

REPERCUSSIONS OF TRANSITION OUT OF ELITE SPORT ON SUBJECTIVE WELL-BEING: A ONE-YEAR STUDY

Yannick Stephan, Jean Bilard, Grégory Ninot and Didier Delignières

UPRES EA 2991 “Sport, Performance, Health”,

School of Sport Sciences and Physical Education, University of Montpellier I

Abstract

This study examined the dynamics of subjective well-being during transition out of elite sport. Athletes retiring from sport following the Sydney Olympic Games ($n = 16$) were compared to active athletes ($n = 16$) four times during the first year post-career termination using the 12-item General Health Questionnaire (Goldberg & Williams, 1988). Qualitative data from semi-structured interviews provided a complement to the quantitative data. Four phases were quantitatively identified in the evolution of subjective well-being, from an initial decrease, followed by an increase, a stabilization, and a final increase. Qualitative data demonstrated that the transitional athletes' feelings and attitudes during the transition ranged from initial difficulties facing the substantial changes in all life areas to reconstruction of and adjustment to a new life style and a new socio-professional situation. The importance for athletes to develop transferable skills during the sport career is underlined, as well as the potential for optimizing the timing and type of intervention/assistance offered during the specific phases of the transition and adjustment process following retirement from sport.

Key words: Transition, Elite sport, Subjective well-being

Retirement from elite sport marks the beginning of a transition that may be distressful for athletes (Lavalley, Gordon, & Grove, 1997) because references in social, professional and physical domains must be reevaluated. Exiting a career is a major life change that transforms one's social and physical worlds, with changes in roles, relationships and daily routines (Kim & Moen, 2001). The transformations induced by any transition may well affect how individuals perceive themselves, their abilities and the quality of their lives (Kim & Moen, 2001). As a result, these changes could affect subjective well-being. Generally, subjective well-being is the assessment of the quality of one's life based on personal experience (Diener, 1994; Diener & Suh, 1997) and can be expressed as the degree to which individuals are satisfied with various aspects of life (Sarvimaki & Stenbolk-Hult, 2000). Subjective well-being is deeply linked to feelings of competence and confidence with respect to valued goals

(Carver & Scheier, 1999; McGregor & Little, 1998; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). Lang and Heckausen (2001) noted that it is also enhanced by having a strong sense of control and autonomy. Subjective well-being is dependent on expectations, values, and previous experiences, and on the gap between expectations and hopes and present life experiences (Diener & Lucas, 2000). Thus, because life-transition points often lead to self-appraisal (Schlossberg, 1981), subjective well-being has been used as a global measure of self-perceived adjustment for individuals at different stages of life (Diener, Emmons, Larsen, & Griffin, 1985). Insight into subjective well-being can be acquired by examining how individuals feel about life in the context of their personal standards and how they internally experience the events in their lives (Diener & Suh, 1997).

Elite athletes report high life satisfaction during their career because of the living, loving relationship they develop with their sport (Werthner & Orlick, 1986). To better understand how transition out of elite sport could affect subjective well-being, it seems important to consider the areas that contribute to their satisfaction with life and that constitute the basis of their subjective well-being.

First, elite athletes' life styles are subordinated to sport, which becomes a way of life (Stambulova, 1994). Life style is based on powerful commitment, both physically and emotionally (Wylleman, De Knop, Menkehorst, Theeboom, & Annerel, 1993), with daily routines and regimens of energetic discharge and physical exercise, stimulation and efficiency (Steinaker, Lormes, Lehman, & Altenburg, 1998). Training and exercise are crucial components of athletes' daily lives (Durand-Bush & Salmela, 2002) and are often mentioned as reasons for their life satisfaction (Loland, 1999). As a result, they never visualize a life without training and competing (Ungerleider, 1997). They attribute great importance to the adrenaline rush of high level sport (Drahota & Eitzen, 1998) as well as to the sport atmosphere (Stambulova, 2001). Most elite athletes report high subjective well-being because of the euphoric effect of exercise (McAllister, Motamedi, Hame, Shapiro, & Dorey, 2001) and the intensity emerging from the life style in high level sport (Gearing, 1999).

Elite athletes' subjective well-being is also based on their socio-professional status. These individuals benefit from a very high status thanks to their exceptional physical skills that have been channeled to reach sports-related goals. Athletic goals are the main life goals (Stambulova, 1994). In all occupational activities, specific skills are needed to reach goals. In the case of elite athletes, physical skills are central. Sport achievement and the feeling of being athletically competent contribute to their subjective well-being and life satisfaction (Saint-Phard, Van Dorsten, Marx, & York, 1999; Werthner & Orlick, 1986). But the main difference with almost any other profession is that the attainment of sport goals occurs in the public eye. This leads to positive social recognition and psychological fortification (Adler & Adler, 1989; Loland, 1999; Werthner & Orlick, 1986). Thus, the elite status becomes a part of overall identity (Webb, Nasco, Riley, & Headrick, 1998).

Their performance-oriented life style is facilitated by the sport environment, such as coaching staff. Werthner and Orlick (1986) and Kerr and Dacyshyn (2000) observed that, retrospectively, very few athletes indicate a strong sense of control during their sport career, and note that, in fact, the coach or the association had been in control of their lives. Many decisions are made for them, ranging from how, when and where to train to arrangements for plane fares and accommodations (Werthner & Orlick, 1986). They lead formally-managed lives with restricted autonomy and are nurtured and protected (Gearing, 1999), and thus develop a false sense of control (Werthner & Orlick, 1986). This, of course, serves to preserve athletes from external influences that could have an impact on sport achievement.

Retirement introduces a discontinuity in one's life (Crook & Robertson, 1991) and begins a transition during which athletes are faced with dramatic changes in their personal, social, and occupational lives (Taylor & Ogilvie, 1994). This transition induces inevitable shifts in priorities and interests. In the socio-professional domain, retiring athletes find that they have become "ordinary citizens" (Werthner & Orlick, 1986, p. 337). Some studies have suggested that this passage has negative repercussions, such as identity crisis reactions (Brewer, Van Raalte, & Linder, 1993; Ogilvie & Howe, 1982), emotional difficulties (Allison & Meyer, 1988), mental health problems (Menkenhorst & Van Den Berg, 1997), and/or decreased self-confidence (Werthner & Orlick, 1986).

Transitions naturally occur over time. Life transitions such as role shifts, or other major life change's often bring about adjustments in existing trajectories. Thus, retirement from elite sport is a process as opposed to being a discrete, isolated event (Taylor & Ogilvie, 1994). Several studies have suggested that transition from sport lasts between six months and one year (Brandao, Winterstein, Pinheiro, Agresta, Akel, & Martini, 2001; Sinclair & Orlick, 1993; Stambulova, 1997, 2001), with transitional athletes facing several stages that force them to make psychosocial adjustments. Transition out of elite sport is a dynamic process, often marked by an initial sense of loss leading to a period of personal growth and adaptation (Crook & Robertson, 1991; Kerr & Dacyshyn, 2000; Werthner & Orlick, 1986). The adjustment process involved a shift in identity, from the identity and orientation of athlete, to a state of disorientation and loss of identity, and finally to a re-orientation and new definition of self (Kerr & Dacyshyn, 2000). Using a dynamic perspective, Kim and Moen (2002) have demonstrated that psychological adaptation processes shift over time during transitions. The present study thus investigated the dynamics of subjective well-being in former elite athletes during the transition out of elite sport. More precisely, the objective of this research was to determine the repercussions of the transition and adjustment process following sport career termination on subjective well-being.

Transitional athletes face the end of a career that was highly satisfying. Thus, they may experience decreased life satisfaction because of pressures related to decision-making and attempts to find and adjust to a new life following their sport career (Werthner & Orlick, 1986). Thus, subjective well-being could be influenced by the challenges defined by Stambulova (1994) and of interest to our study, *i.e.* changing one's way of life and beginning a new career with a different status and new competencies.

As described by Kim and Moen (2001), a dramatic change in life style is usually accompanied by a shift in subjective well-being. As underlined by Chamalidis (2000), career termination begins a transition from an exciting existence oriented toward adrenaline rush to a more sedentary professional situation and life style. Many athletes have emphasized the difficulty of adjusting to a totally different life style in which they are suddenly like everyone else (Lavallee et al., 1997). Transitional athletes are confronted with new daily timetables (Gearing, 1999; Wylleman et al., 1993) and have to adjust to "getting up at 6, 7 o'clock, commuting, working in an office, working indoors" (Gearing, 1999, p. 50). This life style has been characterized as void of sensations and stimulation and, during the transition out of elite sport, former athletes miss the sport atmosphere, the competition—with its intensity, stimulation and fame—and pushing the body to exhaustion (Drahota & Eitzen, 1998; Kerr & Dacyshyn, 2000; Stambulova, 2001). They express a feeling of emptiness in their lives (Stambulova, 1997). One of the main stakes of this transition is thus to reconstruct and adjust themselves on the basis of a new life style.

Second, transitional athletes need to adapt to new social status and professional responsibilities. This transition marks the passage from "something they knew very well to

something new” (Werthner & Orlick, 1986, p. 358), with the individual descending from the heights of the extraordinary into the mundane world of ordinariness (Sparkes, 1998). Feelings of competence and self-efficacy are called into question by confrontation with the demands of normal working life (Gearing, 1999). The physical skills that an athlete has perfected for so long may now seem useless (Thomas & Ermler, 1988), and they have to learn all over again to be competent at something new (Werthner & Orlick, 1986). Doubts about their competence in the new situation may also affect subjective well-being. Thus, transitional athletes have to reorient and redefine their goals and competencies to fit this new situation by developing interests toward which they can direct the considerable time and energy that were previously devoted to training (Grove, Lavalley, & Gordon, 1997). Transitional athletes must also develop a new sense of autonomy and control over their lives in new settings and according to new roles. During transition, most feel a loss of personal control over their lives and have to learn to take control again (Kerr & Dacyshyn, 2000; Werthner & Orlick, 1986).

From a methodological point of view, longitudinal methodologies are best suited to understanding the dynamics of subjective well-being. No research to our knowledge, however, has ever studied transition out of elite sport from a longitudinal perspective or *in vivo*, despite the evident problems of using recall to reconstruct past experience (Kerr & Dacyshyn, 2000). The limitations associated with retrospective studies, *i.e.*, memory decay and recall bias, are well known and these studies are also limited by changes in perception over time (Lavalley et al., 1997) or the risk of significant information being neglected (Squire, 1989). As Grove et al. (1997) noted, a multi-method approach is also needed for research in the area of transition out of elite sport. Qualitative procedures could complement more quantitative approaches by delineating the experiences of transitional athletes and the stresses they face (Grove et al., 1997).

In the present study, the dynamics of subjective well-being were explored over a one-year period in elite athletes who had participated in the Sydney Olympic Games before ending their careers. We hypothesized that these transitional athletes would face two major phases during the transition period and that subjective well-being scores would reflect the progression from initial crisis, caused by substantial changes in life style and socio-professional situation, followed by a period of personal growth and new beginnings, resulting from adjustment to new rhythms and the development of new skills. These transitional athletes were compared with elite athletes remaining in competition. This quantitative research was complemented by interviews, which provided qualitative data for our results.

Method

Participants

Sixteen French Olympic athletes retiring from elite sports after the Sydney Olympic Games participated in this study. Their ages ranged from 27 to 35 years with a mean age of 30.56 years ($SD = 3.7$). The group included one female canoer, one female badminton player, three female synchronized swimmers, one female and four male fencers, one male archer, two female and two male rowers, and one male wrestler. The transitional athletes were compared to sixteen elite athletes remaining in high-level sports. These active athletes were selected to constitute a ground measure of the former status of the transitional athletes, and all were matched with the transitional group in terms of sport, gender and age ($M = 29.36$ years, $SD = 2.3$). Their ages also ranged from 27 to 35 years.

Measures

Subjective well-being. To evaluate the dynamics of subjective well-being over a one-year period, we used the French version of the 12-item General Health Questionnaire (GHQ-12) (Goldberg & Williams, 1988) as our quantitative instrument because of its short design. This short instrument have been used as a measure of subjective well-being, and is designed to assess short-term changes in subjective well-being by providing a measure of how much subjects feel that their present state over the past few weeks is unlike their usual state. Previous studies have reported test-retest reliability coefficients of .82 (Patton & Donohue, 1998). The subjects are asked to rate themselves using a 4-point Likert scale. An overall GHQ score is obtained by summing across items, with a high score representing a lower level of subjective well-being. The meaning of the measure resides less in the actual score obtained than in the change in score observed over time, and there are no reference norms. This instrument has been used to study other transitions; for example, to evaluate the impact of relocation on well-being in employees (Moyle & Parkes, 1999). In the present study, test-retest coefficients ranged between .76 and .79.

Semi-structured interviews

Characteristics of transitional and active athletes. The characteristics of the participants in the two groups were identified at the first meeting before moving on to the main evaluation. Retired athletes were asked how many years they had had the status of elite athlete, *i.e.*, as members of national teams (e.g., “How long were you on a national team competing internationally before ending your career?”), why they had decided to retire, and if it was voluntary, *i.e.*, a sense of accomplishment and free choice, or involuntary, *i.e.*, age, deselection, injury. An example of a question was: “Why did you retire from elite sport?” They were also asked questions regarding the work they began doing after retiring (e.g., “What kind of work are you doing now?”). Athletes whose retirement was involuntary were not available. Active elite athletes were asked questions only regarding their years of elite sport participation.

General semi-structured interviews. Semi-structured interviews were conducted individually with each transitional athlete by the first author. An interview guide¹ was developed to standardize all interviews across participants and minimize bias (Patton, 1990). This guide was designed to elicit information regarding (a) participants’ perception of changes in life style and (b) changes in socio-professional situation. The shifts that occur in these areas have been demonstrated to be psychologically stressful for life satisfaction, one component of subjective well-being (Werthner & Orlick, 1986). Participants’ perceptions of changes in life style following retirement from elite sport were defined as perception of changes in daily life and timetable (Wylleman et al., 1993) and in life intensity and stimulation (Drahota & Eitzen, 1998; Kerr & Dacyshyn, 2000) compared with their sport career. The perception of socio-professional situation following career termination was also explored and corresponded to perception of changes in socio-professional status and changes in needed competencies and skills compared with their former status (Werthner & Orlick, 1986). The interview guide was pilot-tested with five former Olympic athletes, retired since 1993, who were familiar with sport psychology. Feedback from these individuals was used to optimize the validity of the interview guide and to refine the interview questions. Based on Spradley’s (1979) suggestions, more broad and general questions were asked at the beginning to give the participants an opportunity to speak in a relaxed atmosphere. With permission from the participants, the face-to-face interviews were audiotaped.

Procedure

Twenty-one athletes who had decided to end their careers after the Olympic Games were contacted at the end of the Games. Their telephone numbers and addresses were obtained from federations in the respective sport disciplines. All were informed of the purpose of the study and provided with indications of the time required to complete both the written questionnaire and the interview. Four athletes did not respond and one declined the invitation to participate. Sixteen athletes agreed to participate, and informed consent was obtained from all of them. The sixteen active elite athletes were contacted at the National Institute of Sports and Physical Education and were also informed of the purpose of the study. Informed consent was also obtained from these sixteen athletes. The participants of the two groups were assured that confidentiality would be preserved. The two groups were evaluated with the GHQ-12 four times at approximately three-month intervals. The first evaluation (CT1) took place between one-and-a-half and two months after career termination. The second was five months after career termination (CT2), the third was about eight months after career termination (CT3), and the fourth was between eleven and twelve months after career termination (CT4).

At each of these times, a convenient time and location for a meeting was arranged with each athlete so that the same researcher (e.g., the first author) could administer the GHQ-12 and conduct interviews individually in the same session. Questionnaires were administered prior to the interviews. Meetings lasted an average of two hours. Active elite athletes were only administered the GHQ-12.

Data analysis

GHQ-12. For the purpose of the present investigation, analyses were repeated-measure ANOVAs in which subjective well-being was the dependent measure, time was a repeated-measure independent variable, with four times, and a between-group independent variable with the two groups, transitional and active elite athletes. This analysis was followed by post-hoc comparisons using the Newman Keuls test when statistical significance was obtained.

Semi-structured interviews. After each session, audio recordings of the interview were transcribed verbatim and the content was analyzed using both inductive and deductive processes of reasoning. In the case of our study, the broader categories (e.g., changes in life style and socio-professional situation) were already established by the interview format with two sections, and were created deductively. Athletes' responses within each of the pre-existing categories were logged and grouped into common subcategories in an inductive manner where appropriate following the methods used by Gould, Eklund, and Jackson (1993). A continual overlap of data collection and analysis was performed not only to verify and refine existing themes but also to secure the identification of additional concepts of importance as well as salient cues which were then incorporated into the next scheduled interviews (Lofland & Lofland, 1995).

Measures taken to ensure the trustworthiness of the data analysis included member checking before and after each interview. An external researcher who was a sport psychologist familiar with qualitative research verified the codes and coding. The transcripts were also read independently by the first, second and third authors to determine the interpretation that best fit the data. Agreement between the three investigators or triangular consensus (Lincoln & Guba, 1985) was thus sought for each transcript, a procedure which allowed for correction of data interpretation. Feedback from study participants was also sought at each session (Meyer & Wenger, 1998). Thus, after the questionnaire was completed, the principal investigator summarized what he had understood during the previous interview and each participant was invited to clarify, confirm, or disconfirm the findings. The observations made by the athletes were thus used to enhance the quality and relevance of the

interviews and the interview guide was refined at each evaluation; that is, between each evaluation session (*i.e.*, CT1 vs. CT2, etc.).

Results

Characteristics of transitional and active elite athletes

At the time of retirement, all transitional athletes had been competing as members of national teams for 10.81 years ($SD = 2.4$). Their retirement from elite sport was freely chosen because of a sense of accomplishment, with all claiming to have achieved their sport-related goals. An example of this is the statement: “I had reached all my goals in sports—I felt I had gone as far as I could—and I knew it was time to leave.” They also expressed a desire to discover new activities and new focuses in their lives, as illustrated by the response: “I wanted to learn something new in a different area, to enhance myself.” All had had part-time jobs during their careers adapted to high-performance needs; that is to say, complete availability to train and compete. All had full-time jobs to focus on after career termination. Three were teachers in French high schools, six were coaches, three had returned to school, one was a public relations consultant, and three were working in government administrations.

The active elite athletes were members of national teams and competed in World Cups and Championships or European Championships. They had been competing as members of national teams for an average of 9.68 years ($SD = 1.6$). A t test demonstrated no statistical difference between the two groups for age, $t(30) = 1.05$, $p = .29$, or years of elite sport participation, *i.e.*, members of national teams, $t(30) = 1.54$, $p = .13$.

GHQ-12 score

GHQ-12 mean scores and standard deviations for transitional and active athletes are presented in Table I.

Table 1: GHQ-12 mean scores and standard deviations for transitional athletes and active elite athletes at CT1, CT2, CT3, and CT4

	Transitional Athletes							
	CT1		CT2		CT3		CT4	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
GHQ score	25.06	4.21	23.00	4.24	22.43	4.03	19.56	2.50

	Active Elite Athletes							
	CT1		CT2		CT3		CT4	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
GHQ score	21.18	3.01	21.43	3.09	21.31	2.08	20.25	1.57

Note. CT1 = One and a half months after Career Termination; CT2 = Five months after Career Termination; CT3 = About eight months after Career Termination; CT4 = Between eleven and twelve months after Career Termination.

Repeated-measure ANOVA revealed a statistically significant time effect, $F(3, 90) = 8.83$, $p < .0001$, and a significant Group by Time interaction effect, $F(3, 90) = 4.22$, $p < .01$. No group effect was found, $F(1, 30) = 2.73$, $p = .10$. *Post-hoc* comparisons using the Newman Keuls test revealed that the GHQ-12 score of the transitional athletes decreased significantly between CT1 and CT2 ($p < .05$) and between CT3 and CT4 ($p < .01$), but did not change between CT2 and CT3 ($p = .53$). No significant differences were found in the active elite athletes' scores. The analysis revealed a significant difference between the two groups at CT1, with transitional athletes having higher GHQ-12 scores than active ones ($p < .001$), but did not differ between the two groups at the other times.

Qualitative results

All transitional athletes welcomed the opportunity to talk about their experiences in transition out of elite sport. Analyses of the interview data revealed that the transition process spanned four separate phases in the participants' attitudes and feelings toward their life style and socioprofessional situation following retirement from elite sport.

Session 1: One and a half months after career termination (CT1)

Confrontation with a whole new life style

New sedentary daily life. At this time, transitional athletes emphasized their first contact with new daily routines, timetables and habits. As a female rower said: "It's strange to get up in the morning and think that there is no training or traveling for competition today. Just going to work." These athletes found the new life style more passive and sedentary, as in the case of this fencer: "My daily activities are ordinary and so I feel very passive in my new life."

A lack of physical sensations and stimulations. All the transitional athletes expressed a lack of physical sensations. As a wrestler expressed it: "There's no more physical intensity or stimulation. When I was an athlete, it was a physical effort, and now it's really hard to find the same thing mentally." Even those who remained in sport as coaches or administrators were not nearly as active as when they had been athletes, as a male rower engaged in coaching said: "I'm on a boat, but the only effort I make is to yell out instructions! Physically, there's no stimulation." Part-time jobs had been transformed into full-time work without any training highs. A female synchronized swimmer said: "I like my job, but I miss the swimming pool, the physical sensations."

The loss of frequent traveling. The other aspect of elite sport life that transitional athletes missed was the frequent traveling. A female fencer underlined: "I miss the frequent traveling. For example, every year at this period, we were in Cuba for training camp. It's strange to remember that every year at this period I was somewhere else. It's a void in my life." For these athletes, this rhythm of traveling and frequent trips to other countries was a major part of their life style and was felt as a great lack in their current life, as an archer said: "I feel an enormous void in my life. Not only because of the lack of exercise, but also the loss of competing in other countries, traveling for training camps."

Confrontation with a new socio-professional situation

The discrepancy between former and current competencies. These former athletes described a discrepancy between current workplace references and competencies and the former ones focused on physical competencies.

It's really difficult to shift away from the importance of my athletic skills. When I was an athlete, my body and athletic efficiency were the foundations of my life, and now they are useless in my new job. I'm between something that was extremely important and something that must become important. (A wrestler)

This discrepancy resulted in a liminal position, between past sport achievement that continued to play a role in the former athletes' lives and the current situation not entirely integrated as a potential source of achievement. A female synchronized swimmer explained: "I have to build a new framework of references. My behavior and feelings have to be turned away from the body and reinvested in my work."

A liminal position between the status of athlete and that of "ordinary individual". In addition to facing a discrepancy between former and currently required competencies, transitional athletes found themselves in an "in-between" social status: not yet entirely ex-athlete but not yet entirely full-time employee. This situation was presented by an archer: "When I introduce myself, I still talk about myself as an archer." Most underlined the fact that, even if they were integrated into a new career, they had not fully assimilated the status attached to it.

I tend to reason from my status of athlete, as if I were still one, even though I'm not. It's difficult to tell myself that I'm doing a different job with a new status. It's like I'm between two chairs and I know I have to sit down on the second one. (A wrestler)

Session 2: Five months after career termination (CT2)

The difficulties of accepting a new life style

The investment in alternative non-sport activities. During this period, the athletes invested in alternative activities. As described by a wrestler: "I try to compensate for the lack of training and the physical high by other activities after work." There was a transfer of energy toward new activities to compensate physically unstimulating jobs and the lack of physical sensations one and a half months after career termination. A female rower said: "I sit all day at work. After a day like that, I need to get out and see friends, go to a restaurant and then a movie. I can't stay put, I really need to keep moving."

The avoidance of a more passive life style. This investment in alternative activities and the search for social networks was a substitute for the rhythm of elite sport, and it allowed them to avoid confronting the reality of a new life style.

I'm doing a lot of things with friends after work. So this way I don't have time to get bored—even if these activities are totally different from sports. It's just like going to train with friends, but there's no physical effort! This way, at least I don't go home and sit in front of TV. (A rower)

For the ex-athletes working in sport, these compensatory activities reduced the frustration of not being an active athlete, as a female synchronized swimmer said:

When I'm at the swimming pool, I'm frustrated by not being in the water. I see my swimmers training hard, and I'm passive—I'm not in the pool. It's very difficult mentally. So after training other swimmers, I get rid of the tension with friends in other places.

New beginnings in the socio-professional area

The search for social support. The transitional athletes emphasized initial difficulties related to the lack of autonomy and control of one's life experiences during the sport career. A wrestler said: "When I was an athlete, coaches and technical staff organized my life: training hours, schedules, trips, I only thought about training and exercise. So right after I retired, I was lost, no one was deciding for me." Thus, the search for social support was underlined by all the transitional athletes; an archer explained: "I have to keep getting information from my colleagues. On my own, I couldn't learn my job. I'm lucky because everyone is helping me adjust!"

The avoidance of identification with other athletes. The transition was described as difficult, particularly for former athletes working in sport. They emphasized the danger of identifying with the athletes they train. This awareness helped the former athletes to integrate the truth that the sport career was over and points out the need to develop new competencies based on the new socio-professional situation.

Sometimes I'm thinking of my own feelings and sensations, and then I suddenly realize that I have to be more objective, to act like a coach. And the older coaches are there to remind me that I'm not an athlete anymore. (A female synchronized swimmer)

Liberation through losing the social status of athlete. Paradoxically, a decrease in social reinforcement was noted—but as a factor that facilitated transition. This loss in fact helped to clarify their transitional situation one and a half month after career termination as not entirely full-time workers but also not entirely ex-athletes. A female badminton player revealed: "Even if it's good to be recognized, it's liberating not to be. Now I can evaluate myself objectively in my work and build a new framework of competencies thinking that I'm someone new."

Session 3: Eight months after career termination (CT3)

The reconstruction of a healthy life style

The reinvestment of leisure time in physical activities. This period was marked by a transfer of energy that had been invested in compensatory activities back to the sport domain—but in a new way, with different attitudes toward the physical activity. As a fencer expressed it: "I try to go running when I have the time." A female canoer was even clearer: "I can't be inactive. But I prefer to find time to exercise and stay healthy than to go out to discotheques or restaurants all the time." This awareness of the difficulty of adjusting to a new life style brought them to the decision to reinvest the body, but in a healthy and pleasurable manner, as described by an archer: "There are two reasons for exercising: staying in good physical health and getting rid of job tensions!"

The physical transformation as warning signal. This transfer of energy was in response to the physical transformations due to lack of training and the substantial deregulation of daily habits. It responded to the need to, as a wrestler said: "...stay in good health. The past months, I've been tired all the time and gained weight." Physical changes were perceived as "warning signals" (a male rower), and investment in compensatory activities began to be seen as a way of hiding from difficulties rather than as facilitating adjustment to a new life style and professional activities. A female rower said: "I think I was trying to find a source of stimulation. But in reality, I was losing the body I've had for years and I couldn't adequately invest in my job either."

The paradox of the adjustment to the socio-professional situation

The development of a feeling of competence. These athletes emphasized positive adjustment to professional references and the development of new competencies in the workplace. An archer said: “I still make mistakes, but I feel like I’m making progress.”

The lack of personal goals. They expressed a paradox, the impression of learning new things and enhancing themselves, but not quite knowing why, as suggested by a female fencer: “I’m making progress, I’m learning a lot—but why? I don’t see the point, why I’m making all this effort.” When they compared their current situation with the former, they recognized that the feeling of progress in the workplace had no meaning and was not directed toward short-term or even long-term goals and focus. As described by a fencer: “Life isn’t the same. It’s different—before I had events in the season to focus on, and I was always preparing for them.” They expressed difficulty seeing the finality of the investment in the professional setting, and found it difficult to work without self-projection into the future. Thus, an archer underlined: “I don’t see myself in the future. I have a hard time understanding how my progress and my current effort could have consequences in the short-term future.”

Session 4: Between eleven and twelve months after career termination (CT4)

The balance in life style

Complementary and healthy physical activities. The transitional athletes talked about balance in their lives at this point. Their life style had become organized around work and maintaining physical fitness, between a sedentary job situation and leisure time activity. In this newly-defined physical activity, they found stimulation and physical sensations to offset their sedentary professional situations. As a wrestler emphasized: “It’s good to exercise and to feel physical tiredness. It’s a leisure activity, a pleasant way to feel good.” Renewed physical activity was considered by the transitional athletes to be a key to their new life style. Exercise became a source of equilibrium, health and pleasure, as described by a female rower: “There are several ways to consider it. First, I’m maintaining my health. Second, after my job, it helps me unwind and get rid of tension. And third, it feels good—physically good, and that makes me feel overall good.”

A sense of autonomy and control. The transitional athletes became autonomous also, in the sense that they were finally able to decide when to exercise, without any external pressure and without a feeling of obligation. This physical pleasure had to take into account professional responsibilities, as acknowledged by a female fencer: “I run when I have the time or when I really need to.” These athletes underlined the fact that they were controlling their leisure time and their exercise timetable differently than during their sport career when exercise was an obligation controlled by the sport staff. A female rower shared the following:

Now I feel in control of my life. Now I decide when and where I’m going to run, how many times. If I don’t want to run, I don’t. It’s different from during my career when the coach and the federation controlled my rhythm, decided for me when and where I would train, and I had no choice.

Adjustment to the socio-professional situation

A sense of accomplishment. All the transitional athletes underlined a feeling of accomplishment and competence in their professional activities compared with the previous period. An archer said: “I was wondering why I was working. Now I see that work has many satisfactions.” Goal-setting seemed to underlie this feeling, with satisfaction of seeing hard work rewarded by the attainment of goals, as a female fencer suggested: “I set goals at my

job. I've reached them and, more than that, I've gone beyond them. I feel competent in my job now." The transitional athletes recognized that this achievement of work goals was similar to sport achievement, with the notion of preparation and attention focused toward something definite and concrete. A female badminton player told us:

I worked hard on a project. Night and day, for a long period, I kept thinking about it and working on it, and then when I finished it, I was as happy as when I used to win a competition.

By approximately one year post-retirement, these athletes had discovered that their jobs could be as satisfying and self-enhancing as athletic achievement, as summarized by this fencer: "You have an objective or a project, you spend nearly all your time on it, you carry it out and achieve your goal—and you are recognized for your results." Being recognized in the workplace increased this feeling of accomplishment, as described by a female synchronized swimmer: "I'm recognized now for my training methods as a coach, and no more as an athlete."

Discussion

The purpose of this study was to evaluate the repercussions of the transition out of elite sport on subjective well-being. Four phases were identified in the dynamics of subjective well-being and perceptions of changes in life style and socio-professional situation. The phases ranged from initial difficulties facing the substantial changes in all life areas to reconstruction of and adjustment to a whole new life style and socioprofessional situation, and thus support our initial hypothesis. The present results are original and contribute to the literature on transition out of elite sport in several ways. The longitudinal assessment at the actual time of transition, with repeated measures across time, allowed us to identify the dynamics of subjective well-being, and this was completed by qualitative study of the underlying mechanisms of these dynamics. An important finding concerned the shift in psychological adaptation to changes in life style and socio-professional situation over time. The identification of both quantitative changes and the strategies used during the transition and adjustment process provides information on Taylor and Ogilvie's assumptions (1994) about the coping skills deployed by retiring athletes and about how social supports mediate adjustment to this retirement. The previous studies that demonstrated that transition out of elite sport is composed of several phases are complemented (Crook & Robertson, 1991; Kerr & Dacyshyn, 2000; Werthner & Orlick, 1986) with more detail. This study also confirms that the adjustment to transition out of elite sport results from a change in the place of sport in the life and history of an individual, as suggested by Stambulova (1994).

The mechanisms underlying the dynamics of subjective well-being

The transitional athletes faced an initial period of one and a half to two months after career exit during which they were confronted with feelings of loss and void, but they also expressed the feeling of being in a liminal position between their former status and the current one in a new socio-professional setting, as if they were between worlds (Kerr & Dacyshyn, 2000). Sagiv and Schwartz (2000) underlined that subjective well-being may be undermined by conflicts between values acquired earlier and values whose internalization is advocated in a new environment. It seems quite logical that retirement from elite sport, which introduces a substantial discrepancy in past and emerging life style, could affect this dimension, as demonstrated by the difference in scores compared with active elite athletes. In the case of our study, the new values and competencies in the workplace did not correspond to those internalized by elite athletes during their sport career.

Following this first period and up to five months post-career termination, coping strategies such as avoidance were used to avoid boredom and compensate the rhythm of elite sport. This may explain the increase in subjective well-being noted at this time, and it agrees with Stambulova (1997), who demonstrated that retired athletes try to spend their free time on distracting activities to compensate a feeling of emptiness. Avoidance is adaptive by distancing the individual temporarily from the stressful situation (Anshel, Kim, Kim, Chang, & Eom, 2001; Carver, Scheier, & Weintraub, 1989). This finding could confirm the assumption of Grove et al. (1997) that although avoidance strategies are temporarily adaptive, prolonged use could become maladaptive. In fact, few non-athletes are as active as athletes, and an athlete's rhythm would be hard to duplicate outside of sport (Baillie & Danish, 1992). Moreover, the loss of social status clarified this by signaling that elite athletic status was over. Maintenance of social recognition can be problematic during transition out of elite sport because efforts to establish a new life and identity are undermined when the individual is still recognized and valued as an athlete, rather than simply as a "work colleague" (Gearing, 1999). Added to this is social support from job contacts, allowing the athletes to learn new skills and find ways to obtain advice, assistance and information to ease transition and adjustment (Sinclair & Orlick, 1993; Taylor & Ogilvie, 1994).

From five to eight months following career termination, subjective well-being remained stable. The transitional athletes changed from avoidance strategies to the strategy of training and/or exercising. This finding also confirms the assumption of Grove et al. (1997) that there is a point during the transition where individuals begin to perceive more control and change their coping strategies. Training and exercise may be more adaptive (Sinclair & Orlick, 1993). The second factor tied to the stability of subjective well-being was the lack of personal goals for these athletes, even if they developed new competencies. Feeling competent for valued goals is deeply linked to subjective well-being (Reis et al., 2000). During the sport career, training is planned around specific events and physical progress is thus always directed toward something definite (Durand-Bush & Salmela, 2002). In their new professional situation, the development of a feeling of competence would not have a real positive effect without concrete objectives and goals.

Subjective well-being increased between eight and about twelve months after retirement from sport. The transitional athletes' sense of personal control grew as they began to make decisions concerning their lives and this was tied to adjustment to post-sport life (Taylor & Ogilvie, 1994; Werthner & Orlick, 1986). Having a sense of control is strongly related to a positive evaluation of one's life (Lang & Heckhausen, 2001). Moreover, leisure time physical activities played a central role in the enhancement of subjective well-being, as demonstrated in previous research (Fox, 2000; Oishi, Schimmack, & Diener, 2001).

The sense of job accomplishment and competence also contributed to this increase in subjective well-being. As described by Werthner and Orlick (1986), the transitional athletes realized at a certain point in time that there were other areas of life potentially as exciting and rewarding as athletics, and their life satisfaction became close to or above that of their sport career. These authors suggested that renewed confidence and adjustment to new situations is related to gaining skills in new settings. Goal setting creates meaning in a new situation because it allows the projection of self into the future through valued goals to focus on. Transition out of elite sport can be an opportunity for personal growth because it leads to a search for meaning in new settings (Kerr & Dacyshyn, 2000). The sense of accomplishment that comes from reaching goals enhances perceived competence in the workplace and increases subjective well-being, and this is reinforced by peer recognition. Pleasurable physical activities could also explain the positive adjustment to a new socio-professional

situation. As Argyle and Martin (1991) claim, exercise and sport tend to increase subjective well-being in general and to increase satisfaction with work and leisure time in particular.

Even if the transitional athletes felt some difficulties one and a half months after career termination, the positive influence of voluntary and controlled retirement on the adjustment process is underlined in the present study as in the literature as a whole (Crook & Robertson, 1991; Sinclair & Orlick, 1993; Taylor & Ogilvie, 1994; Webb et al., 1998; Werthner & Orlick, 1986). Moreover, a new professional situation to turn to as the sport career comes to an end—as was the case in the present study—is tied to pre-retirement planning (Sinclair & Orlick, 1993; Werthner & Orlick, 1986), and eased the adjustment to a new life in the context of our study.

It is interesting to note that, in contrast to the transitional athletes, the active athletes' subjective well-being remained stable across one year.

The change in the place of sport in individual life and history

The global mechanism allowing the adjustment to transition out of elite sport, and thus the increase in subjective well-being, is related to the change in the place of sport in former athletes' life and history, along with a change in internal attitude about sports (Stambulova, 1994). The present study demonstrated that the transitional athletes reoriented their expectations to accommodate changes in quality of life. When life references change, individuals must shift their internal standard to accommodate the changes (Allison, Locker, & Feine, 1997). Thus, the former athletes shifted their focus from their competencies in the athletic domain oriented toward athletic goals to professional competencies directed toward attaining valued professional goals. Attitude toward physical activity changed as well: From a source of extreme physical sensations and stimulations, physical exercise became a healthy, leisure time activity and a source of pleasure.

Moreover, during their sport career, the elite athletes ascribed the greatest importance to the athletic domain, even when they had other occupations. There was an inversion in the values attributed to the life domain, with the professional domain becoming the main valued life domain and physical exercise becoming a complement of professional investment. This confirmed the findings of Koukouris (1994) and emphasized the positive effect of shifting the energy once spent in pursuit of athletic goals to the professional level.

Implications for practice

The results of both the quantitative and qualitative data indicate several issues related to the interventions designed to help active athletes to prepare for retirement. First, practitioners should help these athletes to become aware of, develop, and use transferable skills that may provide direction and motivation in their post-athletic career (Sinclair & Orlick, 1993; Taylor & Ogilvie, 1994). Goal-setting, as demonstrated, could be one of the most important skills to develop as it played a central role in the adjustment process and in the increase of subjective well-being to a level close to that of the sport career. The issue of autonomy and control over one's life is central to the preparation of post-sport life. In fact, the transitional athletes in our study adjusted well to their new situation because of the development of autonomy and sense of control, both positive for the enhancement of subjective well-being (Lang & Heckhausen, 2001). This development became apparent after a first period of loss of control and uncertainty. Athletes must develop more autonomy related to decision-making during the sport career—despite the influence of the sport environment—to avoid developing a false sense of control.

The major applications for practice concern the potential for optimizing the timing and type of assistance during the transitional period. Four main periods were revealed that might correspond to four types of intervention or assistance. One interesting aspect to explore is the potential use of a progressive detraining program to help athletes cope with the substantial changes in life style at the beginning of the transition. This assistance might prevent reliance on avoidance strategies in voluntarily retired athletes, and it might protect them from the abrupt physical transformations that threaten feelings of self-worth and self-identity. Sport psychologists can also help transitional athletes to reduce the discrepancy between the values and standards acquired during the sport career and the values of their new environment at the beginning of the transition. The development of generativity must be encouraged, through discussing their refined account with still active athletes (Grove, Lavalley, Gordon, & Harvey, 1998). This could give their new identity a greater sense of meaning and allow the integration of former identity as a part of personal history, which was central in the case of the present study.

One interesting aspect emerging from the methodology used was related to the use of four semi-structured interviews during a one-year period. Although this was designed to provide information about the mechanisms underlying the dynamics of subjective well-being, it may also have had complementary therapeutic properties, as was the case in Kerr and Dacyshyn's study (2000). Repeated interviews at the actual time of transition may have positive consequences on the adjustment process of transitional athletes, allowing them an understanding of their situation at particular points in time, and this may accelerate their adjustment to a non-athletic career. Over time, these athletes may have elaborated a story of their experience of transition out of elite sport, close to the account-making successfully used by Grove et al. (1998) and Lavalley et al. (1997). This suggests that it would be interesting to provide the opportunity for confiding at regular points during the actual time of transition.

Suggestions for future research

This timing of specific interventions may not be generalizable to every athlete, as our study sample was small and did not include those who retired involuntarily. Future research is needed to capture the dynamics of subjective well-being with repeated measures in a larger sample of transitional athletes to create a more valid and generalizable model of timed intervention. Evaluations and interviews must begin before retirement, to identify potential decrease in subjective well-being between the sport career and the beginning of the transition. It would be also interesting to focus on those athletes who retire for involuntary reasons, such as age deselection or injury, and who are assumed to have greater problems adjusting to retirement from elite sport than voluntarily retired athletes. These involuntarily retired athletes could present different dynamics in their adjustment to the transition, with a more pronounced crisis stage and a use of different kind of coping strategies, such as emotion-focused coping.

Footnotes

1. Complete interview guides for CT1, CT2, CT3, and CT4 are available by request from the first author

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