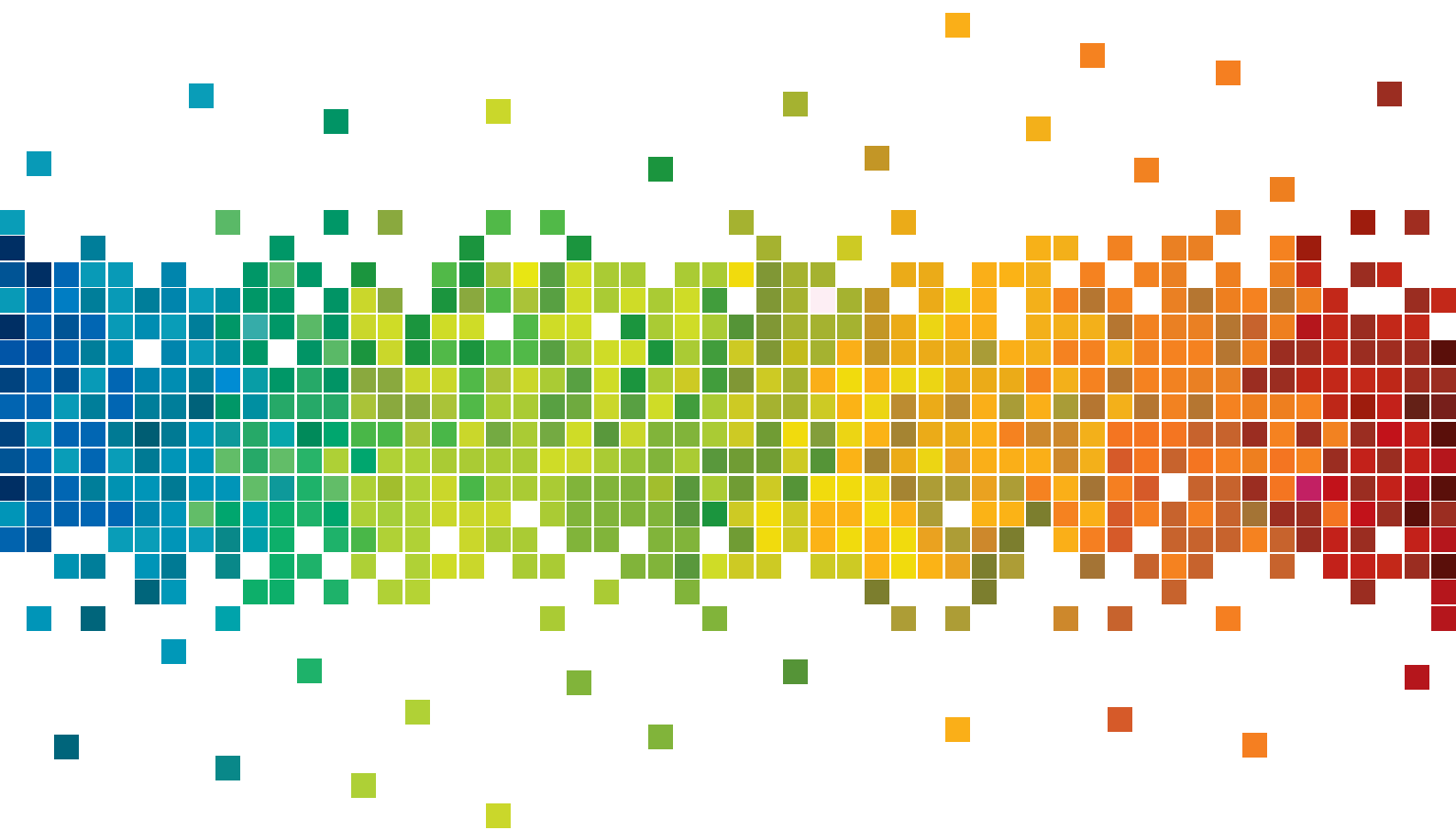# Leadership

The Impact of Gender

January 2010

Introduction

Research carried out by the US Bureau of Labor Statistics and published on the Catalyst website (www.catalyst.org) shows that women account for 47% of the US labour force. However, the 2009 statistics for the Fortune 500 show that only 15 of the Fortune 500 and 29 of the Fortune 1000 have female CEOs. A similar situation prevails in the UK where, according to research conducted by Cranfield University School of Management and published in The Female FTSE Board Report 2009, only 12.2% of directorships are held by women, a figure which falls to 5.2% for executive directorships. In the FTSE 100, 25% of organisations have no female directors at all.

Referring to the gender imbalance in a recent interview in the Financial Times, Helen Alexander, President of the CBI commented on the "danger of losing real talent…at an important time". Organisations fall foul to the risk of having a board which doesn't represent its customers as well as increasing the potential for thought narrowing 'groupthink', something that occurs within groups of people with similar backgrounds, i.e. 'all male' boards. Consequences of these issues are to be ignored at a Chairman's peril. There are just seven women in director positions in the FTSE 100 banks. Perhaps therefore the FT's referral towards the financial disaster as a product of "testosterone fuelled excesses" is not surprising.

In the Foreword of Cranfield University's 2009 report, Harriet Harman, Leader of the House of Commons and Minister for Women and Equality references "old boy networks" and reflects that "there is still much more to be done". This suggests there is an important socio-cultural problem needing to be addressed. It is, however, beyond the scope of the current paper to do this. Rather than looking at the issue at the macro level, here we take more of a micro but no less important level of analysis, investigating the individual differences, or rather, the gender[1] differences, which exist. These gender differences will be discussed in terms of how they contribute to the wider socio-cultural problems before suggesting steps that can be taken to address the issue.

There are, of course, obvious physical differences between men and women. This report will focus on something less concrete but no less important – personality. Over several years Glowinkowski International Ltd (GIL) has measured male and female personality across a wide range of cultures and different organisational sectors using a tool called the GPI™. GPI™ measures predispositions, defined as the underlying preferences or natural behaviours of an individual. Sometimes called traits, predispositions represent the individual, stable characteristics which determine 'who we are'.

GPI™ has been developed for use in a business environment and the data, structured across three core feedback models, is contextualised so as to make it applicable to the way individuals prefer to operate in organisational life. The models are as follows:

- Problem Solving and Implementation Style; in other words, how an individual thinks around a problem and implements their plans

- Communication and Interpersonal Style; how an individual interacts with others and the way they prefer to behave in a social context

- Feelings and Self Control; how emotional an individual is, the way they feel in their own skin and the extent to which they react to impulses and desires

For the purpose of this report, data will be presented as a comparison of the position of men and women on the dimensions which make up the GPI™. This data will be discussed in terms of the way it contributes to behaviour and, where there are differences between men and women, the behavioural consequences of the predisposition differences will be reported.

It is important to note at this stage that predisposition and behaviour are not the same. Although predispositions encompass the way we prefer to behave, other situational and environmental factors influence our behaviour. Situations can therefore force an individual to behave 'out of character'. Behaviour should be looked at as an interaction arising from the combination of a person (their predispositions) and the situation they are in.

The difference between predisposition and behaviour is a key point because it is behaviour which really matters. It is behaviour that delivers results and raises performance and ultimately, it is behaviour, not predispositions for which an organisation pays. That said, predispositions are likely to influence behaviour in the extent to which an individual feels comfortable behaving in a certain way and therefore, the extent to which they will deliver/neglect role required behaviours.

The associations we make between predisposition and behaviour are based upon 25 years of experience in giving personality feedback and working in the organisational development arena.

Differences in Predisposition

In the study, 3,719 individuals' data from the GPI™ database were included. Of this sample, 2,328 were men and 1,391 were women. The sample was drawn from individuals GIL had encountered through its consultancy interventions in recent years. They were spread geographically around the globe and were members of many different types of organisations, from small entrepreneurial start ups to large multi-national PLCs belonging to a range of different sectors, from financial services to religious orders, from science and technology to education.

The GPI™ is a 182 item personality indicator. Data is presented across three primary feedback models which can be broken down into 22 sub-dimensions.

Data comparisons were made between the raw data of men and women at the sub-dimension level. The data was subjected to a One-Way Analysis of Variance (ANOVA) to statistically study the significance of the differences between the means before being considered in terms of the consequences for the behaviour of the two groups.

Results and Discussion

Before reporting the findings of the study and discussing the differences that exist in the data, it is important to point out that there are positive and negative behavioural implications for all predispositions; development issues (rather than weaknesses) in some contexts can be seen as strengths in another context. To say that men differ from women suggests that there are resulting advantages and disadvantages for both genders.

Clear differences were found in the data at the raw level. In fact, out of the 22 scales, 17 showed a statistically significant difference. Of these differences, 15 were at the $p<0.001$ level. In real terms, this means the significance level is extremely high. In fact, there is less than a one in one thousand chance of the differences being reported as significant and caused by gender when they actually occurred by chance.

The 17 dimensions showing significant differences are shown on the next page.

Rather than presenting raw data to individuals in GPI™ feedback sessions, data is compared against a normative group and plotted on the scales to create a personality profile which shows the strength of predispositions in comparison to the rest of the population. Completing this process with the average profiles of men and women is illustrative of the differences between genders that exist.

Overall, women were found to have higher Anxiety and lower Self Esteem than men. Men were found to be more Assertive, suggesting they are more likely to surface issues and raise their thoughts.

The male and female forms of Extraversion look markedly different. Whilst the female Extraversion of Fun Loving and Outgoing implies an encouraging warmth, friendliness and sociability - especially when combined with an Affiliative nature - the male 'colour' of Extraversion, combining the more Assertive and Serious Minded tendencies, has a much harder edge. Combined with Social Assuredness and less of an

Affiliative tendency, the male engagement style is likely to be more forthright and challenging.

Both women and men can be thought of as conscientious but in different ways. The female form is about attainment of standards, detail and results focus. The male form is more about drive; influencing others, developing high aspirations and striving for more.

The other differentiators which merit mention are the greater male tendencies to find comfort in combining abstract, apparently disconnected pieces (Conceptual) of information in order to form forward thinking, long term, big shift ideas for change (Revolutionary). There is also a lower level of Impulsivity implying less of a tendency to act, then think. Classic research suggests a Disciplined nature – "Deferred Gratification" - leads to greater long term results (See Walter Michel's Marshmallow Experiments[3]). That said, Impulsivity can afford an individual the opportunity to get ahead. It is more of a risk taking stance but one that can reap rewards. Whilst the Disciplined person can talk themselves out of trying and never know if they would have succeeded, the Impulsive type is more likely to try and face the consequence if they fail.

Finally, men are shown to be less Modest than women. Although Modest people would hope they can let their achievements speak for themselves, Assuming implies a comfort with selling your virtues which lessens the risk of being overlooked in organisational career systems.

It is important to reiterate the point that there are positive and negative behavioural implications associated with all predisposition types.

These differences complement past research in the area. Alan Feingold's review[4] carried out at Yale University in the mid nineties found men to be higher in assertiveness whilst women were found to be higher in gregariousness (i.e. sociability – more outgoing), anxiety, trust and

Dimension	Direction of difference
Anxiety	Women more tense, less relaxed
Self Esteem	Women higher self conscious, lower self esteem
Impulsivity	Women more impulsive, less disciplined
Change Orientation	Women more incremental, less radical
Information Processing	Women more practical, less conceptual
Implementation Style	Women more outcome orientated, less spontaneous
Conscientiousness	Women more conscientious, less cursory
Achievement	Women more perfectionist, less pragmatic
Sociability	Women more outgoing, less reserved
Assertiveness	Women higher in accepting, lower in assertiveness
Hedonism	Women more fun loving, less serious minded
Affiliation	Women more affiliative, less unaffiliative
Conformity	Women more conforming, less dissenting
Modesty	Women more modest, less assuming
Influence	Women more consensual, less persuasive
Ambitiousness	Women more content, less ambitious
Energy	Women more energetic, less paced

Table 1: The significant predisposition differences of men and women

tendermindedness. Paul Costa and Robert McCrae, famed for their work in the development of the Big 5 model, along with Antonio Terracciano[5] replicated and expanded upon these findings across a broader range of traits in a more recent meta-analysis[6], finding that women tend to be higher in Agreeableness, Neuroticism, Warmth and Openness to Feelings, whilst men tend to be higher in Assertiveness and Openness to Ideas (shown in the present study through higher Revolutionary, Conceptual and Intuitive 'scores'). Costa et al make note of the fact that variation is greater between individuals within genders than it is between the genders, something we would not deny (we are looking at the average profiles of men and women, which doesn't mean all women are Accepting), but conclude that "gender differences are modest in magnitude, consistent with gender stereotypes, and replicable across cultures" (p 328).

Michael Kirton's well known Adaptor-Innovator model has consistently shown men to be more innovative and women to be more adaptive[7]. These findings have been reliably recorded across cultures. In relation to GPI™, Innovators are Revolutionary and Cursory whilst Adaptors are more Conscientious and Evolutionary. We can find from the current study that the male population is a more innovative one in predisposition terms.

It is likely to be the case that the actual differences between men and women are more marked than we have found here. Whilst the sample for both men and women is sound, the
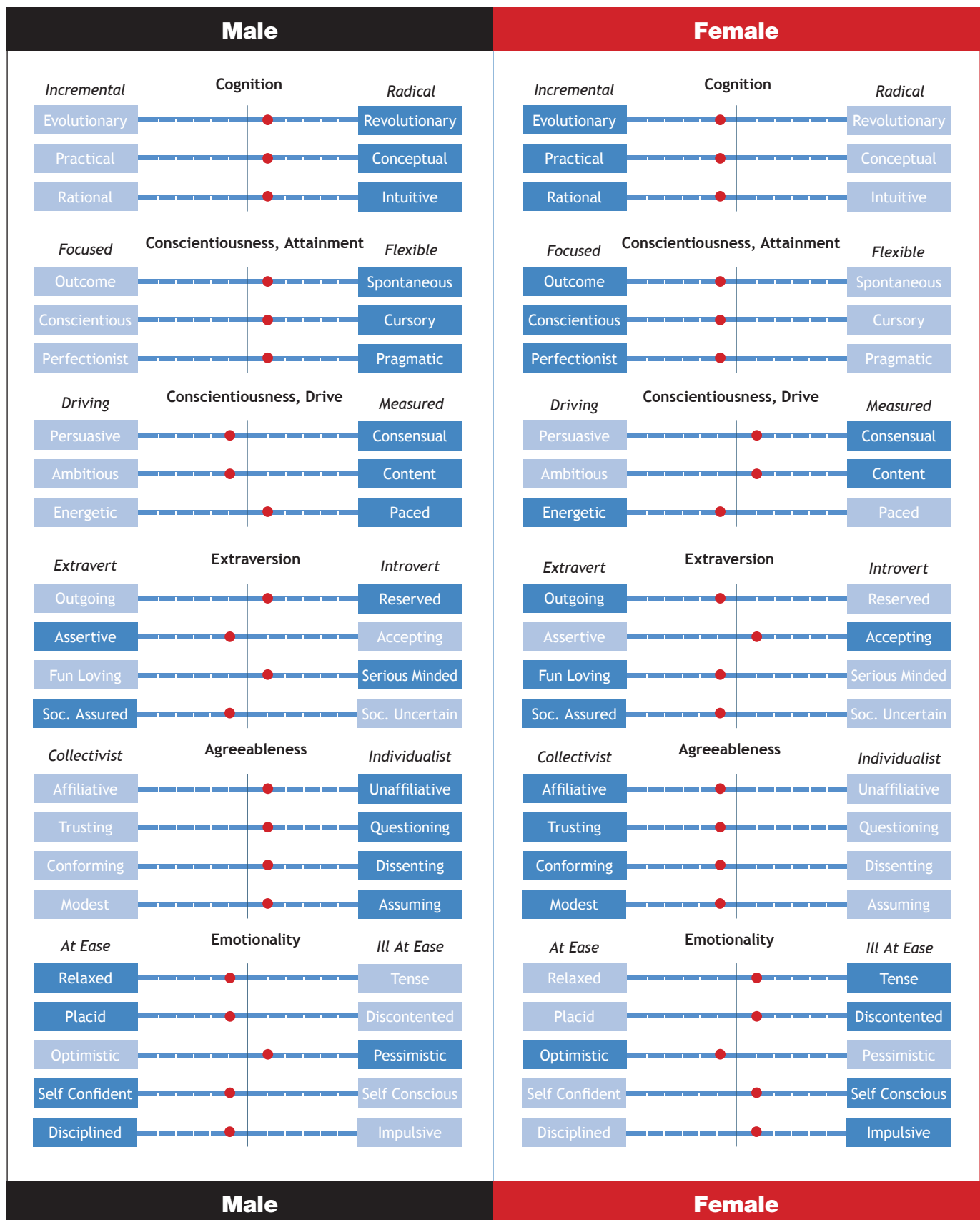
Male		

Cognition

Incremental		*Radical*
Evolutionary		Revolutionary
Practical		Conceptual
Rational		Intuitive

Conscientiousness, Attainment

Focused		*Flexible*
Outcome		Spontaneous
Conscientious		Cursory
Perfectionist		Pragmatic

Conscientiousness, Drive

Driving		*Measured*
Persuasive		Consensual
Ambitious		Content
Energetic		Paced

Extraversion

Extravert		*Introvert*
Outgoing		Reserved
Assertive		Accepting
Fun Loving		Serious Minded
Soc. Assured		Soc. Uncertain

Agreeableness

Collectivist		*Individualist*
Affiliative		Unaffiliative
Trusting		Questioning
Conforming		Dissenting
Modest		Assuming

Emotionality

At Ease		*Ill At Ease*
Relaxed		Tense
Placid		Discontented
Optimistic		Pessimistic
Self Confident		Self Conscious
Disciplined		Impulsive

Female		

Cognition

Incremental		*Radical*
Evolutionary		Revolutionary
Practical		Conceptual
Rational		Intuitive

Conscientiousness, Attainment

Focused		*Flexible*
Outcome		Spontaneous
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Self Confident		Self Conscious
Disciplined		Impulsive

Male			Female		

Figure 1: The average profiles of men and women[2]

Advantages and likely strengths of the average profile for women	Advantages and likely strengths of the average profile for men
Working in well structured environments Delivering on well defined tasks	Working in less well defined structures
Fostering warm relationships built on trust is likely to be engaging	Politically orientated relationship building is likely to be engaging
People minded and comfortable in group environments	Independently minded and less group orientated
React well to encouraging leadership	Less in need of encouraging leadership

Table 2: Advantages and strengths of different predisposition profiles

disproportion of men in senior leadership positions suggests that the male sample is likely to be more representative of the broader male population than the female sample is to be of the broader female population. The female sample is more likely to sit away from the centre of the distribution curve therefore. If the sample was not limited by consisting predominantly of middle to senior managers and instead represented a broader spectrum of the population, the male sample would remain relatively constant whilst the female would probably change slightly, most likely differentiating it further from the male sample.

Although both reliable and valid, firm conclusions cannot be drawn from predisposition data alone on the imbalance between men and women in senior roles in the workplace. It is behaviour which sets individuals apart and it is (or should be) behaviour which an organisation bases its personnel decisions on. Nevertheless, the data undoubtedly points towards the need to do further research, this time looking at the factor which distinguishes high performers from indifferent and bad: behaviour.

Behaviour

Any individual that has to achieve through others has a leadership challenge. The challenge is to build a positive Climate (how it 'feels' in an organisation) and win the engagement of employees, galvanising their support for the achievement of the organisation's goals and in the process, driving up organisational performance. Irrespective of the size or scope of this challenge, it is the leader's behaviour which determines whether they will be successful.

Through our research and consulting work, we have measured and observed six behavioural approaches to leadership. None of these approaches should be used exclusively or at the expense of any other. In fact, in order to create an engaging Climate, leaders should utilise all of the approaches. The situation should dictate which approach or combination of approaches is used at any one time. The approaches are as follows:

1. Directional

Providing a clear sense of direction and purpose and aligning what happens on the ground, day-to-day, to that goal

2. Engaging

Engaging the commitment and enthusiasm of others to build energy and momentum

3. Positional

Building capability and empowering others through effective delegation

4. Constructive

Maintaining open and healthy relationships within and outside the team; dealing with difficult situations early on

5. Democratic

Involving others in decision-making and planning activities, building trust and encouraging others to put forward ideas and suggestions; avoiding coercion

6. Developmental

Developing others to fully realise their career aspirations, as well as enhancing current performance; building organisational capability for the future.

Thinking about behaviour in terms of six approaches is complicated and from a behavioural skills training perspective, overload. At higher level however, these six approaches can be boiled down into two factors. The first factor is highly people-focused. The approaches that fit within this factor are:

- Engaging
- Developmental
- Democratic

They are linked by the commonality of 'showing concern' for other individuals. By 'concern' we do not mean 'nice'. Rather, there is a realisation in the leader that for success, other people are important. The second factor has more of a task-focus. The approaches that fit within this factor are:

- Directional
- Positional
- Constructive

All are orientated towards showing pro-activity and direction.

Over the last 25 years we have measured and observed these factors in approximately 20,000 individuals. Within this time, we have seen leaders who display high levels of concern whilst others display low levels. The former can be described as being Concerned For People whilst the latter can be described as being Indifferent Towards People. Similarly, we have witnessed leaders who display extremely high levels of directional behaviour and others who display virtually no direction at all. Within this factor, the former can be thought of as being Directive and the latter as being Passive[8].

Our research has led to the development of the Glowinkowski™ Model of Behaviour. The basic premise behind the model is that the two factors cannot be looked at in isolation; in fact, they go hand in hand - whilst a leader is displaying directive behaviour (high or low), they are also displaying a level of concern. In the model therefore, the two factors are combined, creating four behavioural styles.
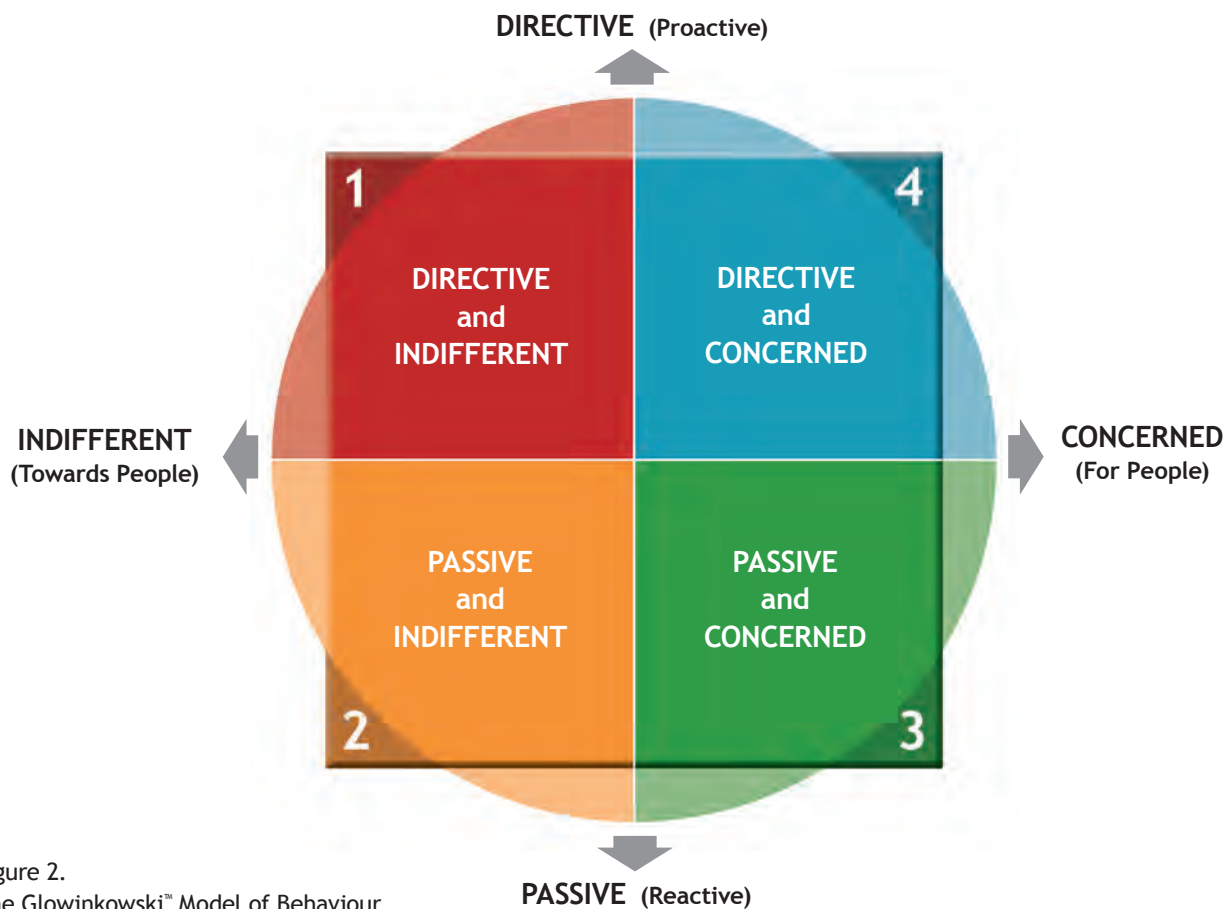

Figure 2.
The Glowinkowski™ Model of Behaviour

Characteristics

- **Directive:** *Proactive* - Taking the lead, being in charge, driving forward, making things happen, task focused, exercising control

- **Passive:** *Reactive* - unresisting, following others, concedes, abdicating control, submitting responsibility

- **Indifferent:** *Towards People* - lacking regard, uncaring, not sensitive to the feelings, needs, etc. of others

- **Concerned:** *For People* - displaying respect, interested, empathising and sensitive to the feelings, needs, etc. of others

Each style is characterised by a different set of behaviours.

Red 1 (Control and Demand)

Red 1 behaviour is typically dominant and dictatorial. Red 1 uses authority and position to intimidate, pressurise and force others. Communication takes the form of 'I'll talk, you listen'; collaboration is by no means the Red 1's top priority, preferring to go it alone.

Amber 2 (Avoid and Abdicate)

Amber 2 leadership behaviour is cautious and distant. The Amber 2 style is to hold off and as they see it, let others make the mistakes. Amber 2 is typified by a pessimistic view that people cannot be lead to develop and improve their performance. Characteristically speaking, Amber 2 takes a back seat and 'leads' from afar.

Green 3 (Befriend and Pacify)

Green 3 behaviour is disorganised and unplanned. Green 3 is geared towards being liked, tending to be overly agreeable and undemanding. It is highly sociable, often too much so, and results are not pursued with any great determination. Raising contentious issues can be difficult for a person displaying Green 3 because they want to keep things harmonious.

Blue 4 (Challenge and Engage)

Blue 4 behaviours combine a directional, proactive approach with concern for others. Behaviour tends to be results focused but collaborative and open to considering the opinions of others in setting direction. Communication is two-way and candid. Blue 4 galvanizes support and motivates through considering and being responsive to the individual.
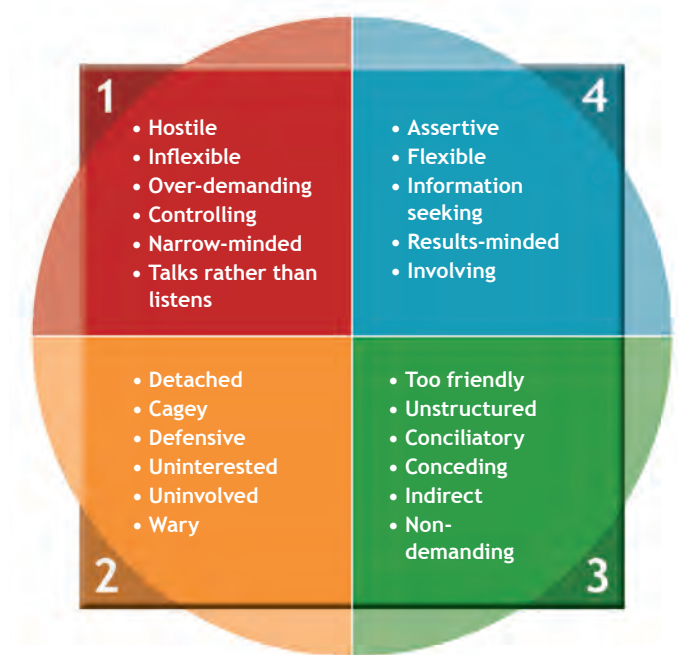

Figure 3. Characteristics of the four styles

It is important to understand several things when thinking about this model and the behaviour that the quadrants describe:

- No one behaves in just one of these four ways. An individual's behaviour is far more dynamic than that, displaying characteristics from each of the quadrants as they go about their roles

- Individual behaviours always fit within one of the four quadrants

- Individuals should not be labelled as Red 1, Amber 2, Green 3 or Blue 4. It is behaviour which is being observed and thus it is behaviour which should be categorised

- Behaviour is not personality. Behavioural styles from each of the four quadrants can be adopted in a single interaction, but personality remains constant and unchanged

Behaviour can be observed and therefore measured in a naturalistic way. However, for the purpose of research studies and consultancy interventions, we measure it using a 360 degree tool called the Engagement Style Inventory (ESI). ESI provides an individual with feedback relating to both style and level, i.e. the extent to which an individual performs each of the four behavioural styles and the quality with which they display them.
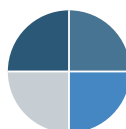
Differences in Behaviour

Data was analysed for a subsample of the GPI™ sample that had attended GIL behavioural skills training and had completed ESI beforehand. Including 70 men and 37 women, the proportion of women in the study (a little over a third) was approximately the same as in the personality analysis.

For the ESI, a respondent measure which combines both normative and ranking styles of questioning, each of the participants had their behaviour rated by at least three other people. For the purposes of the present study we were interested in the quality of behaviour, i.e. the level.

Results and Discussion

	Blue 4	Green 3	Amber 2	Red 1
Male	50.7429	17.6000	13.4857	18.1857
Female	49.0270	17.3243	12.3514	21.2432

Table 3: Behavioural style scores reported by immediate reports

It is clear from the data that the difference in behaviour between men and women, as rated by immediate reports, is not a pronounced one. Behavioural style was shown to be similar across Blue 4, Amber 2 and Green 3. The difference between men and women was found to be more substantial however for Red 1 Behaviour with women scoring significantly higher than men (Female mean = 21.24 , Male mean = 18.19, $F(1,105)=4.465$, $p<.05$). This difference suggests that individuals working for females perceive their manager to be cooler, more top-down and less democratic than do individuals who have male managers.

A Red 1 style is synonymous with what McGregor (1961) refers to as Theory X management. Theory X is coercive and controlling, affords little autonomy on behalf of reports and prevents them from using initiative. This style stamps out any entrepreneurial input from others and whilst it may deliver results in the short term, is not conducive to long term performance.

As well as offering some explanation for the difference in fortune between male and female leaders, the difference also suggests there is some interplay between the predisposition data and the ESI data. We have previously said that behaviour and predisposition are different and that an individual predisposed to behave in one way can behave in another. However, effective delivery of 'out of character' behaviour demands practice. Where a behaviour is being 'forced' it can be delivered in a gauche way and appear to others as abrupt. This appears to be happening with the way women deliver Directive behaviour. Given the combination of lower assertiveness and serious mindedness than in men and higher levels of self doubt, Directive behaviour is likely to be more of an 'out of character' form of behaviour and therefore cause problems.

In competency terms, the similarity in all but Red 1 behaviour suggests that the competency profiles of men and women are alike. We're likely to see a similar level of threshold behaviours between men and women which lead to good performance. The less abrasive, more collaborative style reported for men however suggests they are more likely to deliver a greater level of the differentiating, truly added-value behaviours. The differentiating elements are those that gain commitment in reports, increase discretionary effort and encourage them to transcend personal goals for the goals of the organisation. Such transformational leadership develops others and ups the talent pool of an organisation. These are the behaviours which we have found through our research to most impact upon performance.

Through appreciation of the challenge, understanding of the framework and practice, individuals can increase their level of differentiating behaviours. There is no reason why women cannot compete on a level playing field with men. This difference is one which can be overcome through behavioural skills training.

Of course, there could be a very different explanation for the findings of this study. It may be a factor of negative perception held towards women in the workplace. If the high proportion of men in leadership roles means that leadership is still seen as a male occupation, women are going to be perceived differently as leaders. The woman who delivers stereotypically male behaviours is seen negatively whilst the man is seen as stereotypically male. This of course works in the other direction as well, where men delivering stereotypically female behaviours are seen differently to women. The important point is that men and women can do exactly the same things and yet be viewed differently for it. This is clearly a socio-cultural problem and needs to be addressed at that level. However, the immediate answer to the problem is the same as if the problem is caused by predisposition: behavioural skills training. Behavioural skills training can help an individual to appreciate their individual characteristics, the characteristics of the people and situation around them and the way to manage oneself in order to get the most out of this dynamic.

Behavioural Skills Training

GIL use a well researched and proven methodology called Engagement Through Leadership Skills (ETLS) which helps individuals to up their leadership game. On many occasions individuals have gone through this process in team and individual settings and experienced extremely positive results for their leadership delivery. For example, we collected data recently for members of a financial services company on the ESI, put them through the ETLS programme and then collected ESI data again six months later. According to the leaders' immediate reports, individuals were found to show statistically significant higher levels of Blue 4 behaviour and lower levels of Red 1, Amber 2 and Green 3.

	Blue 4	Green 3	Amber 2	Red 1
Pre ETLS	51.17	18.83	12.33	17.61
Post ETLS	55.33	16.89	11.50	16.33

Table 4: Behavioural change following ETLS

Performance indicators measured over the period beginning pre ETLS when the initial ESI rating was taken and going through to the second collection of ESI showed substantial improvements. For example, debt recovery in terms of gross collections went up by 27%, the numbers of letters managed (folded, inserted and franked) increased by 100% over the same period of the previous year, help desk calls went up by 30% on the previous year with higher service standards recorded.

As we would expect, female improvement was found to be on a par with male improvement. At an individual case study level, one female in particular went through considerable improvement. Despite being talented, the ESI showed she was seen by direct reports as having problems with her leadership. Following ETLS, the re-measure of ESI showed she had improved in Blue 4 by 27%. This impressive shift in behaviour was accompanied by dramatic rises in her performance as a leader, her team's performance and her personal wellbeing. Although slightly anecdotal, this case study shows how the ETLS programme represents a practial process for improving leadership delivery.

The ETLS programme can be specifically tailored towards women in the workplace, acknowledging the fact that there are extra challenges from a socio-cultural perspective that women need to overcome.

As Sir David Walker, former director of the Bank of England states , "we need to change the culture and have a much better understanding that boards are not golf club committees." The answer is a long term one and therefore the situation is one which women, in the short term, have to be aware of. However, if culture is the sum of all that we do and therefore shaped by behaviour, women can in the short term behave their way out of the issue and begin to change the culture. Behavioural skills training through ETLS can go a long way to helping women adapt their behaviour so they are perceived differently in the workplace and ultimately help them to redress the balance.

Clearly men need to modify their behaviour as well. The results of behavioural training for both men and women are potentially huge. The outcome for both groups is a positive one and similar, i.e. a modification of the way they behave, influencing the way they are seen by others and how successful they are. The journey to behavioural change is different however. Given the average personality and behaviour of the two groups, i.e. where they are coming from and what they do, the actions required to change are different. This should be taken into account when considering behavioural training for men and women.
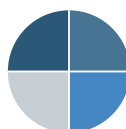
Key Conclusions and Recommendations

In predisposition terms men are different to women, this is natural and to be expected. The implications of this natural difference are that the gender groups are going to be more comfortable in different sets of behaviour. The recommendation is that training development needs to provide the opportunity for each gender group to learn different behavioural skills. The development for men and women is therefore not necessarily the same.

In order to help women to achieve their potential at the senior levels of management, from the perspective of predisposition and behaviour training we recommend the following:

1. Women need to be provided with the opportunity to develop their behavioural skills towards Blue 4 in a way that recognises their particular predisposition patterns. To ignore gender differences in personality is to ignore diversity

2. Managers of women need to be aware that given the predisposition profile of women, together with the prejudices with how they are perceived in general, it is critical women are provided with the opportunity to experience as much Blue 4 behaviour from their manager as possible, i.e. great behaviour begets great behaviour

3. ETLS training provides the opportunity for women to learn skills that enable them to engage more effectively. ETLS helps individuals to manage their managers who operate in a Red, Amber and Green manner. This skill of upward management is vital

4. To get the most out of talent management practices a broad range of leaders need to go through the same training

Particularly important for women is their experience of Blue 4 behaviour – what they see from colleagues and their boss. Men are not immune, indeed, given the situation that prevails, maybe they are more in need of training than women. ETLS has proven success in helping both men and women to become more Blue 4. The route to Blue 4 is very attainable and likely to result in more positions at the senior table.

Endnotes

[1] As is stated by the American Psychological Association (APA Publication Manual, 4th Edition, 1994), gender is cultural and sex is biological. Whether the differences are down to culture or gender is not the subject of this paper. For simplicity and in line with past research in the area, gender differences will be adopted.

[2] The difference of one 'sten', although small, is consistent in the large sample and does have noticeable implications.

[3] For a full review of these experiments see Mischel, W., Shoda, Y. and Rodriguez, M.L. Science, New Series, Vol. 244, No 4907 (May 26, 1989), 933-938

[4] Feingold, A. (1994). Gender differences in personality: A meta-analysis. Psychological Bulletin, 116, 429-456

[5] Costa, P.T., Terracciano, A. and McCrae, R.R. (2001). Gender Differences in Personality Across Cultures: Robust and Surprising Findings. Journal of Personality and Social Psychology, 81, 322-331

[6] Meta-analysis is a statistical method that combines the results of studies looking at the same question and determines whether a particular finding is consistent across studies and therefore valid. Meta-analysis is capable of aggregating data from many thousands of individuals.
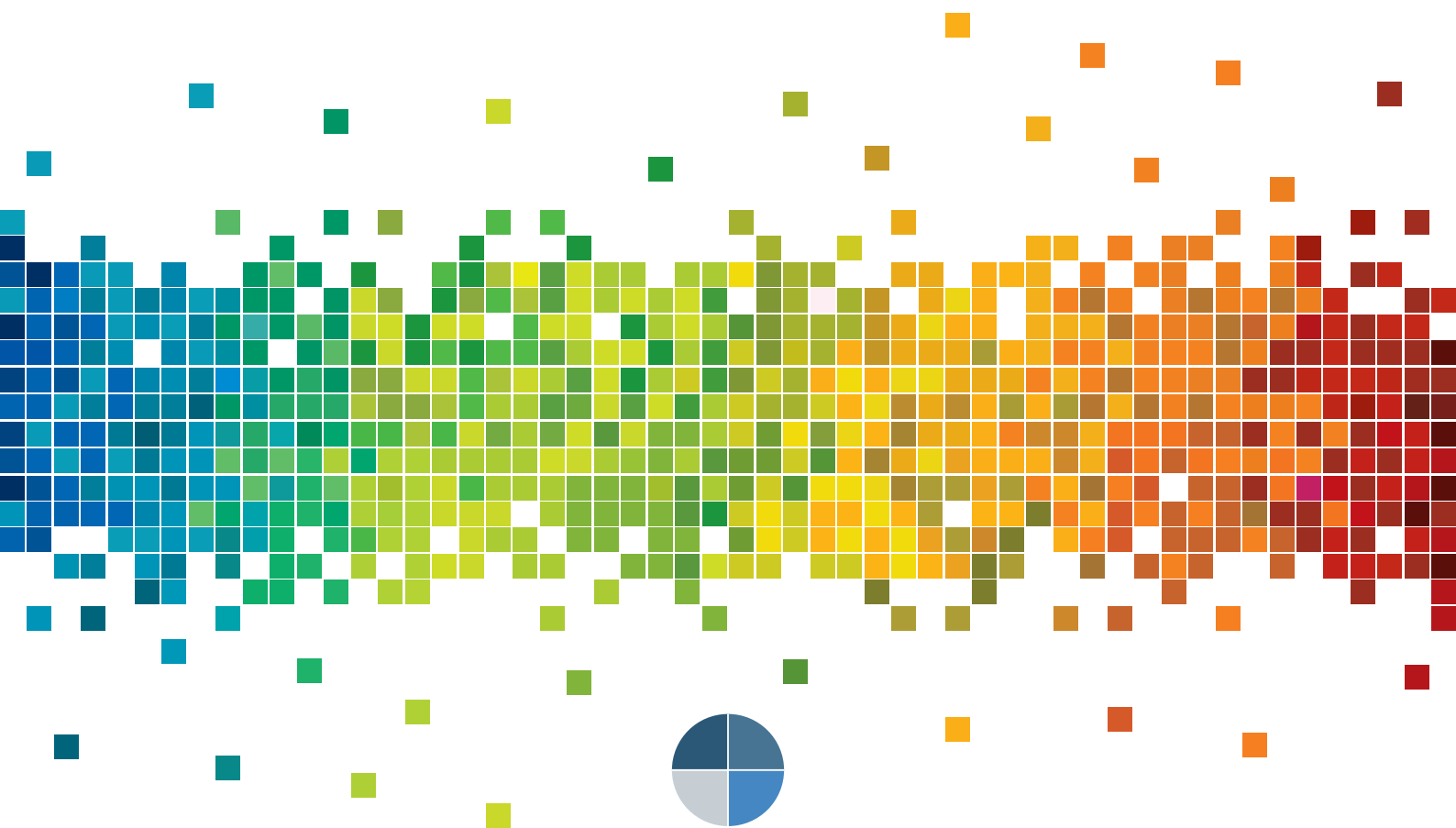
[7] e.g. Kirton, M.J. (1976). Adaptors and Innovators: A description and measure. Journal of Applied Psychology, 61, 622-629. Foxall, G.R. (1992). Gender differences in cognitive styles of MBA students in three countries. Psychological Reports, 70, 169-170

[8] It should be noted that the concept of two broad factors – one task and the other people focused - underpinning leadership effectiveness is not necessarily a new one. Halpin and Weiner (1957) identified the factors of 'Consideration' and 'Initiation of Structure' as explaining the majority of variance in leadership behaviour. Blake and Mouton's (1964) Managerial Grid Model references 'Concern for Production' and 'Concern for People'.

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International