Belbin self-perception inventory: reflections and self-evaluation

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The Belbin self-perception tool is often compared alongside personality assessment as a means to categorize individual team member personalities. In fact this type of understanding lies firmly detached from the truth. This paper outlines the differences in Belbin's model compared to other manifestations such as the Myers-Briggs Type Indicator and the Minnesota Multiphasic Personality Inventory. It then goes on to provide a critical analysis of the potential Belbin's model has to offer. As a means for the report to form example, a case study type approach is adopted in the form of a retrospective account of a recent teamwork project undertaken by the author, from which examples of current opinion ware compared.
Further to the Belbin self-perception inventory analysis, the general group dynamic is then scrutinised. An account of the team's behaviour in terms of its approach and management of cooperation and competition, conflict and communication is also assessed. Differences in cultural values and social perspectives are also investigated in terms of their effects on the performance of the group
Finally conclusions are made as to the validity of Belbin's model and guidance offered to ways in which the model could be implemented from the managerial perspective.

Introduction

The Belbin self-perception inventory is a tool for determining how an individual perceives themselves and their behaviour as a working member of a team. It comes as a self-assessment and can be compared with a further peer assessment can be compared to highlight any contrasts or support original findings. It is not a personality assessment tool like Myers-Briggs type indicator, a self-reporting assessment based on the factors highlighted by Carl Jung (Carlyn, 1977). Other tools include the Spectral Management technique, which exposes management style types as well as giving learning roles and team assessments (Lessem & Baruch, 2000), and the Parker Team Player Survey which allocates individuals into the categories of Communicator, Collaborator, Challenger, and Contributor. This tool also takes the contrasting format of a self as well as a peer rating

The Belbin test maintains sizable popularity and is widely used among management. Originally there were eight team roles according to Belbin's, though nowadays this has been redefined to include the nine types below:

- Plant
- Resource investigator
- Co-ordinator
- Shaper
- Monitor Evaluator
- Teamworker
- Implementer
- Completer Finisher
- Specialist

Belbin lays argument that the optimum size for any team is 4 people. Beyond this figure he suggests individuals cannot work closely enough in order to constitute a team and are therefore to be defined as a group (Belbin, 1981).

The Belbin test was taken and the 'formed' characteristics (those falling in the 'preferred' or 'least preferred' roles) were reflected upon through a retrospective view of recent groupwork activities. The group work used for this paper was an educational environment based construction project management exercise. The team consisted of four individuals from different construction backgrounds. In addition to the background diversity, each member originated from a different area of Europe, the age range varied from 20-39 years and imbalanced gender ratio of three females to one male was present.

Critical reflection of Belbin self-perception inventory results

Review of relevant opinion

There are several alternative psychometric approaches available, such as the Myers-Briggs Type Indicator (MBTI) and the Minnesota Multiphasic Personality Inventory (MMPI), both of which are held with high regard amongst scholarly circles (Carlyn, 1977; Senior & Swailes, 1998). Possibly through ease of use and understanding, the Belbin inventory has pushed ahead of the mainstream techniques as a typical management tool.

It should be noted that the Belbin self-perception inventory, however, has attracted several critics, notably Furnham et al,(1993). Their concerns about inaccuracy were played out in a service of exchanges between themselves and Belbin. Belbin's retort was founded on their misunderstanding that the inventory could be used for scholarly enquiry, instead of the managerial referencing it was intended for (Belbin, 1993) and should be used alongside the observers assessment (Senior & Swailes, 1998).

Prichard and Stanton (1999) criticise the absence of the 'people manager' in the Belbin model whilst they add weight to the claims that mixed teams perform better than those composed of similar roles, especially shaper types (as discussed later).

According to Katzenbach & Smith (1993) the role of teams has become a primary force when measuring the performance of top end organisations. It has become apparent that the quality of human resources determines the performance of the team (Katzenbach & Smith, 1993; Partington & Hilary, 1999). Swailes & McIntyre-Bhatty (2002) also support the claims, adding that Team Role Self Perception Inventory tools (TRSPI) have contributed greatly to the understanding of team roles within the work situation, having helped team managers to appreciate this concept, and can also be of great use to HR managers.

There is a need for identifying task-orientated as well as social/emotional-orientated skills Prichard and Stanton (1999) cite Torrington et al.(1985). In addition, they also support the importance of developing team-role theory, concluding that their research has highlighted a considerable improvement in consensus decision making in groups of mixed roles, over those of purely shaper roles, supporting Belbin's 'role balance' theory (Prichard & Stanton, 1999). They go on to make a key observation that teams with multiple 'shaper' characters are more prone to conflict and less capable of reaching consensus. It is their understanding that when team members adopt a particular role other members would object to the way the role was played or who should actually play the role. This created increased tension and decreased productivity. They list possible causes for this behaviour to be competition amongst members for the same roles (Levine & Moreland, 1990; Prichard & Stanton, 1999). Their study concludes that team balance indicates better performance than teams of pure shapers. Better task processing skills in mixed teams leading to more effective team functioning. Results concluded superior performance (Prichard & Stanton, 1999).

Pritchard and Stanton (1999) do however question the reliability of Belbin's role identification, recommending further research to validate them. Whilst they remain 'on the fence' they do credit the role identities, regarding them as beneficial tools for identifying the needs and expectations of team roles, however full integration of teams is not necessary in order to facilitate effective team operation (Baiden et al., 2006, p. 22).

McHarg and Coombes (2012) insist that Belbin profiling, in order to construct mixed teams, had no effect on group functionality in problem-based learning (PBL) environments. They attribute this to the participants were focused on individual rather than group learning goals. Watkins and Gibson-Sweet (1997) recommends that in educational environments, groups are chosen at random in order to demonstrate the practicalities of working in group situations.

Analyses of the Belbin test results

According to the results of the Belbin self-perception inventory, I show three strong characteristics in the preferred roles sector, and one in the least preferred sector. It was therefore decided to focus on these three distinctions and address opinions and popular understanding regarding their validity.

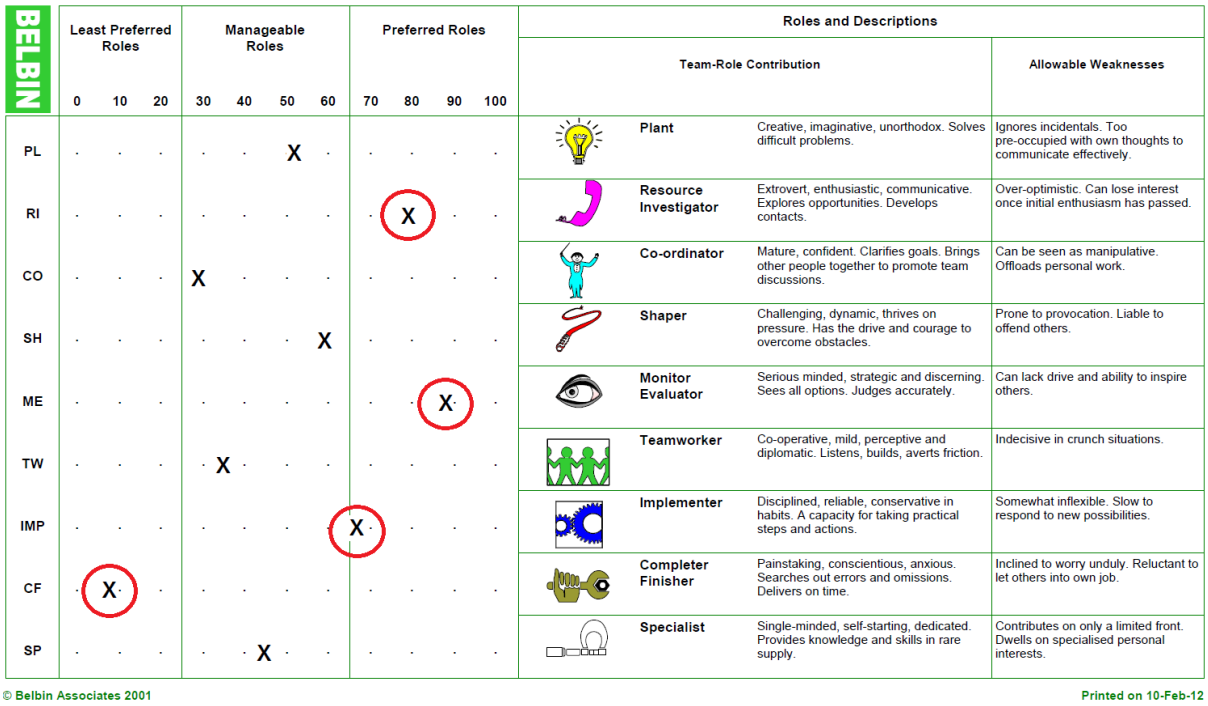

Fig.1 Results from Belbin self-assessment test

Monitor evaluator

This characteristic fell as the most preferred of all. Belbin describes the Monitor/evaluator as having a very analytical yet accurate view of problem solving, being able to detach from bias. On the down side they often lack stimulus and can struggle to inspire others.(Belbin, 1993)

In the sample situation I felt that I played this role quite accurately. My perception of myself is that of being rational and able to weigh up all the options. Fisher et al (1998) describe these players as being especially useful at steering teams into making decisions due to their ability to evaluate alternative courses of action. I would agree that this characteristic is prominent in my personality.

Fisher et al (2000) go on to support Belbin's idea of pairing the monitor evaluator with the plant, and again I would agree. Upon reflection of the groupwork exercise, I can draw upon examples of beneficial outcomes from 'plant' type members of the team.

Resource investigator

This role suggests an extrovert, full of enthusiasm and extremely sociable. These are both characteristics which I can see in my own personality. They make good relations and explore opportunities. Weaknesses of this role may include loss of interest, especially after the initial enthusiasm has worn away. Again, I agree. I can see that one of my greatest weaknesses is my attention span. Once the interest wains, I soon struggle to pursue the team's goals. This is despite my initial burst of enthusiasm, which is often coupled with an exaggerated sense of optimism, akin to Belbin's description. Interestingly Belbin (1981) groups this role with that of the team worker, a role which I scored quite low in. He justifies the pairing by explaining the high degree of communication skills shared by these roles. He adds that resource investigators develop a broad network of external contacts

Implementer

According to Belbin, this role involves transforming ideas into practical working actions. The personality of this player will be disciplined, reliable and conservative. He will have good organisational skills, be systematic, and lack spontaneity. This could not be further from my personal view of myself and I strongly disagree with this result. However, I have little experience working for an employer and may therefore have a naïve understanding of what Belbin's description really means.

Completer finisher

The completer/finisher has good ability to look into the detail for omission and error. They are contentious and deliver on time. On the down side they are inclined to work unduly and reluctant to share tasks with others. This role came out as least preferred of all and would indicate that I would chose to avoid scrutiny and relish shared task work. This result is another which I can strongly relate to and agree with. As previously discussed, my attention span often prevents me from finishing tasks and my attention to detail is often hindered through a lack of stimulus.

Fisher and Hunter discuss another grouping of roles includes the plant, monitor evaluator, completer finisher and shaper. (Fisher & Hunter, 1998). Interestingly my strongest and weakest characteristics fall into the same grouping.

Discussion

The characteristics of chairman, team worker, resource investigator and company worker fall under the umbrella of 'relationship based roles, and plant, monitor evaluator, completer finisher and shaper under 'task' based roles (Fisher & Hunter, 1998).

Fisher and Hunter (1998) divided the roles into 'relationship and 'task' categories. They conclude that when grouped roles fall into the 'relationship' side, the team is more prone to strong interaction but low productivity. Similarly falling on the 'task' side is likely to cause low interaction as well as low productivity. The ideal scenario for producing both strong interaction and high productivity would include a fusion of both categories. They conclude that players with relationship based primary roles are not likely to adopt task based secondary roles, and vice versa.

Critical evaluation of team dynamics

The case scenario provided four members with contrasting profiles. Differences in nationality, culture, gender, age, education and personality gave an ideal opportunity for the breeding of diverse behaviour. In such a multi-cultural environment it was felt appropriate to make some analyses of Hofstede's dimensions of culture

Hofstede's studies into the dimensions of culture focused on six topics:

- Power distance (PDI), perception of inequality
- Individualism versus collectivism (IDV), perception of responsibility, 'I' or 'we'

- Masculinity versus femininity (MAS), assertiveness versus cooperation
- Uncertainty avoidance (UAI), perception of the future and security
- Long-term versus short-term orientation (LTO), traditionalist or adaptive/innovative
- Indulgence versus Restraint (IVR), engagement through wants versus needs

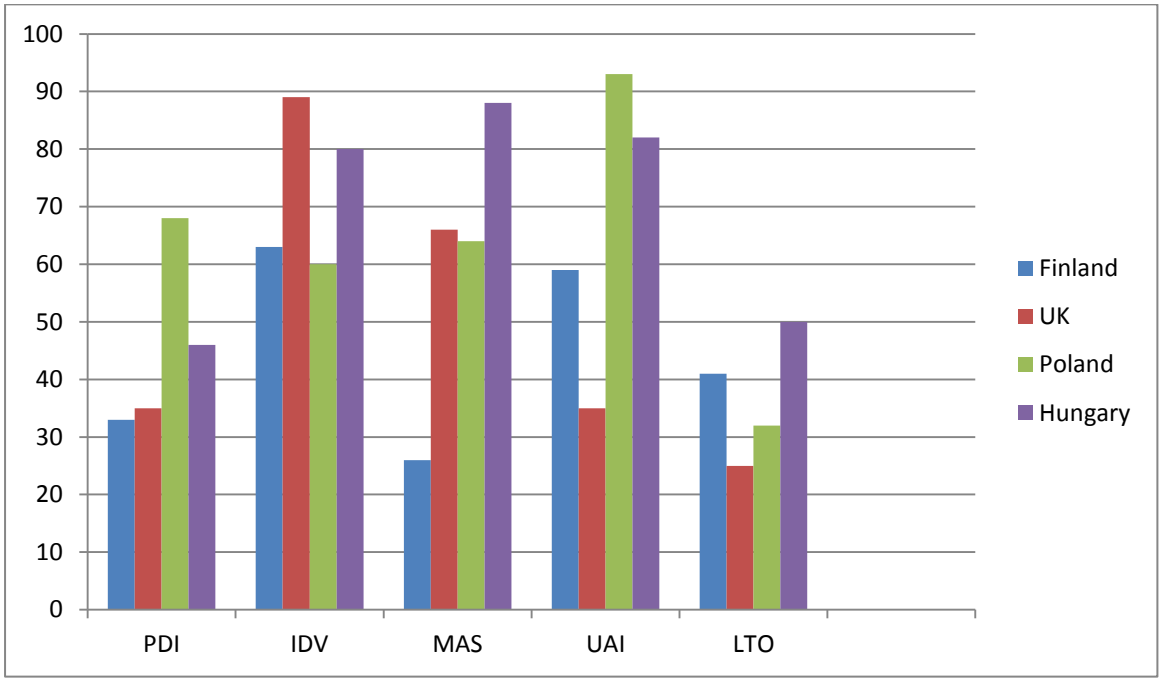

Fig.2 Adaptation of Hofstede (2001) dimensions of culture for team configuration

The chart above is a graphic comparison of Hofstede's cultural dimensions. Conflict was a regular occurrence among team members. Interestingly the Polish national showed a great deal of individualism, refraining from collaborated work wherever possible, whereas the British member took part in promoting task partnerships. This behaviour seemed to be in contrast with Hofstede's indicators; however the power distance indicator predictions of "latent conflict between powerful and powerless" hold true (Hofstede & Hofstede, 2001, p. 97).

In the sample situation the team was compiled outside of the influence of the four team members. The task was assigned via a 'preliminary brief' document to facilitate a project which was to last the duration of one full semester. I feel that my monitor/evaluator character was very predominant during the early stages of the project, instigating a thorough preliminary investigation of the relevant.

Communication

"Every act of communication is an act of translation"

From "If this be Treason", by Gregory Rabassa (Bliss, 2011)

Communication is the social connection between two or more members in the group situation. Although English, or Euro-English (Jenkins et al. 2001), was the 'lingua franca' of the team (an amicable situation as no two members shared a common mother tongue), interpretation and expression did become an issue at times. Members where seen to be conferring with and seeking support from sources external to the group, mostly from their fellow countrymen. This made the group seem fragmented at times.

As mentioned earlier, the team seemed to have several common personalities. One of the traits which seemed to prevail was the incapacity to see through some of the smaller mechanisms. Team meetings was one of the more predominant aspects of concern and were often dismissed, postponed, unprepared for, badly followed up, or rushed. When they did take place they often involved a great deal of conflict among team members. Reasons for this behaviour could be the result of cultural differences (Hofstede & Hofstede, 2001), differences in personality (Wilde, 2010) and perceived roles (Belbin, 1993), gender (Brahnam et al. 2005) or age differences. This proved cause me great personal frustration which would agree with Belbin's account of the 'Implementer', and conflicting with my own opinions of myself.

Levi (2007) dissects communication into three parts, the sender, the receiver and the message itself. He insists that trust needs to be established in order to facilitate and improve good communications within teams. 'Receivers' will develop distrust for 'senders' who appear to benefit more from their messages. It could be understood that in the group situation, opposing personalities, possibly competing for dominance in some way, eroded this trust resulting in poor communication and understanding.

An interesting point to make is the omission of a leadership structure in the team. Decision making took the form of a mix between consensus and 'laissez-faire'. With no one to steer meetings and decision making, the group often experienced difficulty reaching consensus, which left a certain degree of resentment among opposing members. My usual reaction to this would be to take the reign, however in this situation, opposition was met and I found myself backing down from confrontation. In hindsight I feel this may have been a result a combination of gender conflict (Martin, 1990) and similar role-types clashing (Belbin, 1981).

Co-operation and competition

Co-operation and competition is essential for productive team operation, and when done successfully, can offer huge benefits (Levi, 2007). Within teams it is often derived through cultural differences (Hofstede & Hofstede, 2001), personality (Knight & Dubro, 1984, cited in Levi, 2007, p.) and rewards or compensations.

Cultural differences were abundant in the team situation according to Hofstede (2001), and the predominant factors could be interpreted to be individualism, masculinity/femininity and uncertainty avoidance as they all included at least one member who scored 80% or more. Upon reflection this could be seen to transpose into……..

Personality wise the team appeared to have four opposite corners, with all five elements, neuroticism, extraversion, openness to experience, agreeableness and conscientiousness, proposed by Costa & McCrae (1992) (or their opposites) included in the mix. This has been supported by the triple-personality breakdown offered by Knight et al.(1985)). They suggest that team players can display three distinct characteristics competition, co-operation or individualism. They also conclude that age and gender are related to the expression of social values and therefore team behaviour.

On an individual basis, team members had one single tangible reward available, the final grade, attained through a mixture of group and personal presentations. Intangible rewards would take on the form of the learning outcomes and attained knowledge, accomplishment and satisfaction. Different members of the team may hold different motives or be engaged at different levels. The group seemed to have at least one member that followed their own single agenda. Goals were not shared. In the case example, the team would be assessed as a group as well as individually. The lack of team co-operation from some members may have been attributed to this mixed motive situation according to Levi (2007, p. 74) citation of Wall & Nolan (1987).

The team rapidly developed conflict between three of the four members over differences of opinion as to how tasks should be performed and by whom. It became apparent quite early on that a power struggle was happening. The resulting conflict will be discussed next.

Conflict

Conflict within the group seemed to be an everyday occurrence. This resembled Prichard & Stanton's (1999) theory of too many Shapers. Although this report focuses more on the three

extreme roles outlined in the Belbin assessment, the fact cannot be ignored that Implementer as well as Shaper characteristics were both borderline preferred roles.

The group's cross-cultural connotations may have also given opportunity for the emergence of a Machiavellian type dimension, as documented by Macrosson & Hemphill (2001). It was common at times for the group to split into four corners, each fighting for their own dominance. However, according to Christie & Geis (1970) this type of behaviour, though not impossible, would not be so likely either due to the high ratio of females in the group.

Sources of conflict

Whilst Levi (2007, p. 113) offers the concept of conflict being positive (healthy) or negative (unhealthy), he also highlights that both varieties have similar roots, relationship based or those that materialise through task based activities, with Jehn & Chatman (2000) introducing a third aspect, process based conflict. Similarly, Kassab et al. (2006) cite Williamson (1979) as identifying three root causes to be behavioural, contractual and technical problems due to uncertainty and low experience. Individual factors which promote conflict in teams include influence, resources, differing values, opinions and goals (Gardiner & Simmons, 1992; Handy, 1976). It could certainly be confirmed that values would differ through cultural differences (Hofstede & Hofstede, 2001) though technical and contractual aspects were unlikely to cause major conflict due to the educational environment. (Wolstenholme, 2012). The different stages of relationships within teams has an effect on the type and character of conflict (Levi, 2007, p. 115). On an organisational level, groups as well as individuals will compete for influence, power and resources. Opposition will be driven by differences of opinion, priority, goals and values (Gardiner & Simmons, 1992; Handy, 1976). Conflict may peak in the early to middle part of a project and then subside once the team has established a routine. Conflict within the team seemed to peak and lull repeatedly. Peaks came when key decisions needed to be made and the lull was apparent when the onus was focused on time. Disputes in the construction industry often arise as a result of the scale of the work, poor coordination amongst participating players, badly prepared contract documents, inadequate planning, financial problems, and conflicting opinions concerning resolution methods and site orientated problems (Klinger, 2009; Wolstenholme, 2012; Yousefi, Hipel, & Hegazy, 2010).

Conflict resolution

" The resolution of differences or potential differences takes up the largest single chunk of managerial time and energy" (Gardiner & Simmons, 1992, p. 192)

There are several tools for the effective resolution of conflict within teams. They usually come under the terms negotiation, mediation and arbitration. Due to the circumstances of the case scenario, arbitration was unavailable option and most situations were resolved through negotiation and majority consensus. Mediation was an available option but was never resorted to, possibly due to a common sense of pride amongst the team.

Conflict management

Avoidance of conflict in the first place is a likely candidate for this type of scenario. In retrospect the solutions seem quite obvious. Game theory was a discreet tactic deployed by some members of the team. The lose-lose situation having acted as a driver to keep the team from 'falling over the edge' and will also have contributed to the lower achievements in the end (Ma, 2007).

Conclusion

The Belbin self-perception inventory, whilst not an effective personality scoping tool, is able to provide a relatively accurate picture of perceived roles within the team environment. The accuracy of the resulting report turned out to be very much in line with the individuals own perception, however, as the input data was based on the subject's own self perceptions and preferences, this could have expected to a degree. Critics of the test argue that its role should not be seated in scholarly enquiry (Furnham et al., 1993), a point supported by Belbin himself who adds that it is best suited to managerial referencing, alongside the observer input (Belbin, 1993).

From the test results, two out of the three preferred roles given to the author (monitor/evaluator and resource investigator), as well as the single least preferred (completer/finisher), were deemed to be accurate showing that the author held an accurate view of his preferred position. The one characteristic which proved to be the exception to the rule was that of 'implementer'. Belbin's description of this role included having good organisational skills and lacking in spontaneity. This inconsistency could possibly be explained away through a lack of employment experience on behalf of the author.

Within the team, a high rate of 'task' based players was a probable cause of low productivity and high conflict (Fisher & Hunter, 1998; Fisher, Hunter, & Macrosson, 1998). Cultural differences, as well as gender, age and education all had influence on the social structure within the team. Conflict didn't seem to come as a result of any one aspect, but instead from

several directions. Communication breakdown were born through a clash of different personalities as well as similar perceived positions. Mixed motives and individual goals were also seen as possible drivers of incompatibilities between team members.

Team dynamic left much to be desired in this scenario. Future recommendation would include the aspect of selective forming of the team, through Belbin profiling and also including true personality based methods such as the Myers-Briggs type.

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