

Factors Associated with Achievements of the Hong Kong Wheelchair Fencing Team 香港輪椅劍擊隊能取得佳績之有關因素

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Abstract

Wheelchair fencing took root in Hong Kong in the early 1980s. Within a short span of 20 years, Hong Kong wheelchair athletes had worked themselves to world-class standards. In the Sydney 2000 Paralympics, the Hong Kong wheelchair-fencing team captured 4 gold, 2 silver, and 2 bronze medals. These were the best results ever achieved. In order to understand this phenomenon, perceptions of possible factors associated with this were explored. These factors include: Perceived Positive Outcomes, Organizational Support and Family Support.

摘要

八十年代初開始，輪椅劍擊運動已於香港紮根發展起來。短短二十年間，香港輪椅劍擊運動員已攀升至國際級的水平。於2000年悉尼傷殘奧運會中，香港輪椅劍擊隊更創出史無前例之四金、二銀、二銅的佳績。為了解此現象，本文將探討各個可能之誘因，包括：正面結果之認知、機構組織的支持以及家庭的支持。

Key Words: Wheelchair fencers, Perceived outcomes, Perceived support

Introduction

Wheelchair fencing was introduced in Hong Kong as a form of recreational activity in 1980. Four years later, Hong Kong wheelchair fencers made their debut in the 1984 Paralympic Games (SAP Annual Report, 1984, 1988). Although none of the team members captured any medals, the exposure provided inspirations for their continual struggle towards excellence.

In the Sydney 2000 Paralympics, the Hong Kong wheelchair-fencing team captured 4 gold, 2 silver, and 2 bronze medals. These were the best results ever achieved by Hong Kong athletes. In order to gain a better understanding of this phenomenon, a study was conducted to explore its associated factors.

Examination of factors influencing athletic success has been a dominant theme in sports research and designs of study had taken either a macro or a micro approach. For example, from a macro perspective, Kruger (1984) proposed that social and political conditions, economic condition, traditions of sports, training systems, and development of sports organizations were necessary conditions for a country to achieve athletic success. Heinila (1989) added to this and suggested that athletic success is related to the amount of resources a country is willing to invest in promoting elite sports. Working from a micro perspective, scholars had tried to understand athletic success through examining characteristics of individuals. Findings from these efforts provided us with some understanding of respective contributions from training methodology, game plan preparation, and individual characteristics. More recently, a multi-faceted approach to identify factors that had influenced exceptional performance was initiated by Greenleaf, Gould, and Dieffenbach (2001). By interviewing a group of Olympic athletes who had performed beyond expectations, they uncovered factors such as mental skills and preparation, attitude towards the Olympics, support services, physical preparation and coaching to be major contributors. Our study took a similar route and aimed at identifying possible factors that could have facilitated the exceptional achievements of the Hong Kong wheelchair fencers in the Sydney 2000 Paralympics.

Method

Design

There were two phases in this study. In Phase 1, the focus was to identify possible elements associated with the achievements of the fencing team through face-to-face interviews with sports administrators, coaches, retired elite fencers ($n=2$) and second-tier fencers. Based on elements in the content of the discourse, 3 key factors were extracted: Organizational Support, Family Support, and athletes' Perceived Positive Outcomes from engaging in the sport.

To further explore the perceived relevance of these factors by members of the Hong Kong elite wheelchair fencing team, a questionnaire developed from the discourse content was presented to the members for response. This procedure constituted Phase 2 of the study.

Questionnaire

The questionnaire used in Phase 2 of the study contains a section to tap demographic information and a section with 27 statements developed from the discourse content identified in Phase 1. Eleven statements sought to seek respondents' perception of Organization Support along two dimensions: Coaching Support and Publicity/Promotion Strategies. Sample statements for the first dimension of Coaching Support included "the coach was well qualified and reliable" and "the training methods could enhance performance", whereas sample statements for the second dimension of Publicity/Promotion Strategies included "able to find achievements of wheelchair fencers in an eye-catching space in a newspaper" and "the promotional tools for the sport is effective". Four statements were dedicated to seeking responses to perceptions on Family Support. Sample statements included "encouragement from family to participate in the sport", "family commitment is not a barrier to training", and "family commitment will not affect my achievement". Twelve statements were used to assess Perceived Positive Outcomes. Statements such as "able to establish self-confidence through the sport", "able to contribute to society like other able bodied counter parts", and "social status of athletes with disability has been recognized" were included.

A 5-point response was provided to each statement with 1 representing "Strongly Disagree" and 5 representing "Strongly Agree".

Subjects

Participants of the study were 18 wheelchair fencers in the elite squad (Male = 12, Female = 6). Disabilities represented in the sample include poliomyelitis ($n = 10$), paralysis due to spinal injury ($n = 5$) and lower limb amputations ($n = 3$). Ten participants were classified as Category A athletes and the rest as Category B athletes according to the system used by the International Paralympic Committee. While a majority ($n = 9$) had taken part in training as part of the squad for over 4 years, 4 had joint the squad for 3 - 4 years and 5 for less than 2 years. All, except 2 individuals had captured at least one regional medal.

Results

Organizational Support

When the elite athletes were asked about the performance of the organization in the dimensions of Coaching Support and the use of Publicity/Promotion Strategies to promote the sport, they agreed more strongly to the role of the organization's provision of coaching support ($M = 3.86$, $SD = .69$) than the organization's efforts in publicity and promotion strategies ($M = 2.70$, $SD = .59$) in facilitating the achievements of the wheelchair fencers. Result of the Repeated ANOVA indicated that the mean ratings provided to these two aspects were significantly different ($F = 44.92$, $p < .05$, $\eta^2 = .72$), thus suggesting that the elite athletes held distinctive perceptions in these two areas of work performed by the National Sports Organization.

Family Support

Family Support was identified as an important factor associated with the success and achievements of wheelchair fencers by the interviewees in Phase 1 of the study. The elite athletes agreed moderately that Family Support ($M = 2.97$, $SD = .65$) was an element associated with the success of the wheelchair fencers.

Perceived Positive Outcomes

Following Coffey and Atkinson (1998), the 12 statements on Perceived Positive Outcomes from engaging in the sport were further categorized into 5 sub-factors. To the elite wheelchair fencers, participating in the sport was seen a means to improve Personal Fitness ($M = 3.83$, $SD = .91$), to fulfill Civic Responsibility ($M = 3.61$, $SD = .87$), as an opportunity to Self-actualize ($M = 3.47$, $SD = .66$), and to some extent, means to achieve Material Gains ($M = 3.25$, $SD = .96$). When tested for mean differences, no significant differences were found among these four sub-factors. However, as compared to improving Personal Fitness, engaging in the sport was considered a less effective mechanism for gaining Social Acceptance ($M = 2.97$, $SD = .72$).

Discussion

As an exploratory study, the main focus of the study was to obtain an indication of factors perceived to be associated with achievements of the Hong Kong wheelchair fencing team so as to provide some insight and reference to other sports teams for athletes with disabilities.

This study has identified factors associated with the sporting achievements of the Sydney 2000 Paralympic wheelchair fencing team and has also examined the perception of elite wheelchair fencers on the identified factors. With respect to factors identified as important contributors to the achievement of the Hong Kong wheelchair fencing team, sport administrators, coaches, and retired athletes agreed that the following were important: support provided by the National Sports Organization, especially in terms of provision of high standard coaching and the use of publicity/promotional strategies to promote the sport, and support from the family. An individual's perceived positive outcomes from participating in the sport was also regarded as an important related factor.

In order to understand the perception of these factors from the perspective of the elite fencers, they were asked to rate the extent they agreed that they were associated with achievements of the wheelchair fencers. Their ratings suggested that they held a more positive attitude towards the Organization's provision of coaching support than its use of publicity and promotional strategies. Literature examining the development of a sport from grass-root level to elitism (Hardy & Jones, 1992; Nakamura, 1996) had agreed on the important role played by sports organizations in terms of provision of quality coaching in enhancing the development and eventual competitive achievements of a sport. To some extent, wheelchair fencing could serve as an exemplar to this notion. However, in terms of publicity and promotion of the sport, the elite wheelchair fencers felt that more could be done. Use of appropriate publicity and promotional strategies to raise the profile of a sport are accepted as realistic mechanisms for those working in sports marketing (Berrett & Slack, 2001; Garcia, 2001). However, the financial implications of an elaborate and effective sports marketing plan might be presently too demanding for the National Sports Association. Therefore, until sports for the disabled could attract commercial sponsorships, it would be more difficult for wheelchair fencing, as a sport, to enjoy the profile of other popular sports in Hong Kong, such as soccer and tennis. Also, despite the fact that the wheelchairs fencers did so well in the Sydney 2000 Paralympics, they did not feel that it could enhance the social acceptance of persons with disability. Therefore, in Hong Kong at least, the aspiration of equality is yet to be realized.

Although Family Support has been identified by many researchers to be an important contributor to commitment to sport participation (Brustad, 1993; White & Duda, 1992), and indeed also selected by the local sports administrators, coaches and retired athletes as a factor associated with the achievement

of the wheelchair fencing team, members of the elite squad felt that there is still a conflict between the sport and the family for their time. On the premise that the athletes also perceived a high degree of encouragement from their family to pursue the sport, it appears that this feeling of time conflict is more a sense of guilt felt by the athlete rather than a true reflection of the situation.

The wheelchair fencers reported several positive outcomes from engaging in the sport. Rokeach (1973) termed these perceptions as perceived values. He further added that they are "representations of personal needs" and form the basis for "conduct". In our study, the wheelchair fencers had identified several positive outcomes from participating in high-performance sports, including enhancement of personal fitness and self-actualization. These could be viewed as motivational factors that would encourage continual participation in high-performance sports. On the other hand, participation in the sports as a means to gain Social Acceptance was perceived as a less likely outcome. Possibly given the lack of disability awareness in Hong Kong, the athletes felt that even with their achievement in sports, the chances of making immediate changes is not likely to happen.

In sum, our study had succeeded in identifying some of the possible factors associated with the successful development of a sport to the elite level and the perceptions of elite athletes on these factors. We believe that these findings could offer some insight and evidence to assist local sports authorities when formulating plans in sports development.

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