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CAREER DECISION-MAKING, ATHLETIC IDENTITY, AND ADJUSTMENT DIFFICULTIES AMONG RETIRED ATHLETES: A COMPARISON BETWEEN COACHES AND NONCOACHES

KARIERNE ODLOČITVE, ŠPORTNA IDENTITETA IN TEŽAVE PRI PRILAGAJANJU NA KONEC ŠPORTNE KARIERE: PRIMERJAVA MED TRENERJI IN NE-TRENERJI

Abstract

Identity is considered a central contributor to the career development process in athletes and is thought to influence adjustment to sport career termination. For former athletes, choosing to become a coach may both reflect identity status and affect adjustment to the transition out of sport. In the present study, differences in vocational behavior, athletic identity, and transitional adjustment difficulties between retired athletes who chose to be coaches ($n = 117$) and retired athletes who chose careers not related to sport ($n = 29$) were assessed. Retired athletes were asked to respond to measures of athletic identity, tendency to foreclose, career exploration, transitional adjustment difficulties, life satisfaction, and career choice satisfaction. Relative to noncoaches, coaches reported a stronger tendency to foreclose and less engagement in exploration of career possibilities other than coaching. Coaches and noncoaches did not differ in retrospective reports of athletic identity at the time of retirement, but noncoaches had significantly weaker athletic identity at the time of assessment. No differences were found in transitional adjustment difficulties,

Izvleček

Identiteta velja za enega pomembnejših dejavnikov, ki vplivajo na razvoj športne kariere ter na prilagajanje na zaključek športne kariere. Karierna odločitev bivših športnikov, da postanejo trenerji, lahko odraža status identitete ter s tem vpliva na prilagajanje na pošportno življenje. V tej študiji smo proučevali razlike v poklicnem vedenju, športni identiteti in težavah ob prilagajanju na pošportno življenje med bivšimi športniki, ki so se odločili za poklic trenerja ($n = 117$), in bivšimi športniki, ki so si izbrali poklicno kariero, nepovezano s športom ($n = 29$). Bivši športniki so odgovarjali na vprašanja o športni identiteti, raziskovanju kariernih možnosti, težavah s prilagajanjem na pošportno življenje, življenjskem zadovoljstvu in zadovoljstvu z izbrano poklicno kariero. Za bivše športnike, ki so po koncu tekmovalne kariere postali trenerji, je v večji meri značilen zaprti identitetni položaj, poklicne možnosti pa so raziskovali manj intenzivno kot ne-trenerji. Rezultati so pokazali, da se skupini ne razlikujeta v retrospektivnem poročilu o športni identiteti ob koncu športne kariere, vendar pa so imeli bivši športniki ne-trenerji manj izraženo športno identiteto v času merjenja. Med skupinama ni bilo razlik v oceni težav s prilagajanjem na pošportno življenje, življenjskem zadovoljstvu in zadovoljstvu z izbrano poklicno kariero. Rezultati potrjujejo, da je evalvacija identitete pomemben dejavnik v načrtovanju razvoja športne kariere.

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life satisfaction, and career choice satisfaction between coaches and noncoaches. Overall, the results affirm the importance of examining self-identity when considering the career development of athletes.

Key words: transitions, self-identity, coaching, sport retirement, termination

INTRODUCTION

Researchers in the career development (e.g., Blustein, 1989; Blustein & Phillips, 1994; Jordaan, 1963) and sport psychology (e.g., Good, Brewer, Petitpas, Van Raalte, & Mahar, 1993; Murphy, Petitpas, & Brewer, 1996) areas have touted the importance of career planning and career exploration in the career decision-making process. Blustein and Phillips (1994) used the term “readiness” to describe individuals who are prepared for the task of making a career choice. They cited the planning and exploring processes as important antecedents of better career decision-making.

Despite the profusion of empirical and theoretical documents regarding career transitions in sport (Lavalley & Wylleman, 2000), little empirical attention has been given to career planning and career exploration in the career decision-making process of retired athletes. Within the sport psychology literature, researchers have attempted to associate sport participation variables with career-related outcomes (Kennedy & Dimick, 1987; Martens & Cox, 2000; Murphy et al., 1996). Researchers have assumed that athletes might lag behind their nonathlete peers in career development due to exclusive dedication to sport (Blann, 1985; Kennedy & Dimmick, 1987; Sowa & Gressard, 1983). Because the findings of these studies have not been consistent, however, one cannot conclude that athletes are less career mature than nonathletes. The lack of consistent results across studies might be a result of overly general definitions of expected career outcomes (e.g., career maturity) and the failure to isolate different aspects of sport participation and their impact on the vocational behavior of athletes in career transitions.

It has been suggested that athletes tend not to engage in exploratory behaviors and prepare themselves for future careers due to the demands of sport participation, and because such behavior might put in question their aspirations to become professional athletes (Brown & Hartley, 1998; Good et al., 1993; Lavalley, Gordon, & Grove, 1996). One result of this lack of career planning is greater adjustment difficulties following retirement from sport (Baillie, 1992; Perna, Ahlgren, & Zaichkowsky, 1999). Approaching the end of an athletic career without preparing for a subsequent one may also affect vocational behaviors and career decision-making. In particular, lack of preretirement career planning and lack of engagement in exploratory behaviors may be associated with the decision to continue one's career in sport as a coach.

Retired athletes who choose to become coaches might select a career in coaching with a relatively high tendency to foreclose, which refers to committing to one career goal without examining other career possibilities (Blustein, Ellis, & Devenis, 1989). The tendency to foreclose construct resembles the identity foreclosure status posited by identity formation researchers (Marcia, Waterman, Matteson, Archer, & Orlofsky, 1993). Foreclosed individuals were described by Marcia et

al. as individuals who made a commitment to occupational, ideological, and interpersonal ideas without engaging in exploratory behavior. Identity foreclosed individuals have been found to use more impulsive (Cella, DeWolfe, & Fitzgibbon, 1987), more dependent, and less systematic (Blustein & Phillips, 1990) career decision-making styles. Recently, Brown, Glastetter-Fender, and Shelton (2000) found that the identity foreclosure status was associated with lower career decision self-efficacy among college student-athletes.

The resistance to preretirement career planning, tendency to approach career decision making with a foreclosed attitude, and lack of career exploration might contribute to the decision of retired athletes to become coaches. Because these athletes have not explored other career choices not related to sport, staying in the familiar sport environment might make the transition process less threatening. Deciding to become a coach might be particularly appealing to athletes with a strong and exclusive athletic identity. Athletic identity (Brewer, Van Raalte, & Linder, 1993) has received attention in the sport psychology literature, especially with regard to sport career transitions (for a review, see Brewer, Van Raalte, & Petitpas, 2000). When athletes base their self-worth solely on their sport performance, ceasing sport participation can involve identity loss and emotional difficulties (Brewer et al., 2000). Indeed, empirical findings have consistently shown that strong and exclusive athletic identity is associated with difficulties in adjustment following retirement from sport (Alfermann, Stambulova, & Zemaityte, 2001; Brewer, 1993; Ceci Erpič, 2001; Lavalley, Gordon, & Grove, 1997; Grove, Lavalley, & Gordon, 1997; Webb, Nasco, Riley, & Headrick, 1998). Regarding vocational behavior, Owens (1994) found that student-athletes who were identified with both the student role and the athlete role were significantly more engaged in career exploration than those who identified only with the athlete role. Athletic identity, therefore, can have a substantial effect on both the degree to which retired athletes experience emotional difficulties following retirement and on their postretirement vocational behavior.

Changes in athletic identity following retirement from sport are also an important aspect of the postretirement adjustment and career decision-making processes. Lavalley et al. (1997) found that reducing one's athletic identity following the transition out of sport was associated with improved quality of adjustment, but little is known about the consequences of not reducing athletic identity following the transition out of sport. Athletes who continue to base their self-concept solely on sport even after completion of their sport participation might seek ways to remain involved in sport. Becoming a coach could help retired athletes to avoid the stress associated with exploring new career possibilities. Lavalley et al. maintained that retired athletes who stay involved in sport as coaches may experience fewer adjustment difficulties because they continue to use the same support system that they had while participating in sport. These athletes, however, are still at risk for career transition difficulties when they cease their coaching career (Lavalley et al., 1997).

The present study was designed to explore the differences in vocational behaviors between retired athletes who chose to stay involved in sport as coaches and retired athletes who sought other careers not related to sport. Specifically, differences in career exploration and tendency to foreclose on a career choice were assessed. Retired athletes who chose to be coaches were predicted to have a stronger tendency to foreclose and to engage less in career exploration activities. A second purpose of the study was to assess the degree to which athletic identity and perceived adjustment difficulties were associated with the retired athletes' career decisions. The basic assumption was that a strong and exclusive athletic identity and unfulfilled expectations to compete at the professional level might expose athletes to severe adjustment difficulties when facing retirement from sport. As suggested by Lavalley et al. (1997), these highly identified athletes might choose

to stay involved in sport as coaches in order to alleviate the negative consequences of the transition process and to avoid the stress that is related to the exploration of new career possibilities. Therefore, retired athletes who chose to be coaches were predicted to report fewer adjustment difficulties than retired athletes who chose other careers. Additionally, coaches were predicted to report stronger and more exclusive athletic identity at the time of retirement and at present than noncoaches. Noncoaches were predicted to report greater reduction in athletic identity since their retirement. Finally, an attempt was made to explore whether differences in life and career satisfaction exist between retired athletes who chose to become coaches and retired athletes who made other career decisions.

METHOD

Participants

Participants were retired Israeli athletes attending a coaching certification course ($n = 117$) and retired Israeli athletes who chose other careers not related to sport ($n = 29$). Retired athletes who chose not to be coaches were recruited via snowball and convenience sampling techniques. Individuals over the age of 45 were excluded from the study on the grounds that a long period of time had elapsed since they had been involved in the career decision-making process.

Coaches (98 males and 19 females) reported past participation in soccer (47%), basketball (17%), swimming (11%), tennis (7%), gymnastics (4%), martial arts (3%), water polo (3%), triathlon (3%), track and field (2%), surfing (2%), cycling (1%), and volleyball (1%). The mean age for coaches was 29.45 ($SD = 5.44$) years, with a range of 20 to 44 years. Their mean number of years of sport participation (as an athlete) was 10.37 ($SD = 5.84$) years and the mean number of years of coaching was 4.26 ($SD = 3.66$) years. Noncoach participants (25 males and 4 females) reported past participation in basketball (11 of 29), soccer (6 of 29), tennis (3 of 29), gymnastics (2 of 29), swimming (2 of 29), volleyball (2 of 29), martial arts (1 of 29), and track and field (1 of 29). One participant did not indicate a sport. The mean age for noncoaches was 28.17 ($SD = 4.76$) years, with a range of 22 to 43 years. Their mean number of years of sport participation was 8.95 ($SD = 3.70$) years.

Instruments

Participants were asked to complete a demographic questionnaire (with items regarding gender, type of sport, level of education, and sport participation) and measures of athletic identity, tendency to foreclose, career exploration, perceived adjustment difficulties, life satisfaction, and career satisfaction. All the measurement instruments were translated into Hebrew. The following steps were performed in order to validate the translations: (a) the translations were made by a master's level professional translator; (b) for an additional evaluation, the translations were given to three Ph.D. level professors from the fields of sport psychology, sport sociology, and career development in Israel; and (c) the translations were then given to a group of 28 basketball and swimming coaches to collect pilot data and receive feedback regarding the level of clarity of the items.

Athletic identity was measured with the Athletic Identity Measurement Scale (AIMS; Brewer et al., 1993). Originally, the AIMS contained 10 items scored on a 7-point Likert-type scale with anchors of "strongly disagree" and "strongly agree." Higher scores on the AIMS indicate stronger

and more exclusive identification with the athlete role. Brewer et al. (1993) reported high internal consistency (alpha coefficients ranging from .81 to .93 across three different samples) and a test-retest reliability coefficient of .89 over a 2-week period. Significant positive correlations between the AIMS and related constructs (level of sport involvement and perceived importance of sport), and weak and nonsignificant correlations between the AIMS and conceptually unrelated constructs (self-esteem and sport skill level) support the construct validity of the scale (Brewer et al., 1993).

Recently, Brewer and Cornelius (2001) found that a 7-item higher order model of the AIMS (Brewer et al., 1993) was superior to other models in a large ($N = 2,729$) and diverse sample. Brewer and Cornelius suggested that the 7-item scale was a better reflection of the athletic identity construct than the original 10-item scale and other competing models. Furthermore, the internal consistency of the 7-item scale remained high ($\alpha = .81$). The correlation between the new scale and the 10-item scale was .96. Therefore, previous research using the 10-item scale is still applicable. The new 7-item scale was used in this study. An acceptable internal consistency coefficient (Cronbach's $\alpha = .72$) has been found for the Hebrew translation of the AIMS (Shachar, 2000).

Athletic identity at the time of retirement was measured with a 7-item retrospective version of the AIMS. For example, the item "I have many goals related to sport" was changed to "I had many goals related to sport." Lavalley et al. (1997) and Grove et al. (1997) found acceptable internal consistency (Cronbach's $\alpha = .75$ and $.79$, respectively) for the 10-item retrospective version of the AIMS. Changes in athletic identity were measured by subtracting the current athletic identity from the reported athletic identity at the time of retirement for each participant (Lavalley et al., 1997).

Tendency to foreclose was measured by the Tendency to Foreclose (TTF) subscale of the Commitment to Career Choice Scale (CCCS; Blustein, Ellis, & Devenis, 1989). The TTF subscale contains nine Likert-type items ranging from 1 (*never true about me*) to 7 (*always true about me*). Higher scores on the TTF scale indicate a greater tendency to foreclose, which reflects a closed, narrow, and dogmatic approach in choosing a career. Coefficient alpha for the TTF subscale ranged from .78 to .82 across several samples. Test-retest reliability coefficients for the TTF subscale were .82 for a 2-week interval and .84 for a 4-week interval (Blustein, Ellis, & Devenis, 1989).

Career exploration was measured with the environmental exploration (EE) and self-exploration (SE) subscales from the Career Exploration Survey (CES; Stumpf, Colarelli, & Hartman, 1983). The EE and SE subscales contain six and five 5-point Likert-type items, respectively, with scale anchors of *little* (1) and *a great deal* (5). Participants were asked to indicate the extent to which they had engaged in environmental exploratory activity and self-exploratory activity since completion of their military service. Because the CES was developed for individuals who are about to graduate from college and face the transition from school to work, the original six items were modified in the present study to adapt them to the coaching population. Specifically, the items were modified in an attempt to evaluate the degree to which the participants had explored career options other than coaching. For example, the item "investigated career possibilities" was changed to "investigated career possibilities other than coaching."

Transitional adjustment difficulties were measured by asking each participant to indicate the degree of emotional, social, and time management adjustment that was required during their transition out of sport. Each of the three types of adjustment difficulties was measured with a

Likert-type scale from 1 (*No adjustment*) to 10 (*Considerable adjustment*). The general structure of these items was adapted from Grove et al. (1997).

Life satisfaction was assessed with the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The scale contains five items scored on a 7-point Likert scale, with higher scores indicating greater life satisfaction. Diener et al. (1985) documented favorable psychometric properties for the SWLS. The instrument has high internal consistency (Cronbach's $\alpha = .87$) and 2-month test-retest reliability ($r = .82$). Scores on the SWLS were significantly correlated with scores on other well-being instruments, but not with scores on social desirability and mood state measures.

Career choice satisfaction was measured by two 5-point scales adapted from Meir, Melamed, and Abu-Freha (1990): "How satisfied are you with your vocational choice?" and "Given another opportunity to choose an occupation, how sure are you that your decision would be the same?" Meir et al. found a high correlation between these items ($r = .75$).

Procedure

Each participant in the coaches group received a packet with an informed consent form and all the questionnaires. Coaches were told that participation in the study was anonymous and voluntary, and that all the information would be kept confidential. Instructions were included and were read aloud. Each participant in the coaches group received an additional postage-paid envelope with the same materials. They were asked to give out the envelope to a former athlete with whom they were familiar and who pursued a career not related to sport (i.e., a noncoach). Noncoaches completed the informed consent form and the questionnaires in a location of their own choosing and returned the packet in the mail.

RESULTS

Means, standard deviations, and internal consistency coefficients for the dependent variables are presented in Table 1. Three exploratory MANOVAs were calculated to detect differences between males and females on the adjustment difficulties variables, the satisfaction variables, and the vocational behavior variables, respectively. None of the analyses was statistically significant, so all subsequent analyses were performed across gender. Two separate independent-groups *t*-tests that were calculated to assess differences between coaches and noncoaches in terms of age and years of sport participation yielded nonsignificant results.

In the main analyses, three exploratory MANOVAs were calculated to determine the effect of the career decision (the decision to become a coach or to seek another career) on the vocational behavior variables (i.e., environmental exploration, self-exploration, and tendency to foreclose), the adjustment difficulties variables (i.e., emotional adjustment, social adjustment, and time management adjustment), and the outcome variables (i.e., satisfaction with life and career choice satisfaction). A significant multivariate effect was found for the vocational behavior variables, Wilk's Lambda = .82, $F(3, 116) = 8.42$, $p < .05$, partial $\eta^2 = .18$. In a follow-up univariate analysis, it was found that coaches had a significantly stronger tendency to foreclose on a career choice than noncoaches, $F(1, 118) = 12.08$, $p < .05$, partial $\eta^2 = .09$. Coaches reported less engagement in environmental exploration, $F(1, 118) = 9.92$, $p < .05$, partial $\eta^2 = .08$, and more engagement

in self-exploration, $F(1, 118) = 4.32$, $p < .05$, partial $\eta^2 = .04$, than noncoaches. The multivariate effects for the adjustment difficulties variables, Wilk's Lambda = .93, $F(3, 102) = 2.50$, $p > .05$, and the outcome variables, Wilk's Lambda = .98, $F(2, 132) = 0.18$, $p > .05$, were not statistically significant.

Table 1: Descriptive statistics and internal consistency coefficients.

<i>Variable</i>	<i>Coaches</i> M (SD)	<i>Noncoaches</i> M (SD)	<i>Coefficient Alpha</i> α
AIMS-C	34.80 (7.10)	25.41 (9.40)	.75
AIMS-R	39.24 (6.70)	37.20 (7.21)	.85
AIMS-D	4.38 (7.28)	11.79 (9.10)	
TTF	33.57 (10.07)	26.44 (7.41)	.81
EE	17.61 (6.46)	21.78 (4.32)	.87
SE	17.87 (4.28)	15.81 (4.86)	.78
E-AD	6.08 (2.60)	6.17 (2.74)	
S-AD	5.00 (2.60)	3.86 (2.13)	
TM-AD	3.88 (2.52)	3.07 (2.51)	
CCF	7.90 (1.68)	7.79 (1.73)	.70
SWLS	24.44 (4.65)	24.51 (4.52)	.85

Legend:

AIMS-C = current athletic identity

AIMS-R = athletic identity at the time of retirement

AIMS-D = the discrepancy between athletic identity at the time of retirement and the current athletic identity

TTF = tendency to foreclose

EE = environmental exploration

SE = self-exploration

E-AD = emotional adjustment difficulties

S-AD = social adjustment difficulties

TM-AD = time management adjustment difficulties

CCS = career choice satisfaction

SWLS = satisfaction with life scale

To address differences in current athletic identity and athletic identity at the time of retirement between retired athletes who chose to be coaches and retired athletes who chose other careers, a 2 (career decision) X 2 (time) mixed factorial analysis of variance (ANOVA) was performed. The main effects for career decision, $F(1, 133) = 19.44$, $p < .05$, and time, $F(1, 133) = 100.64$, $p < .05$, were statistically significant. Because the interaction between these two factors, $F(1, 133) = 21.09$, $p < .05$, partial $\eta^2 = .14$, was also statistically significant, the main effects were not interpreted. In a simple effects analysis, it was found that retired athletes who chose to become coaches had stronger athletic identity ($M = 34.88$, $SD = 7.10$) than retired athletes who chose other careers ($M = 25.41$, $SD = 9.40$) at the time of assessment, $F(1, 133) = 35.00$, $p < .05$, but these differences were not statistically significant at the time of retirement, $F(1, 133) = 1.96$, $p > .05$ ($M = 39.26$, $SD = 6.70$ and $M = 37.21$, $SD = 7.21$, respectively). Hence, retired athletes who did

not stay involved in sport as coaches reduced their athletic identity after retirement to a greater extent than retired athletes who became coaches.

Pearson correlations were calculated separately for coaches and noncoaches to assess relations among athletic identity, the adjustment difficulties variables, and the satisfaction variables (see Table 2). As expected, athletic identity at the time of retirement had significant positive relations with adjustment difficulties for both coaches and noncoaches. For the coaches, athletic identity at the time of retirement was positively related to emotional adjustment and social adjustment, but not to time management adjustment. For the noncoaches, athletic identity at the time of retirement was positively related to emotional adjustment, social adjustment, and time management adjustment. Using Fisher's z transformation function procedure, it was found that none of these correlations was significantly different for coaches and noncoaches.

Table 2: Correlation coefficients among scores on the dependent variables for coaches (above the diagonal line) and noncoaches (below the diagonal line)

	<i>AI-R</i>	<i>AI-C</i>	<i>AI-D</i>	<i>E-AD</i>	<i>S-AD</i>	<i>TM-AD</i>	<i>LS</i>	<i>CCS</i>
AI-R	-	.46**	.50**	.27**	.20*	.09	.13	.22*
AI-C	.42*	-	-.53**	.12	.27**	.14	.31**	.19*
AI-D	.36*	.70**	-	.13	-.11	-.05	-.15	.04
E-AD	.56**	.36*	.07	-	.61**	.45**	.00	.05
S-AD	.39*	.12	.18	.56**	-	.47**	.20*	.18*
TM-AD	.33*	.63**	-.39*	.60**	.31	-	.06	.11
LS	.17	-.27	.42*	.24	-.26	-.42*	-	.65**
CCS	-.02	-.30	.30	-.44**	-.15	-.50**	.59**	-

Legend:

AI-R = athletic identity at the time of retirement

AI-C = current athletic identity

AI-D = differences in athletic identity since the retirement

E-AD = emotional adjustment

S-AD = social adjustment

TM-AD = time management adjustment

LS = life satisfaction

CCF = career choice satisfaction.

* $p < .05$ (1-tailed)

** $p < .01$ (1-tailed)

Current athletic identity was positively correlated with both career choice satisfaction and life satisfaction for coaches, whereas these relationships were negative and approaching significance ($p < .06$ and $p < .08$, respectively) for noncoaches. Using Fisher's z transformation function procedure, it was found that the magnitudes of these correlations were significantly different for coaches and noncoaches. Among coaches, the reduction in athletic identity since retirement was not correlated with career choice satisfaction and was negatively correlated with life satisfaction. Among noncoaches, the reduction in athletic identity was not correlated with career choice satisfaction and was positively correlated with life satisfaction. Using the Fisher's z procedure once again, it was found that the correlation between the reduction in athletic identity and life satisfaction was

significantly different for coaches and noncoaches, whereas the correlation between the reduction in athletic identity and career choice satisfaction was not.

Pearson product-moment correlations were also calculated between the adjustment difficulties variables and life and career choice satisfaction (see Table 2). Among coaches, the degree of social adjustment needed was significantly related to both career choice satisfaction and life satisfaction. Among noncoaches, emotional adjustment was negatively correlated with career choice satisfaction, and time management adjustment was negatively correlated with both career choice satisfaction and life satisfaction.

DISCUSSION

Differences in vocational behavior

Support was obtained for the hypothesis that retired athletes who chose to be coaches would approach vocational tasks differently than retired athletes who decided to leave sport and seek other careers. Specifically, it was found that retired athletes who chose to become coaches had a stronger tendency to foreclose and engaged in less environmental exploration. Because these constructs are considered maladaptive in the career decision-making process (Blustein, 1989; Blustein, Ellis, & Devenis, 1989; Blustein & Phillips, 1994; Jordaan, 1963), it is tentatively suggested that the decision to stay involved in sport as a coach following retirement from active participation might be based on maladaptive characteristics. According to existing career decision-making models (Blustein, Ellis, & Devenis, 1989; Blustein & Phillips, 1994), an adaptive approach toward making a career choice involves phases of increasing awareness, alternating between exploring and crystallizing career options, narrowing options, committing oneself to a single career goal, and implementing the chosen career. One of the most important components of this approach is the ability to explore various options, to reflect on them, and to test each one in relation to personality traits and environmental demands (Blustein, Ellis, & Devenis, 1989). Accordingly, it seems that the differences in vocational behavior that emerged in the present study suggest that the decision to seek other careers outside of sport had been made in a more deliberate, reflective, less rigid, and more adaptive fashion than the decision to stay involved in sport as coaches.

In the present study, a specific type of exploratory activity was assessed—exploring career options other than coaching. This type of exploratory behavior is associated with the initial stages of the commitment to career choice process (Blustein, 1988; Blustein, Ellis, & Devenis, 1989) and should be differentiated from exploring opportunities within a career domain, after a commitment to a career choice has been made. Considering these two types of vocational exploratory behaviors, it is possible that retired athletes who stayed involved in sport as coaches made a premature commitment to this career goal, as indicated by their high foreclosure scores, and therefore did not feel a need to explore other alternatives. Blustein, Ellis, and Devenis (1989) hypothesized that individuals with a strong tendency to foreclose at the initial stages of the commitment to career choice process may not feel comfortable examining various career options, may limit the number of occupations they consider, and, therefore, may engage in inhibited occupational exploratory behavior. The negative correlations between the tendency to foreclose and environmental exploration that were found for both coaches and noncoaches add support to this hypothesis, suggesting

that retired athletes who had stronger tendency to foreclose tended to engage less in exploration of career options besides coaching.

An important question emerging from these findings concerns the immediate and future consequences of the obtained differences in vocational behaviors. At present, the relationships between the constructs of foreclosure and career exploration and career outcomes measures are inconclusive (Blustein, 1988, 1989, 1997; Blustein, Ellis, & Devenis, 1989; Flum & Blustein, 2000). These findings can be explained by the fact that both identity foreclosed and identity achieved individuals have clear goals and a strong commitment to their career choice (Blustein, Ellis, & Devenis, 1989; Flum & Blustein, 2000; Marcia, 1966; Marcia et al., 1993). In essence, both show characteristics of high levels of career maturity. Foreclosed individuals, however, arrive at their commitment without engaging in active exploration (Marcia, 1966; Petipras, 1978). Despite the inconclusive relationship between foreclosure and career outcomes identified in the general career development literature, identity foreclosure has been related to lower scores on career outcome indices in studies involving athletes. Specifically, identity foreclosure has been associated with lower career maturity (Murphy et al., 1996) and lower levels of career decision-making self-efficacy (Brown et al., 2000).

Differences in athletic identity and posttransitional adjustment difficulties

An important research question in this study was to examine whether the differences in vocational behaviors were associated with athletic identity. Retired athletes who chose to become coaches and retired athletes who sought other career options did not differ in athletic identity at the time of retirement. The assumption that strong athletic identity at the time of retirement would foster the decision to stay involved in sport as coaches was not supported.

The significant coach/noncoach difference in current athletic identity indicates that retired athletes who chose nonsport careers reduced their athletic identity more than those who remained involved in sport as coaches. Perhaps the relative “distance” from sport involvement reduced the importance of the athlete role in the lives of those who sought careers outside sport. Simultaneously, the development of a new occupational role might capture a larger portion in the multidimensional self-concept (Brewer et al., 2000; Linville, 1985) than the athlete role.

Retired athletes who chose to stay involved in sport as coaches were predicted to report fewer adjustment difficulties than retired athletes who chose other careers. One of the hypothesized reasons for choosing coaching was to stay close to a familiar environment and to avoid the stress and anxiety that often accompany the exploration of unfamiliar alternatives (Blustein, Ellis, & Devenis, 1989; Lavalley et al., 1997). This hypothesis, however, was not supported in the current study. Coaches did not differ from noncoaches in emotional, social, and time management adjustment difficulties. Possibly, the degree to which retired athletes perceive their transition out of sport as difficult is not related to their career choice. Another possibility is that the three 1-item adjustment difficulties scales did not adequately capture the three components of adjustment difficulties. A more complete and psychometrically sound measure of sport transition adjustment difficulties is needed in future research.

It should also be noted that the degree of adjustment difficulties has been associated with factors that were not examined in the present study. For example, it has been consistently shown that involuntary retirement is associated with more severe adjustment difficulties than a voluntary decision to leave sport (Alfermann & Gross, 1997; Alfermann et al., 2001; Kleiber, Greendorfer,

Blinde, & Samdahl, 1987). Researchers have also posited that athletes who had disagreements or difficulties with their coaches before retirement would experience a longer and more difficult period of transition (Kerr & Dacyshyn, 2000). The degree of satisfaction with sport accomplishments might also play a crucial role in determining perceived adjustment difficulties (Kerr & Dacyshyn, 2000; Kleiber et al., 1987). These variables should be evaluated in future research in which transitional adjustment difficulties are examined.

As expected, athletic identity at the time of retirement was positively related to adjustment difficulties for both coaches and noncoaches. Retired athletes who reported having stronger and more exclusive athletic identity at the time of retirement perceived their transition out of sport as more difficult. These findings are consistent with the results of previous studies (Alfermann et al., 2001; CeciĆ Erpič, 2001; Grove et al., 1997; Lavalley et al., 1997; Schmid & Schilling, 1997; Webb et al., 1998) and provide further support for the hypothesis that athletes who maintain strong and exclusive athletic identity at the time of retirement are at greater risk to experience adjustment difficulties following sport career termination.

Noncoaches who reported greater reductions in athletic identity expressed greater satisfaction with their lives. These findings are in accord with those of Lavalley et al. (1997) and add support to the claim that reducing athletic identity is associated with more favorable characteristics in the adjustment process. Furthermore, although only approaching significance ($p = .06$), coaches who maintained strong and exclusive athletic identity tended to be more satisfied with their career choices. A similar pattern was observed when interpreting the relationships between current athletic identity and life and career satisfaction. For noncoaches, those who maintained strong and exclusive athletic identity at the time of assessment were less satisfied with their life and their career decisions. For coaches, on the other hand, strong and exclusive athletic identity was associated with greater satisfaction with life and career decisions. Overall, it appears that maintaining a strong athletic identity is associated with a more favorable adjustment process for retired athletes who become coaches, whereas maintaining strong athletic identity is associated with a less favorable adjustment process for retired athletes who choose careers other than coaching. It is likely that investing one's identity in the athletic domain confers advantages in the sport career termination process only when one's next career is also sport-related.

Implications for research and practice

Several limitations of the present study warrant mention. First, the sample size of retired athletes who chose careers not related to sport was small relative to that of the retired athletes who chose to be coaches. The sample size discrepancy between coaches and noncoaches is likely due to less than full compliance by participants in the group of coaches with the instruction to give an envelope containing the questionnaires to former athletes with whom they were familiar and who pursued a career not related to sport. It is also highly likely that some prospective noncoaches failed to complete and return envelopes that they received from coaches. Second, no cause and effect conclusions can be drawn from the results of this study. Third, the period of time between the retirement from sport participation and the decision to pursue a coaching or nonsport career was not assessed. Even though the level of adjustment difficulties was the same for those who chose coaching and those who pursued nonsport careers, the duration of the adjustment difficulties may have been significantly greater for one group versus the other. Fourth, given the cultural

context in which this study was carried out, the generalizability of the findings is limited to retired athletes in Israel.

The aforementioned propositions regarding the relationships among lack of environmental exploration, foreclosed thinking, and potential career outcomes are tentative in nature and are offered here as potential directions for future investigations. Therefore, developing specific interventions to influence the vocational behaviors of athletes before and after sport career termination might be difficult because the consequences of these behaviors are not clear. In other words, making a firm premature commitment to a career choice without exploring several career options might not lead to negative outcomes. Blustein, Ellis, and Devenis (1989) posited that “the relative degree of adaptiveness or maladaptiveness of the tendency to foreclose cannot be discerned due to the absence of a clear definition and a corresponding psychometric measure of this construct” (p. 346). In future research, potential outcomes should be identified before different interventions are tested.

The implications that emerge from the findings regarding athletic identity are more straightforward. Considering the well-supported relationship between strong and exclusive athletic identity and transitional adjustment difficulties, interventions aimed at reducing the degree of exclusivity of athletic identity, particularly before retirement is foreseen, should be developed. These interventions should be aimed at helping athletes develop a more balanced multidimensional self-concept to prevent a situation in which the athlete role is the only source for self-worth. Ideally, preventive measures should be taken before the retirement process begins. One possibility is that the highly competitive, pressure-provoking sport environment molded by coaches does not encourage athletes to expand their self-concept beyond the athlete role. Athletes' own aspirations to reach the professional level are compatible with this attitude. The result can be unrealistic expectations maintained and even nurtured by the coaches' own needs. Therefore, one line of interventions should be directed mainly toward coaching education programs. In these programs, increasing coaches' awareness of their responsibility to support their athletes' development in domains other than sport or, at least, not to restrict it should be emphasized. It is hoped that coaches' efforts to support the expansion of their athletes' self-concept will also help in preventing the development of a foreclosed identity and reluctance to engage in exploratory behaviors. A foreclosed attitude is particularly maladaptive in the career development process following the transition out of sport. It is our belief that these points should be a part of every coaching education and training program.

The relationship between athletic identity reduction following retirement and improved adjustment that was found in the present study and the Lavalley et al. (1997) study has important implications for counseling athletes in transitions. Counselors should be aware of the importance of reducing the degree of identification with the athlete role as an integral part of self-concept expansion. The AIMS can be used as an assessment tool in that process. Counselors should not, however, attempt to reduce the athletic identity in athletes who continue their involvement in sport as coaches. According to the findings of the present study, maintenance of strong athletic identity is related to a more favorable adjustment process among retired athletes who choose to stay involved in sport as coaches. Nevertheless, in these cases, counselors should ensure that the career choice has been made after a thorough personal and career exploration process rather than just selecting the closest possibility at the moment. In other words, counselors should help retired athletes increase their awareness of their motives in choosing a career.

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