

# An Investigation of the Coaching Behaviours among Singapore Coaches

## 探討星加坡教練員的指導行為

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### Abstract

Athletic performance is the result of interactions among the athlete, coach and performance environment. Each of these factors is critical to performance outcomes. This study is designed to improve our understanding of these interactions, with a focus on coaching in Singapore. Salmela (1996) and colleagues (Cote & Dowd, 1996; Cote, Salmela & Russell, 1995 a, b) recently conducted an in-depth and extensive research project on Canadian expert coaches. The results have provided a knowledge base grounded in coach's realities. The qualitative data gained from expert coaches has led to the development of a questionnaire, the Coaching Behaviour Scale (CBS) aimed at assessing coaching behaviours from the athletes perspective. Preliminary tests of the Scale reveals most of the subscales to have a high degree of internal consistency and that the factor structure approximates the original theoretical framework. These are preliminary findings and there is need to develop the scale further. The purpose of this study is broadly two fold. Firstly the study will contribute to the on going validation of the CBS developed by Cote and Yardley from Brock University in Canada secondly, it will serve as a preliminary study of the coaching behaviours and overall coaching characteristics of Singapore national coaches.

### 摘要

運動的成功之道有乃運動員本身、教練員及其他環境因素的配合。本研究針對上述各因素之間的關係，探討星加坡教練員在這方面的行為表現。並從運動員的層面，以教練行為調查表來評估教練員的行為，初步資料顯示出教練行為調查表具備充分的可靠度，有效作為深入研究之用。

### Introduction

Athletic performance is the result of interactions among the athlete, coach and performance environment. Each of these factors is critical to performance outcomes. This study is designed to improve our understanding of these interactions, with a focus on coaching. Woodman (1993) recently suggested that coaching is as much an art as a science and that "Regardless of the level of scientific knowledge and the use of scientific methods, it is often the application of that knowledge and methodology through individual flair that separates excellent practitioners from the others (p. 6)". A coach's challenge is to teach physical skills as well as to build character, instill

integrity and point the way for youngsters to become confident self reliant adults (Horn, 1987; Martens, 1988). Coaching as an emerging profession, therefore, needs in-depth examinations of coach's behaviours.

Accordingly, Salmela (1996) and Cote and colleagues (Cote & Dowd, 1996a, 1996b; Cote, Salmela & Russell, 1995a, 1995b; Cote, Salmela, Trudel, Baria & Russell, 1995) recently conducted an in-depth and extensive research project on Canadian expert coaches. The intent of their project was to directly ask high performance coaches about the important concepts and strategies they use in coaching. The results have provided a knowledge base grounded in coach's realities.

The most frequently used and cited measurement of coaching behaviours is the Leadership Scale for Sport (LSS) (Chelladurai & Saleh, 1980). However, Cote et al (1996) found the LSS exhibited some psychometric problems. For instance, some subscales were not internally consistent and the expected factor structure was not found. Other authors have found that this widely used instrument is problematic (Gordon, 1986, Summers, 1983). The proposed study would allow the researchers to properly test the two instruments. For example, the results would enable the researchers to make recommendations regarding modifications to the Chelladurai instrument, continue the development of the new instrument (i.e. The CBS), or propose a combination of the two instruments. These improvements would provide the Sports Excellence Division with a more reliable and valid instrument for measuring coaching behaviours. It would also provide feedback to coaches about their behaviours that could then lead to improvements in their efforts to enhance athletic performance and satisfaction.

The purpose of this study is broadly two fold. Firstly the study will contribute to the on going validation of the CBS developed by Cote and Yardley from Brock University in Canada and in conjunction with Sport Canada and the Coaching Association of Canada. Secondly, it will serve as a preliminary study of the coaching behaviours and overall coaching characteristics of Singapore national coaches. As this is an on-going investigation only the descriptive data from the Singapore athletes can be reported at this time. In view of time constraints, our discussion will concentrate on the sport psychology scales including the goal setting scale, competition strategies scale and mental preparation scale. Further work will investigate more definitively comparisons between these data and Canadian data.

## Methodology

### Subjects

The subjects for this study were those athletes who were currently identified by their National Sport Association and the Singapore Sports Council as good enough to qualify for funding to help them train and compete in their sport. These would be the elite and developing elite athletes of Singapore. The CBS was mailed to 604 athletes and at this point 104 have returned the completed questionnaires. The mean age of the subjects in this study was 21.76 years (males,  $n=63$ ; females  $n=41$ ). On average, these subjects had spent almost three years with same coach (mean = 35.84 months) and the majority of coaches under discussion are alarmingly male ( $n=98$ ) with a disproportionate number of female ( $n=6$ ) coaches working at the senior level in Singapore.

## Instrumentation

The Coaching Behaviour Scale (CBS) is designed to assess coaching behaviours from the athletes' perspective (Cote, Yardley, Sedgwick & Dowd, 1996). The scale was designed around seven behaviours of effective coaching and emerged from the interviews with expert coaches these included the need to:

1. plan proactively,
2. create a positive competitive atmosphere,
3. facilitate goal setting,
4. build an aura of confidence,
5. teach skills effectively,
6. recognize individual differences, and
7. establish a positive rapport with each athlete.

The questionnaire is composed of items such as "my coach helps me set long term goals," "my coach is easily approachable about personal problems I might have," or "my coach provides me with advice on how to be mentally tough." Athletes assess each item on a 7 point Likert scale anchored with never (1), (2), fairly often (3),(4),(5) and always (6),(7). Preliminary tests of the Scale reveals most of the subscales to have a high degree of internal consistency and that the factor structure approximates the original theoretical framework. These are preliminary findings and the authors report there is need to develop the scale further hence the data from this study will be added to the data all ready collected and be used by the authors of the questionnaire in their efforts to further validate the instrument.

## Results and Discussions

The mental preparation scale is interesting to us as the formalization of psychological skills training in Singapore has made great strides over the last five years or so. In a study conducted recently (Haslam & Song, 1997) it was revealed that certainly coaches of school age athletes in extra curricula activity programs have a variety of concerns about introducing PST in their programs. At the national level, which is the focus of this study, athletes and their coaches do have access to at least one full time sport psychologist and more than likely have been exposed to the importance of being mentally ready for training and competition. The descriptive data in this study would suggest that the coaches of the athletes in this study (Table 1) do not universally practice PST. The general feeling is that coaches will 'fairly often' provide advice on how to 'perform under pressure' (mean = 4.67), 'stay mentally tough' (mean = 4.80), 'stay focused' (mean = 5.18). Our deduction from these data is that, if coaches had

introduced formally planned and systematized individual psychological skills training (PST) programs for their athletes, mean scores would be in the 6-7 range. In and of itself this suggest that perhaps all national associations should make arrangements to retain their own sport psychologists who is capable, at least at an educational level of teaching, supporting and monitoring the PST of the organizations top athletes. This would then leave the head coach free to assume a conceptual role that concentrates on strategic and tactical program and event problems.

**Table 1. Questions for Mental Preparation (n = 104)**

Question	Mean	Standard Deviation
Provides advice on:		
...performing under pressure	4.67	1.78
...mentally tough	4.80	1.72
...staying confident	4.89	1.72
...being positive	4.94	1.65
...staying focused	5.18	1.60
or :		
...hate opponents	1.84	1.56
...self responsibility	4.02	2.06

The CBS includes scales, which would normally be considered part of the bigger question of PST, and one of those is goal setting. Researchers have long suggested that this might be a departure point as far as introducing PST to athletes. It's concrete, tangible, personally relevant and serves as much as anything to open lines of two-way communication between coach and athlete. The fact that it is considered separate from mental preparation broadly in this study suggest that it is deemed to be an integral part of the coaching process and deserves its distinct status. The descriptive data (see Table 2) in the scale is on the correct side of positive but is not overwhelmingly reassuring as to the prevalence of coaching planning on a personal or team basis among Singapore's national athletes. The data suggest that coaches only *fairly often* rather than *always* 'help athletes identify their goals' (mean = 4.84) and only *fairly often* 'demonstrates a commitment to my goals' (mean = 4.45). The Sports Excellence Division of the Singapore Sports Council who is responsible for counseling and working the NSA's, should perhaps consider further in-service development of coaches on the subject of goal setting. Its importance in motivating athletes as well as making professional athletic programs more accountable to their stakeholders (in this case the general public's tax \$) cannot be underestimated.

**Table 2. Questions for Goal-Setting (n = 104)**

Question	Mean	Standard Deviation
Helps me too:		
...strategies to achieve goals	4.84	1.84
...progress toward my goals	4.87	1.68
...set short term goals	4.36	1.84
...identify target dates	4.56	1.86
...set long term goals	4.80	1.82
...commitment to goals	4.45	1.74
or :		
...set unrealistic goals	2.14	1.36
...set goals without consultation	2.09	1.39
...has low expectations of me	1.66	1.23

Pursuant to using goal setting as a departure point for a formal process of PST it is not unreasonable for a coaching behaviour instrument to ask questions about competition strategies. Competition strategies are the manifestation (in some respects) of a process of searching for an ideal performance state in athletes. The strategies would include effective coping behaviours to distractions during the event, refocusing techniques and how to control game anxiety among others. These skills however, must be practiced during the training year and over a number of years such that they may be automated when required by athletes (and in the heat of the moment). The descriptive data in Table 3 is encouraging, however, as athletes perceived that their coaches were particularly concerned about their competitive readiness. It was evident that coaches 'had a consistent routine at competition times' (mean = 5.26), were 'confident and upbeat during competition' (mean = 5.53) and helped athletes 'to prepare for a variety of competitions' (mean = 5.50). The athletes' interpretation of competition strategies in this instance will be what happens in preparation for a game and what is the role of the coach in relation to my preparation. The PST interpretation of competitive strategies would focus on an athlete centered process where through pre-planning, individual training and practice procedures, individual and team simulations athletes would have been prepared for competition. Then on game day athletes shifts into there learned pre competitive and competitive behaviour mode and play their game. This process begins by counseling athletes about feeling states during best ever performances. Then using diaries and logbooks to define activities (PST) and more importantly feeling states along with coping responses. The coach education fraternity in Singapore must therefore not over estimate this data. Rather clarification is in order as to what the athletes were reading when they answered these questions. It would be advantageous for the authors of the instrument to give some consideration to the issues raised in this discussion and possibly rename the scale.

**Table 3. Questions for Competition Strategies (n = 104)**

Question No	Mean	Standard Deviation
Helps me:		
...focus on performing well	5.26	1.62
...face a variety of situations	5.50	1.45
...stay focused	5.32	1.61
...keep to a routine	5.23	1.63
...deal with problems	5.18	1.63
...stay confident	5.53	1.49
...stay organized	5.29	1.68
or :		
...is angry with me	2.21	1.49
...focuses on winning at all costs	2.59	1.75
...threatens punishment for losing	1.29	0.86

## Conclusion

This on-going project will essentially provide international data to help the validation of the CBS for use across all sports and on an international basis. As the study is still incomplete, only preliminary data could be presented at this time, based on an n = 105 national level Singapore athletes. The demographic data revealed a disproportionately large number of male over female coaches who would be worthy of consideration by NSA's in Singapore. There are perspectives and expertise to be derived from coaches of both gender which suggests a greater effort on the part of sports policy makers to develop females elite coaches.

This paper was limited to a discussion on only three of the CBS scales, mostly because of the time constraints but also because the project is still underway and comparative data from coaches in other countries was unavailable at this time. The athletes perception was that coaches fairly often worked on the athletes mental preparation for sport competition. This was a little disconcerting in view of all the efforts the Sports Council has made in recent years to promote this training domain. It is clear more work needs to be done with coaches so that whenever they coach a national team they always promote the use of systematic PST. It was interesting to note that goal setting was a separate scale in this questionnaire when many sport psychologists view goal setting as a part of an athletes overall mental preparation. Similar descriptive data was evident in the goal setting scales as was demonstrated in the mental preparation. That is that coaches only 'fairly often' encouraged goals setting with their athletes, not always! Haslam & Song's (1997) work could suggest why this might be the case in their study of coaches of extra curricula

activity. In short, coaches were concerned about the consequences of formalizing a PST program generally. It might mean they have to learn new coaching strategies and there is no guarantee that their efforts will be rewarded by enhanced performances. It was more encouraging to note that the 'competition strategies scale' did profile higher than the other two PST scales. We were hesitant to build too much into this as it could have been that athletes were thinking more about the coaches role in the dressing room before and during the actual game. This is a little different than the PST definition of competition strategies which tends to view competition strategies on an individual athlete basis. Athletes make notes of events, and feelings as well as behaviour designed to counter distractions to performance before, during and after the event.

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