

# Using Psychometric Assessment to Promote Effective Management and Inform Professional Development

## Introduction

The SMART Women Project, funded by the European Union Objective One Programme and delivered through Cornwall College Business, was designed to address the under-representation of women working in management roles in Cornwall. Over the 18 months duration of the project, 219 women took up the opportunity to achieve a business qualification and to develop key professional and personal skills in order to become more effective in their management roles. The project beneficiaries were either self employed, about to set up a business or in a middle management position within an SME (small or medium enterprise – up to 250 employees) in Cornwall.

Psychometric assessments were incorporated into the project's induction process to heighten self awareness and enable the women to focus on areas they particularly wanted to address through the personal development workshops within the programme. Two psychometric tools were used. The 15FQ+ provided an in-depth personality profile producing a report informing on styles in terms of work, interpersonal relationships, thinking and decision making, and coping with pressure and stress. Preferences in team roles, leadership and subordinate styles, and career orientation were also included. The Temple Index of Functional Fluency (TIFF<sup>®</sup>) provided a unique profile of behaviour patterns from which an 'action plan' was drawn up to help beneficiaries to re-balance their use of energy in a more effective way. Jane Hicks of Jane Hicks & Associates (JHA) undertook the face-to-face feedback sessions for in-depth exploration of the 15FQ+ and TIFF results.

## Why TIFF was used

This analysis focusses on the TIFF results for the whole group of 219 women in order to assess the value of the TIFF experience as part of the Project, in terms of promotion of management effectiveness. TIFF was chosen as it offered the beneficiaries the opportunity to recognise and understand their own patterns of behaviour and to make sense of their experiences. Furthermore, it provided a framework to support change and to take charge of their own development. The chief value of TIFF is for personal/professional development on an individual basis. Feedback of TIFF profiles builds awareness and understanding of the implications and significances of the behaviour patterns revealed in the person's scores. Discussion and planning for change and development follows. Team development can be built on this foundation.

## How TIFF Works

TIFF measures, in total, nine different ways of behaving – referred to as the nine Functional Fluency Modes. Four of these are to do with the role of 'being in charge'. Four are to do with the way people express their own identity both in relation to others and in doing their own thing. Each cluster of modes has two positives and two negatives. The crucially important central mode is the internal facility people have for assessing reality, making sense of their experience and taking factors into account when choosing how to behave. The term for this internal behaviour is 'Accounting'. TIFF is a tool for enhancing this 'Accounting' facility by increasing self awareness and understanding. TIFF provides a practical pathway for change of which the overall aim is to use the positive modes more and the negative ones less. This is called becoming Functionally Fluent and denotes increased interpersonal effectiveness. For full information see [www.functionalfuency.com](http://www.functionalfuency.com)

TIFF results give evidence of two important practical aspects of interpersonal behaviour:

1. The way people use their energy and how they balance this usage – in terms of the nine modes of the Functional Fluency model. (The TIFF Balances.) These can identify sources of stress.
2. The relationship between the usage of positive modes and negative modes, which indicates the effectiveness of the usage. (The TIFF Ratios). These can identify professional development needs.

### Coding System for the Analysis of TIFF Results

From a research perspective it is useful to examine the profiles calculated for the whole group and for sub groups to see what differences and similarities might be found that could a) indicate the accuracy of the TIFF results, and b) inform future training needs assessments for the various sub-groups.

To enable analysis of sub-groups within the SMART Women project beneficiaries, a three-tier coding system was used, to differentiate business context, role and level of expertise.

Tier 1 - The eight business sector categories:

A – creative arts/design

B – financial/legal

C – retail/wholesale

D – hospitality/catering

E – training/consultancy

F – personal services (hairdressing/holistic therapies/care etc)

G – constructions/ manufacturing/engineering

H – marketing/administrative services

Tier 2 – The business roles:

a) Business owner/director (sole trader, partner, managing director), or

b) Manager (employee rather than business owner)

Tier – 3 The level of expertise:

a) Business start-up (less than 2 years in business) or new to management role, or b) Experienced (at least 2 years in business or management role)

### **TIFF Balances**

It is important to consider the ways energy is balanced in the various modes of behaviour. Putting more or less energy into one mode or another may be appropriate for the circumstances or be counter-productive. An even balance of the five positive modes indicates flexibility and fluency of use, sometimes referred to as 'response-ability'. An over or under-balance can indicate possible 'stuckness' or a habit that can interfere with personal effectiveness. In some cases, it can simply be caused by extreme circumstances that demand a particular sort of energy output, e.g. a new baby in the family or job change.

Accounting mode needs to be considered separately. Here the key word is 'enough', as in, "Is there enough Accounting in relation to the other modes?" An excess or deficit of energy in this mode compared with the other four positive modes can be counter-productive.

It is important that people are aware of how they are balancing their energy so that they can adjust it if necessary to make it as appropriate as possible. The same goes for groups. This can avoid wastage of energy and thereby reduce stress.

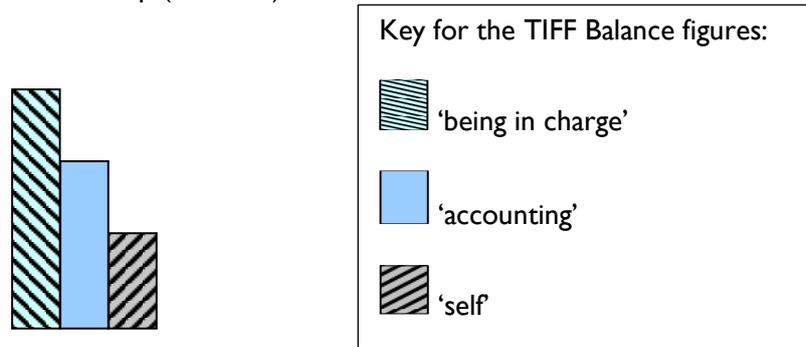
### Central Balances

The 'central balance' is that between:

- The sum of the positive scores for 'being in charge' (energy used on others' behalf).
- 'Accounting'
- The sum of the positive scores for 'expression of self' (energy used on one's own behalf).

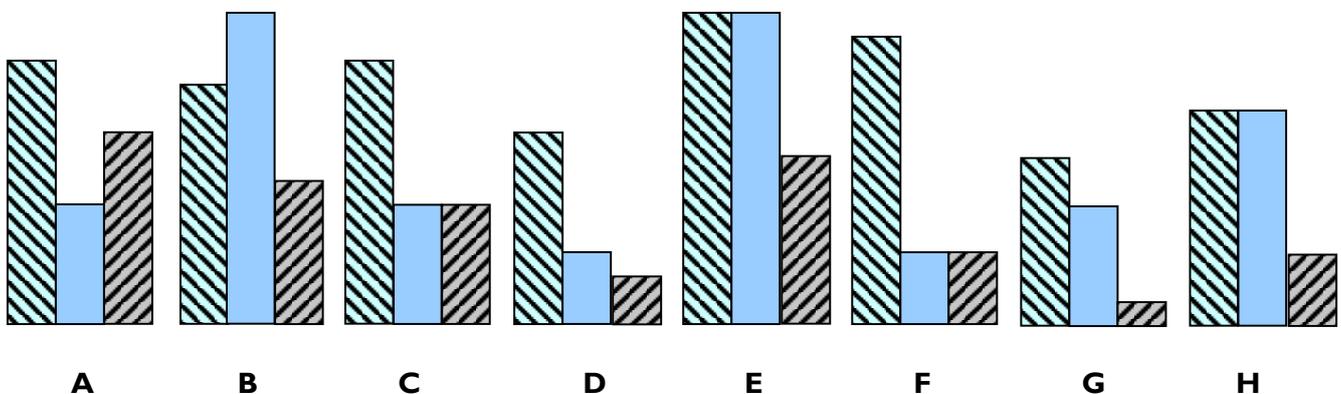
A healthy balance here matches satisfactorily with the demands of life at the present in a way that is sustainable and comfortable. It may be advisable to plan for respite if the balance is very uneven and causing undue stress. It is useful to realise that this balance can be adjusted and TIFF profiles provide the means to plan for this as necessary. Self-awareness is the vital factor.

Figure 1 - Central Balance for Entire Group (N = 219)



This shows even steps between the scores with most energy used on behalf of others and least on behalf of self. The reality of the professional demands of this population in general is that much energy is needed on behalf of others. The danger is that the imbalance means that personal needs may be discounted.

Figure 2 - Central Balances for the different Business Sector Groups



This array of 'central balances' shows the variation of the theme. It is interesting to note that none of the business sector groups reflects the same overall shape for the central balances, as that of the entire group. This emphasises the differences in use of energy between the groups. These relate to the nature of their context and focus of work, see below.

- Group A (creative arts & design) is the only one with 'expression of self' energy higher than Accounting.
- All the groups, including the Entire Group, however, have 'being in charge' showing the highest energy use except Group B (financial/legal), who have Accounting usage the highest. In these cases of Groups A and B this seems logical and to be expected and gives evidence of the validity of TIFF.
- Group E (training & consultancy) also demonstrate this, with energy balanced evenly and with high output in 'being in charge' and Accounting, and 'expression of self' energy nearly as high as for Group A. Perhaps it is their experience and expertise showing through.
- Group F (personal services) shows a startling imbalance that relates to the work of people in the helping professions ranging from therapy to hairdressing, see below.

- Group H (marketing and administration) show a similar pattern to Group E, but with less relative energy used in 'expression of self'.

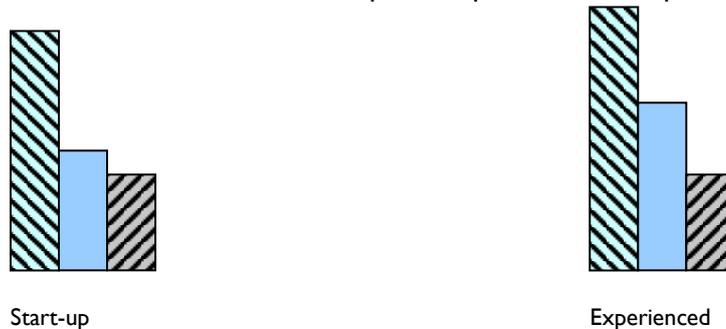
In all cases the individuals concerned discovered more about their balances as they explored the profiles. The Central Balance formed a starting point.

Figure 3 - Central Balances for the Owner/Directors and the Manager Groups



What is startling about this pair of balances is how different the Owner/Director group pattern is from the Managers and, indeed, the Entire Group. The Managers show a lower 'expression of self' score, perhaps indicating that they find less opportunity to use energy on behalf on themselves given the pressure from their roles as employed managers, whereas the owner/directors have a role in which they, in fact, are doing their own thing. Uniquely, of all the groups, Group A is also involved within work roles in 'doing their own thing' and show a similar balance.

Figure 4 - Central Balances for Start-up and Experienced Groups



The main difference between these two groups is the level of Accounting. This may be because the experienced managers have learned more about all the matters that have to be taken into account. Comments from feedback suggest that the more experienced managers had learned to weigh things up more thoroughly and not feel forced into making snap decisions. They also appeared to be more able than those starting up to distance themselves from the business and therefore tend not to take criticism so personally. They had a fuller Accounting facility to use to maintain their objectivity. It is interesting to note that the Managers too use more Accounting, perhaps indicating their awareness of vital decision making requirements.

Control/Care Balances

The 'being in charge' function is considered from the perspectives of 'guiding and directing' (control) and 'responding to need' (care). These two elements need to be considered together as the balance of energy between them affects the quality of leadership provided. This is the Control/Care balance.

Amongst the business sector groups, A (creative arts/design) and F (personal services) showed higher scores for 'care' than 'control'. Group A may be expected to be attuned to their own, and others, needs from a creative perspective. Group F's job satisfaction and business success is likely to be reliant upon their responding to clients' needs. It is, however important that they do not

care for others to the detriment of themselves and may need training to use more energy in a positive controlling way in order to set healthy boundaries for both themselves and others. This is linked to the rebalancing needs shown up in their Central Balance, see above.

Group B (financial/legal) and G (construction/manufacturing/engineering) show the most significant difference in the control/care balance. These business sectors may experience more authoritarian management styles and not realise the negative effect of coercive behaviours. This suggests a key learning requirement for managing people well is that leadership requires a combination of positive care and control. What is needed is a balance of inspiration and support with understanding and sensitivity. Our business culture, in particular, appears to put less emphasis on learning how to 'guide and direct' in a positive way. As Daniel Goleman (2004) puts it, "Many managers are too willing to criticize, but are frugal with praise, leaving their employees feeling that they only hear about how they're doing when they make a mistake." Goleman suggests 'the Artful Critique' which involves being specific, offering a solution, being present and being sensitive. TIFF's positive 'control' and 'care' combination uses the same principles.

Socialised/Natural Balances

These two elements are about expression of the self. 'Socialised self' behaviour involves learned behaviours to do with relating to others while 'natural self' behaviour is uncensored and free-flowing. Both these elements can be positive or negative.

The Entire Group and all of the sub-groups showed a higher 'socialised' than 'natural self' score. It could be expected that people in responsible job roles put more energy into their behaviour to do with relating to others, rather than into individualistic endeavour. Exceptional, however, in this matter was Group A (creative arts/design), which showed not only the highest scores relating to expression-of-self, but particularly the 'natural self' element where imagination and creativity are measured. This makes theoretical as well as realistic social sense, providing more evidence of TIFF validity.

Having examined the balances and noted their even or unevenness, the influence of the positive and negative scores is explored through ratios in the next section.

**The TIFF Ratios**

The Functional Fluency Index (FFI) represents the overall ratio for positive against negative behaviour scores. A score of 1, therefore, would represent an even balance between energy expended using positive and negative behaviours. A score above 2 indicates energy resulting in more than twice as much positive as negative behaviour. The ratios for 'Control' and 'Care' show how much more energy is put into positive rather than negative ways of behaving in terms of guiding and directing people (Control) and looking after people (Care); in other words, how effective the Control or Care is. The ratios for 'Socialised' and 'Natural' show how much more energy is put into positive rather than negative ways of behaving in terms of relating in a personal way with others (Socialised) and expressing individuality as a person (Natural). Again these ratios indicate the effectiveness of energy used for the 'expression of self', (energy on one's own behalf).

Figure 5 - Ratios for the whole population

Group	No. in group	FFI	Control	Care	Socialised	Natural
Total	219	2.32	1.42	1.51	1.50	1.84

Figure 6 - Ratios for the 8 business sector groups

Group	No. in group	FFI	Control	Care	Socialised	Natural
A	20	2.33	1.49	1.50	1.49	1.88
B	15	2.32	1.41	1.53	1.45	1.71
C	35	2.35	1.44	1.51	1.54	1.93
D	44	2.24	1.40	1.45	1.48	1.75
E	26	2.54	1.54	1.66	1.65	1.97
F	34	2.32	1.55	1.50	1.44	1.84
G	16	2.21	1.36	1.44	1.44	1.72
H	29	2.31	1.39	1.53	1.50	1.75

The need to develop positive 'control' behaviours is re-iterated through the ratios. For all but one of the business sector groups, 'control' is the least effective element even though, for the majority of groups, more energy is expended here than for the other 3 elements ('care', 'socialised' and 'natural').

The ratios of Group G (construction/manufacturing/engineering) indicated the lowest effectiveness of all the groups. (This included the highest 'negative control' score.) This group is one of the smallest in number and represents women working in especially male dominated businesses. The reduced effectiveness in energy used in guiding and directing may be indicative of too much authoritarian behaviour and/or being too self-critical. Training to enhance the positive aspects of 'control' and 'care' would be beneficial for both the managers and the staff.

The 'natural' ratio is highest for all of the business sector groups even though the least amount of energy is expended compared with the other 3 elements ('control', 'care' and 'socialised'). This indicates that when uncensored, free-flowing self-expression is carried out in a mature (i.e. age and context appropriate) way it can be very effective and successful. People often need encouragement to use energy this way and also to enjoy relaxing and doing their own thing. Seeing a positive 'natural' ratio can give a person the confidence to put more energy into this element and gain great success and satisfaction.

For all the business sector groups, the 'socialised' ratio is lower than 'natural' even though all groups expended more energy for 'socialised' behaviours. This suggests the women are less effective when relating to others which could be a combination of lack of communication skills and habits of either complying or resisting in a social setting. Training in effective communication could be beneficial.

Group E (training and consultancy) had the highest FFI of 2.54 indicating the most effective overall use of energy, showing the highest 'care', 'socialised' and 'natural' ratios. It may be expected that this group would be the most 'Functionally Fluent' as they are likely to have expertise in 'people skills' and, therefore, work effectively with others.

Group F (personal services) had the highest 'control' ratio due to the low negative score. The ratio indicates the effectiveness of the energy expended to thus guide and direct. Those within this group are likely to carry responsibility for standards, making sure that staff are supported and regulated. Although this group showed a joint highest positive care score, their 'care' ratio was brought down by the negative score. This means that some of the energy they expended in caring was wasted. The energy used in 'care' can even be counter productive if it is overindulgent or inappropriate. Group F's professional development needs, therefore, should be directed towards improving the effectiveness of their caring.

Figure 7 - Ratios for the Owner/Directors and the Managers.

Group	No. in group	FFI	Control	Care	Socialised	Natural
Own/Dir	126	2.31	1.45	1.48	1.50	1.84
Manager	88	2.34	1.42	1.53	1.51	1.81

It is interesting to note that the overall FFI does not show a big difference. The most noticeable difference is in the 'care' ratio which is lower for the owner/director group due to higher negative score. This may suggest an over-protectiveness towards their business and therefore a tendency not to allow others to help in its growth.

Figure 8 - Ratios for the Start-up and the Experienced beneficiaries.

Group	No. in group	FFI	Control	Care	Socialised	Natural
Start-up	82	2.26	1.45	1.48	1.44	1.76
Exprncd	137	2.36	1.44	1.55	1.54	1.84

The experienced group showed quite a significantly higher FFI score. All but one of the ratios were higher too, suggesting more experienced business women are using their energy more effectively across most behaviours. Interestingly, there was not a notable increase in overall positive energy expended. It was the lower scores for negative energy that improved the effectiveness. They had evidently learned how to save energy and reduce stress by avoiding counter-productive ways of behaving.

### TIFF Take2

The beneficiaries were given the opportunity to repeat the TIFF questionnaire after they had finished the course of business management and personal development workshops. The time between completing the two TIFF questionnaires ranged from 8 – 13 months. The time lapse from completion of the workshop elements and the fact that the end of the project coincided with the peak tourist season, reduced the uptake of TIFF Take2. However, those who did take up the opportunity found it very beneficial.

### TIFF Balances for TIFF Take2

Figure 9 - Central Balances for the Entire group (TIFF Take1) and for those who repeated TIFF (TIFF Take2)



The central balance for TIFF Take2 shows a slight increase in the positive energy for 'being in charge', Accounting and 'self'. A similar balance between the three is maintained, with a slightly

greater increase in Accounting. This would be a bonus in terms of increasing self-awareness and understanding and overall effectiveness.

TIFF Ratios for TIFF Take2

The group profile scores show increases in all of the ratios for the second TIFF profiles. This is evidence of increased effectiveness in every area – ‘being in charge’ (control and care), Accounting and ‘self expression’ (socially and as an individual).

Figure 10 - Ratios for the whole group (TIFF Take1) and for those who repeated (TIFF Take2)

Group	No. in group	FFI	Control	Care	Socialised	Natural
TIFF Take1	219	2.32	1.42	1.51	1.50	1.84
TIFF Take2	87	2.49	1.51	1.63	1.65	1.90

The improved effectiveness of energy use has come about more by a reduction in negative scores, as the positive scores show little significant change. There has been a significant increase in the effectiveness of ‘control’, but it is still less than for ‘care’, even though the energy expenditure for each is very similar. This indicates a need for further training to focus on the positive elements of ‘control’ when managing people, as mentioned earlier. The ‘socialised self’ ratio shows the biggest increase, suggesting that the emphasis in the personal development workshops on improving self-confidence and assertiveness has been successful. Continuing to focus on developing positive behaviours when relating to others, and reducing the more negative ones, will further improve effectiveness of energy usage here.

Paradoxically the accuracy of the TIFF results was emphasised particularly by those women whose FFI scores had actually reduced on the second TIFF. Most of the women with a decreased FFI score had experienced some quite dramatic changes in their professional and/or personal lives during the interim period. They viewed their increased negative behaviours as being a result of their current situations and were keen to continue to work on using energy more effectively to give more positive outcomes. Even for them, however, the specific behaviours that they had identified in their personal action plans to work on, showed a score shift in a more positive direction almost every time. This highlights how useful TIFF can be in helping to manage change. It enables individuals to realise that they are continuing to use those positive behaviours which work effectively for them, in spite of struggling with stress or trauma. This encouragement gives a vital boost to morale. Writing about ‘appreciative inquiry’ S, Lewis, J, Passmore and S, Cantore (2008) quote Syder et al on the value of encouragement. “Positive affect stimulates feelings of hope and optimism which are associated with greater tenacity, versatility and self confidence.” [pp 932-934]

**Conclusion**

Evidence from the project evaluation indicated that, in conjunction with 15FQ+, the women’s experience of TIFF had contributed to their improvement in self-awareness and confidence. Comments from feedback suggested that the two psychometric assessment tools complemented each other well. 15FQ+ provided greater self knowledge through exploration of personality traits. The TIFF profile then added to this by focussing on behaviours in context to appreciate how they led to positive or negative outcomes and how desired change could be achieved. One woman reported “It made me think a lot about my behaviour and how I could modify it for the better, both personally and professionally. Having repeated the TIFF questionnaire, there was a significant improvement in the areas I had been working on”. Women who were relatively new to personal development found that learning the TIFF model gave them a framework and language to which they could relate. Their own profile then identified changes they could make which would improve their effectiveness.

The more experienced business women appeared generally more functionally fluent, as might be expected. Training for those starting up in business needs to focus on developing positive ways of

'being in charge' and enhancing collaborative communication skills. This could assist in speeding up the process of learning effective use of energy as a manager. Otherwise this might be only slowly gained through ongoing business experience. Their business success could be much enhanced this way.

The 3-tier sub-grouping system enabled the TIFF results to be used to highlight the particular training needs of different groups. The varying spread of use of energy across the business sector groups indicated different areas for development for specific sectors. For example, it is important for those in the personal service sector, to learn to 'care' without getting worn out so that both carer and cared for continue to benefit.

The TIFF profile provided each woman with a greater self-awareness and a plan for behavioural change that was used to focus their learning from the personal development workshops. A typical comment was, "I have found that the assessment has allowed me insight into making certain changes in my work and home life, leading to improved relations in both areas. It has been very positive." In addition, TIFF provided an important measure throughout the training programme and beyond, showing its usefulness on an ongoing basis as a reminder to continue to use behaviours giving positive outcomes and work to change those giving counter-productive outcomes.

The TIFF Take2 results emphasised how the greater self-awareness and understanding offered through TIFF can be used by individuals to take charge of their own development. One young woman found that her TIFF profiles explained why she may have had some conflicts with people in the past, and that TIFF really helped her awareness of strengths and weaknesses. The experience helped her feel more confident about her abilities. The evidence from the data, feedbacks and evaluations showed that the majority of women gained self esteem, objectivity, empathy and courage in both their personal and professional lives. In essence they became more functionally fluent.

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## References

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