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Abstract

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Keywords
improve, team, performance, psychometric, type, inventory, development, application, personality

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An application of a psychometric personality type inventory to improve team development and performance

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ABSTRACT

The issue of individual type preferences and how they relate to learning and human resource management are explored. Team learning, knowledge transfer, characteristics of leadership and trust and trusting in the context of team development and performance, are analyzed through the use of the Myers Briggs Type Indicator. The research is conducted with a semi professional Australian Rules football team. The team consists of a culturally diverse group. Predominantly, Australian men between the ages of 18 and 35 years. The men are university educated, trades professionals or blue collar workers, who volunteered to complete the Myers Briggs Type Indicator with the expectation of enhancing team functioning and performance. The authors' experiences of sports coaching and the use of psychological type theory are described when applied at a pre season training camp. Critical team performance factors are compared and contrasted with individual personality type preferences over a period of several weeks. The implications, for more extensive use of type theory in sporting team development, is discussed in the context of team learning, knowledge transfer, trust and trusting and leadership.

Key words: transfer of training/ learning, organisational culture, leadership, motivation, individual learning, group dynamics.

The purpose of this project was to create a learning culture to improve team cohesion using the Myers Briggs Type Indicator (MBTI). It was envisaged this would lead to an improvement in team performance. The setting is an Australian Rules Football Club.

The academic literature on the use of psychological personality type indicators and the development of sporting teams is limited. A database search of the academic or research literature in this area revealed little evidence of credible research regarding the application of MBTI to competitive sporting teams. The paper aims to add to the literature and particularly focuses upon team learning, knowledge transfer, leadership and trust and trusting in the context of individual personality type preferences. The outcome of the project indicates there are tangible benefits of employing MBTI in supporting a sporting teams performance providing the other components of performance are of equally competitive advantage.

BACKGROUND

The Wollongong Australian Football Club (the Club) is a semi-professional organisation and is in its third year of competing in the Sydney AFL Premier Division. The team, consisting of a culturally diverse group of predominantly, Australian men between the ages of 18 years and 35 years, are university educated, trades professionals or blue collar workers.

Developing the team through a personality type workshop, as part of an overall team performance improvement strategy, is now explored in the context of a senior semi professional AFL club.

As identified by the National Association for Sport and Physical Education, competency domains contributing to effective coaching of athletes include a) growth, development and learning , b) psychological aspects, and c) skills, tactics and strategies. (Myers, et al, 2006)

Furthermore, research performed by McDermott, Levenson & Newton (2007), identified three unique constructs existing within organisations benefiting from greater use of coaching. These include coaching impacting upon 1) strategy and team work, 2) motivation and organisational culture, and 3) communication and perceived responsiveness.

Growth, Development and Learning

The coach is also required to identify and provide opportunities for players to become effective leaders. The coach is also required to be involved with personal development, to improve coaching techniques and research new methods for increasing player development and team performance.

Underperforming personnel or those struggling with particular tasks will benefit from guidance, mentoring, demonstration and training aids. Receiving and providing consistent feedback is also an expectation and a fundamental job requirement for coaches. (Lindbom, 2007)

Psychological Aspects of Coaching

The objective is to develop a 'winning culture', motivating players and promoting opportunities for players to reach their potential and to contribute towards team goals. Culture can be significant in helping organisations succeed in difficult times and retain services of its talent despite promises from competitors of more money to jump ship. (Lindbom, 2007)

Skills, Tactics and Strategies

The coaching strategy involves holistic coaching and player engagement initiatives. The overarching aim is to implement a game plan, influenced by the team's functioning and development. There is a requirement to address the development of the skills of individual players, assist players to adapt to the team plan, dependent upon internal and external conditions and ensure players understand and are aware of the requirements of the different roles they perform within the team plan.

To effectively perform the above competency domains, the coach is required to facilitate team interaction. During pre match preparation, the coach facilitates training sessions in the days leading up to matches, designed to improve players' skills and impart knowledge regarding the team plan. Match day involves the coach communicating requirements and obtain feedback on match progress and the need to adapt the team plan accordingly. Debriefing after the match, includes feedback to and from all players regarding individual and team performance and its

application of the team plan.

THE MYER BRIGGS TYPE INDICATOR

The Myers Briggs Type Indicator has been selected as an appropriate instrument to explore individual and team functioning for the purpose of this research because of its well-established history and researched past, although not all of this research appears to be evidenced based. Versari (1998) for example, postulates that certain "personality types are attracted to and succeed in certain sports just like they do in certain occupations", however does not support this with verifiable evidence. What is perhaps more convincingly argued by Versari (1998) is that it appears beneficial that athletes and coaches understand their personality preferences and the teams MBTI profile, because it is assumed that if these things are known the more productive teams can be. There is an expectation by the writers', that if this assumption holds true, then this will lead to more motivated and committed behavior by team members. These benefits would then become useful for the individual player in career and life planning, self-management (such as stress/time management) and improved interpersonal skills. There may also be further applications for sports team building and sports management training.

The learning styles of the team were assessed against Kolbs' (1984) traditional learning model illustrated in figure 1. The concrete experience of playing matches draws on what is actual and real, as opposed to training simulation, which is related to what might be and the challenge of learning something new. Reflective observation is achieved through viewing video footage of played matches and of matches at higher level of competition, to reflect upon individual and team performance. Abstract conceptualization is achieved through dialogue about the strategy and concepts outlined by the coach. Active experimentation is learned through skills practice and playing football matches. Although helpful in identifying learning processes, Kolb's theory was perceived, as limited, in terms of how verbal transfer of knowledge might be effectively facilitated. Therefore, the communication between players and the coach and between themselves

was observed and analyzed.

METHODOLOGY

A qualitative approach was used to ascertain the changes in team functioning and the preferred

learning styles of participants following a Myers Briggs Type Indicator workshop.

As part of the Club's pre-season training camp, one of the authors' facilitated the MBTI

workshop.

Preparation for this workshop involved the distribution of MBTI questionnaires to players in the

week preceding the camp. Thirty five (35) players volunteered to complete the Myers Briggs

Type Indicator and participate in a MBTI workshop.

Players, who completed the questionnaires 95%, then returned them to the facilitator for analyses.

All of the participants were new to the MBTI and although perhaps initially skeptical, the

consensus was summed up by the comments below:

> *I thought the Myers-Briggs Type Indicator was very beneficial in broadening my*
> *awareness of other people's personal traits. Before I did the MBTI, it was not clear to me that*
> *there were alternate ways people used to overcome the same problem or situation. This was all*
> *new to me… Player*

The workshop provided information to the participants about the instrument and the 16

preferences identified by the participants self report. Activities to clarify type were used and each

individual had the opportunity to explore each of the type preferences.

Following the workshop, observations of players team functioning and learning style were

recorded and analyzed in terms of communication, commitment and motivation.

Limitations

The study was conducted with a specific cohort; the cohort may not be representative of any other population. The data collection was by necessity, subjective and may be influenced by the author being responsible for both data collection and interpretation. The study was not funded. Ethical approval was not sought as the participants were all consenting adults who freely completed the MBTI instrument and volunteered to attend the workshop.

Findings

The analysis indicated that the majority of participants improved both intrapersonal and interpersonal skills in terms of how they communicated with the coach and between each other. The players demonstrated an array of learning styles including, observation, dialogue, discussion and simulation. The analysis is subjective, and a clear limitation to the study. Ideally a base measurement of these criteria could have been taken prior to the MBTI workshop. However, the observations combined with the participant's comments did show a marked improvement. It could be argued that this may have happened regardless of the intervention but the findings are consistent with the literature.

The observations and comments are supported by the wider literature on team development and performance (Bamber and Castka 2006). Statistics of the group indicate 33.33% of the participants in the workshop have an Introverted (I) – Sensing (S) preference and 25.80% have Extraverted (E) - Intuition (N) preference. The remaining 40.87% include Extraverted (E) - Sensing (S), Introverted (I) - Intuition (N) Extraverted (E) - Thinking (T), Introverted (I) - Thinking (T), Extraverted (E) - Feeling (F) and Introverted (I) - Feeling (F). The Judging (J) – Perceiving (P) dichotomy, although equally of interest, is explored in an expanded version of this paper.

The comment below was representative of several received by the authors following the MBTI workshop: "*Overall I found the Myers-Briggs Type Indicator very useful to not only learning about myself but learning about others as well" Player.* There was agreement at the workshop by

the players to share their MBTI preferences.

It is important to recognize that the participants valued the opportunity to learn about themselves and about others. This may indicate that further self development activities may be well received.

DISCUSSION

Team learning

The expectation was that the use of the MBTI might ameliorate some of the barriers to team development highlighted by Castka, Bamber, Sharp and Belohoubek (2001) such as: "mismatched needs, confused goals, unresolved roles, personality conflicts, decision making, and insufficient feedback". Some of these barriers are to do with the characteristics of individual type preferences which are self reported by those completing the MBTI.

The approach taken by the writers' was to try to identify the players' preferred learning and personality styles. This approach is supported by the abundant research conducted to investigate the relationship between aspects of the individuals' personality and their approach to learning (Zhang 2003). Furnam (1992, 1996a and 1996b) investigated the relationships between personality and learning styles and again discovered relationships between the two constructs. Busato et al (1999) considered the relationships between achievement motivation and the Big Five personality traits for 900 university students and concluded that there was an overlay from learning styles to personality traits.

Bohm et al (1991) and Senge (1990) for example have emphasized the two primary types of discourse, dialogue and discussion, as important to a team capable of generative learning. Generative learning is the active process of saying, "Oh. That's like ..." It's the process of constructing links between new and old knowledge, or a personal understanding of how new ideas fit into an individual's web of known concepts. "The essence of the generative learning model is that the mind, or the brain, is not a passive consumer of information, instead, it actively constructs its own interpretations of information and draws inferences from them" (Wittrock, 1989, p348). Learning involves mental activity - thinking.

Therefore the decision was made to facilitate a team learning environment which was conducive to the promotion of dialogue between members of the team, in other words, to allow the process of thinking and reflection to be facilitated without unnecessary 'noise'.

In dialogue, Bohm et al (1991) contend, a group accesses a larger pool of common meaning which cannot be accessed individually, the whole organizes the parts rather than trying to pull the parts into a whole (Senge, 1990, p240)

Bohm et al (1991) identifies three basic conditions for dialogue:

1. all participants must suspend their assumptions, literally to hold them 'as if suspended before us'
2. all participants must regard one another as colleagues
3. there must be a facilitator who holds the context of dialogue

The coach assumed the role of facilitating dialogue. The initial assumption was that the coach would be required to interject, when assumptions by some team members were negatively influencing the intensity of the team's interactions, interestingly this assumption never actually materialized. For example: new ideas and ways of doing things differently, were debated on there merits and given the opportunity to be implemented through a consensus by the team members.

Knowledge transfer

What is known is the process of acquisition, interpretation and transmission of information will be vital for the success of knowledge development. Figure 2 shows a model of knowledge acquisition and highlights the learning processes that will need to be established if there is to be effective knowledge utilization (Blackman, 2001).

Only if the individual is prepared, ready and able to share newly acquired information will a team's competitive advantage be encouraged (de Geus, 1997).

The following is an explanation of how the model is utilized in an attempt to improve knowledge transfer between the coach and team members.

Acquisition

Players are provided opportunities to acquire information, data, experience and current knowledge through visualization, dialogue and experiential learning.

Interpretation

For effective acquisition, the coach provides information about statistics, skills, strategy and tactics through visual and oral methods, to meet the various learning needs of players.

Transmission

When players have new knowledge, transmitting it in the form of match performance and feedback will develop organisational competitive advantage.

Creating a climate where, "the processes of acquisition, interpretation and transmission will be vital for the success of knowledge development" (Blackman & Froggatt, 2005, p78). What is known is the MBTI provides a useful method for understanding people by looking at eight personality preferences that everyone uses at different times.

> *"I also believe that the Myers-Briggs Type Indicator is a reasonably accurate device in determining ones own personal traits" Player.*

In the knowledge transfer domain the area of perceiving is particularly relevant. For example some of the characteristics of the Sensing (S) – Intuition (N*) dichotomy are;

Sensing (S) a preference for taking in information through the five senses and noticing what is actual, using experience and standard ways to solve problems, enjoy using skills already perfected, seldom make errors of fact, but may ignore inspirations, prefer continuation of what is, with fine tuning.

Intuition (N) a preference for taking in information through a "sixth sense" and noting what might be. Solving new complex problems, enjoy the challenge of learning something new, seldom ignore insights but may overlook facts, like to do things with an innovative bent, prefer change, sometimes radical, to continuation of what is.

The implications are, in terms of knowledge transfer between player and coach and player to player, very poignant. The coach (INTP) is more likely to reflect the characteristics of the intuitive when communicating with the team. However the team profile on the S – N dichotomy is evenly split. Theoretically, the coach may only be transferring knowledge effectively, to half of the team.

Leadership

The relationship between personality and transformational leadership has been researched (Hautala 2006). The personality characteristics regarded by Hautala (2006) of transformational leaders include, "creativity, novelty, innovativeness, proneness to risks, courageous, believing in people, value driven, life-long learners, pragmatism, nurturance, feminine attributes and self confidence" most of these attributes can be connected with intuition (N), feeling (F) and perceiving (P) preferences according to theory of MBTI.

To take maximum advantage of the transformational characteristics of some players, the notion of shared leadership was introduced.

The introduction of shared or distributed leadership models have been published in recent years (Brown and Gioia 2002; Aviolio et al 2003; McCallin 2003; Degeling, Kennedy and Hill 2004; Ponte 2004). The concept is grounded in the notion that leadership may no longer be exclusive to any one individual, but may be distributed among members of the organization. Senge (1990) subscribes strongly to this view when describing leadership in a learning organization and how the leadership role is spread throughout the organization. Using the metaphor of a flock of geese in flight: "There's an effectiveness, functionality in that 'V,' isn't there? It has a lot of effect on the drag, and the difficulty of everyone in the group, and it looks like someone is out there leading, and of course in some sense, someone is, and then someone else is, and then someone else is, and then someone else is, and then someone else is" (Senge,2000). A metaphor which was not lost on the MBTI participants in the context of leadership on the football field during a game.

Supportive of this position also is, Professor Gary Yukl, a well known scholar and author on leadership, "an alternative perspective would be to describe leadership as a shared process of enhancing the collective and individual capacity of its people to accomplish their work roles effectively" (1999a, p292).

The model of leadership encouraged by the coach required players to take personal responsibility for their individual and team performance. Players are required to 'step up to the plate' and take a leadership role as the situation demands. For example; one senior player, intuitively sensed that the team was deviating from the pre determined team plan, influenced other key players to readapt to the original plan. This was achieved by personal demonstration and example and facilitating team members to think, reflect and act; a characteristic of the Introversion (I) preference of this particular team member (INTP).

Trust and trusting

It is argued that trust is a key part of learning and knowledge transfer because the role of trust is integral to creating an environment in which team members feel safe to take risks, are sure of no blame, and being encouraged to develop the commitment to the club that will support learning and knowledge sharing (Crookes & Froggatt 2004).

From previous research (Blackman & Froggatt 2005), the elements identified as those related to the theme of trust in terms of encouraging, supporting or threatening it were:

Culture, Climate, Honesty, Information and Knowledge Sharing, Right moral position; doing what is right, Opposing; what is not right and Integrity.

However, the elements identified as being related to 'trusting', were: demonstrated loyalty and commitment, passion for what you do, competence and a willingness to learn, preparedness to take risks and taking personal responsibility for your actions (Blackman & Froggatt 2005).

Leadership research also by Blackman and Froggatt (2006) concluded that it is important for leaders to do what they say they do, if trust and trusting is to be developed. The one most critical

factor was the gap between saying and doing. Argyris and Schon (1996) identify this as the difference between theory in use and espoused theory. The coach has been consistently mindful that expectations are not unrealistically ambitious, but grounded in the reality of a highly competitive sporting environment. Maintaining the ethical and moral aspects of leadership through appropriate behavior is perceived as an important leadership strength.

MBTI and the issue of trust has been researched, particularly in relation to the Judging (J)-Perceiving (P) dichotomy, essentially identifying the INTP combination of preferences as being inherently trusting of people. This is an area which the authors will continue to explore in the context of this project.

CONCLUSION

The use of MBTI in the development of individual and team development found a number of potential benefits. Namely; improved capacity to learn and implement new ideas and strategy, improved understanding of individual preferences, improved understanding of others preferences, improved communication and respect for individual contributions. Alas, there are other significant factors which contribute to team performance in sport, namely, high caliber playing staff, depth of playing resources and the developmental period involved in creating a new team. The coach and players feel that the aims of using the MBTI in terms of individual growth, team cohesion and communication have been achieved, on the down side, on field results, to date, have not reflected the expectations of performance, initially assumed.

The writers' believe the results will come, as the basis for team learning is now firmly entrenched into the culture of the team. We believe, type dynamics, learning and sporting teams, warrants further research with focus upon team MBTI profiles as well as individual preferences.

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FIGURES

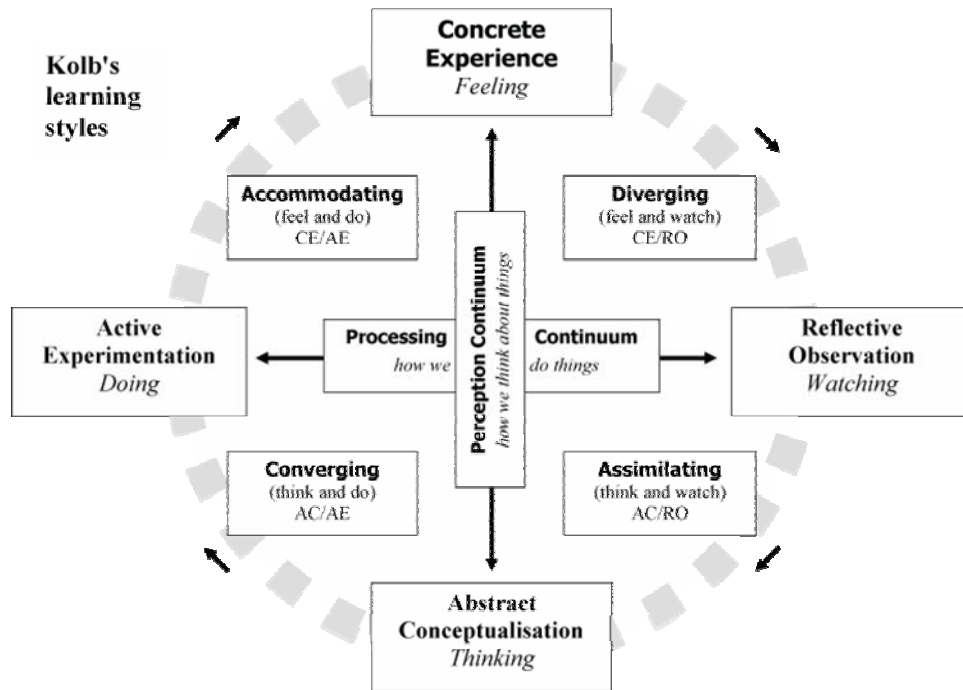**Figure 1: Kolb's Learning Model – Source: www.businessballs.com 2006**

Figure 2: Model of Knowledge Acquisition – Source: Blackman, 2001