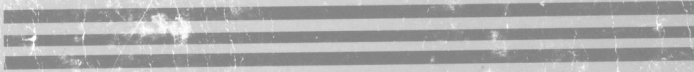




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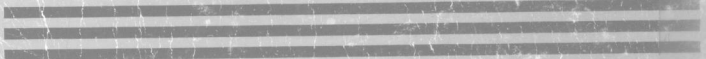
**SPORT AND EXERCISE PARTICIPATION:
MOTIVATION AND BARRIERS**

Proceedings of a Conference organised by the Centre for
Physical Education and Sport and the Physical Education and
Sports Science Unit
November 1993

Edited by: Koenraad Lindner and Mike Speak

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SPORT AND EXERCISE PARTICIPATION: MOTIVATION AND BARRIERS

Proceedings of the Sport Psychology Conference organised by the Centre for Physical Education and Sport, and the Physical Education and Sports Science Unit of the University of Hong Kong. Sponsored by the Hong Kong Sports Development Board

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SPORT AND EXERCISE PARTICIPATION: MOTIVATION AND BARRIERS

Proceedings of a two-day conference held in Hong Kong at the Rayson Huang Theatre, University of Hong Kong on 26 and 27 November, 1993

Editors' Note

These Proceedings represent the content of the fourth in the series of conferences on Physical Education and Sport organised by the University of Hong Kong. This year, the conference was jointly presented by the Centre for Physical Education and Sport and the Physical Education and Sports Science Unit of the Faculty of Education and was co-sponsored by the Hong Kong Sports Development Board.

The theme of the conference, *Sport and exercise participation: Motivation and barriers*, attracted contributions on a variety of related topics. Some papers focused on the participation aspects and the reasons for participating and/or withdrawing (Seefeldt; Speak et al.), whereas others dealt primarily with factors affecting participation and disassociation (Shuttleworth; Lindner et al.). In one presentation the use of sport and recreational facilities in Hong Kong and the participation preferences of its citizens was examined (Sivan & Robertson). The remaining three presentations emphasised the motivational aspects of sport and exercise participation (Chan; McGill; Leahy).

The papers in these Proceedings are essentially as submitted by the speakers, with only minor editorial changes for consistency in style and format. For one presentation (Leahy) only an abstract is reproduced here, as this was largely a visual presentation. We should like to thank Betty Mair and Dr. John Spinks for their opening addresses, and Tom Norcross for so ably chairing one of the sessions. Special thanks to the Hong Kong Sports Development Board without whose generous sponsorship this conference would not have been possible.

It is hoped that this collection of papers will contribute substantially to the body of knowledge in the area of sport participation and that it will be instrumental in the further development of sport in Hong Kong and elsewhere.

K. J. Lindner
M. A. Speak
Editors

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INTRODUCTIONS TO THE CONFERENCE

CONFERENCE 1993
*Sport And Exercise Participation:
Motivation and Barriers*

I should like, on behalf of the University of Hong Kong, to welcome our overseas and invited guests, our speakers and all participants to the 1993 Conference, which concentrates on Sport and Exercise Participation.

Our first conference, in 1989, studied Health-related Fitness, and our speakers drew attention to the health dangers associated with lack of physical activity in children. Our second conference in 1990 concentrated attention on children in competitive sport, and drew attention to the fact that children were not mini-adults, but had their own individual and collective needs, medically, physiologically, psychologically and socially.

In 1991, we turned attention away from competitive sport to the theme of children in sport, considered the Aussie Sport model, the problems facing children in sport, and recommended the establishment of a special programme aimed at children in sport.

This year, our concentration is on participation in sport and exercise, and we explore the motivation and barriers which affect participation in physical activity on the part of children and adults.

We welcome again the sponsorship of the Hong Kong Sports Development Board which enables us to provide a conference of quality in all respects. Although there are implications for us in the University from the findings of this Conference, it really behoves organisations like the Hong Kong Sports Development Board, the Hong Kong Sports Institute, the Amateur Sports Federation and Olympic Committee, National Sports Associations and the Municipal Councils and teachers to take away messages on factors affecting sport and exercise participation, and translate them into action for their own organisations, to the ultimate benefit of children and adults in Hong Kong. The medical, social and physical advantages to be gained are enormous, for the individual and the community.

Mike Speak
Director,
Centre for Physical Education and Sport

The Hong Kong Sports Development Board is pleased to be supporting this conference.

The University of Hong Kong has shown leadership and imagination in bringing together a very diverse and talented range of speakers.

It should make for a very informative and valuable conference. Hong Kong needs more of them.

Howard J. C. Wells
Executive Director,
Hong Kong Sports Development Board

PARTICIPATION IN SPORT AND PHYSICAL ACTIVITY

Vern D. Seefeldt
Michigan State University

ABSTRACT:

The United States Public Health Service has identified increased physical activity as a top priority in its publication Healthy People 2000. A body of evidence that has accumulated during the past two decades has persuaded the American Heart Association to list sedentary lifestyle as the fourth risk factor to cardiac health. Despite these warnings and the concomitant association of modest intensities of exercise to improved health, only 22 percent of American adults engage in leisure time physical activity at the recommended level of health benefits. Full 24 percent of Americans are completely sedentary and the remaining 54 percent are inadequately active.

Why are so few adult Americans physically active? The literature on adherence and compliance provides some tentative answers, that, if addressed by those who promote exercise programs, could change the statistics in a positive direction. Persons who are obese, who smoke, who are blue collar workers and who lack family support to change their present physical condition are likely to discontinue exercise programs. Conversely, exercise programs that are offered close to the client's home, are offered at convenient times and that are of moderate intensity are likely to sustain their clients. In addition, those programs that induce a cognitive commitment, provide incentives and promote attainment of the enrollee's goals are also likely to retain their enrollees.

The research on exercise in children has centered on their achievement on norm-referenced physical fitness tests and their participation and attrition in organized youth sports programs. The prevailing evidence on children's fitness suggests that American children are becoming slightly fatter and more sedentary. However, data accumulated over a 26 year period at Michigan State University suggest that these means are influenced unduly by the lower 25 percent of the youth, who are actually fatter and less active than their peers of several decades ago.

However, the students who remained in activity programs did not change in body composition, but were more competent in motor skills and physical fitness than their peers of the late 1960s and early 70s.

The attrition on American youth sports continues at an unacceptable rate. Data by individual sports suggest that the dropout rate, by age 15, is 75 percent. Reasons for the attrition focused primarily on the ways in which adults managed the youth sports programs and the adverse treatment of young athletes by their coaches. Numerous suggestions of how sports could be improved were provided by the 26,300 participants in a nation-wide study.

PARTICIPATION IN SPORT BY STUDENTS ENTERING THE UNIVERSITY OF HONG KONG: RESULTS OF A SURVEY UNDERTAKEN IN SEPTEMBER 1993

Mike Speak, Koenraad Lindner and Daniel Li

Centre for Physical Education and Sport and Physical
Education and Sports Science Unit, University of Hong Kong

ABSTRACT:

A questionnaire asking the respondents' interest in sport participation at the University of Hong Kong is yearly administered to all incoming students (N = about 2700). The instrument also asks about the respondents' reasons for intending to participate or not participate in the University's sports and activity programmes, as well as the extent of their participation and motives therefore in sport activities during their school years. The students are also asked to rate the physical education programmes, their P.E teachers, the sports facilities, the extra-curricular physical activities programmes, and their own participation for the primary school years and for Forms 1-5 and 6-7.

The results of this year's survey are presented and discussed in this paper. Differences among Faculties, types of school attended and home locations, and between the sexes are analysed, and comparisons are made with the data from previous years in order to assess trends.

1 INTRODUCTION

In 1989 investigations were conducted into a number of factors concerning participation in sport by students entering the University of Hong Kong. These investigations targeted three main areas of interest;

- What sports activities students had already participated in during their school careers.
- What sports activities they would *like* to pursue during their University studies.
- Reasons for their acceptance or rejection of sport and physical activity.

By 1993, the fourth survey had become slightly more sophisticated in both its methodology and its range of questions, and

in addition to the standard queries on participation in sport, were added a battery of questions on experiences and opinions of physical education and sport *within* schools (PE lessons, extra curricular activity, sports facilities, PE teachers) and participation *outside* schools.

This paper concentrates attention on attitudes to physical activity and sport, and attempts to illustrate in the analysis of 2,700 student questionnaires some of the factors affecting participation in sport and physical activity by students in Hong Kong.

2 MOTIVATION TO PARTICIPATE IN SPORT AND PHYSICAL ACTIVITY

Biddle (1992) points out the need to distinguish clearly in research between *exercise* and *sport* when considering motivation and attitudes to participation.

In sport, the attraction from recent research (Biddle & Fox, 1988; Gould & Petlichkoff, 1988) appears to be fun and enjoyment, learning and improving skills, being with friends, success and winning, and physical fitness and health. Wankel and Kriesel (1985) found that motives regularly are divided into three categories;

- *Intrinsic factors*, including personal accomplishment and skill development.
- *Extrinsic factors*, including winning prizes and pleasing parents and coaches.
- *Social factors*, including being part of a team or being with friends.

Intrinsic factors were perceived as most important and extrinsic factors least so.

For exercise or physical activity as opposed to sport, the Canadian Fitness Survey (1983), a Finnish study by Telema and Silvenoinen (1979) and Tappe, Duda & Menges-Elrnwold's (1990) investigations in the USA have revealed that reasons for being active were fun, feeling better, weight control, flexibility, challenge (Canadian Fitness Survey 1983), relaxation, recreation and competitions. These varied according to age (Telema & Silvenoinen, 1979), and strength, mastery, appearance, flexibility and competition for boys, and appearance,

mastery, flexibility, strength and weight management for girls (Tappe et al., 1990).

The reasons given for non-participation are also of interest, and research to date (see White & Coakley, 1986; Gould & Petchlikoff, 1988; Biddle & Fox, 1988) suggests that although little is known about why children cease to exercise outside the sport context, some evidence is available that competing time demands and lack of time, facilities, funding and transportation were major causes.

Data currently available suggest that individuals often have multiple motives for both participation and dropout (Lindner, Johns & Butcher, 1991) and that these change with age, and vary between genders.

3 THE LEISURE BEHAVIOUR OF ADOLESCENTS IN HONG KONG

The leisure behaviour of young people has received increasing attention in the last two decades (see Sillitoe, 1967; Rapoport & Rapoport, 1975; Poole, 1983; Hendry, 1983).

Ng (1984) using a self-administered questionnaire survey of secondary school pupils in Hong Kong (n=1310) identified the major patterns of leisure use of students in terms of frequency and variety, with distinctions for sex, age and socio-economic status. Findings revealed that major leisure activities were television (31.5%), other mass media activities (23.8%), interest activities (6.2%), social activities (9.2%), physical activities (24.2%), and other leisure activities (5%).

He drew attention to differences in the levels of participation amongst the sexes particularly in physical activities where boys (31.9%) were almost twice as active as girls (15.2%). Indeed for boys, physical activity proved more attractive than television viewing (31.9% against 27.2%).

He also considered the effect of age on participation and found that participation in physical activity declined with increasing age from 24.5% (11-13) and 26.2% (14-15) to 20.7% (16+). This may be due to external pressures particularly for examination candidates.

Classifications according to socio-economic status (SES) which was measured by father's occupation and education, family income and type of housing revealed little variation in

participation in physical activity: low SES (23.7) medium SES (23.8) high SES (24.7).

Ng also pursued the view expressed by Rapoport (1975) that adolescence, associated as it is with a wealth of states and interests - novelty, variety, solitude, extra-family relationships, serves to facilitate the process of identity search and establishment. In the field of physical activity, this research revealed that dominant companions were friends and school-mates (67%) as opposed to family (0.8%) and mixed (13%) accompaniment and solitary activity (10.9%).

3.1 Factors affecting participation in sport and physical activity at the secondary and tertiary levels of education

Despite a booming economy which has enabled massive provision of community and private recreation facilities, conditions for the teaching of sport and physical recreation in Hong Kong schools are far from satisfactory. The report on Sports in Education and on Sport in Education: the Future Challenge (Council for Recreation and Sport, 1988, 1992) expressed serious concern at the lack of facilities available at the primary level of education, the inadequacy of extra-curricular activity and inter-school competition, the absence of appropriately qualified teaching personnel, and the failure to identify and nurture sporting talent at an early age. At the secondary level of education, deficiencies are known to exist as a result of the lack of facility provision, separate morning and afternoon schools sharing the same facilities to the detriment of extra-curricular activity, a dearth of graduate or specialist teachers of the discipline, and absence of a structured programme of extra-curricular opportunity and competitive sport. The acute shortage of places in the tertiary level of education also imposes its own pressure on some children to concentrate attention on study rather than extra-curricular physical activity. Only 1.9% of 170,825 HK Certificate of Education Examination (HKCEE) candidates were offered University places in 1984, and only approximately 6% entered some form of higher education (Ng, 1986).

4 THE 1993 SURVEY OF INCOMING STUDENTS' PARTICIPATION AND ATTITUDES TOWARDS SPORT AND PHYSICAL ACTIVITY

4.1 Aims and Objectives

The survey aimed to provide data on Hong Kong adolescents' attitudes towards sport and physical activity hitherto unavailable, and review possible motivations and barriers facing young people in participation. It was also intended that data presented would be worthy of consideration by sports bodies and educationists so that levels and continuity of participation could be improved.

4.2 Methodology

Self-administered questionnaires (n=2895) were issued together with other necessary documents from the University Registry to all incoming undergraduate students. Returns were received by Faculties and transferred to the PE and Sports Science Unit for analysis. The response rate was 96%, including 1337 males and 1442 female students.

4.3 Analysis of Results

After a section on sport experiences during school which is not relevant to this paper, attention turned to the question of students' intentions to participate. In Figure 1, it emerged that over 10% of incoming students were likely to participate 'seldom' or 'never,' but there were significant differences in likely regular participation between male and female students. This reflects Ng's (1984) findings at the secondary level. There were however no significant differences in likely participation from students resident in Hong Kong, Kowloon or the New Territories, nor between students coming from government and subsidized schools. Students coming from private schools however were less likely to participate.

The next set of questions concerned students' motives for likely participation. Figure 2 clearly indicates that leisure and relaxation, health concerns, sports fitness and skills, and social considerations proved important. There were significant differences between the sexes in several of the factors, in particular the male drive for 'excellence' and 'better personal image'. However, both factors received a low rating by both sexes.

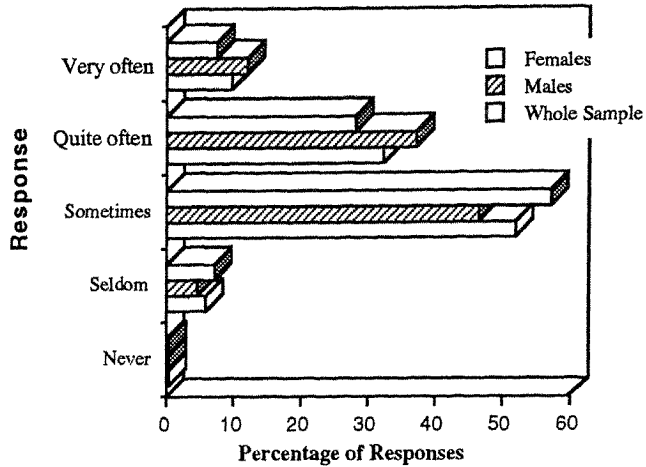


Fig.1 Responses to the question: "Will you be likely to take part in sport or physical activity during your university years?"

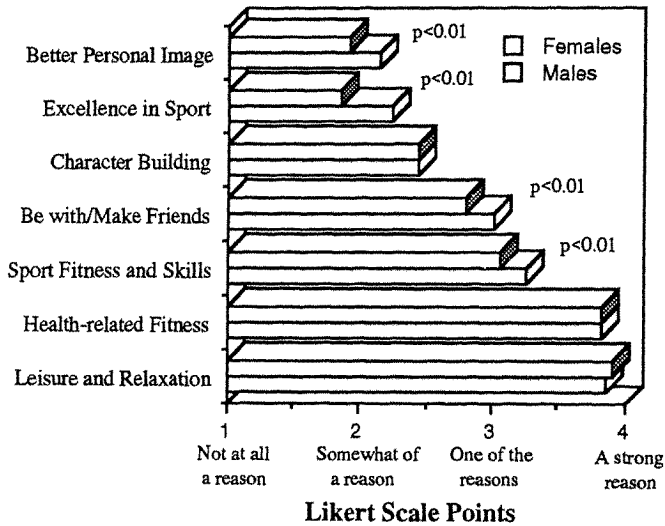


Fig. 2 Ratings of reasons for likely participation during university years

Figure 3 provides information on likely reasons for non-participation. 'Study time' and 'other interests' were major factors, both in effect positive factors in their own right. A 'lack of skill' on the part of female students was a major deterrent, and 'lack of interest' by females was also significantly higher than responses by males. It was heartening to note that parental discouragement was the least of all deterrents. Significant differences between the sexes should be noted in 'studying', 'skill', 'friends', 'interest', and 'injury' anxieties.

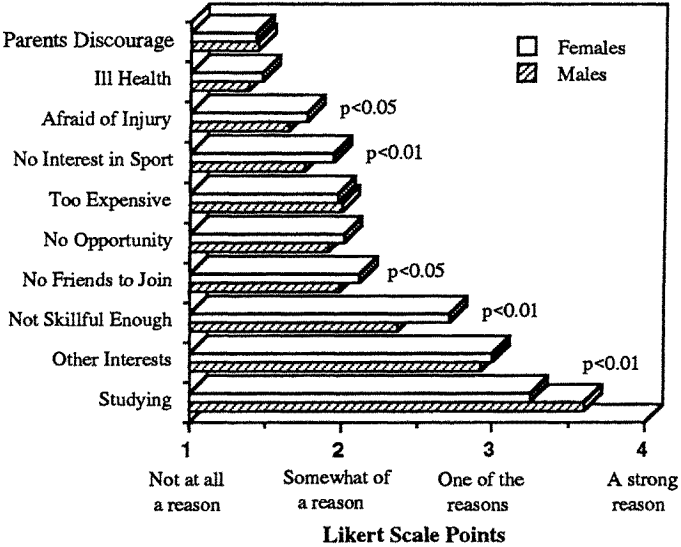


Fig. 3 Ratings of reasons for likely non-participation during university years

A further set of questions called for students' evaluations of school physical education lessons, extra-curricular activities (ECA), sports facilities and teachers.

(Students were positive about their PE lessons) at both primary and secondary levels, but there was a significant change in attitude on the part of males and females between primary and secondary levels (Figure 4).

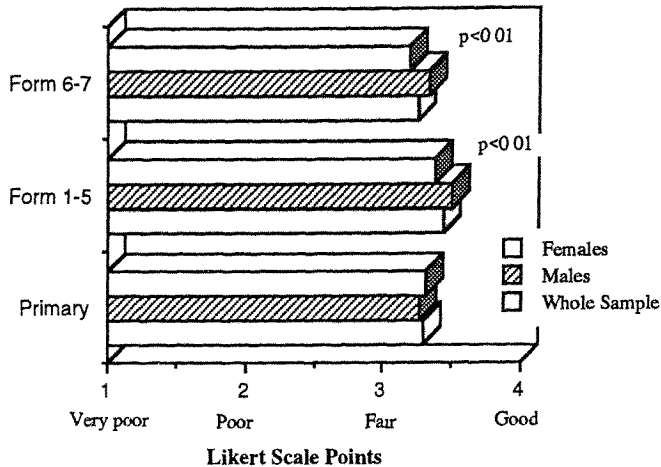


Fig. 4 Evaluations of physical education lessons during the school years

There was a major change in students opinions on E.C.A.'s between primary and secondary levels. Females are slightly more positive than males at the primary level, but this is reversed at the secondary level, and significantly so (Figure 5).

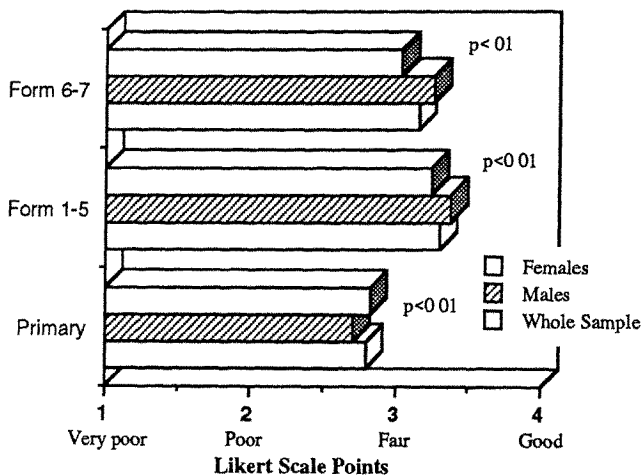


Fig. 5 Evaluations of extra curricular activities during the school years

The students considered sports facilities to be fair at the secondary level, but there was less satisfaction on their adequacy at the primary level. It would be of interest to see if their views changed after experience of tertiary facilities (Figure 6).

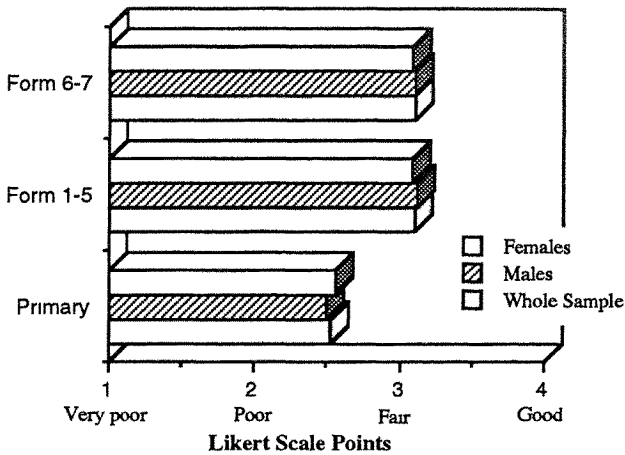


Fig. 6 Evaluation of sport facilities during the school years

There was increasing appreciation of teachers from the primary (non-specialist) to the secondary (specialist) level. Females rated teachers significantly higher than males at two of the three levels investigated (Figure 7).

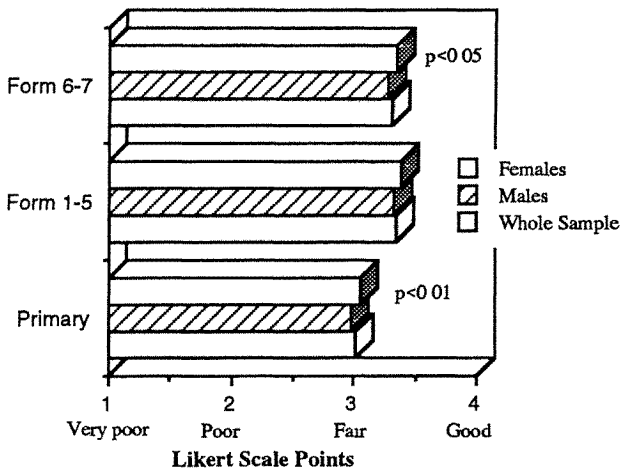


Fig. 7 Evaluation of the physical education teachers during the school years

Another set of questions investigated participation in sport and physical activity *outside* the school environment. Students were asked to rate their participation in activities

organised by sports associations, clubs, Urban and Regional Councils etc. (Figure 8).

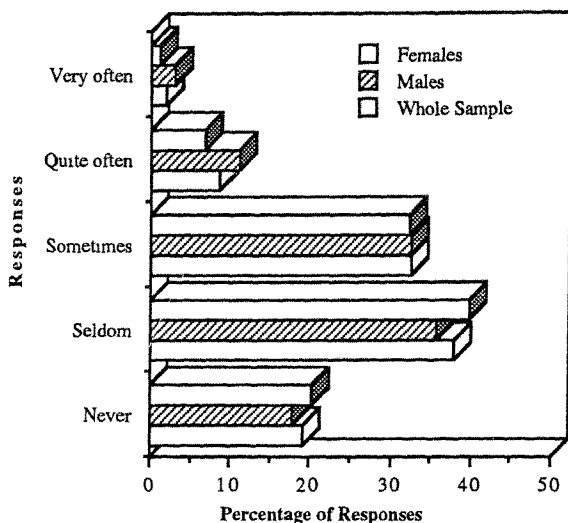


Fig. 8 Responses to the question: "How often did you take part in sports activities arranged by organisations other than schools, such as UC/RC, Clubs, Sports Associations, etc.?"

Figure 8 suggests clearly that only 12% of males and 7% of females participate regularly outside the school environment. The absence of local community sports facilities with recognised junior member sections, district sports clubs which operate on either a social or competitive basis, junior leagues in sport and the lack of recognition generally of the need for provision for junior and youth sport may all play a part in this state of affairs.

It has also been suggested that at some point in the past, the Municipal Councils and the Education Department mutually accepted that sport participation for children and adolescents of school age would be catered for by schools in the form of extra-curricular activities. In the days when community facilities were in short supply, that policy may well have been acceptable, but the absence of links between school and community sport engendered by such a policy will perpetuate the problems faced by students seeking opportunities for sport or recreation on leaving school. This question should be addressed by the relevant authorities.

Students were then asked for reasons for participation or non-participation in outside-school activities. Figure 9 reveals that leisure needs, a concern for health-related fitness, a desire to improve sport skills and the social benefits of making or being with friends were important. Less important were the need for improved personal image and character building, performing excellently and being with family. There were significant differences in responses of male and female students to some questions particularly in the drive for excellence.

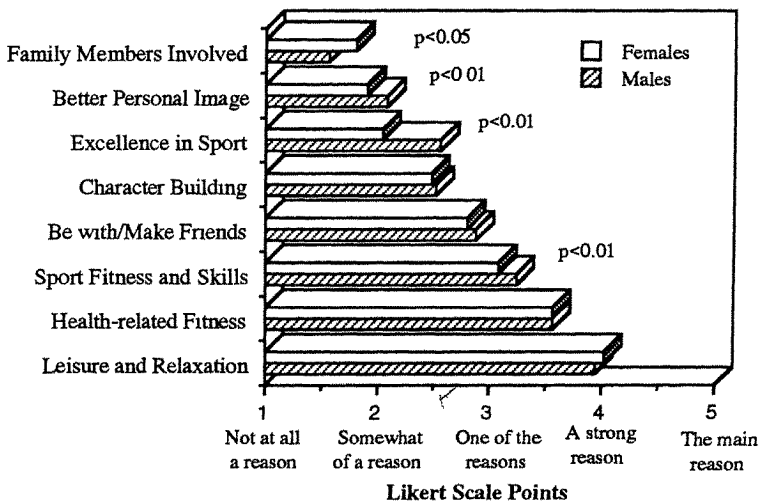


Fig. 9 Ratings of reasons for participation in outside-school physical activities

On the question of non-participation, it is obvious that study time, other interests, a lack of perceived skill and opportunity were key deterrents, and again there were major differences in certain responses by males and females (Figure 10).

What is evident over the years of the survey is that major stated reasons for participation in physical activity are a concern for health and fitness and a need for recreation. An interest in the acquisition of sport skills appears to be growing, which must be satisfying to the Sports Development Board, the ASFOC, the National Sports Associations and clubs. A desire for excellence and competition remains low however,

reflecting possibly a non-aggressive trait in children and adolescents, but also a lack of competitive opportunity and experience.

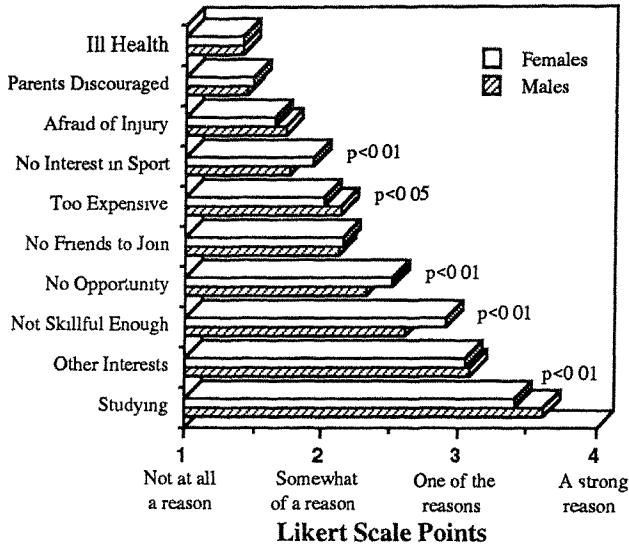


Fig. 10 Ratings of reasons for non-participation in outside-school physical activities

5 CONCLUSIONS

There are obvious limitations to attempts to conclude generally from the results, in that the sample represents only 6% of the total population age cohort, and, in theory at least, the most intelligent segment. There is a need for further investigation into some of the factors affecting participation, but even at this stage, several implications can be drawn from child and adolescent perceptions reflected in the data, and where appropriate, recommendations can be made to appropriate authorities.

5.1 Education Authorities

- Female students' satisfaction with formal physical activity changes between the primary and secondary levels of education.
- Study time is seen as a major deterrent to participation.

- Students' evaluation of school PES, teachers, ECA and facilities was positive at the secondary level, but students expressed less satisfaction with those aspects at the primary level.

5.2 Community Sports Authorities

- There is little evidence of regular participation in sport outside the school context. Where it does exist, it is substantially more prevalent among males than females.
- Family involvement in sport appears to be a significant factor and deserves recognition as a positive motivator.
- Lack of opportunity, although decreasing as a factor since 1989, is still a major obstacle and should be addressed.
- The desire for acquisition of sports skills appears to be an increasingly important motivating factor.

5.3 University Authorities

- Female students indicated that they would be less likely to participate in sport and physical activity.

Duda (1992) has indicated that the key to continued sport involvement through adulthood and a lifetime of physical activity is that one enjoys sport and exercise and feels competent when first exposed to such experiences as a child. She concludes that a sustained investment in physical activities seems more likely when young people desire to *do their best* rather than *be the best*' (p.14). If educationists at the primary, secondary and tertiary levels fail to recognise the significance of that view, then in the drive to encourage participation we may win a few battles but shall in all probability, lose the war.

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SPORTS ACTIVITIES AND THE USE OF SPORTS FACILITIES IN HONG KONG

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Abstract:

The paper presents preliminary findings of a survey recently carried out in Hong Kong on the use of and demand for recreational and sports activities. The population-based sample includes respondents from all nineteen districts of Hong Kong and the survey was administered with the co-operation of educational institutions at primary, secondary and tertiary levels. Data reflect on the actual participation in sports activities during the summer season, as well as on the preferred sports activities respondents wanted to do but had not done. A second survey is currently underway to measure the annual variation of sports participation in Hong Kong.

1 INTRODUCTION

Previous research into leisure and sports pursuits of Hong Kong's people have highlighted the involvement of people in a variety of recreational and sports activities (Ng., 1984; Hong Kong Southern District Board Social Service Committee, 1985; Ng., 1988; Fu, 1993). Most of these earlier studies have been carried out in specific districts and reflect only the recreation behaviour patterns of certain age groups.

The present study aimed to generate an overall picture of leisure and sports patterns and the use of recreational and sports facilities in all districts of Hong Kong. Such a reflection can improve the capacity of the various providers of sporting and recreational opportunities in Hong Kong to effectively manage their current resources and to assist in planning for the provision of new resources. The paper explores main findings with regard to sports involvement of people.

2 METHODOLOGY

Data were collected using a questionnaire which sought to obtain information from the respondents on the range of sports activities they have undertaken in the previous month, their frequency of participation, the place and organising bodies, and the sources of information used by respondents. In addition, respondents were asked about their level of satisfaction with facilities supplied for the activities, activities which they wanted to do but had not and reasons for non-participation in preferred sports activities.

A stratified sample was used for this survey. The survey sample comprises respondents from all nineteen districts of Hong Kong. The population-based survey was administered with the co-operation of educational institutions at primary, secondary and tertiary levels. Two schools (primary and secondary) from each district were randomly selected from a list of schools supplied by the education department. At the tertiary level, questionnaires were submitted to students enrolled at higher education institutions on Hong Kong Island and in Kowloon.

The questionnaires were administered to one class in each school. Each student received two copies of the questionnaire and was asked to complete one copy and then to administer the other copy to an adult of his/her family. Thus the sample covered the age cohorts from 6 years through to elderly. Overall, 3786 were distributed, and 2941 were returned - a response rate of 77.7%.

3 MAIN FINDINGS

3.1 Participation rate, frequency and satisfaction

In order to get information on the participation rate in sports activities the respondents were introduced with a list of sports activities and were asked to tick the five main activities they have done in the previous month. Table 1 shows the participation rate in the top five sports activities.

Table 1 shows that the most popular sports activity was badminton. More than half of the respondents (51.6%) have undertaken this activity in the previous month. Other most popular sports activities were cycling, basketball, swimming and table tennis.

Table 1 Participation Rate in the Top Five Sports Activities

Activity	Percentage
Badminton	51.6
Cycling	41.5
Basketball	36.8
Swimming	31.8
Table Tennis	30.7

Five additional activities: jogging, playground games, soccer, volleyball and hiking had a moderately high rate of participation.

An examination of the participation rate in the top ten sports activities by sex and age revealed that females tended to participate in more activities than males. In addition, there were differences between the type of activities performed by males and females. Females had participated mainly in Badminton, Volleyball and Jogging and males had participated mainly in Basketball, Soccer and Table Tennis. There was an overall decrease in the participation rate with the increasing age with a slight increase among respondents who are 25-44 years old. However, badminton remained popular with older age cohorts.

The majority of respondents had participated between one to four times in the top ten activities during the previous month. Badminton, Basketball, Volleyball, Jogging had the highest rate of participation with a frequency of two to four times. Hiking, Cycling and Swimming had the highest rate of participation with a frequency of once a month.

Overall, the satisfaction level of the participants ranged between average to satisfied for most of the activities.

3.2 Companions and sources of information on the sports activities

Companions participating with respondents in the top ten sports activities were mainly family members, school mates and friends. The companions vary according to the type of

activity in which the respondents had participated. The rate of participation of school mates, for example, was higher in sports activities performed in groups or teams such as: basketball, soccer and volleyball. In contrast, the rate of participation of family companions was higher in other sports activities such as hiking, swimming cycling and playground games.

Friends were the main sources of information on the activities. Family and school teachers also supplied information on certain sports activities. School teachers, for example, were the main sources of information on activities such as: volleyball and basketball.

3.3 Organising bodies of the activities

The majority of the respondents who participated in the top ten activities reported that the activities were organised by bodies other than government, non-commercial, commercial or schools.

One-third of the respondents reported that four sports activities: swimming, badminton, soccer and volleyball were organised by government bodies. More than one third of the respondents reported that they had participated in two activities: badminton and swimming which were held in sports or recreation centres.

3.4 Preferred activities and reasons for non-participation

In order to elicit information on their preferred sports activities, respondents were asked to state the activities they wanted to do but had not done in the previous month. Table 2 shows the percentage of the top five preferred activities.

Table 2: Top five sports activities respondents wanted to do but had not done

Activity	Percentage
Swimming	29.8
Cycling	24.9
Tennis	24.0
Hiking	20.2
Horse Riding	17.7

Almost one third of respondents (29.8%) indicated that swimming was their most preferred activity. Other strongly desired activities were cycling, tennis, hiking and horse riding with five additional activities: bowling, squash, badminton, boating/sailing/windsurf and ice-skating identified as desirable.

Of the above ten activities only four: swimming, cycling, hiking and badminton were in the top ten highest participation activities.

The most frequent reasons for non-participation in the top sports activities were lack and unsuitability of time. Lack of time, time not suitable and lack of companions were cited as the main reasons for non-participation in sports activities which respondents want to do. Lack of companions and the distance to appropriate activities were reported by one-third of the respondents as the reasons for not participating in desired activities.

4 DISCUSSION

The findings of the survey shed more light on the overall sports patterns of Hong Kong people. The study has clearly identified the most popular activities, preferred activities and the context in which these activities are carried out. The results indicate the significance of certain sports activities such as badminton for people in all age ranges. The research also indicated on the important role of friends, family and school teachers as sources of information on activities - information which could be valuable in the process of sports socialisation. As the reported survey was carried out during March and April it represents the participation in sports activities during the summer season. In order to acquire a full picture of the annual variation of sports involvement a second survey during the winter season is currently being carried out.

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FACTORS IMPACTING UPON YOUTH SPORT PARTICIPATION

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ABSTRACT:

The declination in youth sport adherence experienced by several countries generates concern at national and community levels (Johns, Lindner & Wolko, 1990). Low sport adherence impacts upon preventive health care and representative sport systems with significant implications for physical educators and coaches. The perceived benefits of sport participation and the motivations for initial involvement are well documented (Engstrom, 1990; Klint & Weiss, 1987). To counteract sport drop-out and promote sport's benefits, modified sports packages have been initiated in such countries as Australia (Aussie Sport), New Zealand (Kiwi Sport), and Hong Kong (Go Sports). The supportive infrastructure these programs provide facilitates the development of social skills including health, equity, access, cooperation, fair play, participation vs. winning, gender equality and compassion. The conclusion of the programme at 13 years of age and the consequent removal of the infrastructure combined with the advent of adult sport and a range of associated factors reduce sport adherence.

Two-and-a-half thousand Tasmanian school children were surveyed employing questionnaire and in-depth interview techniques to identify factors associated with sport withdrawal. Results strongly indicate that the cessation of Aussie Sport with the consequent removal of the opportunity for maximal participation, the social-competitive environment, the skill development emphasis, effective coaching, modified rules, and codes of behaviour, compounded by the transition to adult sport, peer influence, parental pressure, coach attitude, competitive structure, and transport and financial constraints, account for reduced youth sport adherence.

1 INTRODUCTION

The benefits of sport participation are well documented, recognised and promoted by education and sport organisations as well as the wider community. However, one of the

salient components of the sport system, namely youth sport, has served to undermine such benefits.

The main manifestation of dysfunction within the youth sport system is the withdrawal or "drop-out" syndrome whereby youth become alienated from the formal competitive sport system and fail to adhere to active participation in physical activity.

This situation has generated concern amongst both physical and sport educators as well as sport administrators, for mutually exclusive reasons. The educators express anxiety at the consequent decline in lifespan health, fitness and performance as a function of low physical activity. Sport managers are likewise concerned but at the reduction in flow-through numbers to senior competitive sport. The reaction of the latter has been the implementation of modified sport programmes aimed at gaining and retaining youth sport participation.

This paper initially explores the theoretical paradigm explicating the perceived benefits accruing to youths as a result of sport participation and their motivations for initial participation and subsequent adherence or withdrawal. It subsequently reports on the impact upon youth sport adherence of the removal of the supportive infrastructure associated with modified sports at the transition from primary to high-school in Australia and more specifically in Tasmania. For the purposes of this paper, the term sport is operationally defined as formally organised, regulated and competitive physical activity. It excludes, therefore, informal, non-competitive physical recreation. Youths are considered to be within the Australian high-school range of 11-18 years of age.

2 THE BENEFITS OF SPORT PARTICIPATION

The benefits derived by youths from sport participation may be categorised as extrinsic-institutional or intrinsic-individual. The former generally promote social control and integration through secondary socialisation and enculturation. They are characterised by the range of tangible rewards gained through success in competitive sport such as financial gain, trophies, social status, academic advancement and political power. Such key societal agencies as education, health and welfare, sport and recreation attribute the internalisation of such values as civic pride, moral fibre, health and efficiency to successful sport participation.

Conversely, sport may be considered to facilitate three categories of intrinsic-individual benefits, namely; social (social interaction and friendship), psychological-emotional (self-esteem, self-actualization and aestheticism), and physiological (health, fitness and performance). These intrinsic benefits are a means of achieving personal development and quality of life as opposed to the more instrumental benefits of socio-economic and political integration, efficiency and control.

2.1 Intrinsic Benefits

More recent empirical research targeted specifically at sport highlights the centrality to youth of the intrinsic value motivation to participate in sport. Gill, Gross & Huddleston (1983) identify enjoyment, the attainment of knowledge and skills associated with health and fitness, social interaction and communication, and leadership and decision-making as resulting from sport participation. The findings of Gould, Feltz & Weiss (1985) replicated these benefits identifying sport's capacity to imbue youths with the ability to operate effectively in both social and competitive environments. The recent landmark study, Sport For Young Australians (Australian Sports Commission, 1991), reveals the salient benefits ascribed by youth to sport to include; the acquisition of self-discovery, dexterity and the finding of one's limits, achievement of personal standards and egalitarianism, and fair-play for all. This implies a rejection of the performance-oriented authority-imposed play-to-win ethos of competitive sport in favour of intrinsic personal fulfilment through participation. Though youths do not rate the physiological benefits of health and fitness as being as significant as affiliation, excellence or arousal, they are recognised as valuable assets in facilitating personal and social development and all-round competency and well-being (Gould et al., 1985).

2.2 Extrinsic Benefits

Society has, since the era of 19th century muscular Christianity, a tendency to recruit sport for its extrinsic and investment benefits. By promoting conventional values and behaviours within acceptable societal norms, it has been claimed that juvenile crime can be attenuated through sport participation in a similar manner to which it may counteract enforced leisure and unemployment (McKay, 1991). The socio-economic rationale is further exemplified in terms of the economic and social multipliers emanating from sport's infra

and superstructure. Increased income, employment, production and overall economic activity have been shown to be generated by sport participation and its resources, although Shepherd (1988) counsels caution when advocating health and fitness as economic boosters as his ergonomic and cost-benefit analysis do not clearly demonstrate sport's economic benefits to society. This scepticism is shared by youth as there exists little evidence to suggest that they identify with the social-remedial benefits bestowed by sport (Watson & Henry, 1984). It is the sport system allied to other organisations such as education and welfare which induce in youth a dependency upon the controlling influence of the investment value of sport (Engstrom, 1986).

2.3 Intrinsic-Extrinsic Benefits Mix

The critical mass of empirical evidence regarding sport benefits points to the superordinary of intrinsic value motivation over extrinsic institutional investment. Intrinsic motivations focus upon the acquisition of self-actualization, affiliation, skill development, recognition, equity and access, health and fitness, and empowerment. These, however, are augmented by the extrinsic investment benefit of expectation of progress, success and consequent perceived physical competence. Deci (1972) identifies this factor as a key variable in the motivation-participation-adherence causal chain. This factor's degree of influence is determined by its informational or controlling function whilst its value to youth is based upon their need to experience challenge with an expectation of success and reward. A degree of success thus enhances the intrinsic motivation to participate whilst its absence precipitates withdrawal. Success and physical competency is thus a moderator variable in the motivation-participation-adherence causal chain, a relationship validated by the research of Klint and Weiss (1987).

The decision to initiate and adhere to sport participation is thus a mix of intrinsic value and extrinsic investment benefits, heavily weighted in favour of the former. The classical theorising of Herzberg (1982) and his motivating factors of achievement, recognition and growth effecting job satisfaction, support this assertion, as does Vroom's (1964) Expectancy Theory which establishes that the effort and performance-reward linkages are dependent upon the expectation of attractive outcomes and rewards, a validation of the physical competency and success benefit. Clough and Traill's (1991) recent evaluation of Aussie Sport reveals that the rein-

forcement of physical competency and success allied to the aforementioned intrinsic benefits constitute positive feelings to sport involvement and future adherence.

It is encouraging to note that contemporary views on physical education goals reflect the importance of self-fulfilment and the intrinsic value benefits of sport. Tinning, Kirk & Evans (1993) regret the current exclusive emphasis of many physical education curricula upon fitness, health and skills. This orientation, they contend, implies that the body is an object divorced from reflective consciousness and the ability of youth to understand themselves "... in relation to other people and things in the world, and to use this understanding to generate new knowledge and thus exert some degree of control over our individual and collective lives" (p.57).

3 CURRENT ADHERENCE TRENDS

The main area of concern within youth sport is the declining retention or adherence rate. Adherence of 45% amongst Grade 7 high-school boys has been recorded (Sport and Recreation Tasmania, 1992) with this figure incorporating both club and school participation. More generally throughout Australia, only 38% of 13 - 18 year olds participate in community club sport, 50% in competitive school sport, with 36% not participating at all (Australian Sports Commission, 1991). These figures represent the pattern of organised sport amongst 13 - 18 year-olds across Australia and they are replicated in many other Western nations. In Sweden, for instance, Engstrom (1990) calculates that in the period 1968-1984 there was an overall reduction in adherence of 27% in youth participation in physical activity despite an increase of 27% in youth sport club membership. This trend reflects the increasing professionalisation and bureaucratisation of sport the characteristics of which include : less spontaneous but more organised child-centred leisure; increased school, family and club organised sport; the development of professional human resources servicing sport (i.e. coaches and leaders); national government planning of sport programmes and talent identification; and an adult dominated sport culture.

There has thus been a dramatic shift in emphasis from the intrinsic individual motivation to participate geared to psychosocial, emotional and health and fitness benefits to the extrinsic investment value means of achieving socio-economic and political goals. This trend is apparent not only in Europe but also in Canada, U.K., Australia and New Zealand.

The transition from primary school to high school coincides with a marked decline in adherence to sport participation. The Australian Sport Commission survey (1991) revealed a 5% reduction in school and club participation from primary school to Grade 7. In general, the transition-adherence relationship to the imposition of competitive school and club sport can be explained to a degree by the lack of attention and less immediate support mechanisms available in the larger and more complex organisation. Nevertheless, the primary-high school transition exacerbates withdrawal and its impact requires further examination as do other more specific withdrawal and adherence factors.

4 PARTICIPATION - ADHERENCE FACTORS

Factors which either facilitate or act as barriers to participation adherence are a function of the previously discussed psycho-social, emotional and health and fitness benefits as well as organisational and logistical constraints. These factors can be grouped and, accordingly, five participation-adherence domains have been identified:

4.1 Parental Behaviour

Youth are aware of the strong approval given by parents to their sport activities and this is a positive influence over their sporting attitudes and behaviour. The greater the degree of parental primary involvement, the greater the degree of sports role socialisation (Orlick, 1974). When parental support becomes excessive and oriented to winning at the expense of participation and skill development it can be debilitating and lead to withdrawal of youth from sport. Likewise, youth's inability to achieve parental expectations can lead to failure and frustration (Robertson, 1989).

Nevertheless, the consensus of professional opinion is that parental support and encouragement positively enhance youth experience and participation in competitive sports (Lewko & Greendorfer, 1988).

4.2 Coach Behaviour

The quality and availability of the coach is an important factor in ensuring effective socialisation and participation of youth in sport competition (Martin & Lumsden, 1987). The coach creates and maintains the learning environment which

inhibits or nurtures youth adherence. Lack of trained personnel, poor technique and behaviour, repetitious routines, lack of skill development, authoritarian techniques, undue emphasis upon winning, and hyper-criticism of players conspire to position the coach as a major factor in undermining youth self-esteem thereby promoting withdrawal. It has been estimated that 30% of high school sport dropouts attribute their withdrawal to coach attitude (Australian Sports Commission, 1991). Coach attrition is also a phenomenon which adversely affects participation with a high proportion of volunteer parent-coaches committed for only limited periods (Sale 1992).

4.3 Interests Conflict

The advent of puberty accompanied by rapid physical and emotional growth necessitates the maintenance of peer approval and status (Pritchard, 1988). The peer reference group is critical in validating sport behaviour in a development stage where youth require independence and recognition. New commitments, time availability, part-time jobs, travel, study requirements and the increasing cost of travel and participation impact negatively on training and playing time and thus on adherence (Gould et al., 1985; Lindner, Johns & Butcher, 1991).

4.4 Sport Organisation

The structure of competitive sport, in contrast to recreational sport-for-all and modified sport, can inhibit adherence. The imposition of rules, regulations, equipment and competitive structure emphasising high performance and winning combined with equipment, transportation and entry fees costs are all factors inducing low adherence. The competitive structure can facilitate, however, the success and physical competency motivation sought by a significant proportion of youth.

4.5 Competition Ethos

Organised sport can impose psychological pressure and undue stress on youth. The culture of hyper-competition frequently leads to aggression and violence resulting in significant drop-out (Sherif, 1977). Maximum participation, stimulation, challenge, and skill acquisition in non-threatening or intimidatory environments can enhance competition but an over-emphasis on winning is associated with a high participation attrition rate (Gould et al., 1983).

5 MODIFIED SPORT PROGRAMMES

Government responses to reduced sport participation adherence have been to introduce such modified sport programmes as Aussie Sport (Australia), Kiwi Sport (New Zealand) and Go Sport (Hong Kong).

The following goals underpin such programmes:

- improvement in the quality, quantity and variety of sports available
- encouragement of participation and skill development
- reduction in the win-at-all-costs ethic
- promotion of enjoyable and satisfying competition and sport-for-all
- promotion of fair play
- provision of appropriate sports for all children
- provision of effective instruction and coaching

Evaluations of the impact of the Aussie Sport programme indicate that social skills such as cooperation, interaction, compassion and health have been enhanced. Similarly, equality of opportunity, adherence to rules, fair-play, equity, acceptance of criticism and of mistakes by self and others, and competing rather than winning are attitudes that have been internalized by students, parents, coaches and officials alike (Clough & Trail, 1990, 1991). These positive outcomes may be categorised as intrinsic benefits to the students, however, they do not include the key extrinsic benefit of success and physical competence. Modified rules, playing time, space and equipment, no competing for points, and the absence of finals and trophies were the least preferred aspects of the Aussie Sport programme (Robertson, 1992); results which underline the importance of the success and physical competency benefit. Nevertheless, a significant boost to adherence and the general sport participation pattern of youth was recorded in South Australia where an incremental rise in school and club participation (10%), a drop-out decrease (15%), a greater intention to play sport longer, i.e. adherence, (67%), and a greater desire to learn new sports (70%) were recorded (Robertson, 1992).

The central thrust of modified sport programmes is the nurturing and development of individuals skills and the chance

for children to participate in a non-threatening but challenging environment suited to their ability levels. Whilst this has essentially been achieved, the termination of the programme at Grade 7 transition to high school, coincides with the advent of the competitive sport programme, the imposition of extrinsic investment benefits, and the consequent reduction in adherence to participation. In simple terms, youths approve of the supportive infrastructure of Aussie Sport but its termination upon entry into high school is perceived to influence sport participation negatively.

In addition, therefore, to the need for an accurate identification of the youth sport adherence profile and its association with the five participation-adherence domains, there is a further requirement to assess the moderating and/or intervening effect of the Aussie Sport programme termination at the primary-high school transition upon youth sport adherence.

6 METHODOLOGY

The Tasmanian Department of Sport and Recreation in conjunction with the Centre for Human Movement Studies at the University of Tasmania conducted an analysis of youth sport participation and retention rates within Tasmanian high schools (Sport and Recreation Tasmania, 1992). 2,259 Grades 6 - 10 students were surveyed employing a self-administered structured questionnaire the results of which delineated the profile and dimensions of youth sport withdrawal.

In order to assess the moderating (suppressing/reducing adherence) or intervening (causing withdrawal) effect of the Aussie Sport programme termination upon the 5 participation-adherence domains and thus upon youth sport adherence, a stratified/quota double sample of 60 students was drawn from the 2,259 population frame, organised into focus groups, and subjected to a depth-interview employing an interview guide. The resultant qualitative data were categorized into the aforementioned five participation-adherence domains namely; parental behaviour, coach behaviour, interest conflict, sport organisation, and competition ethos.

7 RESULTS AND DISCUSSION

The impact of the primary-high school transition and the Aussie Sport - senior sport progression upon the participa-

tion-adherence domains is demonstrated in the following data:

7.1 Parental Behaviour

There are two categories of parental support; physical and emotional. The former consists of transport provision, fees and equipment financing, and coaching. The latter includes praise, encouragement and reward.

Physical support was considered more important for continued adherence than emotional support and is instrumental in inhibiting adherence. However, only a minority of subjects experienced negative parental behaviour.

Consequently, the termination of the Aussie Sport Parental Code of Behaviour which advises appropriate emotional parental support, cannot be considered to contribute significantly to youth sport participation withdrawal.

7.2 Coach Behaviour

The most valued skills possessed by coaches which aid sports participation are those which fulfil youth needs. They include: supporting all ability levels, emphasis on skill development, a firm and fair attitude, an enjoyment but not a winning ethos, participation not high-performance, and availability. Coach behaviour acting as a barrier to participation includes: criticism and sarcasm regarding effort and ability, stress on winning not on participation, boring training routines with little skill development, minimal availability, and failure to give all participants a fair go.

The highest ranked coach skills were those enshrined and enforced within the Aussie Sport programme. Conversely, barriers to participation effected by coaches were those specifically discouraged in the Aussie Sport programme.

The termination of the Aussie Sport programme and its Coach Behaviour Code enables coaches to impose the competitive sport system and its associated extrinsic adult imposed behaviours thereby inducing withdrawal.

7.3 Interests Conflict

Affiliation through sport in terms of friendship and social interaction is significant in promoting adherence as is the

gaining of peer recognition, acceptance and approval. Absence of these factors may lead to withdrawal. Logistical dissonance as exemplified in clashes of sport commitments with other leisure pursuits, and family and homework responsibilities, frequently leads to withdrawal. This conflict is compounded by peer group pressure to change leisure-interest allegiance. It is ameliorated if sport complements collateral interests such as fitness.

There was a decrease in team-mate tolerance of mistakes with consequent loss of self-esteem, acceptance and approval, subsequent to the commencement of competitive sport. The conflict between sport and associated leisure and family activities was minimal due to supportive family and peer group systems.

The Aussie Sport programme creates an environment conducive to affiliation, friendship and family involvement. The downgrading of affiliation, acceptance and support with the inception of competitive sport contributes significantly to withdrawal.

7.4 Sport Organisation

The key extrinsic investment benefit of success and physical competency is a highly rated positive aspect of high school sport competition. Conversely, the limited range of sports and the high operational costs induce withdrawal.

The introduction of adult rules and the organisation of competition were seen as highly positive aspects of high school sport. The limited selection of sports and their relatively high financial capitalization and operational costs adversely affected retention.

The cessation of modified rules, playing conditions, service delivery and equipment are not significant factors in effecting withdrawal. Cost and the limited range of sport options, however, militate in favour of Aussie Sport and contribute, therefore, to withdrawal.

7.5 Competition Ethos

In the immediate post-transition period of high school, students exhibit a propensity for adopting adult competitive rules and playing conditions in accordance with their success and physical competency extrinsic investment benefit. Youths,

however, are reluctant to adopt or adjust to the associated behaviour ethic of aggression, violence, and win-at-all-costs.

Youths approved of high school competitive sport contingent upon it providing fun, maximum participation and individual skill improvement. However, there was disapproval of increased violence, interpersonal aggression, criticism, and the stress on winning over participation.

The termination of the social competitive sport environment of Aussie Sport does contribute to withdrawal. However, its effect is mitigated by the application of competitive sport rules and playing conditions.

In sum, the most salient participation-adherence domains either intervening in (causing withdrawal) or moderating (suppressing/ reducing adherence) youth sport adherence were coach behaviour, interest conflict (peer recognition, acceptance and approval), and the competition ethos. The data also reveal that youths are motivated to participate for benefits that are mainly intrinsically based, e.g., peer affiliation, competency, arousal and stimulation, excellence and success. The organisation and service delivery of youth sport is thus a critical factor in the fulfilment of youth intrinsic needs. The Aussie Sport programme is designed specifically to reflect and reinforce these needs regardless of ability or gender in its policy and service delivery. The removal of this supportive social competitive environment and its replacement by extrinsic investment rewards, contributes significantly to high-school sport competition withdrawal.

8 RECOMMENDATIONS

There is a range of both specific and more general recommendations that may be drawn from this study. The specific recommendations refer to the organisation and delivery of high school sport whilst the general recommendations pertain to the wider sport and physical education community. The impact upon youth of the psycho-social and emotional well-being and the broader implications for preventive health care of adherence to sport participation with its range of intrinsic benefits, have been well documented. Parents, coaches, sport administrators, and physical education teachers bear a heavy responsibility for ensuring that the youth sport delivery system fulfils these benefits and that it is not merely a mechanism for serving the extrinsic investment requirements of senior sport.

Specific Recommendations:

Governments, education authorities and sport governing bodies should jointly develop a youth sport policy and programme based upon a sport-for-all ethos whose characteristics incorporate:

- (i) equity and access for all youth irrespective of gender or ability.
- (ii) a social competitive environment.
- (iii) a skill development programme not compromised by a win-at-all costs ethic.
- (iv) a service delivery system embracing parents, coaches, the school, and sport organisation officials, which makes available a coordinated activities, procedures and resources package.
- (v) a volunteer accreditation programme for community coaching initiated to set and appraise maximum performance standards.
- (vi) a coordinated developmental high-school sport system providing a transitional programme from modified to senior competitive sport jointly managed by physical education and community sport organisations.

General Recommendations:

There are currently several attempts being made internationally to develop and implement a coordinated youth sport policy incorporating the needs of youth and the requirements of physical education, community sport and high-performance sport. The most persistent problems impacting on this endeavour are the relative ignorance and/or respect for youth's intrinsic motivations for sport participation; the dearth of resources allocated to physical education and the lack of appreciation of its contribution to health, fitness and performance; the largely unqualified, and in certain cases misguided, community sport club system; and the strident extrinsic investment demands of high performance sport.

There are several sequential steps that should be taken in order to derive the requisite policy and plan:

- (i) The acceptance at governmental level of a responsibility and commitment to coordinating and researching a youth sport system.
- (ii) The identification of youth sport needs and the articula

tion of physical education, sport education, and competitive sport objectives at the national level (Refer to: Children and Youth Physical Activity Plan, Sport Canada, 1990).

- (iii) The commitment of human, physical (plant and equipment) and financial resources at national and local levels targeted at education authorities (physical education), community sport and recreation, and national sport governing bodies (Refer to: Physical and Sport Education, Senate Standing Committee on Environment, Recreation and the Arts, Canberra, 1992).
- (iv) A local physical education and community sport policy from Kindergarten to Grade 12 (5-18 years old) articulating both systems in fulfilment of students' intrinsic and extrinsic needs (Refer to: Tasmanian Strategy for Junior Sport, 1993).
- (v) The establishment of a hierarchical delivery system for physical education and sport progressing from foundation through participation and performance to excellence with clear designation of responsibilities, accountabilities and authority allocated to physical education, community sport, and high-performance sport organisations. (Refer to: A Strategy for Young People and Sport, British Sports Council, 1992).
- (vi) A specific operational plan detailing tasks for community sport club officials, physical education teachers, coaches, and parents (Refer to : Sport for Young Australians, Australian Sports Commission, 1991).

There is currently a crisis in many Western nations in the health, fitness and performance profiles of youths. The service delivery of physical education is underresourced and declining rapidly whilst high performance sport is attracting greater resources and sponsorship from the government and private sectors. Both children and youths are victims of an inherently devious process whereby physical education and sport compete to service their intrinsic and extrinsic motivations. An extension of the modified sport programme within an integrated sport and physical education system will contribute significantly to the amelioration of low sport participation adherence amongst youth and the enhancement of lifespan health, fitness and performance.

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FACTORS AFFECTING WITHDRAWAL REASONS IN YOUTH SPORT

by

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ABSTRACT:

This paper provides an overview of the factors influencing withdrawal from competitive sports by school children in Winnipeg, Canada. Grade 10 students (15 yrs of age, N=1375) who completed a sport participation and withdrawal questionnaire indicated that they had dropped out of a sport for a total of more than 2200 times since Grade 1. Reasons for withdrawal were gauged through 7-point Likert Scale statements. Differences in reasons for dropping out between sexes and among age levels, dropout types, groups based on number of simultaneous sports at the time of withdrawal, socio-economic status groups, and among sport programmes were tested for significance through ANOVA procedure.

There were significant differences between the sexes for statements relating to competence, pressure, studying, injury, and job. Samplers, Low and High level Participants and Elite athletes differed significantly on statements dealing with enjoyment, competence, pressure, other sports, injury, job, and expenses. There were significant differences among the grade levels for enjoyment, other sports, coaching, studying, injury, and job. Socio-economic status groups showed differences in enjoyment, expenses, studying, other sports, non-sport activities, and parents, while groups based on number of incomes in the family differed in pressure, studying, job, and expenses. Dropouts who were involved in no other sports at the time of withdrawal differed from those who were simultaneously involved in one, and two or more sports in their reaction to the Likert statements: non-sport activities, pressure, competence, and other sports. School sports differed from Community and

Private club sports with regard to enjoyment, competence, studying, opportunity, job and expenses.

These results suggest that sport withdrawal is affected by a host of factors and that generalisations about dropouts cannot be validly made without considering their sex, age, dropout type, socio-economic status, sport programme type, and the extent of their involvement in sport.

1 INTRODUCTION

The reasons for dropping out of competitive sport by children and youths has been of considerable interest to researchers because the dropout rates for most sports are alarming (Ewing & Seefeldt, 1988). In their extensive study of sport participation and withdrawal, Seefeldt and his co-workers (Athletic Footwear Association, 1990) have identified the primary reasons for sport disassociation in children in the United States as being lack of enjoyment and loss of interest, while coaching and other sport-related reasons were also prominent. Reviews of the withdrawal reason literature (Gould, 1987; Weiss & Petlichkoff, 1989; Lindner, Johns & Butcher, 1991) concluded that conflicting interests, coach dislike, boredom, and competitive stress were important motives for withdrawal. However, this literature has been criticised for approaching the dropout phenomenon too generally. Weiss and Petlichkoff (1989) named factors such as programme type, level of sport participation, developmental differences and sport type that have not been taken into account when examining the dropout. Lindner *et al.* (1991) suggested a dropout classification system in which dropouts were grouped based on competitive level, length of time in the sport and amount of time they devoted to training and competition. The influence of socio-economic parameters on withdrawal reasons has also not yet been studied.

The purpose of this paper is to summarise the reasons for withdrawal from competitive sports as given by the school-aged children and youths who were respondents in a larger questionnaire study on competitive sport participation and withdrawal (Lindner, Butcher & Johns, 1994). Specifically, the hypothesis is tested that the following factors influence withdrawal reasons: Sex, Age, Dropout type, Number of Simultaneous sports, Programme type, and Socio-economic status.

2 METHOD

2.1 Subjects

The sample consisted of 1387 (666 females, 721 males) Grade 10 students (15 years of age) from 13 high schools, representative of the population of a mid-sized Canadian city. The respondents completed a questionnaire in which they were asked to recall their history of competitive sport participation and withdrawal since Grade 1 (6 years of age). The questionnaire was administered to complete Grade 10 classes by trained assistants, who carefully instructed the subjects in the correct completion of the forms and advised where required.

2.2 Instrument

The questionnaire inquired about personal information, the occupation of father and mother, in what competitive sports the respondents participate(d) and for how long, and for a maximum of three dropout sports the extent of agreement with stated reasons on 7-point Likert scales, as well as their level of involvement in the dropout sport and the number of simultaneous other competitive sports at the time of withdrawal.

The instrument had previously been pilot-tested on a group of 15-year olds to ascertain that accurate recall of sport participation and reasons for withdrawal was feasible and that there were no ambiguities or difficult questions in the instrument.

2.3 Data Analysis

Age Levels at time of withdrawal were grouped according to the school type the respondents attended when they dropped out: *Primary School* (Grades 1-6), *Junior High* (Grades 7-9), and *Senior High* (Grades 10-12).

Dropout Type was determined on the basis of extent of involvement in the dropout sport at the time of withdrawal:

- **Sampler Dropout:** Withdrawal after one year or less in the sport.
- **Low Level Participant Dropout (Low):** Withdrawal after more than one year, but participation at low frequency and duration
- **High Level Participant Dropout (High):** Withdrawal after

participation at high frequency, level and duration

- **Elite Dropout:** Withdrawal after participation at Provincial or National representative level.

Number of Simultaneous Sports was the number of other competitive sports the respondent was involved in at the time of withdrawal: *None, One, or Two or More*.

Programme Type refers to what organisation controls the competitive sport: *School, Community Club, or Private Club*.

Socio-economic Status was expressed in two ways:

- Socio-economic Score (SES) based on the Canadian index for occupations (Blishen, Carroll & Moore., 1987). The subjects were then classified into *High, Medium, and Low* SES groups.
- Number of incomes (#Inc) as an economic indicator. The subjects were assigned to *No Income, One Income, and Two Incomes* groups.

2.4 Statistical Analyses

The twelve Likert scale statements in the questionnaire were analysed through a number of analysis of variance (ANOVA) techniques, including multivariate factorial ANOVA and univariate factorial ANOVA. In this paper only the results of one-way ANOVAs examining the role of the hypothesised factors are reported. Full reports on the results including the significant interaction effects are in preparation.

3 RESULTS AND DISCUSSION

3.1 Responses to Likert Scale Statements and Differences between Sexes and Age Groups

As can be seen in Figure 1, the reason for withdrawal most strongly agreed with for the whole sample was the lack of enjoyment. This agrees with the results in Seefeldt's study (Athletic Footwear Association, 1990). Two statements related to time required by other activities were the next highest agreed to. Unlike Seefeldt's findings, own competence as a reason for withdrawal was more prevalent here than poor coaching. Costs of participation and parents' discouragement were least agreed to as reasons for dropping out of competitive sport.

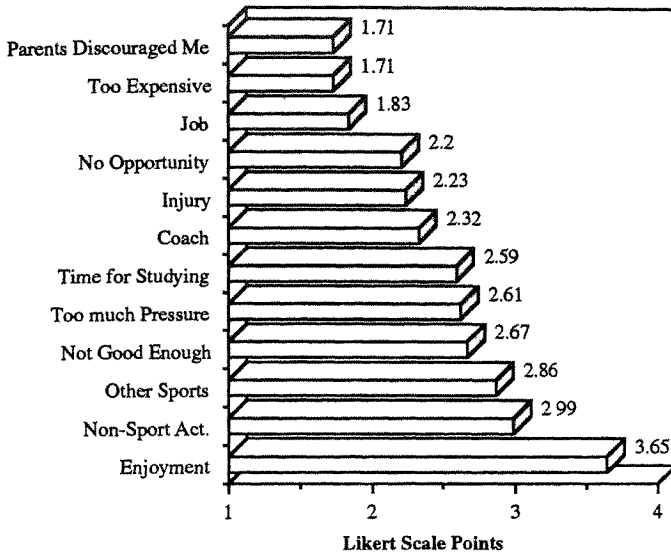


Fig. 1 Extent of agreement with Likert Scale statements (Whole Sample)

Figure 2 shows the significant differences in Likert Scale points between the male and the female dropouts. Females indicated greater agreement with competence reasons, studying time, pressure, and injury, while the males rated the job reason as more important than the girls did. Enjoyment,

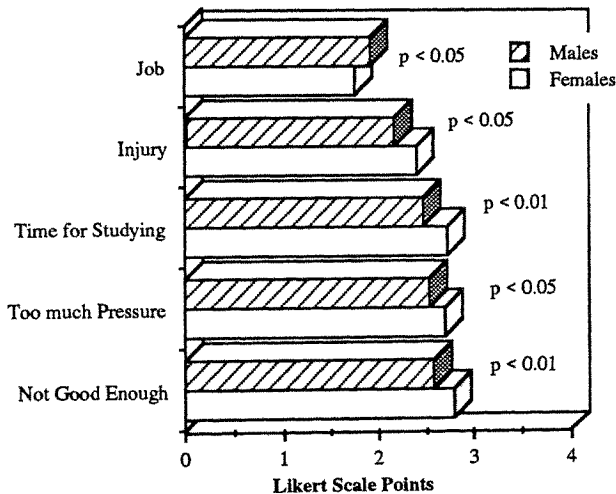


Fig. 2 Differences in responses to Likert statements between males and females

other sports, other activities, coach, opportunity and expenses received about equal agreement or disagreement from both sexes.

Large differences among school levels were found for the statements referring to enjoyment, studying time and job (Figure 3). The results indicate that at lower age levels children tend to drop out because the sport is no longer providing the fun they used to have in it, whereas at higher levels other activities such as studying, a part-time job and other sports become more important reasons. Younger dropouts also agreed less to the coach and injury being the reason for withdrawal.

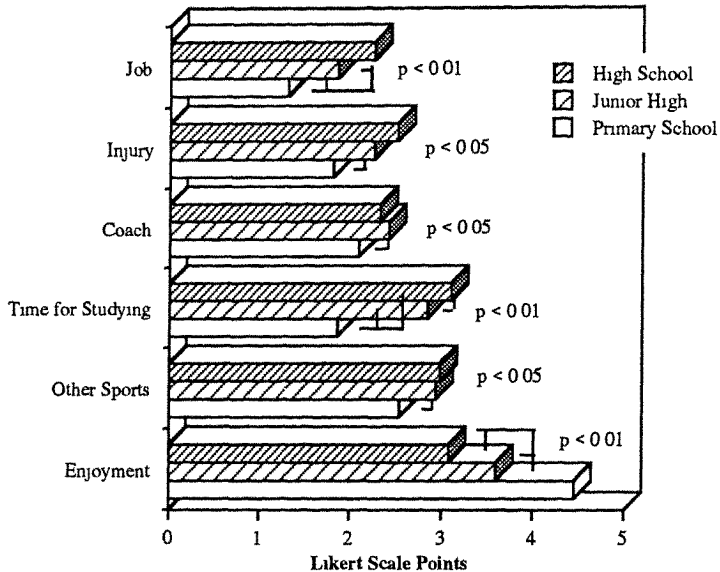


Fig. 3 Differences in responses to Likert statements between age groupings based on school levels

3.2 Differences between Programme types

The enjoyment reason was considered more important by dropouts from private clubs and community clubs than by school sport leavers (Figure 4). Private club dropouts agreed more strongly to the expense reason than those from community clubs, who in turn were significantly higher than the school sport leavers. Job, opportunity, studying and competence were more important to school sport dropouts. It

should be pointed out that for many school sports participation opportunity ends, either because the sport is no longer organised by the schools at a certain age level, or because the school only allows competition for one or two school teams forcing those who did not make the cut to cease participation.

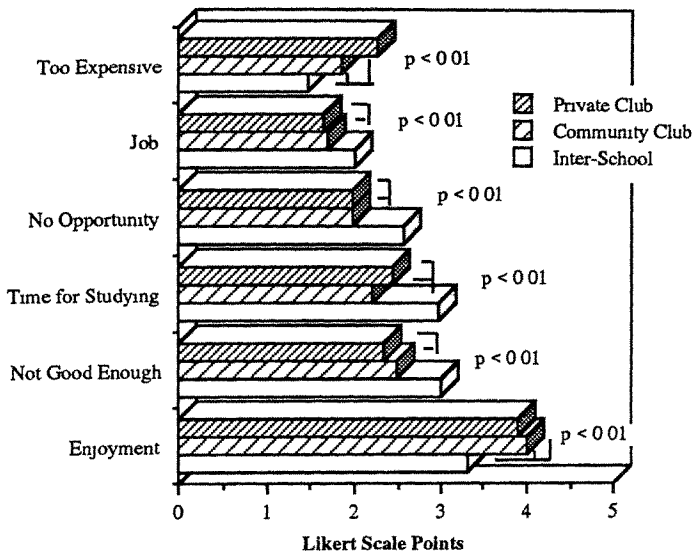


Fig. 4 Differences in responses to Likert statements between groupings based on the sport programme they participated in

3.3 Differences between Groups Based on SES score and Number of Incomes

When the dropouts were grouped according to their parents' combined socio-economic status, significant differences were found in their reactions to the various Likert Scale statements as shown in Figure 5. Low SES dropouts agreed more strongly to the job and the studying reasons, whereas the High SES group rated the pressure reason for dropping out higher. The Medium SES group agreed significantly less with the pressure reason than the other two groups, but rated the expense reasons higher than the High SES group.

Groupings based on number of current incomes in the family showed different results from those of the SES groups (Figure 6). The double income dropouts rated expenses, parents, studying, non-sport activities lower, but the enjoyment

reason higher than the other two income groups. The no-income group agreed least to the enjoyment reason and to the other sports reason.

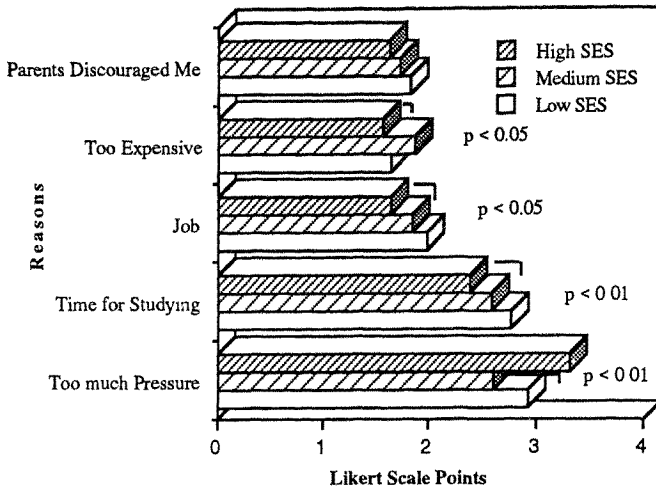


Fig. 5 Differences in responses to Likert statements between dropout groupings based on socio-economic status

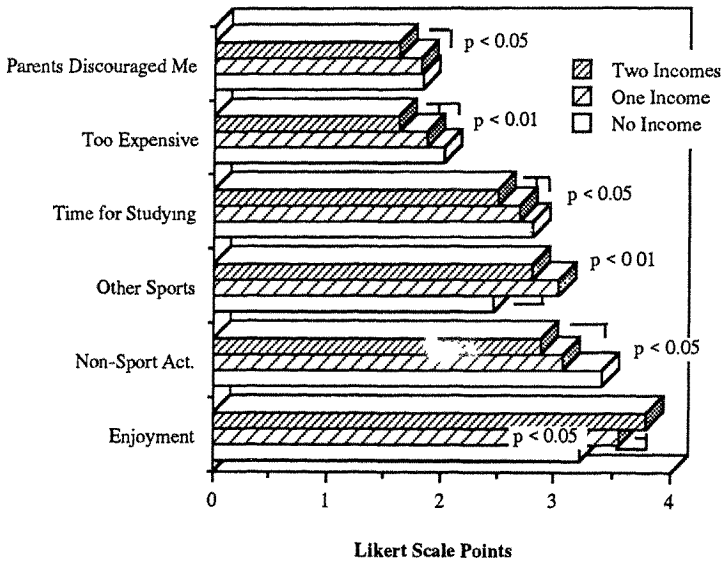


Fig. 6 Differences in responses to Likert statements between groupings based on the number of incomes in the family

3.4 Differences between Dropout Types and Groups with Different Number of Simultaneous Sports

Dropout types were significantly different in their reactions to the Likert statements as can be seen in Figure 7. Elite level dropouts agreed much less to the enjoyment and competence reasons, but much more to pressure, injury and expenses. Sampler dropouts rated competence higher, but other sports, injury and job lower than the other dropout types.

For four of the Likert statements significant differences were found between the groups based on how many other sports they were involved in at the time of withdrawal from the criterion sport. Figure 8 shows that, as can be expected, other sports became more important as a reason with increasing numbers of simultaneous sports, while non-sport activities became less important. Competence and pressure were stronger reasons for those who had dropped out of their only competitive sport.

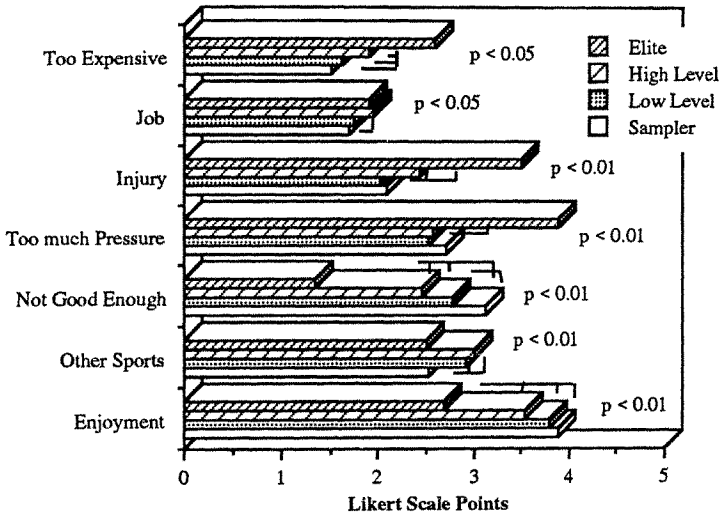


Fig. 7 Differences in responses to Likert statements between groupings based on dropout type

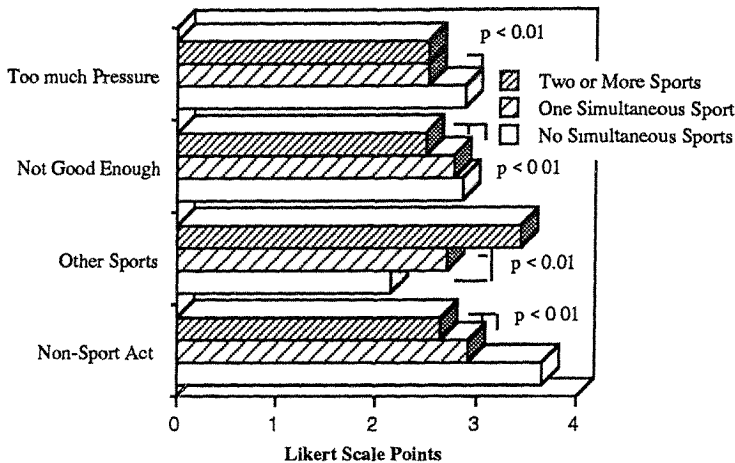


Fig. 8 Differences in responses to Likert statements between groupings based on the number of simultaneous sports at the time of withdrawal

5 CONCLUSIONS

These results confirm (Lindner *et al.*, 1991) that withdrawal reasons are specific to groupings of individuals (sex, age), types of dropouts (level of involvement, number of simultaneous sports), socio-economic factors (SESc, number of incomes), programme types, and interactions among these factors.

Future studies in sport disassociation should avoid using "dropout" as a generic term, but rather should classify subjects into groupings representing the above factors. Failure to find clear patterns in previous withdrawal research may be due to heterogeneity of the samples and the sports studied.

When measures to improve sport adherence are contemplated, it should be realised that these measures likely need to be different for the various groupings of sport participants and various types of sports.

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MOTIVATION AND THE BELIEF SYSTEM

by

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ABSTRACT:

Motivation can best be expressed as a model for change in behavior. Motivation is the driving force behind setting an outcome, reorganizing information necessary for change, and reaching the outcome. Beliefs represent one of the larger frameworks of behavior, providing outcome expectancy and self-efficacy expectancy. Since in "motivation" we expect to achieve a permanent change in behavior, and we found that, according to the model of Robert Dilt's Levels of Organization in Systems, belief is at a higher hierarchical level than behavior, we can safely assume that long-term change in behavior starts at a higher level in the logical system, that is, belief. Through examination of the structure of beliefs and reality, belief strategies, and various methods in generating new behaviors, we can see the problem of "motivation" in a new light that is both straightforward and practical.

In referring to motivation, it is impossible to get away from the words "to do", and even harder to ignore the words "to be". For a highly motivated person to be involved in a situation, there is an urge to do, to learn and to be. Learning essentially means changes. It is not enough to cognitively or intellectually knowing the existence or the intricacies of certain things unless one is going to do something about it. Not just doing it, but sustaining the effort of doing it, and ultimately, being it. We have seen countless times how people were involved in reducing diets trying to lose weight; most often they did lose weight, only to gain it back later. In essence, they cannot sustain their efforts. Therefore, I would say that a truly motivated person is a person learning it, doing it, and being it.

Logical Levels and Belief Systems

When we are looking for permanent change as an outcome of motivation, we tend to look for the reasons for change.

Robert Dilts (1990), one of the pioneer of Neuro-Linguistic Programming (NLP), organized the brain (or any biological or social system) into different levels of processing. This leads us into different levels of thinking and being. These six levels are (1) spiritual, (2) the environment, (3) our behaviors, (4) our capabilities, (5) our belief systems, and (6) our identity.

It is very common for one to blame the environment for poor performance outcome. Since Hong Kong is such a small place, and not even an country, and with the additional numerous reasons for the de-emphasization of sports, we could very easily resign to the fact that this is not an ideal environment for training elite athletes. A parallel example is the state of high level tennis in Britain, which for years has poured in large amount of money to improve coaching and facilities, but has as yet shown very little that would remind people of the glory days of Fred Perry. Working at the lowest of the logical levels, we must realize, yields negligent dividends.

We can see from Figure 1 that environment is at the bottom of the hierarchical order of the Logical levels of systems. In Dilts' model, changes at the lower levels seldom affect changes in the higher levels, but changes in the higher levels usually affect the lower levels. It would seem to be futile to change the environment in the hope to change the behavior. Indeed, since the eighties, the phrase "behavioral sciences" has been used less and less in describing psychology; because of the realization that identity, beliefs, values and cognitions often do not show in behavioral terms.

If we go back to the fat-person-on-a-diet analogy, it is much more powerful and encompassing in saying that "I believe in a fit and healthy lifestyle" (Belief statement) than "I want to eat less and exercise more" (behavioral statement). In terms of motivation, we can see that the level of the former statement would elicit much more intensity and persistency in behavior.

It is clear that the way to introduce music to a child is not to buy the most expensive instrument and hire the best teacher to force-feed music lessons to him. The famous Suzuki method works on the belief/value level in building strong interests and beliefs in the value of music. We have to ask, as physical educators and coaches, at what level are we influencing the students and athletes?

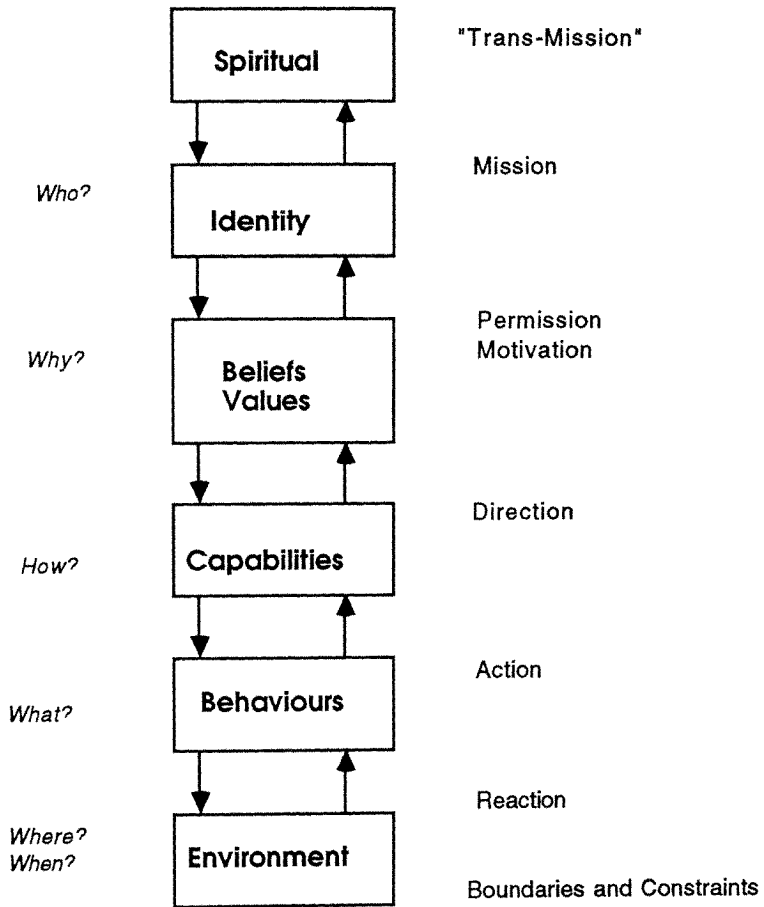


Fig.1 Questions and goals of different logical levels of systems

Defining Beliefs

Actually, athletes and students form their beliefs all the time. If we as coaches and teachers are not careful in structuring our relationship with them, we might lay the foundation for negative beliefs. We might briefly look at some properties of beliefs in Dilts' (1990) attempt to define belief's inherent qualities:

1. A belief may be a generalization about:

CAUSAL RELATIONSHIPS.

For example:

- What do you believe causes cancer?
- Is what causes cancer things that you did?
- Is cancer a punishment from God for my sins?

2. A belief may be a generalization about:

MEANING RELATIONSHIPS.

- Does it mean I am a weak person?
- Does it mean I am just like my mother who died of cancer?
- Does it mean that I have been putting myself under too much stress?
- Does it mean that I have an opportunity to really learn something?

3. Finally, beliefs may be generalizations about:

LIMITS.

- I believe I can affect my health with my beliefs and with my mind up to a point, but above this point I can't.

If we treated formations of beliefs carelessly, we could introduce negative motivational factors, ending up in feelings of hopelessness, helplessness, or worthlessness (Dilts, Hallbom & Smith, 1990). These situations can be compared to common problems encountered by coaches in the form of self-doubts, self-fulfilling prophecies, fear of success, fear of failures and diffidence (Martens, 1987).

Ecological Considerations in Changes

Neuro-Linguistic Programming does provide many tools in dealing with these motivational problems, such as outcome elicitation, metaphors, reimprinting and hypnotherapy, the details of which are beyond the scope of this discussion. However, one important aspect of any changes is the ecological balance that would be bound to happen. For example, demand of time accompanying extended practice, the giving up of certain favourite foods that comes with healthier diets; increased expectations from others with increased abilities, etc. These problems might introduce incongruity within one's belief system (O'Connor Seymour, 1990).

Dilts reminds us that when we work closely with people and dealing with the intricacies of their psyche, it makes sense to be knowledgeable, experienced and extremely careful for motivation to lead to positive change. Dilts (1990) put it best when he cautioned that when working with beliefs, "You can only lead people to change their own beliefs. It is not up to you to change somebody else's belief. The goal is to pace and lead them into establishing a new belief for themselves."

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ANALYSING THOUGHT PATTERNS IN RELATION TO SPORT PERFORMANCE AND MOTIVATION¹

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ABSTRACT:

Specific techniques can be developed and used by coaches and athletes in all sports, although this paper will describe the techniques used with the Singapore Archery Team during their preparation for the 1993 SEA Games.

All athletes have distinctive thought patterns, but many are not aware that these thought patterns influence the quality of their performance and level of success.

The concept of thought patterns includes areas such as self-talk, affirmation statements, the level and quality of belief in oneself, and personal expectations. For many athletes the level of their success is directly related to their level of motivation. It is helpful and informative for an athlete to become aware of their thought patterns and to learn to control them in the "heat of the competition." It is probable that all athletes use the same thought patterns during competition that are used during training, so the first steps in analysis begins on the training ground.

One interesting finding is that if an athlete has a low level of expectation for success, then their motivation for training and related activities is concomitantly low. However, once their self-confidence has improved, their personal expectations can be raised. This is particularly evident in the preparation and use of self-affirmation statements.

The purest form of athletics, and sports in general, is to break through the limitations of what the body can accomplish.

(Csikszentmihalyi, 1992, p. 96)

¹Adapted version of *Intervention Strategies of Elite Archers* in Proceedings of International Sports Science Conference 93. Singapore : Singapore Sports Council.

Introduction

Athletes seek to perform in a state of flow in which every action and thought is smoothly joined and the whole experience seems to take very little effort. To illustrate, Csikszentmihalyi (1992) provides the following example of how a simple physical act can be transformed so as to produce flow:

The essential steps in this process are: (a) to set an overall goal, and as many subgoals as are realistically feasible; (b) to find ways of measuring progress in terms of the goals chosen; (c) to keep concentrating on what one is doing, and to keep making finer and finer distinctions in the challenges involved in the activity; (d) to develop the skills necessary to interact with the opportunities available; and (e) to keep raising the stakes if the activity becomes boring (p.97).

Motivation is being committed to a goal. Committed to the discipline, planning and effort needed to achieve that goal. If athletes have no direction they have no goals and as a consequence their motivation will be low. They have no signposts to guide them, no distance markers to measure their progress, no challenges to provide inspiration and therefore, they will not receive intrinsic rewards from their achievements during training or competition. They have no direction.

Even the simplest physical act becomes enjoyable when it is transformed so as to produce flow.... The challenges of the activity are what force us to concentrate. (Csikszentmihalyi, 1992, p. 97).

Self-talk is an important factor in the mix of motivation, goals, training and success for athletes. It is self-talk that provides a barometer for an athlete to measure their feelings of well-being during their training and competitive performances. Self-talk is the window to our self-image. We are talking to ourselves all of the time and the words and phrases used not only reflect our present feelings but have an important influence on our future behaviour and will decide the level of performance which will be attained.

Attitude! There's not much else to say ... You are as successful as you allow yourself to be. (Beer, 1993, pp. 160-161).

When our attitude is right, our abilities reach a maximum of effectiveness and good results inevitably follow. (E.H. Schell quoted in Schwartz, 1959, p.121).

Flow, self-talk and motivation are inseparably linked. Each influences the other. All athletes have distinctive thought patterns and it is important for them to understand their influence and to learn to use these thought patterns to enhance their performance.

... 'Know thyself' is the first of three maxims inscribed on the Temple of Apollo at Delphi; it is also a goal of sport psychology. Becoming a psychologically skilled athlete depends on athletes coming to know ourselves. (Martens, 1987, p.71).

There are many factors in the training and competitive environment which are able to cause this flow to be disrupted. The purpose of this paper is to describe some of the techniques used with the Singapore Archery Team during their preparation for the 1993 SEA Games which can be used by coaches and athletes in all sports.

In research conducted by Landers, Boutcher and Wang (1986), the findings suggested that those athletes who worried less over past performance were competent in using visual imagery and possessed high confidence levels were the most successful. In all sports, success demands that the athlete repeats the same skilled performance time after time. Consistency is the overriding demand on all athletes. In a study by Leroyer, Van Hoeche and Helal (1992) it was concluded that motor task regularity is one of the main parameters that should be taken into account when improving skills.

To explain the techniques, I will describe them as they apply to a composite athlete. It is obvious that all of these techniques will not be used for all athletes. You will have to decide the appropriate technique. In some cases the performances of the athletes may deteriorate during some of these processes, however once the athlete has 'automated' the processes, scoring will return to normal and then improve. As in all learning the athlete will experience plateaus when no progress will be made and then suddenly improvement will be observed.

Observation

It seems too obvious, but the first stage of the process is to watch the athlete performing. You will be able to collect valuable information during this observation during training and competition. Observe the various parameters including their performance technique and routines, coping strategies, how athletes interact with one another and the coaches, training strategies and attendance. This takes time but is essential so that an overall understanding of the team and the individuals is developed. This process also contributes to the feelings of mutual trust between all parties.

Talking through the performance

Ask archers to demonstrate their technique and to describe verbally each stage as it occurs. This technique helps the archer to:

1. Develop an awareness of precisely what they are doing;
2. Focus their attention on their performance and thereby remove the influence of possible distractions such as spectators, their score, other archers, and their own non-archery related thoughts;
3. Use this technique as a system for analysing and correcting errors in performance.
4. Become aware of the routine they will use in competition. This word sequence process can be used to refocus the archer's attention as technique to deal with distractions.

Firstly, the archer's dialogue could be similar to the following:

1. "I am now placing my feet and setting my stance, getting my body lined up with the target. Placing my bow on my front foot;
2. Am now taking a deep breath and trying to get relaxed;
3. Taking an arrow from the quiver and nocking the arrow;
4. Relaxing, taking a deep breath, relaxing.
5. Placing my right hand on the string, pre-drawing, pushing my left shoulder forward and pulling the string all the way to the anchor position;
6. Aiming, opening my shoulders, releasing the arrow;
7. Follow-through;
- 8 Placing bow on front foot;

9. Taking a deep breath and relaxing."

The archer should remain at this stage for a short time, approximately 6 arrows. Then they should move to the next stage where archer uses just one word at each point in the sequence. For example: "Arrow; nock; pre-draw; aim; gold; release."

Thoughts during performance

In this process the archers are asked to describe their thoughts at strategic points during the performance. Sample questions:

1. What were you thinking about while you were lining up your body?
2. What were you thinking about while you were breathing and relaxing?
3. When do you focus on the gold?
4. What do you see when you are aiming at the gold?
5. What are you thinking about while you are aiming at the gold?

In many cases archers have replied that they were thinking of "Nothing!", "My mind is blank!" But, it is difficult to believe this when some also responded that after a bad arrow they would think about what went wrong and what must be changed for the next arrow to be gold. Their focus is on errors and how to prevent them. It takes just a little effort to predict that the next arrow is most often a 'bad' arrow, too.

What is the purpose of this technique? It forces the athlete to become consciously aware of what they are thinking about. These techniques of talking through the performance and describing thoughts also provide opportunities for the archers to compare any differences between good arrows and bad arrows and to build up a routine which includes all the elements of movement and thought associated with a good arrow.

My perfect performance

The 'My Perfect Performance' technique is when the athlete is asked to demonstrate their technique and you then ask them a series of questions about the technique.

Questions could include variations of:

1. Where do you want your feet pointing?
2. Where should your hips and shoulders be lined up to?
3. Should your head be still during the drawing action?
4. If your head is to be still, at what point in your routine do you want to 'set' it in place?
5. When do you focus on the target?
6. When do you see the gold?
7. Do you want to stop your drawing action or should there be movement throughout?
8. Where should the bottom end of your bow touch your body during the follow-through?
9. How should your bow sound?

Other questions will become appropriate as you both work through the process. The questions to be asked and the number will vary according to the athlete. If the most critical question is asked first then all aspects of the performance will be accounted for. Time spent on this process should be limited. The aim is to have the archer move back to the automatic performance level, governed by feeling, as quickly as possible. The purpose of this exercise is for the archers to have the correct technique reinforced in their mind so they can concentrate on competitive performance. All assistance given in the name of sport psychology should be designed to help the athletes to perform at their optimum under competitive conditions. The ultimate goal is to score the maximum points.

A bonus to be gained from this technique of asking the archer how their technique should ideally be is that if any errors are discovered then a process of correction can be implemented. There is limited benefit to be gained for the athlete to work on psychological skills designed to cope with competitive stress when there are any flaws in their technique. It has been known in some cases where athletes (not this group of archers) have tried to use psychological skills as a panacea for technical errors. It is an approach which will end in failure.

Control of Anxiety

It is necessary for athletes to learn to monitor and control their level of anxiety during competition. Most athletes need to learn to lower their heart rate. During interviews many of the archers said that they felt anxious, their heart increased

its rate of beating and some felt nervous. The technique recommended for archers is:

- a. take a moderately deep breath;
- b. hold the breath for a moment or two;
- c. slowly exhale and feel the tension flow down the body through the legs and out through the toes;
- d. also feel the body parts, shoulders chest, hips knees sink, so that there is a more steady feeling in the body.

This technique can be developed after the athlete has learned a basic relaxation technique such as progressive relaxation (McGill, 1990, 1993). The breath can be used as a trigger or anchor which elicits the relaxation response. The physical action of breathing out and allowing the body to sink reinforces the response. It also helps the archer to feel steady and secure. Archers can use this at least twice during each arrow - after setting their stance and before taking an arrow from the quiver and after nocking the arrow and before drawing the bows although the latter should probably be used only in an 'emergency'. An observation is that archers got themselves into a mood which 'forced' them to shoot slowly, and in many of these cases their scores decreased. This is consistent with the findings of Keast and Elliott (1990). They take a long time to get the relaxation response. It is important that this strategy takes the maximum amount of time.

An added benefit of using the strategy as part of the regular shooting routine is that the archer becomes refocused after every arrow. It can assist them to 'forget' a bad arrow. The suggested sequence is to trigger the relaxation responses before taking the arrow from the quiver, then to use the feel of the arrow as the trigger for the shooting routine which will only be altered under extreme 'provocation' from an external distraction.

Time limits

Official time limits have been set for competitions. Archers must shoot 6 arrows in 4 minutes or 3 arrows in 2 1/2 minutes. If their routine is prolonged, particularly if they spend too much time trying for the relaxation response, the time limit can become a source of pressure or anxiety (Keast & Elliott, 1990). It is therefore necessary to practise during training sessions to perform the complete routine within the prescribed time limits.

It is possible to time the following components of the shooting routine:

- a. complete flight (6 or 3 arrows);
- b. time on each arrow:
 - either from the moment the drawing hand touches the string until the arrow is released;
 - or from the moment the archer begins the routine, usually when they take the arrow from the quiver until release;
- c. Aiming time - the time that the drawing hand is touching the chin until release.

It is necessary for each archer to have knowledge of the time they require to shoot good arrows. It must also not take too much time. The shooting routine should be quick but not rushed. Too much means that the archer has that much more opportunity to think irrelevant and distracting thoughts. This routine must be practised. Archers can develop their own technique to monitor their own rhythm and tempo. With sufficient successful practice it will become automatic. In the beginning it will probably be necessary to work with a stopwatch. In addition to the archer having to deal with non-archery related thoughts physical responses such as postural sway also occur.

Belief System, Goal Setting and Affirmations

The archer's belief system and the development of goals and affirmation statements are not usually classified as intervention strategies. However, the athlete's belief system is considered by some to be the starting point for the development of effective psychological skills and strategies (Usher, 1993). It is conceivable that should an archer, or any other athlete, have a negative self-image and a belief system which reinforces lack of ability or success, then helping them to 'convert' the belief system into positives becomes an important intervention strategy. An intervention upon which all other procedures will be built.

When an athlete believes in him or her self, and when others believe in them, then many things are possible. In a peculiar way, devious even, athletic endeavour can be a physical manifestation of a self-fulfilling prophecy. 'I believe I can; therefore, I will and do.' Strategies which are used to 're-program-

me' the sub-conscious, the governor of the belief system, include the preparation and writing down of short, medium and long term goals, preparation of affirmation statements and self-affirmation cards to be placed in prominent places in the athlete's home and work place, and the preparation of audio tapes with imagery scripts and affirmation statements. All of this material must be used often, more than once a day, so that the messages become accepted as part of the total athlete.

Monitoring mechanism

If all of this is true then athletes and coaches would benefit from a systematic procedure to monitor thoughts and performance. I present here a procedure (Figure 1) which athletes can use to monitor and regulate their thoughts, feelings and performance.

To be successful an athlete must control as many of the factors which influence performance as is possible. The competition arena can add additional stress to the athlete and simple occurrences can be 'blown out of proportion' and assume greater influence than they would during training or a less important competition. If athletes were conscious of their thought patterns and consciously controlled them in training and competition that would eliminate one other possible source of distraction to performance.

I offer this technique for athletes to use for monitoring their feelings and thoughts during training and competition. As for all other psychological techniques, it must be learned, practised and mastered in training.

The purpose of the procedure is to have the athlete consciously and systematically check their performance. The aim is to have the athlete focus on specific aspects of the performance, make an assessment, make a decision and then do something.

There are two possibilities. First that each aspect of the performance is okay; therefore the athlete makes no change and continues with success. The athlete knows from the feel of the performance and the results that they are successful. So, during success the athlete 'flows' through the performance. Occasionally they experience a peak performance where everything takes the minimum of effort. Most often they continue being successful. However warning bells ring when mistakes

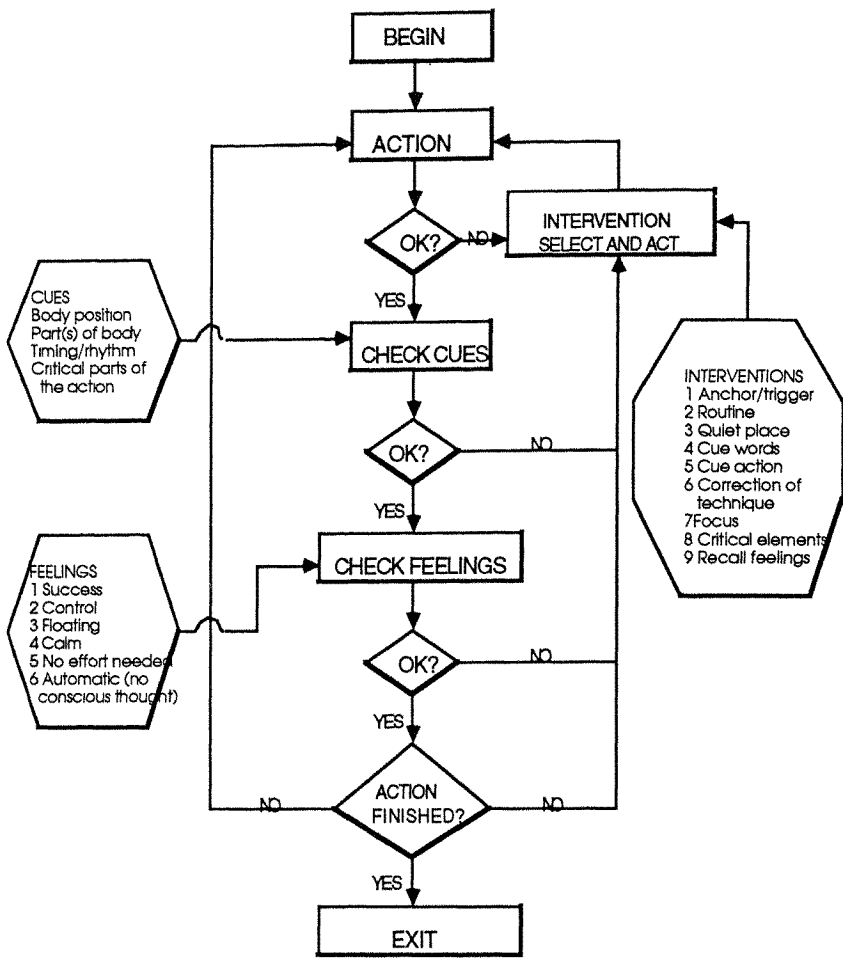


Fig.1 Monitoring mechanism for athletes

occur. When the expected results are not forthcoming. It is then that the athlete needs to use a systematic approach to making changes. It is not unknown for athletes under the stress of competition to make irrational changes to their performance. Changes which are logical only in respect to their heightened emotional reaction to what they perceive is happening to them. They have forfeited control. Outside factors are now their master. They are not in control of their destiny.

I therefore offer a systematic procedure for athletes to use to monitor their performance during training and competition. It is based on the belief that an athlete's performance and results will be enhanced when the athlete is in control of all components of their performance. The procedure encourages the athlete to make adjustments in response to the feedback and then only in a systematic, pre-planned manner.

The athlete performs the skill and asks the question: 'Was that okay?'. Answer, 'Yes' - check cues: body position, parts of the body, timing and rhythm, critical parts of the action. This can be a cursory check because there will probably be no need for any changes. But, constant checking helps to prevent small errors becoming habits; and then these small errors becoming major errors.

Answer, 'No' - immediately instigate an intervention. The first stage must be to recognise that the error occurred and to then put it aside by using an anchor, or trigger, to return the body and mind to a stage of feelings of success. Next recall cue words and cue actions, regain focus, and continue performance. If on the next attempt the performance is not okay then correction to technique must be made. This change in technique must be implemented in a systematic manner. This can be accomplished by checking through the critical elements of the skill; starting position, initial movement, contact/release position and finishing position.

When the performance is okay, and the cues are okay, then the athletes checks on their feelings. Continue to be attached to feelings of success.

Again, if feelings are not okay, a suitable intervention action is selected and implemented.

All of this may sound confusing and complicated but in reality it can take very little time. The athlete learns and practises the procedure during training sessions. Awareness of

each component of the performance is enhanced and then are integrated into their total performance strategy.

The benefits of such an approach: (a) haphazard, 'knee-jerk', reactions to failure are removed and instead a systematic coping strategy is used, (b) the procedure 'forces' the athlete to refocus on their performance, (c) the athletes will be exerting conscious control over their performance and their physical and psychological reactions to that performance, and (d) their understanding of the various components of the performance will be increased. Such benefits will be an encouragement for the athletes to work towards their goals and increase the chance of attaining them.

Conclusion

When we work with athletes it is essential that we begin by helping them to examine their belief system. What they believe in is a very powerful form of the self-fulfilling prophecy. Their beliefs are likely to become evident in their sporting competition. If an athlete has a series of goals and they work conscientiously and deliberately towards them then the balance of success moves gradually in their favour. A confident athlete moves and performs with confidence. They behave like a champion. If necessary they 'fake it until they make it'. They are a champion and their level of motivation is concomitantly high. Self awareness, positive self-talk and a belief in oneself is a sound foundation upon which an athlete can build a successful athletic and personal career.

Motivation is the pursuit of a goal. Self-belief and self-talk inexorably influence and even determine the degree of success attained. It is apparent that each athlete has it within his/her power to be the successful athlete they see and believe is possible. The challenge for us as coaches is develop the knowledge and techniques which are best suited to helping our athletes to achieve their goals. All of this is part of the journey of life and the skills learned will be useful in all aspects of human endeavour.

You can fuel your motivation to accomplish your goal by constantly reminding yourself of all the benefits you will enjoy once you reach your esired outcome. Visualise your goal as already achieved. Trust in your ability to meet your own needs. (Glickman, 1990, p.31).

SUMMARY TABLE

TECHNIQUE	EXAMPLE/PURPOSE
Observe	Spend time watching the athlete perform. Take note and develop a feeling for: rhythm, timing, idiosyncrasies, routines in set up and execution. Develop a spatial awareness of the performance.
Talking through Performance	At least two possibilities: <i>During</i> performance and <i>after</i> performance. Athletes become aware of their actions. This can be a technique to move the focus away from distractions to the task at hand.
Thoughts through Performance	It is helpful for athletes to verbalise their thoughts during performance. Their thoughts often reflect their self-image and also tend to indicate the level of performance actually attained.
My Perfect Performance	Athletes need to develop and refine the skill of knowing how they learn. In this way they are better able to monitor their skill and performance development. This is a way of encouraging the athlete to develop and maintain independence. Ask the athlete: Do you enjoy performing? Do you want the ball, the action, to come your way? Do you want to be actively involved in the action?
Control of Anxiety	Anxiety interferes with coordinated performance. Relaxation is a dynamic technique which is adjusted to meet the needs of an athlete's specific movement challenge. Ask the athlete: Do you greet the ball in a positive manner? Do you view the ball as a friend? Do you view opponents as enemies who must be beaten or as people who are co-operating with and who will enable you to meet your goal? It is helpful for athletes to develop a technique for dealing with 'failure', to acknowledge it, then put it aside and get on with the competition as though it had not happened.
Time Limits	All sport performances are performed within a definite time frame. Each performance/skill has a particular time from peculiar to its demands and expected outcomes. When an athlete hurries or takes too much time then the chances of success are reduced. This is so even when the skill is performed in response to other players - opponents and fellow team members.
Goals	Ask athletes to delineate their goals. This will be an accurate indicator of their motivation. Can they see themselves achieving their goals?

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**THE SOCIAL-COGNITIVE APPROACH TO
MOTIVATION:
PRACTICAL IMPLICATIONS FOR COACHES AND
PHYSICAL EDUCATORS**

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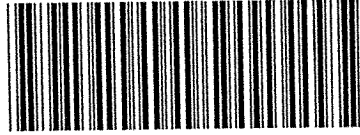
ABSTRACT:

Achievement behavior and motivation are two aspects of sport behavior that have given rise to much debate in both the coaching and academic environments. One of the most influential perspectives to emerge in recent years with regard to motivation in sport is social cognitive theory. Researchers within this theoretical framework see motivation and achievement behavior as manifestations of cognitions and thought processes within dynamic social contexts.

This school of thought centres around the expectancies and values that individuals attach to different goals and achievement activities. Three sub-areas or mini theories within the social cognitive approach have generated an impressive corpus of literature on motivational issues in sport. These are (i) the theory of self-efficacy, (ii) the theory of perceived competence, and (iii) achievement goal perspectives.

The practical implications of such theorising for the coach and physical educator in the creation of a motivational sport training environment are discussed.

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