



UNIVERSITI PUTRA MALAYSIA

**COGNITIVE STRATEGIES FOR COPING WITH STRESS
IN A SIMULATED GOLF TASK**

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**COGNITIVE STRATEGIES FOR COPING WITH STRESS
IN A SIMULATED GOLF TASK**

By

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This project paper is the final concluding chapter towards my fulfillment for the degree of Master of Science, at the Faculty of Educational Studies at the Universiti Putra Malaysia in 1999. My experimental study manuscript, is the “Cognitive Strategies in Coping with Stress in a Simulated Golf Task”, punctuating in psychological and psychological inducements resulting in behavioural excellence. Allow me to paint a very brief glimpse of that part of ‘stress’ I traversed to try to reach

Participation in any form of sport must be competitive, it is either between, you versus yourself, or you versus another. It is merely a question to the extent you are prepared to stretch and strain your system, to perceive and conquer that elusive goal, and in the process, deleterious insurgencies, in the form of violence, injury, harm and defeats, sneaks its ugly head, rears, and roars at you in the form of “stress”. Various sports scientists have expounded various theories on stress management to overcome the imbalance i.e. at the moment of need, the inability to deliver what you think you have acquired, or even the assured absence of providence at any given moment of your need.



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Lastly, I dedicate this very first and most precious concluded mental activity, to my mentor, who was singularly responsible to inculcate in me the total importance of higher education who with his caring insistence saw me through He is Mr Mahendran s/o Dr Arasaratnam, Bar-at-Law



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ABSTRACT

Abstract of project presented to the Faculty of Educational Studies,
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Degree of Master of Science

COGNITIVE STRATEGIES FOR COPING WITH STRESS IN A SIMULATED GOLF TASK

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This study examined the effectiveness of approach and avoidance strategies for coping with stress experienced during sports performance. Twenty two undergraduate female students whose ages ranged from 20 to 40 years participated in this experiment. They were randomly assigned to four experimental groups to perform two different tasks (approach and avoidance tasks), with two coping strategies (approach and avoidance strategies) and two control groups. The approach task was to putt fifteen golf balls on a man-made putting mat along a straight path, up an incline slope to reach a target hole. The



avoidance task was to putt fifteen golf balls into an easy target while music and noise was played to distract subjects from the task. Subjects were then trained in either approach (mental rehearsal) or avoidance (attentional focus) strategies. The relationship between approach and avoidance coping strategies, the nature of the task, the appraisal of perceived demand and perceived capability, and their performance were examined.

The findings support the classification of stressful transactions as requiring either an approach or an avoidance strategy. The use of the appropriate strategy enhanced perceived capability and improved performance. The findings also support the conceptualization of stress as an appraised imbalance between perceived demand and perceived capability. These results further suggest that the training and use of an appropriate strategy can lower stress and enhance the performance of people in a sporting exercise. The theoretical and professional implications of these findings are discussed within.



ABSTRAK

Abstrak projek yang dikemukakan kepada Fakulti Pengajian Pendidikan,
Universiti Putra Malaysia sebagai memenuhi sebahagian syarat bagi
Mendapatkan Ijazah Master Sains

COGNITIVE STRATEGIES FOR COPING WITH STRESS IN A SIMULATED GOLF TASK

Oleh

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Penyelia Dr. Shahrudin b. Abd. Aziz

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Kajian ini dijalankan untuk menguji keberkesanan dua strategi bagi menangani stres yang dialami semasa penglibatan seseorang individu dalam situasi sukan, iaitu strategi pendekatan (approach strategy) dan strategi pengelakan (avoidance strategy). Dua puluh dua orang mahasiswi yang berumur dalam lingkungan 20 hingga 40 tahun telah mengambil bahagian dalam penyelidikan ini. Mereka telah dibahagikan secara rawak kepada empat kumpulan eksperimental untuk melaksanakan dua tugas yang berlainan (tugas pendekatan dan tugas pengelakan), dengan dua strategi (strategi



pendekatan dan strategi pengelakan), dan dua kumpulan kawalan. Tugas pendekatan (approach task) menghendaki subjek memukul limabelas biji bola golf di atas pengalas rumput tiruan melalui satu lorong lurus mendaki cerun menuju ke lubang sasaran. Bagi tugas pengelakan (avoidance task) pula, subjek dikehendaki memukul limabelas biji bola golf ke dalam lubang sasaran yang mudah sementara muzik dan bunyi bising dimainkan untuk mengganggu dan mengalihkan tumpuan dan perhatian subjek daripada tugas tersebut. Subjek dilatih menggunakan salah satu pendekatan, iaitu latihan mental (mental rehearsal) atau pun strategi pengelakan, iaitu pemfokusan perhatian (attentional focus). Hubungan di antara kedua-dua strategi, tugas yang diberi, persepsi subjek terhadap kehendak dan keupayaan diri terhadap tugas tersebut, serta prestasi dan pencapaian mereka diuji.

Hasil kajian yang diperolehi menyokong bahawa klasifikasi terhadap transeksi stres memerlukan sama ada strategi pendekatan atau strategi pengelakan. Penggunaan strategi yang sesuai dalam keadaan tertentu dapat memperbaiki persepsi subjek terhadap keupayaan diri dalam melaksanakan sesuatu tugas, dan seterusnya memperbaiki dan meningkatkan prestasi mereka. Terdapat juga bukti yang menyokong pengertian konsep stres sebagai satu keadaan ketidakseimbangan antara persepsi terhadap kehendak dan keupayaan seseorang individu. Keputusan ini mencadangkan bahawa latihan dan penggunaan strategi

yang sesuai boleh mengurangkan stres dan meningkatkan prestasi bagi individu yang terlibat dalam situasi sukan yang sebenar. Teori dan implikasi profesional ke atas hasil kajian ini juga dibincangkan.

CHAPTER I

INTRODUCTION

Background of the Study

Sports place intrinsic demands on the physiological, psychological, and behavioural resources of the participants. Athletes are required to test the limits of their abilities in competition with themselves and their rivals. Like many aspects of modern life, the sport setting is one that is capable of generating high level of stress (Jones, 1995). From youth leagues to the professional ranks, participants are forced to cope with the pressure inherent in striving for victory. For some individuals, athletic activities are an exhilarating challenge; for others, they prove to be threatening and aversive. Anxiety, stress, and worry about the athletic experience on their part is a major area of concern (Scanlan, 1986).

Athletes at all competitive levels must learn to cope with the demands and pressures of competition if they are to succeed in sports. It is an unfortunate fact that some who choose not to participate in sports or eventually drop out because

of non recognition, fear of failure, and anxiety (Smoll & Smith, 1989). It is estimated that many young athletes drop out of organized sport each year due to frustration and fear of failure (Cox, 1990). Many young athletes thrive on the pressure and tension associated with competitive sport. However, far too many find that the experience precipitates feelings of apprehension and stress (Cox, 1990).

Many athletes devote time and effort to their sport, making sacrifices to improve. Often they also make a financial commitment in the hope of a major breakthrough. Despite these good intentions though, and often despite some excellent performances in training or in minor competitions, some athletes fail to live up to their expectations. While there will always be some variation within any athletes' performances in a season, it is particularly frustrating if they save the worst for the most important competition. Obviously, the physical 'peaking' process has something to do with this, but more realistically it is a psychological factor that leads to the disappointment (Pooley, 1980). One way that the athletes can reduce their variation in performance at such crucial times is by arming themselves with coping strategies. Certain stress management techniques can give us the power to gain some control over our reaction to pressure. If an athlete becomes distracted or overly hyped-up in the days, hours or even minutes prior to

an event, it is important that he or she gets himself or herself back in the groove as quickly as possible

Stress, coping, and emotion have been recognized as important factors in sporting performance and satisfaction (Kroll, 1979, Vallerand, 1983) Many sport scientists have strongly advocated the use of psychological techniques and programmes to combat the deleterious effects of stress (Anderson & Williams, 1988, Crocker & Gordon, 1986) The development and evaluation of stress management programmes, however, was impeded by a lack of a coherent conceptual definition of stress The last decade has witnessed the promotion of a cognitive phenomenological model of emotion in which stress relationships occur as a result of a transaction between environment and individual factors (Lazarus & Folkman, 1984) In this model the perception of threat, harm/loss, or challenge develops when external or internal demands exceed or tax the perceived resources of the athlete (Lazarus & Folkman, 1984, Long, 1980)

Stress and Stress Management

Stress is a pervasive problem which affects many aspects of modern society (Kleine, 1994) Stress relationships in all levels of organized athletic competition



have been a dominant topic for athletes, coaches, parents, and sport scientists (Kroll, 1979, Scanlan, 1986, Smoll, 1986)

Factors related to stress including sport violence (Goldstein, 1983), athletic injury (Andersen & Williams, 1988), sources of worry (Goudl, Horn, & Spreeman, 1983), anxiety-performance relationships (Burton, 1988), athletic burn-out (Smith, 1986), and stress management interventions (Crocker, Alderman, & Smith, 1988) have all been the subject of scientific scrutiny. Despite this extensive investigations, our understanding of critical person processes involved in sport related stress is limited (Crocker, Alderman, & Smith, 1988, Vallerand, 1983, 1987)

Cox (1978) refers stress as a state of unacceptable divergence between a perceived demand and a perceived response capability. When an imbalance exists between the perceived demand of a situation and the perceived coping ability of an individual, stress is said to arise. Such subjective appraisal is the key determinant of stress (Johnston & McCabe, 1993). The imbalance produces an emotional experience of stress which is accompanied by changes in the person's physiological state (Johnston & McCabe, 1993). Individual variations in the appraisal of the perceived demand of the situation are due to factors the person brings to the transaction that shape its significance for the person and the

perceived difficulty of the overall task. Two of the most important of these subjective factors are previous experience with the situation, and its perceived importance (Johnston & McCabe, 1993).

Hans Selye (1975) often referred to as the ‘father of stress’, defined stress as the ‘nonspecific response of the body to any demand made upon it.’ In other word, stress, like arousal, is a mental physiological response to some sort of stressor. The stressor could be in the form of physical exercise, or it could be some sort of bodily harm threat. Selye (1975) and Humphrey (1986) further differentiated the nature of stress by referring to positive stress as eustress and negative stress as distress. Haris (1980b) referred to positive affect (joy, exhilaration, happiness) in sport as eustress, while Martens (1982) defined anxiety in terms of negative affect (fear, apprehension, worry). In other words, Selye’s use of the term distress is virtually identical to Marten’s use of the term ‘anxiety.’

Some degree of previous experience with the situation, small or great, influences the person’s appraisal of it. It is likely that a person who has previously experienced a sense of mastery in a given situation would appraise a similar situation in the future as challenging or beneficial to his or her well-being. Thus, a sense of self-efficacy and control would be mobilised by such an appraisal in terms of the person’s response capability. If on the other hand, the person has a

psychological association of harm or loss with the situation because of the outcome of previous experiences, then, the appraisal is more likely to be one of threat (Johnston & McCabe, 1993)

Underlying the transaction between person and the situation is the degree of importance that the person attaches to successfully meeting the appraised demand. Sells (1970) commented that, for stress to occur, the consequences of failure to successfully meet the demands of the situation must be considered subjectively significant. When environmental demands are such that an individual may ignore them, or fulfil them inadequately, without serious consequences, those demands will not generate threat however accurately they may be appraised and no matter how much they are perceived to exceed the individual's response capability (McGrath, 1970). Generally, the more important and uncertain a sporting outcome is, the more an athlete is likely to experience competitive anxiety (Martens, 1977). However, athletes differ in the appraisals they make of sporting situations. A situation that is experienced as stressful to one may be seen as a challenge to another (Blais & Vallerand, 1986, Passer, 1983, Scanlon & Lewthwaite, 1984, Simon & Martens, 1979, Taylor, 1987)

The transactional model of stress and emotion is a major advance from static stimulus or response models. It rejects the notion that stress is



caused solely by stimulus events or “stressors” Two athletes can have entirely different responses to the same “objective” sporting situation The transactional model also rejects the view that stable personality factors are strong predictors of stress Rather, it is the dynamic interaction of environmental and personal factors that creates stress relationships (Lazarus & Folkman, 1984)

Presented with a demand in the environment the person appraises it and his or her ability to respond to it affectively, should a negative imbalance between perceived demand and perceived capability exists, stress is experienced emotionally and a stress response occurs (Johnston & McCabe, 1993) Pargman (1986) lists a number of “products of mental activity” which may exacerbate or induce psychological stress in motor performance situations These include evaluations of previous performances, comparisons with other performers, and perceptions of the importance of forthcoming performance If an attempt is made to address the situation, cognitive and behavioural strategies to reduce the stressful nature of the demand (coping strategies) are then initiated (Johnston & McCabe, 1993) The key to the transactional model of stress is the role of subjective appraisal (Lazarus & Folkman, 1984) The two main issues of appraisal concern the evaluation of the person’s response capability and of the demand Two factors influencing an individual’s perceived capability are perceived self-efficacy, and perceived control Perceived self-efficacy is

determined by the individual's belief in his or her capacity to cope with situational demands in terms of motivation, cognitive resources and appropriate modes of response (Bandura, Gioffi, Barr Taylor, & Bronillard, 1988)

Perceived control is a second important factor in the appraisal of a stimulus as threatening (Bandura et al , 1988, Lazarus & Folkman, 1984) The individual's belief that he or she has some control over what is happening has stress reductive effects on the person (Bandura et al , 1988) Indeed, control need not actually be available but only be perceived to be available for stress reduction to occur (Averill & Rosenn, 1972)

Coping and Coping Strategies

Coping is recognised as a critical mediating factor in potentially stressful transactions with the environment Coping may be defined as “constantly changing cognitive and behavioural effects to manage specific external the resources of the person” (Lazarus & Folkman, 1984) That is, coping refers to the psychological strategies that are mobilised when the person's perceived capability to successfully meet that demand

Ray, Lindop, & Gibson (1982) define coping as “behaviour directed towards the resolution or mitigation of a problem with the aim of changing the situation or its perceived implications, or of combating the negative emotions generated” However, many levels of analysis of coping have concerned researchers, for example broad skills or attitudes which are considered advantageous (Antonovsky, 1979), coping styles (Hann, 1977), coping resources such as self-concept (Mullen & Suls, 1982), and specific coping efforts (Lazarus & Launier, 1978, Pearlman & Schooler, 1978)

Coping is a dynamic process which involves appraisal and re-appraisal of both the meaning and significance of the person for responding appropriately Coping consists of learned behavioural responses that successfully lower arousal by neutralising or minimalising the importance of a dangerous or unpleasant condition (Lazarus & Folkman, 1984) Thus, coping is a conscious process that allows a person to master, reduce, or tolerate stressful demands Failure to cope with and respond constructively to acute stress may lead to ineffective cognitive processes, energy reduction, performance failures, and other debilitating outcomes (Smith, 1986) Often, stressful feelings and muscular tension result which undermines efficient sport skill execution (Anshel, 1990)

Perhaps an important aspect of coping is what Bandura (1977, 1982) calls outcome expectancy, the person's evaluation what a given behaviour will lead to certain outcomes, and efficacy expectation, the person's conviction that he or she can successfully perform at levels required to produce the desire outcome. For example, a skilled competitor will cope with the stress of the coach's reprimand by taking responsibility for his or her performance, learning from the incident, and making an optimal effort to play better.

Despite the admonition that "coping and stress are but two faces of the same coin" (Roskies & Lazarus, 1980), stress-management studies seldom include systematic assessments of the participants' coping behaviours. Few studies relate variations in coping behaviours to the outcomes of stress-management programmes. Although most comparative outcome studies report that treatments are equally effective on indicators of stress and anxiety, the similarity in outcome could be due to the effective use of different coping strategies (Long, 1993). Consequently, which coping strategies are used with what frequency and effectiveness in which situations has not yet been determined (Long, 1993). Many sport psychology intervention investigations have implicitly recognized that a limited coping repertoire or the absence of specific coping skills is a contributing factor in inadequate performance and sport dissatisfaction (e.g., Crocker, 1989, Crocker et al., 1988, Mace & Carroll, 1985, 1989, Smith, 1980).

Performance-related stress may be experienced before, during or after the performance itself. According to Pargman (1986), pre-performance stress is reflected predominantly in a cognitive form consisting largely of “worry” about the expectation of negative self-evaluation related to performance. Stress experienced during performance is often linked to level of arousal, with both cognitive and somatic anxiety being prominent features. The muscular tension due to bracing of large skeletal muscle groups is regarded as an example of stress-induced muscular tension which may lead to impaired physical performance skills. However stress experienced after competitions are most often related to performance outcome, including the evaluation of the performance by the individual or the perceived evaluation of others (Pargman, 1986). The application of techniques to modify the effects of stress, commonly referred to as coping techniques or ways of coping with stress, has been found to lead to improved performance in many sporting situations (Sunn, 1972. Mahoney, 1979. Seabourne et al , 1985. Pargman, 1986)

Folkman and Lazarus (1980) identified at least two coping styles that may be employed by a person in the face of a given stressful event. With the first of these styles, “problem-focused coping”, an attempt is made to change the troubled person-environment relationship. Here, the person-environment relationship is the focus of attention. Problem focused coping may lead to a