



MEMORANDUM MS06/07 TO ARLRA REFEREES' COACHES

13 July 2007

I promised you this paper. Incidentally, the tutor was very impressed. What do you think of the idea of a similar broad based study into refereeing at all levels?

EXAMINATION OF PSYCHOLOGICAL STRENGTHS AND WEAKNESSES OF AN ELITE RUGBY LEAGUE REFEREE

Object

To develop a set of criteria that will enable an investigation of an elite match official's psychological skills and their relationship to performance levels. Further, to identify the reasons for successes and disappointments of the official.

Introduction

Referees or match officials in all sports perform under immense scrutiny from players, coaches, fans and the media. At the elite levels, such scrutiny and the weight of expectation can have an enormous impact upon performance. It is hypothesized that those with better psychological skills handle the pressure of elite performance better than non elite match officials.

To test this hypothesis, an elite Rugby League Referee, Shayne Hayne, was interviewed specifically in regard to areas including **self-confidence, motivation, stress and anxiety**, and **concentration and attentional control**.

Research has already supported an association between psychological skills and sports performance generally (Morgan and Pollock, 1977; Morgan 1979; May et al., 1985). Mahoney et al., (1987) developed an instrument that assessed a broad range of psychological skills possessed by athletes and is sport specific. I have adapted the Psychological Skills Inventory for Sports (PSIS R5) and modified it specifically for use by Referees. Shayne's responses were recorded for comparison with the Inventory.



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A 5 point Likert system is employed and transformed to percentile scores to offer some evidence of the respondent's proficiency across the psychological skills areas mentioned above. As a word of caution, it must be stressed that the PSIS R5 has not been met with universally uncritical acclaim and its nature as a self report instrument lends itself to some degree of skepticism. However, as support (or otherwise) for the eventual findings of this paper, it is a satisfactory vehicle.

Shayne Hayne is a full time professional Rugby League Referee employed by the National Rugby League in Sydney. He has officiated as a central Referee in 127 top grade matches and was recently appointed to control his first State of Origin match between Queensland and NSW at the Telstra Stadium on 13 June. The match will attract a crowd of close to 83,000 people with a live television audience close to 4 million in Australia alone (Source: Media Department, NRL). It could be argued that this appointment indicates that Shayne is the leading Referee in the game.

Establishment of Criteria to Determine Strengths and Weaknesses

SELF-CONFIDENCE

Bandura's (1977, 1982) theory hypothesizes that if necessary skills and appropriate incentives are present, actual performance may be predicted by **self efficacy**. Sources of Efficacy expectations, in order of importance, are *performance accomplishments, vicarious experience, verbal persuasion and emotional arousal*.

My own criteria would include goal setting, successful implementation of imagery, and the extent to which the respondent expected to succeed.

MOTIVATION

Orlick and Partington (1988), amongst others, suggest that elite performers sustain high levels of **intrinsic motivation** throughout their careers. According to Cognitive Evaluation Theory, "...elite performers ...choose...difficult and demanding goals the achievement of which confirms their feelings of competence and self determination..." (Hardy et al., 1996, at p 75).

Goal orientation would seem to have relevance to levels of motivation. It has been suggested that high levels of both task and ego orientation is associated with a positive motivational climate and higher levels of performance (Goudas et al., 1992). The respondent completed Duda's (1989a) Task and Ego Orientation in Sport Questionnaire (TEOSQ).

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Attributions for success and failure need to be investigated for the effect on motivation.

STRESS AND ANXIETY

Antecedents of stress serve to predict the intensity of any response. The five sources of psychological stress identified by Kroll (1979) can serve as criteria with which to judge the level of stress on a match official before and during a performance. These are

- Fear of failure
- Feelings of inadequacy
- Loss of internal control
- Guilt, and
- Current physical state.

Gould et al (1984) found that the lowest cognitive anxiety is amongst those with more years of experience and that the strongest predictor of self-confidence is related to those with a clear perception of their ability.

CONCENTRATION AND ATTENTIONAL CONTROL

The degree to which the respondent attributes his concentration levels to automatic processes as opposed to controlled processes can be a clear indicator of his attentional control. Jones and Hardy (1990) reported on physical practice and mental rehearsal. Quality training can place the athlete "in the zone" and actions become automatic, therefore using less memory and contributing to the feeling of flow. The three most important criteria were identified by Boutcher (1990) and were

- Competition plans
- Pre-performance routines, and
- Process oriented goals.

Method

Shayne was chosen as he was an elite Referee who had made considerable progress in the past year. He was interviewed for 45 minutes at the end of a training day and handed the PSIS R5 (Refs model) to take with him to complete and hand in the next day. The interview was recorded and subsequently copied to



DVD. The scores were calculated as per the instructions presented with the original instrument, and converted to percentile scores. Shayne was finally asked to complete the TEOSQ.

Analysis

Shayne impressed at interview as a most self assured and confident individual. When asked about his best performance to date, and its antecedents, he replied -

“I think that the performances that you have leading into those sort of games on the back of performances that you have done quite well in I think that gains confidence in yourself...”

Furthermore, after alluding to “knowing the rules”, he added that -

“It’s a snowball effect - when you go into a big game on the back of those performances you can go into that big game with confidence. If you make some good calls initially, that gives you confidence.”

When asked if he felt good about himself (self efficacy) he replied that he was a confident person although not arrogant. However, his whole carriage and manner gives the impression of a person brimming with self confidence and high self esteem. I asked whether he always expected to succeed and he replied -

“Yes, that is what I’m there for. If I was to go out and have second thoughts about whether I was going to succeed or not, I might as well not go out at all. When you are in the tunnel about to go out you say to yourself “I’m going to go out and nail this game” if you don’t then that is when you are not concentrating and focusing on what you need to do...”

When asked about preparing for a performance, Shayne described how he practiced role plays on route to the game “...putting myself through scenarios of situations that may arise in the game so that if that happens in a game I think well I’ve been there before and it sort of comes second nature...”.

On goal setting, Shayne responded that he has always set goals, long term and short term. He described the types of goals that he set and it is apparent that the longer term goals are outcome oriented, but the shorter term ones are performance based. When we spoke about training and training goals, these goals clearly were of a process nature. Shayne also completed the TEOSQ which unsurprisingly rated him high in both ego and task orientation. On failure to



reach goals, he emphatically denied that it was due to a lack of effort but described issues such as lack of sleep, poor diet and other unstable reasons.

The goals were set by him and he feels in control. Success in achieving goals would seem to be attributed to internal, controllable and stable reasons and failure to internal, controllable (“It makes you work harder the next session to make sure that it doesn’t happen again”) and unstable reasons.

As goals are personally set and his motivation is a personal one driven mostly by enjoyment, one could say that Shayne exhibits a high level of intrinsic motivation.

None of the answers to questions relating to stress and anxiety indicated a fear of failure, feelings of guilt or inadequacy. Certainly Shayne exhibits all the symptoms of having strong internal control. His years of experience allow him to give the impression that he “knows” that he is good at what he does.

When he feels that he is at peak performance he says –

“It’s like being in the zone, no matter where the ball goes you know that you will be there, no matter what you say to the players, they’re doing exactly what you say, they’re getting up and playing the ball. It just seems as if you’ve got all the time in the world. When you’re in that zone, you don’t feel tired”.

And further –

“...sometimes you sense that I’ve done this before. I think that it comes back to the imagery stuff that you do or the role plays. When you’re in that mind set or zone, things are just happening for you, they’re just rolling.”

By way of contrast, Shayne confides that at times when he needs to control his thoughts he “...concentrate(s) on the ball only not worrying about what anyone else is saying to you, focus on the ball. Get through the next five minutes then the next five.” When speaking of attentional control, Hardy et al., (1996) says that successful athletes are less likely to become distracted by irrelevant stimuli, maintaining more task oriented attentional focus. According to Boutcher’s (1992) integrated model of attention in sport, optimal attention states are achieved when a (referee) has achieved an exact balance between controlled and automatic processing necessary for (a) particular task. This is clearly what Shayne is alluding to.



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When asked about his worst performance, Shayne referred to a game some years ago when he was thrown off track by his team mates, the weather and seemingly a number of other potentially stable factors. His concentration was poor and he was easily distracted. But the most telling factor of all seemed to be the fact that his preparation had been poor. He is unlikely, given his experience since that game, to attribute failure to those issues again.

PSIS R5 (Refs model) Results

The six categories of psychological skills, and the percentile results, were motivation (0.79), confidence (0.83), anxiety control (0.70), concentration (0.88), mental preparation (0.58), and teamwork (0.71). With the exception of mental preparation, they are all strong results, reinforcing the proposition that elite athletes in whatever capacity or sport, exhibit a strong relationship between psychological skills and performance levels. The instrument was consistent with the findings from the interview.

Discussion

The relatively low score for mental preparation should not come as a complete surprise given the findings of Reilly (1996) who found that “an increasing minority of soccer players are now paying attention to psychological preparation”. Supporting that finding in their study on professional sport psychology in Ireland, MacIntyre et al., (1998) also reported low levels of mental preparation in top athletes.

Clearly Shayne’s confidence and ability to concentrate are strong points. These have come about as a result of training techniques and attention to goal setting, and his stated ability to shift his focus of attention from automatic to controlled focus. Prior successful performances have had a major impact on his confidence levels as, I believe, have his use of imagery.

Although he admitted some anxiety before his biggest game to date (last year’s semi final), Shayne professed that once the game began, he felt all right. He exhibits no indication of inadequacy, fear of failure or any of the other criteria which one could adjudge levels of stress and anxiety.

His goals include competition plans, he has pre game routines set out, and process oriented goals are an important factor in training and games.

There are clear and undisputable evidence to the effect that Shayne’s psychological skills are of such a degree that it is unsurprising that he has risen



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to the top of his profession. The only proviso is that there needs to be an improved concentration on mental preparation for games.

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Although it is our 100th year, let's still look young and enthusiastic!

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