# BATTING RELATED EXPERIENCES OF SOUTH AFRICAN UNIVERSITIES CRICKETERS

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#### **ABSTRACT**

In order to substantiate qualitative data gained regarding the cognitions, feelings and behaviours experienced by three potentially elite top-order cricket batsmen, a quantitative post hoc study was undertaken. One hundred and ten South African Universities (SAU) cricketers completed the Mental Processes During Batting in Cricket questionnaire which was drawn up by the first author from a summary of nine in-depth interviews with three case study participants. The five most strongly supported batting related experiences of the SAU cricketers were: playing of each delivery on its merit; feeling a sudden rush of nervousness when having to bat; expecting to be perfect in their batting; using a pre-delivery routine before facing their first delivery in an innings; and an over-analysis of their batting when in bad form.

**Key words**: Attention; Cognitions; Cricket batting; Mental processes; Self-talk.

# INTRODUCTION

Because attention/concentration is seen as a vital factor in sports performance, coaches and sports psychology consultants have recognized the need to develop effective attentional training programmes. However, before these programmes can be designed and conducted with individual athletes, the attentional demands of the specific sports activity need to be identified. The individual athlete's attentional strengths and weaknesses also need to be assessed, preferably within the actual playing milieu.

The act of cricket batting can be classified chiefly as an open-skill activity, but of a stop-start nature. The batting situation requires a selective (focused) attention directed to the task, while disregarding irrelevant influences. Batting tasks are performed in a relatively stable environment, and batters are able to preview the situation as well as their intentions. Although the batter responds to an unpredictable stimulus (bowler's delivery), his/her taking guard is initiated at his/her own pace. Attention to the demands of the task is therefore potentially under the control of the batter. It is, however, easy to become distracted and to lose appropriate focus (Singer *et al.*, 1991; Boutcher, 1992).

Distractions, which can lead to the loss of appropriate focus, include both external and internal factors. Cricketers have reported external distractions like officials and the unexpected, and internal distractions such as expectations, nervousness, mistakes, thinking too much about the score or the end result, having vague goals or no goals at all and injury or muscle soreness (Winter, 1992).

Overcoming the many potential irrelevant cues and psychological distractions inherent in the game of cricket requires the cricket batter to orient his/her attention properly and to remain focused on his/her task for very long periods of time.

Gordon (1990), the mental skills coach of the Western Australian State cricket team, believes that concentration in cricket is of utmost importance for effective performance. He outlines the following four essential characteristics of concentration in cricket: focus on one thing at the critical moment, that is for all cricketers, the point of delivery in bowling; a focus on the present; an ability to selectively attend to critical cues; and an ability to minimize periods of intense concentration (i.e., to "switch on and off" when necessary). Bull, Fleming and Doust (1992) referred to this as the phasing of attention. They propose the use of "triggers" or concentration cues which assist the player in focusing with high intensity when necessary and then relaxing attentional intensity at other times. Batters should focus only on the ball in the bowler's hand when facing, and by attending to each delivery on its merits without either dwelling on previous deliveries or thinking ahead to future deliveries, can maintain focus on the present. It is also important to passively "switch on" at every delivery and "switch off" during periods of inactivity in order to delay the debilitating effects of mental and physical exhaustion which can so easily occur in a game that lasts seven to eight hours a day (Gordon, 1990).

Concentration lapses have been found by Gordon (1990) to concern batters more than bowlers or fielders. At the critical point of delivery, batters need to focus only on the ball, then play the ball by making a stroke or offering no shot, and then switch off. This "switching off" appears to be more of a problem at the beginning of an innings, thus inducing premature fatigue and poorer concentration after approximately 50 to 90 minutes of batting. Gordon (1990) believes that by learning a pre-delivery routine to "switch on" to each delivery, and a "switch off" routine, and by becoming more aware of the symptoms of concentration lapses, batters may be better able to focus appropriately. He suggests combining self-instructions and self-affirmations with physical actions.

Winter (1992), a sports psychologist to the Australian Olympic Team, maintains that concentration is the most important psychological factor involved in cricket, and especially so in batting. Good concentration skills allow the batters to perform at their best in tight situations, help them to handle sledging from the fielders, allow them to let crowd comments pass them by, and to play the game one ball at a time. Batters with good concentration skills accumulate runs, letting the score look after itself. They play each bowler and each delivery on their merits, can bat for long periods of time because they know how to relax between deliveries, and are able to redouble their efforts when their team loses a wicket (Winter, 1992). Common focus points of successful batters include watching the ball, moving the feet, playing straight, looking for singles and pushing into the gaps (Winter, 1992).

Tension can have an affect on the batter's ability to concentrate (Winter, 1992). Mistakes made by over-anxious batters include being hesitant, playing at deliveries that should be left alone, poor judgement of quick singles, and failure to dispatch the loose delivery. Under-arousal can also have detrimental effects on performance. It is a common occurrence for batters to get out soon after scoring a century because of a lack of nervous tension, which affects concentration (Winter, 1992).

The use of pre-performance routines as useful concentration mechanisms to help the batter avoid distraction and stay relaxed is proposed by Bull *et al.* (1992). They stress the need for the pre-performance routines to be individualised to suit the needs of different players with different styles and personal preferences.

Although appropriate attention is considered to be essential for successful cricket batting, there is a lack of research reported on the topic. This study aims to investigate the experiences of cricketers during batting, which reflect their focus of attention.

#### **METHOD**

# **Participants**

The population included the members of the top 10 South African Universities cricket teams. The sample group included 110 participants with ages ranging from 18 to 28 years, with an average age of 21 years. With regard to the major role played in their respective cricket teams, 25% of the participants were specialist batsmen, 26% were bowlers, 36% considered themselves all-rounders, and 13% were specialist wicket-keepers. Twenty-nine percent of the sample group batted in the top order (1-3), 29% batted in the middle order (4-6), 20% batted in the lower middle order (7-8), and 22% batted in the lower order (9-11). The sample group included four national players, 19 provincial A players, 22 provincial B players, and 16 provincial under 24 players.

#### Measure

From a summary of nine in-depth thought-sampling interviews undertaken with three potentially elite, top-order batsmen (Slogrove, 1998), a list of statements was drawn up, reflecting cognitions, affect and behaviours relating to batting in cricket. The original list of statements compiled by the first author was given to a cricket academic and past provincial batsman, a provincial and past national cricketer, a professional cricket coach, and an Afrikaans-speaking league cricketer for their evaluation of the relevance and clarity of the English statements. Forty statements were considered to be appropriate for the final draft of the "Mental Processes During Batting in Cricket" questionnaire.

Respondents were required to indicate the frequency with which they experienced the various situations during batting in limited-overs matches. Responses on a five-point Likert scale range from "never" to "always". By developing the questionnaire on the basis of findings from in-depth interviews with cricket batsmen, and by consulting cricket experts, the content validity of the questionnaire was assured. Other aspects related to the validity and reliability of the questionnaire still need to be established. The frequency with which response choices were endorsed by the respondents for each item will be reported in this investigation. The questionnaire statements appear in Table 1.

## **Procedures**

Permission for the distribution of the questionnaire to the South African Universities (SAU) players who participated in the SAU Cricket Week was obtained from the SAU Cricket Committee.

Brief details of the study were presented, and the questionnaires were handed out to the respective team managers at the managers' and captains' meeting held the night before the start of the SAU

Cricket Week. Managers were requested to ask their teams to complete the questionnaire honestly, ensure the players of the confidentiality of the results, and return them to the first author within three days. Informed consent regarding the publishing of the results was obtained from the participants. A total of 110 of the questionnaires that were returned, were suitable for use in the data analysis.

# Data analysis

The frequency with which the 110 participants endorsed the various response options per statement, as set out in the "Mental Processes During Batting in Cricket" questionnaire, was computed. Frequencies in the form of percentages were calculated to show prevalence of responses.

Ranking was done by means of attaching a weight between 0 and 4 to each frequency category (i.e., never = 0; occasionally = 1; often = 2; frequently = 3; always = 4), and multiplying the percentage of incidence within each category by the respective weighted number. All category scores for each individual item were added to arrive at a final total. For example, item 1's total was calculated as follows:  $(0 \times 3.7) + (1 \times 35.2) + (2 \times 21.3) + (3 \times 25) + (4 \times 14.8) = 212$ . This gave item 1 a ranking of 2. The most strongly supported response to each item of the questionnaire is highlighted in bold print in Table 1.

Thereafter, each item was ranked from 1 to 40, according to the prevalence of experiences as indicated by the sample group of university cricketers. For example, item 18, the playing of each delivery on its merits, is ranked as the statement most strongly supported, while item 38, which indicates that thoughts are negative when one is in good batting form, is the least supported statement.

# **RESULTS**

Table 1 provides the frequency percentages on each item of the "Mental Processes During Batting in Cricket" questionnaire for the sample group, together with the ranking of each item. The most strongly supported response to each item by the sample group is highlighted in bold print.

TABLE 1. THE FREQUENCY WITH WHICH SOUTH AFRICAN UNIVERSITIES CRICKETERS GENERALLY EXPERIENCE CERTAIN MENTAL PROCESSES DURING BATTING IN LIMITED-OVERS MATCHES

Rank order	Item no.	Statement	Never %	Occasionally %	Often %	Frequently %	Always %
1	18	I play each delivery on its merit.	1.8	18.2	30.9	40.9	8.2
2	1	When a wicket falls and it is my turn to bat, I feel a sudden rush of nervousness.	3.7	35.2	21.3	25.0	14.8
3	34	I expect to be perfect in my batting.	19.1	19.1	25.5	26.4	10.0
4	2	I follow a specific routine of things which I do and/or say before facing the first delivery in my innings.	26.4	21.8	15.5	11.8	24.5
5	19	When in bad form, I try to analyse my batting too much.	11.9	27.5	31.2	22.9	6.4
6	26	When I am unable to score quickly enough (bogged down), I become impatient and I think too much about hitting the big shots rather than going for the 1's and 2's.	5.5	41.8	31.8	16.4	4.5
7	20	I try to hit the ball too hard.	7.3	46.4	21.8	20.9	3.6
8	21	I follow a specific routine of things which I do and/or say before facing deliveries during my innings.	26.4	30.0	16.4	10.9	16.4
9	24	When in bad form, I bat tentatively (e.g., push instead of hit the ball, don't punish bad deliveries.)	10.1	42.2	27.5	19.3	0.0
10	7	I put too much pressure on myself to score runs.	11.8	42.7	26.4	17.3	1.8
11	28	My mood affects my batting.	16.5	35.8	33.0	9.2	5.5

1.0	10	1: 50 T	15.4	41.2	10.2	20.2	1.0
12	13	After reaching 50, I begin to hit too freely, with little respect for the wicket.	17.4	41.3	19.3	20.2	1.8
13	31	When batting well, I am inclined to play lazy shots.	9.1	50.0	28.2	10.0	2.7
14	4	When facing fast bowlers, I play tentatively.	10.1	56.9	16.5	14.7	1.8
15	35	It is dreadful when conditions are not the way that I think they should be.	16.7	41.7	28.7	11.1	1.9
16	9	When I am scoring too slowly, I hit rash shots in order to score runs more quickly.	8.2	55.5	26.4	9.1	0.9
17	37	When out of form (not batting well), my thoughts/self-talk are negative.	15.5	50.9	19.1	12.7	1.8
18	10	When a bowler whom I enjoy facing comes on to bowl, I hit out before having a good look at his/her deliveries.	20.9	41.8	23.6	10.0	3.6
19	32	When my good shots keep going straight to the fielders, I become frustrated, and it affects my batting negatively.	11.9	58.7	20.2	9.2	0.0
20	33	When runs are not coming as freely as I would like, I am inclined to throw away my wicket.	13.8	53.2	26.6	4.6	1.8
21	22	When close to achieving an important personal goal (e.g. 50 or 100), I become result/score- orientated, which affects my batting negatively.	15.5	56.4	17.3	9.1	1.8
22	40	I premeditate/nominate shots and this leads to my dismissal.	16.4	51.8	23.6	6.4	1.8

23	14	When I run out a batting partner, I worry about it for a few overs.	30.9	36.4	18.2	11.8	2.7
24	39	I experience negative thoughts immediately prior to dismissals.	31.8	40.0	13.6	10.0	4.5
25	5	Physical intimidation (e.g. bouncers) unsettles me.	22.7	55.5	8.2	12.7	0.9
26	16	My internal thoughts/self-talk interfere with the playing of my shots (i.e. I am still thinking when I should be reacting to deliveries).	24.8	48.6	17.4	7.3	1.8
27	15	I find myself in two minds when playing my shots.	16.4	61.8	15.5	6.4	0.0
28	17	I get distracted by external factors around me.	16.4	64.5	16.4	1.8	0.9
29	8	When I get hit painfully on the body, it unsettles me and I worry about getting hit again.	24.5	54.5	13.6	6.4	0.9
30	29	I focus on where to hit the ball instead of watching the ball.	22.0	56.9	17.4	3.7	0.0
31	3	When stuck on 0 for 4 or 5 overs, I try to do something different, and I attempt to play shots which are not natural to me.	22.0	62.4	11.0	4.6	0.0
32	23	I dwell on a previous shot while I am facing the next delivery.	31.8	47.3	17.3	3.6	0.0
33	12	After short drinks breaks, I struggle to "switch on".	35.8	43.1	16.5	4.6	0.0
34	30	I experience negative, self-defeating thoughts during my innings.	37.3	44.5	13.6	4.5	0.0

35	11	I bat too defensively before breaks in the game, and I get out as a result of that.	42.7	39.1	12.7	4.5	0.9
36	6	When I play and miss, my self-talk becomes negative (self- defeating).	36.4	44.5	15.5	3.6	0.0
37	25	I get distracted by sledging (i.e. verbal intimidation).	46.8	46.8	5.5	0.9	0.0
38	27	I focus on scoring runs for myself instead of on what I should do for the team.	56.6	37.3	4.5	4.5	0.0
39	36	I make use of "triggers" or cue words to "switch on" when facing deliveries.	36.4	31.8	14.5	9.1	8.2
40	38	When in good batting form, my thoughts/self-talk are negative.	75.5	18.2	5.5	0.9	0.0

The rankings of the items give a clear indication of which statements were most strongly supported by the participants, and which were least supported. A discussion of the items that ranked in the top 30 percent (n=12) follows.

#### DISCUSSION

The only two statements relating to emotions appear to be of great relevance. The experiencing of a rush of nervousness immediately prior to batting has been indicated as a highly common occurrence amongst South African Universities cricketers. Of the 40 items listed, the statement referring to nervousness (item 1) is ranked second, while the fact that mood affects batting (item 28) was rated eleventh in the ranking order. Although the sample group responded that nervousness is a very real issue immediately prior to batting, it is not indicated whether the nervousness is debilitating, facilitating or of no effect. It would be expected that the perceptions of the cricketers would determine whether the effects would be positive or negative and that elite cricketers would experience pre-game anxiety as more facilitating then non-elite cricketers (Jones, Hanton & Swain, 1994). Item 1 also does not differentiate between cognitive and somatic anxiety. If it is assumed that the sudden rush of nervousness implies the experiencing of somatic anxiety, this result would lend support to research which suggests that somatic anxiety tends to peak close to the start of competition (Ussher & Hardy, 1986; Krane & Williams, 1987; Martens, Vealey & Burton, 1990). Winter (1992) believes that it is natural to feel a sudden rush of nervousness when about to bat, and that it will usually subside once the batter has settled in. He maintains that the important requirement is being in control of one's thoughts and movements. The experiencing of nervousness immediately prior to batting also supports the view of Morris, Renshaw and Murray (1985) who maintain that most cricketers are aware of their experiences of anxiety before batting in important matches.

The high incidence of reported mood affecting batting is also of relevance to the cricket coach and/or the sports psychology consultant. Once again it cannot be determined in what manner mood affects batting. However, it is assumed that negative feeling states would be associated with ineffective performance while a positive mood would affect batting positively. Prapavessis and Grove (1991) propose that the ability to produce and maintain appropriate emotional feelings prior to competition is one of the most important factors contributing to sports performance. It would therefore be possible that altering debilitating emotional states to bring about ideal performance states, may lead to enhanced performance.

A number of the items reflect strategy choice. Unfavourable or inappropriate strategies which feature in the top 30 percent of the statements are: over-analysis of batting and tentative batting when in bad form (items 19 & 24); becoming impatient when unable to score quickly enough, and going for big shots instead of for 1's and 2's (item 26); trying to hit too hard (item 20); and hitting too freely after reaching 50 runs (13). These inappropriate strategy choices may result from a change in tension levels, and if so, would support Winter's (1992) findings regarding mistakes made by batters when over- or under-aroused.

The prevalence of the use of performance routines by university cricketers as indicated in items 2 and 21 is noteworthy. In the present study, 24.5% of the participants always use a specific routine before facing the first delivery of their innings, while 26.4% never do so. Although the use of a specific pre-delivery routine throughout an innings was shown to be a common practice amongst the sample group, 26.4% never use one, while 30% occasionally make use of a specific routine. On the opposite end of the ranking scale, item 36, which reflects the use of triggers or cue words to "switch on" when facing deliveries, is the statement with the second lowest ranking on the questionnaire. These results are in contradiction to the proposition of cricket psychologists that triggers be used to "switch on" at every delivery and "switch off" during periods of inactivity (Gordon, 1990; Winter, 1992).

The two other items ranked in the upper 30% include the expectancy of being perfect in one's batting (item 34) and putting too much pressure on oneself to score runs (item 7). These two items may be related in that they both refer to internal pressure to be successful. These findings may support the view of Ellis (Heyman, 1984) who proposes that the absolute necessity to succeed in sports is one of four basic irrational beliefs related to sport. Ellis contends that perfectionistic desires may lead to outstanding performances, but perfectionistic demands and commands more than likely lead to disastrous outcomes. It cannot be assumed however, that the expectation of perfection in batting is necessarily debilitative because no indication of the favourableness or unfavourableness of perfectionistic thinking is given.

## CONCLUSION

The results of this investigation can provide some practical guidelines for sports psychology consultants, cricket coaches and cricket players. A number of these overlap with the implications for practice, proposed by Slogrove (1998) in a qualitative research undertaken with cricket batters.

- 1. There appears to be the need to help batters combat negative and task-irrelevant thoughts that may interfere with attentional focus, especially when the batters are in bad batting form.
- 2. Each individual participant's batting experiences are unique, and he/she should therefore

be counselled on an individual basis. The situations, which lead to negative/inappropriate thinking and subsequently also less effective performance, differ amongst the individual participants. It would therefore be important for the cricket coach and/or sports psychology consultant to identify individual scenarios which lead to ineffective attention and less than optimal performance. Although a few trends are evident regarding experiences relating to cricket batting, and sports psychology consultants and cricket coaches can consider certain consistencies when working with groups of cricketers, the need to individualize is paramount.

- 3. Although item 40 was only ranked 22, the premeditation of shots is common among the participants, and a major cause of dismissals (often when the batter is required to push up the run rate). It may therefore be an area of focus for counselling and/or coaching. Because certain situations, specifically in limited-overs matches, require the batter to score at a predetermined run rate per over, premeditation of shots may be a necessity. However, in most cases the appropriate selection of shots or strategy choice requires the batter to play each delivery on merit. This means attacking the loose deliveries and maintaining the run rate by scoring ones and twos whenever possible.
- 4. The investigation revealed that the occurrence of mood affecting batting is common amongst South African Universities cricketers. It may therefore be beneficial to determine whether the individual cricketer perceives mood to be an influencing factor on his/her performance, and exactly how he/she is affected. This information could reveal a possible need for psychological intervention.
- 5. Apart from ongoing mental preparation for all cricketers, batters struggling with form may require special attention. Batters should also be guided in preparing mentally to face form loss in order to avoid debilitating consequences.
- 6. The "Mental Processes During Batting in Cricket" questionnaire provides an effective means of identifying experiences of batters while batting. It can be used in the initial stages of the counselling of the cricketer, and followed up by in-depth interviews to identify possible problem areas or inappropriate attention.

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#### REFERENCES

- BOUTCHER, S.H. (1992). Attention and athletic performance: An integrated approach. In T.S. Horn, *Advances in sport psychology* (251-265). Champaign IL: Human Kinetics.
- BULL, S.J.; FLEMING, S. & DOUST, J. (1992). Play better cricket: Using sports science to improve your game. Eastbourne, UK: Sports Dynamics.
- GORDON, S. (1990). A mental skills training program for the Western Australian State cricket team. The Sport Psychologist, 4: 386-399.
- HEYMAN, S.R. (1984). Cognitive interventions: Theories, applications, and cautions. In W.F. Straub & J.M. Williams (Eds.), Cognitive sport psychology (289-303). Lancing, NY: Sport Science Associates.
- JONES, G.; HANTON, S. & SWAIN, A.B.J. (1994). Intensity and interpretations of anxiety symptoms in elite and non-elite performers. *Personality and Individual Differences*, 17: 657-663.
- KRANE, V. & WILLIAMS, J. (1987). Performance and somatic anxiety, cognitive anxiety, and confidence changes prior to competition. *Journal of Sport Behavior*, 10: 47-56.

- MARTENS, R.; VEALEY, R.S. & BURTON, D. (Eds.) (1990). *Competitive anxiety in sport*. Champaign, IL: Human Kinetics.
- MORRIS, P.; RENSHAW, I. & MURRAY, S. (1985). Stress and batting in cricket. *Carnegie Research Papers*, 17: 4-11.
- PRAPAVESSIS, H. & GROVE, J.R. (1991). Precompetitive emotions and shooting performance. The mental health and zone of optimal function models. *The Sport Psychologist*, 5: 223-234.
- SINGER, R.N.; CAURAUGH, J.H.; TENNANT, L.K.; MURPHEY, M.; CHEN, D. & LIDOR, R. (1991). Attention and distractors: Considerations for enhancing sport performances. *International Journal of Sport Psychology*, 22: 95-114.
- SLOGROVE, C.L. (1998). Attention and associated factors relating to cricket batting performance: A multiple-case study approach. Unpublished Doctoral Dissertation. Port Elizabeth: University of Port Elizabeth.
- USSHER, M.H. & HARDY, L. (1986). The effect of competitive anxiety on a number of cognitive and motor sub-systems. *Journal of Sports Sciences*, 4: 232-233.
- WINTER, G. (1992). The psychology of cricket: How to play the inner game of cricket. Sydney: Pan Macmillan.

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# **NOTES**