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# Abstract

Former athletes ( $\underline{N}$  = 48) from a variety of sports provided information about the primary reason for their athletic retirement and the degree of adjustment required. Content analysis of reasons for retirement indicated that this sample of athletes retired from competitive sport for numerous reasons, including age, injury, deselection, and voluntary career termination. Subsequent comparisons between athletes who retired for voluntary and involuntary reasons indicated that involuntary retirement was associated with significantly greater emotional and social adjustment upon career termination. In addition, the former athletes who experienced the greatest adjustment difficulty perceived the least personal control over the reasons for retirement. Implications for professional and applied work in the area are discussed, and suggestions are made regarding future research on career transitions from sport.

The causes of career termination from sport and their relationship to post-retirement adjustment among elite-amateur athletes in Australia

In recent years, interest and concern regarding retirement from sport has grown considerably. As Ogilvie and Taylor (1993) have stated, a small, but steady body of literature has emerged on this topic over the last two decades, making it an important issue in psychological practice. While it is becoming apparent that psychologists can play a vital role in dealing with retirement from the labour force (Seppa, 1996), the sport scientific community has suggested that a somewhat different approach is required when consulting with retired athletes. Numerous theorists have attempted to explain the process of retirement from sport (e.g., Gordon, 1995; Murphy, 1995; Sinclair & Orlick, 1994), and others have discussed the potential difficulties associated with athletic career termination (e.g., Baillie & Danish, 1992; Crook & Robertson, 1991; Taylor & Ogilvie, 1994). There has also been considerable attention given to the development of pre-retirement programs for elite-amateur and professional athletes (e.g., Olympic Athlete Career Centre, 1991; United States Olympic Committee, 1993). What is readily apparent, however, is that very little empirical research has been conducted on career transition issues worldwide.

Over the past few years, there has been an increasing discussion about the retirement of athletes in Australia (Gordon, 1995; Morris, 1995). Several researchers have conducted investigative surveys on the career transition needs of elite and professional athletes (e.g., Fortunato, Anderson, Morris, & Seedsman, 1995; Hawkins, Blann, Zaichkowsky, & Kane, 1994). Some career assistance programs have also been developed for elite-amateur athletes in Australia, including the Athlete Career Education

(ACE) Program, the Life Skills for Elite Athletes Program (SportsLEAP) and the Olympic Job Opportunities Program (OJOP). While OJOP was designed primarily as a work experience program for Olympic-level athletes, the ACE program has recently merged with SportsLEAP to provide a comprehensive and nationally-consistent career and education service for elite-level athletes (Australian Institute of Sport, 1995). At the present time, however, there exists a general lack of empirical data on retirement from sport in Australia which could be used to improve these career assistance programs.

One of the most important areas of research on career termination is that of identifying the causal factors associated with retirement from sport. As described in conceptual models of career transition (e.g., Gordon, 1995; Sinclair & Orlick, 1994; Taylor & Ogilvie, 1994), an empirical exploration of the athletic retirement process begins by identifying the reasons why individuals end their careers in sport. Once these primary causes have been identified, the conceptual models suggest that it is also necessary to determine which reasons are most associated with retirement difficulties (Ogilvie & Taylor, 1993). There have been very few studies, however, which have examined the difficulties associated with career termination in general, and no specific investigations on how the causes of retirement affect the overall adjustment process.

Several exploratory studies have suggested that a number of causal factors are involved in the career termination process (e.g., Mihovilovic, 1968; Sinclair & Orlick, 1993; Svoboda & Vanek, 1982; Wylleman, De Knop, Menkehorst, Theeboom, & Annerel, 1993). For example, empirical research with retired elite athletes in Yugoslavia and Czechoslovakia has demonstrated that the predominant reasons for discontinuing a career in sport are athletic injury, chronological age, and being

deselected from a team (Mihovilovic, 1968; Svoboda & Vanek, 1982). More recent research with ex-Olympic athletes in Europe and North America has indicated similar findings, and has also identified a number of voluntary reasons for retirement among elite athletes (e.g., Sinclair & Orlick, 1993; Wylleman et al., 1993). The most important determinant of athletic career termination in Belgium, for example, was found to be combining elite-level sport and study/work (Wylleman et al., 1993). Similarly, a sample of high-performance Canadian athletes retired predominantly because they were tired of the circuit/lifestyle (Sinclair & Orlick, 1993). Thus, it appears that elite athletes end their sporting careers for a number of different reasons, but these reasons may be influenced by the structure of sport at the elite level in the particular country being examined.

The purpose of the present study, therefore, was to assess the predominant causes of retirement from sport in Australia by utilising the steps outlined in the recently developed conceptual models of career transition (e.g., Gordon, 1995; Sinclair & Orlick, 1994; Taylor & Ogilvie, 1994). More specifically, a sample of former elite-amateur athletes were asked to qualitatively describe their reasons for athletic retirement, and then to classify this cause in terms of its locus, stability, and controllability (Weiner, 1986). Although the need to address each of these areas has been previously suggested in the career transition literature (e.g., Crook & Robertson, 1991; Murphy, 1995), a dimensional analysis of retirement causes has not been conducted. The preferred method for doing so, therefore, is to obtain an open-ended attribution for retirement and to involve the respondent as an active agent in the subsequent coding of that ascription along causal dimensions (McAuley, Duncan, &

Russell, 1992; Russell, 1982). The general hypothesis of this investigation is that athletes who were forced to retired would view the cause of their career termination as significantly more out of their control that those who retired from sport on their own terms.

A further purpose of this study was to examine the relationship between the causes of career termination and adjustment to retirement from sport. While the extant literature suggests that adjustment difficulties can be financial, occupational, emotional, and/or social in nature (Ogilvie & Taylor, 1993), no empirical studies to date have examined the effect of causal attributions on these dimensions of post-athletic career adjustment. Several theorists have suggested that greater adjustment is required when athletes retire due to involuntary circumstances (e.g., Crook & Robertson, 1991; Ogilvie & Taylor, 1993), but there are no empirical data to support this hypothesis. Therefore, it is necessary to clarify not only the predominant causes for athletic career termination in Australia, but also to determine how these particular factors are related to specific aspects of the adaptation process among retiring athletes.

## Method

# **Participants**

As part of a larger investigation of career transition experiences among elite-amateur athletes in Australia, data were collected from 48 of 51 retired athletes (return rate = 94%) who were former scholarship holders at State and/or National Institutes of Sport. Names of these individuals were obtained from available data bases at the respective institutes of sport, with current mailing addresses of 51 former athletes being identified. A total of 13 sports were represented in the final sample including: basketball ( $\underline{n} = 1$ ),

cycling ( $\underline{n} = 1$ ), diving ( $\underline{n} = 2$ ), gymnastics ( $\underline{n} = 8$ ), hockey ( $\underline{n} = 16$ ), netball ( $\underline{n} = 1$ ), rowing ( $\underline{n} = 1$ ), shooting ( $\underline{n} = 1$ ), squash ( $\underline{n} = 1$ ), swimming ( $\underline{n} = 8$ ), track and field ( $\underline{n} = 4$ ), volleyball ( $\underline{n} = 2$ ), and water polo ( $\underline{n} = 2$ ). These retired athletes (28 females; 20 males) began participating in competitive sport at the mean age of 9.42 years ( $\underline{SD} = 2.47$ ), reached their highest level of participation at 20.40 years of age ( $\underline{SD} = 4.43$ ), and competed at their highest level for 6.25 years ( $\underline{SD} = 3.90$ ). On average, they retired at 25.21 years of age ( $\underline{SD} = 6.39$ ), and had been retired for 3.44 years ( $\underline{SD} = 2.10$ ) at the time of this study.

# <u>Instrumentation</u>

Causal Dimension Scale. The causes for cessation of an athletic career were assessed using the Revised Causal Dimension Scale (CDSII; McAuley et al., 1992). The CDSII employs a combination of qualitative and quantitative methods. Each participant was first asked to think about their athletic career termination and write down the most important reason for retiring from their highest level of competitive sport. After providing this open-ended attribution, respondents were instructed to code this causal attribution along four different dimensions. These causal dimensions, each of which consists of 3 items rated on 9-point Likert-type scales, included locus of causality, causal stability, personal control, and external control. This instrument has been widely used in research on causal attributions in sport and physical activity, and it has been shown to be a valid and reliable tool for assessing the perceived causes of sport-related behavior (Biddle, 1993; Hanrahan, 1995; McAuley et al., 1992). Internal consistencies for the four dimensions of the CDSII range from 0.67 to 0.82, with a mean of 0.74 (McAuley et al., 1992).

Adjustment to Retirement. Career termination adjustment was measured by asking each participant to rate the degree of adjustment required following their retirement from their highest level of competitive sport in the following areas: financial, occupational, emotional, and social. Each aspect of adjustment was measured with a single item, and responses were made on 10-point Likert-type scales with anchors of No Adjustment (1) and Considerable Adjustment (10). These items were created for this study, and they were assumed to possess a high degree of face validity.

### Results

## **Qualitative Analysis**

The causes of athletic career termination were first content analysed for general categories. This was accomplished by placing each of the open-ended responses on index cards and performing an inductive analysis. This procedure was conducted simultaneously by three doctoral candidates (two females; one male) specialising in sport and exercise psychology who were familiar with qualitative research methods and the literature on retirement from sport. Independent classification of the causes for career termination in this manner generated highly consistent categories (inter-rater reliability = 97.9%). Discrepancies were then consensually validated by the three analysts (Patton, 1990). The results obtained from this content analysis suggested that these Australian athletes retired from sport for the following nine reasons: work/study commitment, lost motivation, age, injury, deselection, politics of sport, decrease in performance, finance, and decrease in enjoyment. Table 1 lists the causal categories, identified sub-themes within each category, and percentage of responses for each cause

of athletic retirement. Example statements of the qualitative responses are also provided.

## **Quantitative Analysis**

Following the content analysis, an examination of the causal dimensional ratings was undertaken. The athletes who retired for involuntary reasons (i.e., , deselection, or injury; n = 15) were grouped together and compared to those who ended their careers voluntarily (i.e., work/study commitment, lost motivation, politics of sport, decrease in performance, finance, decrease in enjoyment; n = 33). The ratings for locus of causality (M = 16.52, SD = 7.63), stability (M = 18.52, SD = 5.34), personal control (M = 15.52, SD = 5.34)SD = 7.76), and external control (M = 13.42, SD = 7.92) were examined as a function of the voluntary and involuntary categories. Multivariate analysis of variance showed a significant difference between the two groups [ $\underline{F}(4,43) = 8.50$ ,  $\underline{p} < .0005$ ]. Subsequent examination of univariate F-values showed that individuals who retired voluntarily viewed the causes of their career termination as more internal than those who did not [F(1,46) = 13.84, p < .001)] and perceived significantly more personal control over the cause of their career termination [F(1,46) = 21.78, p < .0005]. The stability  $[\underline{F}(1,46) =$ .68, p < .414] and external control [F(1,46) = .35, p < .554] indices, however, did not demonstrate significant differences between groups. Results of these analyses, as well as the mean ratings of the causal dimensions within the voluntary and involuntary categories, are presented in Table 2.

In order to identify which causes of career termination were most associated with retirement-related difficulties, the ratings for financial ( $\underline{M} = 3.58$ ,  $\underline{SD} = 3.54$ ), occupational ( $\underline{M} = 4.83$ ,  $\underline{SD} = 3.55$ ), emotional ( $\underline{M} = 4.37$ ,  $\underline{SD} = 3.34$ ), and social ( $\underline{M} = 4.83$ ), and social ( $\underline{M} = 4.83$ ).

3.83,  $\underline{SD} = 3.37$ ) adjustment were also examined as a function of the voluntary and involuntary categories. Multivariate analysis of variance indicated that adjustment to retirement was significantly different between the two groups,  $[\underline{F}(4,43) = 5.58, \underline{p} < .001]$ . Subsequent examination of univariate  $\underline{F}$ -values revealed a significant difference on emotional  $[\underline{F}(1,46) = 15.98, \underline{p} < .0005]$  and social  $[F(1,46) = 4.67, \underline{p} < .036]$  adjustment ratings, but nonsignificant results for financial  $[\underline{F}(1,46) = 1.27, \underline{p} < .266]$  and occupational  $[\underline{F}(1,46) = 1.02, \underline{p} < .318]$  adjustment. Table 3 presents the means, standard deviations, and results of these analyses.

#### Discussion

The results from this investigation support previous research and theories on the causes of athletic retirement. A content analysis of open-ended attributions suggested that the Australian athletes in this study retired from sport predominantly because of age, athletic injury, deselection, and voluntary career termination. These reasons are consistent with results from previous empirical studies on career termination (e.g., Mihovilovic, 1968; Svoboda & Vanek, 1982), but a very high proportion of athletes retired from sport for voluntary reasons in this study (68.8%). While this finding concurs with recent research conducted in Belgium (Wylleman et al., 1993) and Canada (Sinclair & Orlick, 1993) in which elite-amateur athletes retired predominantly for personal reasons, the relatively high number of voluntary reasons in this study may be due to structural aspects of sport in Australia. As has been previously stated, sport is becoming one of the most important economic and social institutions in Australia (e.g., McKay, 1991; Vamplew, Cashman, Jobling, Moore, & O'Hara, 1994). The increased professionalisation of sport in Australia in recent years has allowed many individuals to

make a living solely from athletic participation (Hawkins et al., 1994). Elite-amateur athletes, however, are currently only eligible to receive financial scholarships from National and/or State Institutes of Sport. These federally-subsidised awards, of which there are few, are provided to help these individuals off-set expenses associated with training and competition (McKay, 1991). Many international competitors must also hold nonprofessional jobs that provide additional income but, at the same time, offer enough flexibility for them to maintain heavy training and competition schedules. As an occupational sub-culture, therefore, elite-amateur athletes in Australia have restricted economic and social mobility while participating in sport. Thus, many individuals may not have the 'luxury' of waiting until they are forced out of sport to assume a new direction in life.

The qualitative findings were reinforced by a quantitative analysis of the causal dimension ratings. Following Russell and colleagues' model of attributional processes (McAuley et al., 1992; Russell, 1982), the dimensional characteristics of the causes for athletic career termination differed among individuals who retired for voluntary and involuntary reasons. The internality and personal control dimensions, for example, were significantly higher among athletes who retired for voluntary reasons. As was hypothesised, individuals who ended their athletic careers by choice perceived the cause to be more internal, and believed they had greater control, than those who retired for involuntary reasons. Nonsignificant results, however, were demonstrated on the external control and stability dimensions.

Consistent with the hypotheses advanced in conceptual models of retirement from sport (e.g., Gordon, 1995; Sinclair & Orlick, 1994; Taylor & Ogilvie, 1994), the

reasons for career termination among this sample appeared to have an impact on adjustment to athletic retirement. More specifically, the degree of emotional and social adjustment following retirement was significantly lower among those who ended their career for voluntary reasons. These findings suggest that athletes who have experienced an involuntary career termination may be at risk to experience considerable psychosocial distress upon retirement from sport and may, perhaps, benefit from intervention programs designed specifically for them (e.g., Australian Institute of Sport, 1995; Olympic Athlete Career Centre, 1991; United States Olympic Committee, 1993). However, while these results correspond with the suggestion that ending a career involuntarily appears to be the least desirable reason for retirement (e.g., Crook & Robertson, 1991; Ogilvie & Taylor, 1993), it is, of course, possible that some athletes who end their careers by choice will also experience considerable distress.

We believe there are several implications of our findings, both from a theoretical and a practical viewpoint. For example, knowledge about the impact of causal interpretations on post-retirement adjustment adds detail to contemporary models of career termination (Gordon, 1995; Sinclair & Orlick, 1994; Taylor & Ogilvie, 1994). In addition, these results provide empirical data on the specific reasons why elite-amateur athletes in Australia retire from competitive sport. Career assistance programs currently in place in Australia, such as the Athlete Career Education (ACE) Program, may be able to use this information to develop more specific interventions for athletes in career transition. With the much coveted 'home field advantage' in the Sydney 2000 Olympics, however, it is possible that elite-amateur athletes in Australia will begin to focus more exclusively on their sporting performance than on their

personal development and post-athletic career planning. Many more individuals, therefore, may be at risk to experience adjustment difficulties upon retirement from their sport, and it is possible that measures of attributional style could be combined with other instruments to identify those most at-risk (e.g., Anderson, Jennings, & Arnoult, 1988; Hanrahan, Grove, & Hattie, 1989; Peterson, Semmel, von Baeyer, Abramson, Metalsky, & Seligman, 1982). As demonstrated in this study, the athletes who experienced the greatest adjustment difficulty perceived the least personal control over the reasons for their career termination.

There are a number of limitations that must be taken into account when considering the implications of our findings. First, the athletes assessed in this study had been retired for an average of 3.44 years at the time of data collection. It is difficult to know the extent to which perceptions of causal factors and/or adjustment processes might have changed over time, so it may be desirable to control for the time factor and/or analyse its influence in future studies. In addition, while each former athlete in this study was asked to list and evaluate only the main reason for their retirement from sport, it has been suggested in the literature that the nature of the adjustment process may be dependent on several causal factors (Gordon, 1995; Ogilvie & Taylor, 1993).

Consequently, a more comprehensive inquiry into the causes for retirement from sport could incorporate a multi-causal analysis and include a multi-national orientation.

While we believe an account of the single most important reason for retirement is an appropriate starting point for further empirical and theoretical inquiries in Australia, a multi-national research orientation is also needed in this area. It is likely that structural differences in specific countries will influence both the causes of career termination and

the nature of the adjustment process following retirement from sport (Ogilvie & Taylor, 1993). We, therefore, agree with Hawkins et al. (1994) that more international research is needed to provide comparative data to help establish universal principles for effective retirement programs for athletes in transition.

# Footnotes

<sup>1</sup> We chose to classify age as an involuntary cause of retirement because one cannot voluntarily stop the aging process. A <u>decision</u> to retire because of age could be considered to be voluntary, but our categorisation was based on the cause itself rather than the decision process.

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Table 1

Results from Content Analysis of Causes for Retirement from Sport

Cause		<u>n</u>	%	Example Statement	
Voluntary					
Work/Study Commitments	12	25.0		To concentrate on building a career.	
Lost Motivation	9	I had lost the desire to train and compete.		I had lost the desire to train and compete.	
Politics of Sport	4	The politics that went on made me feel negative.			
Decrease in Performance	3	6.2		I was not competing at the level at which I believed I was capable	
Finance	2	4.2		I needed to establish financial security.	
Decrease in Enjoyment	2	4.2		Enjoyment was starting to wane.	
Involuntary					
Age	6	12.5	I was too old to compete.		
Injury	5	10.4		Forced to retire as a result of injury.	
Deselection	4	8.3		Not selected to National team.	

Table 2

Means and Standard Deviations for Dimensional Ratings of Retirement Causes

Dimension and Group	n	<u>M</u>	<u>SD</u> I	<u>p</u> -value					
Locus of Causality									
Voluntary	33	18.97	5.95	<u>p</u> < .001					
Involuntary	15	11.13	8.32						
Stability									
Voluntary	33	18.09	5.30	<u>p</u> < .414					
Involuntary	15	19.47	5.50						
Personal Control									
Voluntary	33	18.45	6.34	<u>p</u> < .0005					
Involuntary	15	9.06	6.72						
External Control									
Voluntary	33	13.88	7.22	<u>p</u> < .554					
Involuntary	15	12.40	9.46						

Table 3

Means and Standard Deviations for Career Termination Adjustment Ratings

Adjustment Domain and Group	n	<u>M</u>	<u>SD</u>	<u>p</u> -value
Financial Adjustment				
Voluntary	33	3.97	3.81	<u>p</u> < .266
Involuntary	15	2.73	2.76	
Occupational Adjustment				
Voluntary	33	4.48	3.93	<u>p</u> < .318
Involuntary	15	5.60	2.47	
Emotional Adjustment				
Voluntary	33	3.24	3.25	$\underline{p} < .000$
Involuntary	15	6.87	1.92	
Social Adjustment				
Voluntary	33	3.15	3.45	<u>p</u> < .036
Involuntary	15	5.33	2.72	