than they conflict.

“Group leadership and group working (more than 12 people)” had approx 20% prediction of declining importance and a mode of 3. This suggests that the move will be towards small groups working together rather than larger groups. “Loyalty” was split fairly evenly in its predictions, which again is a little contradictory, as there is an expectation that the future holds shorter contracts, the end of the career for life, more self-employment, and outsourcing; all of these point to a decline in loyalty rather than an increase.

“Academic achievement (undertaking part-time studies)” only had a 44% predictive increase, with 21% predicting a decline in importance in 10 years time. This suggests a move away

from the need for qualifications to boost employability on the CV, and is in line with the increase in commitment to lifelong learning and ability to learn, which were predicted to increase by over 70% of the sample.

“Data location, retrieval and handling skills” only had a predicted increase in importance of 46%, with 19% believing it will be less important. This could be because it is felt that in 10 years time data access will be easier per se (and hence the skills necessary to handle and retrieve the data will be lesser), or it could reflect that the sample feel they are on top of it at the moment and shall remain so.

Given the current business press obsessions with globalisation and digitalisation, generally the ‘e’ statements and the ‘international’ statements only had predicted increases of 60-65% with 20-30% feeling they will only be of the same importance that they are today. Again this could reflect the lack of a base line measure, ie if everyone thinks they are very important today then they will remain very important in the future, rather than increase. However, this said, these statements were expected to have higher results.

All the finance based subjects had a mode of 3 rather than 2, as was the norm for most of the subject and knowledge bases. While this could reflect finance currently being seen as more important than the others, and hence staying relatively unchanged, while the others increase to meet it, it could equally indicate a shift away from a fixation on the bottom line in performance measurement. “Statistical concepts” also had 61% prediction of being of the same importance as it is today, which is perhaps surprising given the increases in “foresight” and “risk management”, as these two areas can draw heavily on statistical methods.

“Mergers, joint ventures and acquisitions” was the other subject base which had an increase lower than expected, with only 41% predicting increasing importance and 45% predicting the same degree of importance. Given the increasing number of mergers and acquisitions that are

taking place at present, and joint ventures with China (for example) as foreign direct investment, this activity is predicted to increase in business and management literature.

4. Discussion

The business world today is regulated in such a way that decisions have to be justified in a logical manner to shareholders, and financial outcomes are still the primary drivers. However, this may not be the case in tomorrow's workplace. Bowring, for example, argues that parenting, learning, socialising, taking care of oneself and each other, and building networks of trust will contribute to the future of growth of organisations and the further development of the post-Fordist capitalist workplace [17]. Others view this as wishful thinking [18] seeing the future workplace as being hi-tech, virtual and global, diverse, competitive but autonomous in terms of people organising their work time around their lifestyle. Either way, there is a growing interest in work-life balance, emotional intelligence, spirituality in the workplace, and other such trends, which are emerging in both the management literature and the workplace. For example, a study comparing MBTI type with emotional intelligence (EQ) found some significant correlations between the two concepts [19]. The EQ elements were given as self-awareness, emotional resilience, motivation, interpersonal sensitivity, influence, intuitive decision making, conscientiousness, and integrity, all of which the study claims are developable. Intuition was positively correlated with overall EQ scores, particularly interpersonal sensitivity, influencing, and intuitive decision-making, while the Sensing preference correlated negatively with these factors. While some might expect the Thinking-Feeling dimension to correlate strongly here, the only significant relationship found was that those with a Feeling preference were less likely to exhibit emotional resilience; this makes sense as the manager who has a Feeling preference may carry the burdens of their team with them, and all of their emotional baggage.

The analysis suggests implications for both organisations and individuals, and raises as many questions as it provides answers. For decision making, it would appear that managers show a typical profile that is fairly data rational, while contemporary organisations appear to be seeking managers who value people and relationships. Obviously data rationality and people/relationship awareness are not mutually exclusive. However, it could be that managers need to review their approach to data collection and decision making and perhaps take more account of people and relationships as part of the process. Can you adapt your managerial style to suit your reports? Can you vary your influencing approach to suit the people and situations you face? Have you spent time exploring with your colleagues and reports what it is that motivates and demotivates them, and do you spend sufficient time dealing with people and their values at work? Do you unconsciously recruit in your own likeness? Nutter [20], for example, found that Chief Executives are more likely to include HR Directors in their strategic decision making processes if they both have the same S-N preferences (ie either both were S or both were N). How much do you value diversity of personality in your team and organisation? These and other similar issues are significant for the way managers are selected and developed – in particular in relation to the content of any management development programme, or indeed in redundancy. There is some evidence [21] that managers with some of the qualities particularly important in tomorrow's business leaders may be over-represented amongst those made redundant.

Looking specifically at the four dimensions, the lack of managers with preferences for Feeling may be of some concern. If we accept that many decisions in business and management are based on logic and objective reasoning, there could be a danger that personal values are overridden or ignored in decisions made by bosses and organisations. Perhaps the lack of "F" in management teams could mean that managers forget or fail to notice the effect of organisational decisions on people. This could also come across as organisations or managers appearing not to care about the effect of decisions on their people. "T" managers may not always communicate their feelings and ideas with others, not seeing them as

important. It is interesting to note that none of the “F” types appeared to be over-represented in the redundancy sample, indeed in many cases they were significantly under-represented.

In the general UK population there are significantly more Sensing types than Intuitives, yet in management there is a much more balanced split. Might this have some significance for the challenges many managers face when dealing with change, both from their own perspective and in convincing others of the necessity for change? Given the assumption that Intuitives cope more effectively with ambiguity and change, and with so many Sensing types in both management and the general population, the challenge for everyone might be about speed and acceptance for change (although of course those with preferences for Intuition can have issues with change too [22]).

So, what can we deduce from the above? It may be that people with particular preferences are attracted to managerial positions, or that existing managers tend to recruit people “in their own image”. Either way there are implications for both managerial and organisational development, especially if one subscribes to the view that organisations are seeking more managers who take a balanced approach by considering people and relationships as much as the rational business focus. It may be that this is one of the reasons why there has been a significant growth in the demand for management development in the area of leadership, and especially the focus on the softer side of leadership.

5. Conclusions

The fact that the Ashridge sample contains a large proportion of people whose preferred types may make it harder for them to demonstrate the skills and attributes predicted as being of more importance in 10 years time can be seen either positively or negatively. From the positive perspective, a case could be drawn to support the hypothesis that organisations are recognising this gap and are therefore sending their managers for management and leadership

development in order to address the gap before it is a burden on their performance. From the negative perspective, a case could be drawn to support the hypothesis that organisations are not recruiting and developing the types of people that they will need in order to keep their organisations successful in the future.

Despite all the reservations about the survey design of the skills audit, and a tendency for everything to be more important in the future, the results do highlight some shifts in emphasis that need consideration in the workplace.

Elements of strategic thinking elements and continual development are of increasing importance; this does not appear to be restricted to a “personal” engagement level, but to apply to the organisation or wider community also. Being able to see across functional areas, being willing to change, and being able to learn and have vision suggests that the current type distribution table for managers currently may not be what we see in the future.

The results also show that on a personal level the individual manager or leader in the future will need to be robust, self confident and resilient. The responsibility for managing themselves, their career and their work-life balance will sit squarely with the individual, rather than the organisation, and it will be up to the individual to ensure they seek out the best development opportunities.

Within the area of interpersonal skills, the most important element in the future will be the ability to develop networks; that is, building beneficial relationships within and between industries – something that may come more readily for Extraverts than for Introverts. Williamson views such organisational patterns of communication as being a prime contributor to how people feel about themselves, impacting on their creativity and contribution to organisational goals [23]. Second in importance are those interpersonal skills which relate either to developing others directly (e.g. mentoring and coaching skills), or which would be

expected to be held by a leader who is recognised as being developmental (e.g. listening skills, being inspirational, and establishing trust relationships). This goes beyond helping the employee to ask the right questions, to the complexity of discovering what the employee needs to do their job which is ever changing and subject to multiple influences in unpredictable ways [24].

Within this framework, organisational psychologists and HR practitioners clearly have a role to play. Type theory suggests that while individuals may find it difficult or odd to do things that are not their preference, they can learn to do so, and often very effectively. With effective coaching, the ESTJ manager can adapt and become the business leader of the future, provided that practitioners are aware of their own type biases as they go about this task. There is clearly a role for the business school in developing managers to behave in a manner which is not in keeping with their type preference. Many people already do this as they have been socialised in their workplace and society at large, for example, to behave in an extraverted manner when in fact their type preference is for introversion. If they become aware of this, they often change their jobs or careers, or make a life changing decision in what is generically referred to as a 'mid-life crisis' (for more information on Type and midlife [25]). By helping people understand this dichotomy between their behaviour and their type preference, psychologists can help people shape their careers and futures without the shock of a change crisis.

In addition, there is a role for business schools in actually developing types to act outside of their type preference so that a broader range of types are represented at senior management and board level. This will increase diversity at the top of the organisation as each type brings something different to the table, while ensuring that the top of the organisation remains functional and effective. Bayne [13] found that managers in the USA, UK and Japan 'tend to be the toughminded ISTJs, INTJs and ENTJs. Type theory, though, is very clear that a good

manager may be of any of the types; that type development matters much more than type itself; and that type tends to affect style rather than effectiveness of management.’

There are challenges in this for psychologists. Psychologists as a group have MBTI type preferences that favour Introversion to Extraversion [26], the opposite to the client group they are likely to be dealing with. In addition as a group they are more likely to have preferences for Feeling and for Perceiving than the Ashridge sample. It would be easy for conflict to arise between the two groups due to their type differences, and this is something that psychologists will have to be aware of when engaging in such client relationships.

Appendix 1: Ashridge Sample Description

- Total sample size=8,039
- 80% male, 20% female
- Junior manager to senior executive and chief executive
- Nationalities:
 - Belgium: 1.7%
 - France: 3.3%
 - Germany: 8.5%
 - Italy: 1.6%
 - Irish Republic: 1.5%
 - Netherlands: 4.9%
 - Spain: 1.6%
 - Sweden: 2.8%
 - United Kingdom: 57.0%
 - United States: 3.7%
- Industry Sectors:
 - Agriculture, Forestry, Fishing: 1.2%
 - Energy. Water Suppliers: 4.5%
 - Chemical and Pharmaceutical: 11.3%
 - Construction: 5.7%
 - Retail: 1.5%
 - Transport, Communication: 6.4%
 - Finance, Banking, Insurance: 9.8%
 - Publishing, Entertainment: 9.6%
 - Public Sector: 21.8%

Appendix 2 – Results of the Skills Audit

SKILLS & PERSONAL ATTRIBUTES	% Increase	% Same	% Decrease	Mean	Median	Mode	Standard Deviation
A clear framework of personal beliefs/values	60	27	13	2.19	2	1	1.150
Ability to empathise	61	30	9	2.23	2	2	.999
Ability to empower others	72	19	9	2.01	2	1	1.059
Ability to learn	78	15	7	1.79	1	1	1.094
Ability to manage their own career	68	21	11	2.05	2	1	1.066
Ability to manage work-life balance	68	21	10	2.12	2	1	1.090
Ability to rationalise	42	47	10	2.51	3	3	.916
Abstract thinking (connectivity)	65	24	12	2.19	2	2	1.059
Act in accordance with religious beliefs	16	35	49	3.45	3	3	1.103
Approachability	47	40	13	2.48	3	3	.975
Challenge (standing up and being counted/speaking out against the majority view)	55	31	14	2.39	2	2	1.029
Charisma	37	46	17	2.69	3	3	.965
Commitment to lifelong learning	70	20	10	2.08	2	1	1.057
Compassion (to other people)	50	39	11	2.46	3	3	.976
Conformity to organisational culture	20	30	49	3.32	3	4	1.006
Consistency of performance	48	40	11	2.45	3	3	.930
Coping with overload	54	31	15	2.43	2	2	1.031
Courage	53	37	10	2.35	2	3	1.027
Creativity (generation of ideas)	72	20	8	2	2	1	1.036
Cultural awareness and understanding (multicultural)	68	20	11	2.18	2	2	1.062
Designing effective work flows	49	35	16	2.5	3	3	1.019
Detachment (managing your personal emotions)	38	47	15	2.65	3	3	.940
Enthusiasm	56	36	7	2.32	2	3	.979
Face-saving (deflecting blame)	14	28	57	3.61	4	4	1.036
Flexibility (willingness to change)	83	9	8	1.8	1.5	1	1.056
Foresight (ability to predict future occurrences)	70	21	9	2.02	2	1	1.032
Forgiveness	35	47	18	2.78	3	3	.961
Group leadership (more than 12 people to lead)	45	35	19	2.60	3	3	1.059
High ethical standards	59	30	11	2.26	2	1	1.110
Holistic thinking abilities (ability to see the whole situation and its consequences)	74	16	9	1.93	2	1	1.110
Initiative (ability to start things themselves)	73	18	9	2.01	2	1	1.042
Integrative thinking abilities (thinking outside of functional areas)	77	12	9	1.96	2	1	1.073
Intuition (gut feel)	43	42	15	2.55	3	3	1.046
Kindness	27	54	18	2.85	3	3	.918
Leadership (ability to gain followers)	63	28	9	2.22	2	2	.998

	% Increase	% Same	% Decrease	Mean	Median	Mode	Standard Deviation
Loyalty	33	32	35	2.98	3	3	1.126
Openness to feedback (willingness to change)	68	22	10	2.15	2	2	1.010
Perseverance (ability to keep going)	63	28	9	2.21	2	2	1.016
Politeness	32	48	20	2.81	3	3	.996
Political skills	49	3	18	2.52	3	3	1.069
Resilience	60	33	7	2.27	2	2	.934
Respecting the individual and their role outside of the organisation	54	29	17	2.45	2	2	1.077
Self confidence	60	34	6	2.21	2	3	.969
Self discipline	63	29	8	2.19	2	2	.997
Self motivation	66	27	7	2.10	2	1	1.027
Stamina (not being worn down)	56	35	9	2.30	2	3	.974
Stress management (personal)	61	29	10	2.24	2	2	1.033
Tact (diplomacy)	44	44	12	2.56	3	3	.913
Team leadership (up to 12 people to lead)	50	37	13	2.46	2	3	.989
Time management (personal)	63	28	9	2.21	2	2	1.005
Tolerance	47	39	14	2.54	3	3	.936
Visionary (knowing where you are going)	75	17	8	1.95	2	1	1.068

WORK RELATED ABILITIES	% Increase	% Same	% Decrease	Mean	Median	Mode	Standard Deviation
Ability to analyse in a logical manner	48	43	8	2.42	3	3	.920
Ability to balance differing stakeholder needs	68	22	9	2.17	2	2	.970
Ability to design solutions that work in practice over time	56	34	9	2.36	2	2	.958
Ability to establish trust relationships	67	23	9	2.13	2	2	1.024
Ability to handle and resolve conflict	58	33	7	2.28	2	2	.988
Ability to make a personal impact	56	33	10	2.35	2	2	1.011
Ability to make decisions under time pressure	61	29	9	2.24	2	2	1.011
Ability to make decisions with incomplete information	57	28	16	2.41	2	2	1.064
Ability to make decisions with multiple sources of data	72	19	8	2.10	2	2	.990
Academic achievements (undertaking part-time studies)	44	36	21	2.71	3	3	1.006
Acknowledging and rewarding others	59	30	11	2.33	2	2	1.001
Adaptability (ability to change)	7	14	7	1.88	2	1	1.040
Being inspirational to others	67	25	8	2.15	2	2	1.007
Being perceived as fair and just	50	38	12	2.39	2	3	1.096
Coaching skills	66	24	11	2.27	2	2	1.000
Commitment to quality	58	34	8	2.22	2	3	1.012

	% Increase	% Same	% Decrease	Mean	Median	Mode	Standard Deviation
Communication skills using IT media (eg e-mail)	69	20	11	2.10	2	1	1.120
Computer literacy	70	19	11	2.06	2	1	1.125
Counselling skills	50	38	12	2.50	2.50	3	.949
Crisis management skills	57	34	8	2.32	2	2	.935
Data location, retrieval and handling skills	46	34	19	2.59	3	3	1.072
Develop networks (build beneficial relationships within and between industries)	74	17	8	1.96	2	1	1.050
Effective delegation skills	56	35	8	2.30	2	3	.970
Effective listening skills	62	29	8	2.18	2	2	1.016
Entrepreneurial ability	63	29	8	2.21	2	2	.939
Eye for detail	32	54	14	2.76	3	3	.846
Influencing skills	62	30	8	2.27	2	2	.894
Leading by example	55	35	10	2.31	2	3	1.012
Long term planning skills	56	29	15	2.40	2	2	1.076
Maintenance of harmony in the workplace (conflict avoidance)	32	44	24	2.83	3	3	.946
Managing trade union relations	18	36	46	3.36	3	3	1.000
Negotiating skills	53	40	8	2.39	2	3	.891
Oral communication skills	61	29	9	2.24	2	2	1.010
Oral presentation skills	55	33	12	2.37	2	2	.998
Risk management (understanding probabilities and making informed judgements)	68	25	8	2.15	2	2	.987
Setting goals	54	36	9	2.32	2	3	.953
Setting of deadlines	46	46	8	2.45	3	3	.912
Short term planning skills	45	45	10	2.47	3	3	.919
Skills in giving feedback	54	35	10	2.41	2	2	.943
Speed reading skills	43	36	21	2.73	3	3	1.039
Working in groups (more than 12 people)	39	41	20	2.71	3	3	1.011
Working in teams (up to 12 people)	48	38	13	2.53	3	3	.955
Written communication skills	39	47	14	2.41	2	3	1.009

SUBJECTS & KNOWLEDGE BASES	% Increase	% Same	% Decrease	Mean	Median	Mode	Standard Deviation
Accountancy concepts	39	46	14	2.67	3	3	.866
Business ethics & corporate responsibility	69	20	11	2.18	2	2	1.017
Business law	46	42	12	2.56	3	3	.890
Change management	75	15	10	2.06	2	2	1.070
Comparative analysis of different countries	58	26	16	2.45	2	2	1.006
Diversity management	65	22	12	2.29	2	2	1.045

	% Increase	% Same	% Decrease	Mean	Median	Mode	Standard Deviation
E-commerce	65	22	12	2.24	2	2	1.022
Economic concepts	40	52	7	2.56	3	3	.810
Entrepreneurial management	56	35	8	2.30	2	3	.981
Environmental awareness	67	20	12	2.20	2	2	1.052
Financial analysis	46	46	8	2.46	3	3	.851
Financial concepts	46	44	9	2.47	3	3	.899
Human resource management practices	56	31	13	2.40	2	2	1.028
Information analysis skills	65	27	8	2.24	2	2	.938
International trade & investment	47	42	11	2.54	3	3	.880
Knowledge management	67	22	11	2.15	2	2	1.047
Languages	46	34	19	2.62	3	3	1.058
Macro-finance issues	33	53	14	2.74	3	3	.839
Management theory & practice	38	49	13	2.68	3	3	.883
Managing across cultures	65	22	13	2.26	2	2	1.008
Managing research & product development	49	41	9	2.48	3	3	.907
Managing risk	67	23	7	2.11	2	2	.999
Marketing functions	46	45	7	2.49	3	3	.860
Mergers, joint ventures & acquisitions	41	45	13	2.64	3	3	.864
Operations management	32	57	11	2.71	3	3	.811
Organisational behaviour	54	35	11	2.37	2	3	.957
Project management	55	36	8	2.33	2	3	.937
Public sector management	3	48	19	2.77	3	3	.930
Quantitative data analysis skills	35	50	14	2.73	3	3	.853
Research methodology	34	53	13	2.70	3	3	.845
Research skills	42	46	12	2.59	3	3	.903
Social enterprise (interactions between business and civic and government sectors)	50	35	15	2.49	2	3	.993
Statistical concepts	27	61	12	2.81	3	3	.760
Sustainability	58	31	11	2.31	2	2	.989
Technology management	60	30	10	2.34	2	2	.968
The international macroeconomy	45	42	14	2.59	3	3	.920
Total quality management	39	45	16	2.63	3	3	1.018
Understanding information systems	56	34	10	2.37	2	2	.958
Understanding ethical issues	61	29	10	2.28	2	2	1.008
Understanding business culture	61	29	10	2.25	2	2	.972
Understanding organisations as open systems	61	28	11	2.29	2	2	1.001
Understanding the legal implications of management decisions	58	31	11	2.30	2	2	1.019
Understanding the role of structure in strategy	56	34	9	2.33	2	2	.963

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Table 1: Ashridge Type Table (Total Group, n=8,039)

ISTJ	ISFJ	INFJ	INTJ	Type	n	%	% (pop)
n = 1149	n = 121	n = 75	n = 645	E	5036	62.6%	52.6%
14.3%	1.5%	0.9%	8.0%	I	3003	37.4%	47.4%
SSR=1.04	SSR=0.12	SSR=0.53	SSR=5.70				
ISTP	ISFP	INFP	INTP	S	4048	50.4%	76.5%
n = 314	n = 52	n = 120	n = 527	N	3991	49.6%	23.5%
3.9%	0.6%	1.5%	6.6%				
SSR=0.61	SSR=0.10	SSR=0.47	SSR=2.75	T	6901	85.8%	45.9%
ESTP	ESFP	ENFP	ENTP	F	1138	14.2%	54.1%
n = 463	n = 85	n = 296	n = 929	J	5253	65.3%	58.3%
5.8%	1.1%	3.7%	11.6%	P	2786	34.7%	41.7%
SSR=1.00	SSR=0.13	SSR=-.59	SSR=4.14				
ESTJ	ESFJ	ENFJ	ENTJ				
n = 1675	n = 189	n = 200	n = 1199				
20.8%	2.4%	2.5%	14.9%				
SSR=2.00	SSR=0.19	SSR=0.89	SSR=5.14				