Effects of Transferable Skills Workshops on the Career Self-Efficacy of College Student-Athletes

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ABSTRACT

This study was designed to investigate the effects of two types of transferable skills workshops on the career self-efficacy of intercollegiate student-athletes. Student-athletes ($N = 79$) were randomly assigned to one of three conditions: (a) a control condition that involved viewing a video on sports nutrition, (b) an unaugmented transferable skills workshop that was based on the model suggested by Petitpas and Schwartz (1989), and (c) an augmented transferable skills workshop similar to the unaugmented workshop but including completion of a self-report inventory designed to help athletes identify sport-related skills that can transfer to other domains. All participants completed the Career Decision Self-Efficacy Short-Form (CDSE-SF; Betz & Taylor, 2001) before and after the workshops. Analyses of covariance (ANCOVAs) with CDSE-SF pretest scores as a covariate revealed that the augmented transferable skills workshop produced significantly greater increases in career self-efficacy than the unaugmented transferable skills workshop and the control condition. Paired samples *t*-tests indicated that both transferable skills workshops, but not the control condition, produced statistically significant gains in career self-efficacy. The results suggest that both transferable skills workshops can have a positive influence on the career self-efficacy of student-athletes and that a standardized transferable skills inventory can be a helpful tool in enhancing the ability of student-athletes to identify transferable skills that can increase their career self-efficacy.

INTRODUCTION

Intercollegiate student-athletes have been identified as a population that requires special support services (Chartrand & Lent, 1987; Ferrante, Etzel, & Lantz, 1996; Lanning, 1982; Parham, 1993; Remer, Tongate, & Watson, 1987). Researchers investigating student-athletes have revealed several developmental concerns, including lower career maturity (Kennedy & Dimick, 1987; Martens & Cox, 2000; Murphy, Petitpas, & Brewer, 1996; Smallman & Sowa, 1996), lower levels on age appropriate developmental tasks (Sowa & Gressard, 1983), and lower academic attainment (Purdy, Eitzen, & Hufnagel, 1982) relative to non-athlete peers. It has been suggested that these concerns, all of which may have an adverse impact on the career development of student-athletes, arise as a consequence of student-athletes' dual roles as student and athlete (Ferrante et al., 1996; Selby, Weinstein, & Bird, 1990) and the nature of the intercollegiate athletic system (Eitzen, 2001; Sperber, 2001).

Researchers have also argued that athletes, through participation in sport, can gain skills that have value in other fields (Danish, 1983; Danish, Petitpas, & Hale, 1990, 1993). Skills that can be transferred to other domains are called transferable skills (Bolles, 1992). Danish, Petitpas, and Hale (1992) suggested that "sometimes, especially in a sports situation, it is not the lack of skills per se but the athlete's inability to transfer the desired skill from a sport to a non-sport setting that impedes the athlete from achieving success in non-sport settings" (p. 410). Accordingly, to facilitate the career development of student-athletes, it may be useful to assist student-athletes in identifying their transferable skills and applying them in the career realm.

There are only a small number of studies that have examined the effectiveness of career development interventions on student-athletes. Nelson (1982) found that freshmen intercollegiate student-athletes who attended career counseling workshops had significantly higher grade point averages than student-athletes who were not enrolled in these sessions. The United States Olympic Committee (USOC) created the Career Assistance Program for Athletes (CAPA) to assist Olympic level athletes in planning for future careers (Petitpas, Danish, McKelvain, & Murphy, 1992). Nancy Hilliard, who coordinated the CAPA and was a former Olympian herself, commented, "A major problem for athletes in making the transition from sports competition to new careers is, believe it or not, self-esteem... They are confident in their sports, but they feel ill-equipped outside them" (Hanlon, 1988, p. 5). Most CAPA participants reported that they had benefited from the experience and stated that they were more confident in their abilities to engage in career development. They rated the transferable skills identification portion of the workshop as the most useful component of the overall experience (Petitpas et al., 1992).

Although no published studies have examined the effects of interventions on student-athletes' confidence to engage in career development activities, several investigations have explored the effects of interventions on the career self-efficacy of students in general and have produced contradictory results. For example, Fukuyama, Probert, Neimeyer, Nevill, and Metzler (1988) investigated the effects of a computer assisted guidance system called DISCOVER on the career self-efficacy and decision making of 77 undergraduates who had not yet declared an academic major. The researchers found significant improvements on career self-efficacy and decision making of participants after working on the DISCOVER program for one hour.

In contrast, evaluation data from a similar career development intervention conducted by Kraus and Hughey (1999) revealed no significant effects on career decision-making self-efficacy or career indecision in high school students, even though the intervention was facilitated by an experienced school counselor twice a week for a period of four consecutive weeks. A possible explanation for the inconsistent findings in this area is the age of the participants. There is some evidence that providing college students with a list of transferable skills or a print-out of specific occupational information can influence their level of career self-efficacy (Fukuyama et al., 1988). As such, college students may be more realistic in their self-appraisals and responsive to career development interventions than high school students.

The purpose of the current study was to assess the effects of two types of transferable skills workshops on the career self-efficacy of college student athletes. The goal of both workshops was to help student-athletes identify and gain confidence in their ability to transfer skills to non-sport domains. One of the workshops was augmented with a pencil-and-paper inventory designed specifically for athletes to facilitate the process of identifying transferable skills. It was predicted that the augmented transferable skills workshop would produce a greater increase in career self-efficacy than the unaugmented transferable skills workshop and a control condition. It was also hypothesized that both transferable skills workshops would produce significant increases in career self-efficacy over baseline, whereas the control condition would not.

METHOD

Participants

Participants were 79 college student-athletes (45 males [30 football players and 15 basketball players] and 34 females [14 softball players and 20 soccer players]) enrolled at a small NCAA Division III institution. The mean age for participants was 19.08 ($SD = 1.14$) years. In terms of self-reported race/ethnicity, the sample was 86% White, not of Hispanic origin; 10% Black, not of Hispanic origin; 3% other; and 1% unspecified. The college year distribution for the participants was 57% freshman, 17% sophomore, 15% junior, and 11% senior. One-third of the participants reported playing more than one sport in college, and 87% of the participants were on varsity teams. Participants reported having been involved in their particular sport for approximately 1 to 13 years.

Measures

A demographic questionnaire was used to obtain information regarding the gender, age, college year, intercollegiate sport involvement, and length of involvement in the primary sport of participants. The Career Decision Self-Efficacy Short-Form (CDSE-SF; Betz & Taylor, 2001), an abbreviated version of the Career Decision Making Self-Efficacy Short-Form (CDMSE-SF; Betz, Klein, & Taylor, 1996), was used to assess career self-efficacy. The CDSE-SF is a 25-item instrument with response options ranging from "no confidence at all" to "complete confidence" on a 10-point confidence continuum. Betz and Taylor reported adequate internal consistency for the CDSE-SF. The concurrent validity of the CDMSE-SF has been documented through significant correlations with self-efficacy (Betz & Klein, 1996) and, as reported by Taylor and Betz (1983) and Robbins (1985), scales of the Career Decision Scale (Osipow, Carney, Winer, Yanico, & Koschier, 1980) and My Vocational Situation (Holland, Daiger, & Power, 1980), respectively.

Procedure

Participants were randomly assigned to one of three conditions: (a) control condition ($n = 22$); (b) transferable skills workshop ($n = 30$); or (c) augmented transferable skills workshop ($n = 27$). Participants in all three groups completed an informed consent document, the demographic questionnaire, and the CDSE-SF. All workshops were scripted and were approximately one hr in length. The workshops were facilitated by graduate students enrolled in a master's level counseling program who received training in delivering the workshop content. The workshop facilitators rotated across conditions to control for differences in individual presenting skills. Members of the control group were shown a video on eating disorders in student-athletes and, after a brief question-and-answer session, asked to complete the CDSE-SF a second time.

The two transferable skills workshop conditions followed the format outlined in the *Athlete's Guide to Understanding and Identifying Transferable Skills* (Petitpas & Schwartz, 1989) to facilitate the identification of transferable skills by student-athletes. The workshops consisted of large and small group activities designed to assist student-athletes in identifying transferable skills that they have learned through sport and facilitating the transfer of these skills to other career-related domains. The workshops were designed to enhance the career self-efficacy of student-athletes by providing the four sources of self-efficacy information (i.e., performance accomplishments, vicarious learning or modeling, verbal persuasion, and emotional arousal) specified by Bandura (1977). Small group discussions were intended to enable vicarious learning from other student-athletes in the group and reduce anxiety about the career decision making process. Group facilitators emphasized that student-athletes had already taken an important first step in their career development through sport participation. At the conclusion of the workshops, participants completed the CDSE-SF for the second time.

The transferable skills workshop condition and the augmented transferable skills workshop condition were essentially identical with the exception that participants in the latter condition also completed the Transferable Skills Inventory (TSI; Cornelius et al., 2001), a self-report instrument on which respondents rate the extent to which they have acquired each of 88 skills (e.g., motivating others, making good decisions, being competitive) through sport or other activities on a scale from 0 (*not at all*) to 4 (*very well*). TSI items are clustered in 11 skill areas (with 8 items per cluster): communication skills, teamwork skills, leadership skills, ethics and proper conduct, problem solving skills, self-motivation skills, organization skills, physical skills and knowledge, coping skills, execution skills, and creativity skills. Group facilitators helped participants interpret their TSI scores as part of the process of identifying transferable skills gained through sport participation.

Statistical Analysis

An analysis of co-variance (ANCOVA) was performed on CDSE-SF post-test scores with CDSE-SF pre-test scores as a co-variate to investigate the different effects of the unaugmented and augmented transferable skills workshops on career self-efficacy. Two additional ANCOVAs were performed to compare the CDSE-SF post-test scores (controlling for CDSE-SF pre-test scores) of (a) the control group and the augmented transferable skills workshop group, and (b) the unaugmented transferable skills workshop group and the augmented transferable skills workshop group. In

these additional analyses, a multistage test by Holm (1979) was used to adjust the alpha level for inflated Type I error when testing multiple hypotheses with ANCOVA. Finally, paired samples t-tests were performed on pre-test and post-test CDSE-SF scores to investigate the effect of each workshop separately on career self-efficacy.

RESULTS

Means for the pre-test and post-test scores of CDSE-SF are presented in Table 1. As shown in Table 2, there was a significant difference in post-test CDSE-SF scores of participants across the three conditions when controlling for pre-test CDSE-SF scores, $F(2, 75) = 5.19, p < .01$. For the Holm's test used in the follow-up analyses, the alpha level was divided by the number of hypotheses remaining to be tested. Thus, the alpha level for the ANCOVA comparing the post-test CDSE-SF scores of the control group to the scores of the augmented transferable skills workshop group, while controlling for pre-test CDSE-SF scores, was .025. The adjusted mean CDSE-SF score of the augmented transferable skills workshop group was significantly higher than the adjusted mean score for the control group, $F(1, 46) = 6.73, p < .013$.

For the remaining ANCOVA, the alpha level (.05) was divided by 1 because there was one hypothesis left to be tested. The ANCOVA comparing the post-test CDSE-SF scores of the unaugmented transferable skills workshop group and the augmented transferable skills workshop group, while controlling for pre-test CDSE-SF scores, revealed that the adjusted mean CDSE-SF score for the augmented transferable skills workshop group was significantly higher than the adjusted mean score for the unaugmented transferable skills workshop group, $F(1, 54) = 5.01, p < .029$.

Paired samples t-tests performed on CDSE-SF scores separately for each workshop indicated that: (a) there was no significant difference between pre-test and post-test scores for the control group, $t(21) = -.24$, $p > .05$; and (b) post-test scores were significantly higher than pre-test scores for both the unaugmented transferable skills workshop group, $t(29) = 2.95$, $p < .01$, and the augmented transferable skills workshop group, $t(26) = 3.57$, $p < .001$. Thus, although the CDSE-SF scores of the control group did not increase after the workshop, they did increase after the two transferable skills workshops.

DISCUSSION

This current study was designed to examine the effects of two types of transferable skills workshops on the career self-efficacy of a group of intercollegiate student-athletes. Both of the transferable skills workshops followed the model suggested by Petitpas and Schwartz (1989), but participants in the augmented workshop also completed the TSI as part of the workshop protocol.

The career self-efficacy level of student-athletes who participated in the transferable skills workshops increased significantly compared to that of the control group. In addition, participants who completed the TSI as part of their transferable skills workshop showed higher levels of career self-efficacy than student-athletes who did not complete the TSI. It appears that participating in transferable skills workshops helps student-athletes to identify personal skills that enhance their beliefs about their abilities and their confidence to engage in the career development process.

Consistent with the results of the Olympic CAPA program (Petitpas et al., 1992), participants in the present study who participated in a transferable skills workshop increased their career self-efficacy. In addition, those student-athletes who also completed the TSI showed even greater increases in career self-efficacy. Exposing student-athletes to a wide variety of transferable skills may be helpful in challenging personal beliefs about their abilities to engage successfully in career development. Danish et al. (1993) suggested that one of the primary reasons that skills acquired through sport participation do not transfer automatically to other career domains is that athletes often do not understand what skills they have learned. As a result of having student-athletes examine and discuss a list of skills that are often learned through sports participation, they may challenge their self-doubts and change their self-talk from "I have never done this before" to "I have done this before." From the result of the present study, it appears that the TSI can be a useful self-assessment tool for student-athletes and a helpful component of a comprehensive career development program for intercollegiate student-athletes.

The present study had several limitations. All of the participants were team sport student-athletes from a Division III school who were randomly assigned to one of the three conditions. No additional attempt was made to match the groups by age or number of years in college, which could have been related to the effect of the transferable skills workshops. In addition, controlling for all the factors related to the exact adherence of the workshop presenters to the planned format of each workshop was difficult. These limitations should be addressed in future research.

In general, the results of the study supported the hypothesis that transferable skills workshops can positively influence career self-efficacy in student-athletes. The more exposure that student-athletes have to transferable skills through tools such as the TSI, the greater the possibility that they will be able to identify more of their own skills and thereby increase their career self-confidence. Other resources on transferable skills are available on the Internet (e.g., www.studentaffairs.cmu.edu/career/CareerBriefs/transkills.html , www.lifeworktransitions.com/exercises.html). Although the study provided some empirical support for the effects of transferable skills workshops, more research is needed to investigate the effectiveness of other career-related interventions with student-athletes, such as computer-based and one-on-one counseling.

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TABLE 1.

Descriptive Statistics by Group (N = 79)

	Pre-test		Post-test		
Group	*M*	*SD*	*M*	*SD*	*N*
Control	91.36	38.04	90.45	43.68	22
Unaugmented Transferable Skills Workshop	83.00	32.00	87.60	34.25	30
Augmented Transferable Skills Workshop	83.85	38.31	97.33	40.99	27

TABLE 2.

ANCOVA Results Comparing the Three Groups

Comparison	F Value	Degrees of freedom	Alpha level	p value
Differences among all three groups	5.19	2,75	.05	.008*
Augmented group versus control group	6.73	1,46	.025	.013*
Augmented group versus unaugmented group	5.01	1,54	.05	.029*

* indicates significant differences between groups

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