Comparing Two Groups of Student-Athletes: Implications for Academic and Career Advising

Mary E. Buzzetta, Florida State University
Janet G. Lenz, Florida State University
Emily Kennelly, Florida State University

In this study, we explored the career variables of goal instability, vocational identity, and career decidedness levels in two groups of student-athletes. We compared scholarship student-athletes who had been selected to participate in a summer academic-support program designed for at-risk students to scholarship athletes who were not included in the summer-support program. Both groups consisted of student-athletes from various sports with football and basketball the primary sports for the summer program participants and swimming and cross country the primary sports for student-athletes not included in the summer-support program. Results of the study indicated that no significant differences were found between the two groups of college student-athletes with regard to their goal instability, vocational identity, or career decidedness. Implications for academic and career advising as well as future research are discussed.

[doi:10.12930/NACADA-15-041]

KEY WORDS: academic advising, career advising, career decidedness, college student-athletes, goal instability, vocational identity

Academic advising has increasingly focused on strategies for combining both academic and career planning because students bring both concerns to the advising process (Gordon, 2006; Leslie-Toogood & Gill, 2008). College student-athletes represent a unique subpopulation in many higher education settings (Harding, 2008; Leslie-Toogood & Gill, 2008). In charting their academic and career paths, these students may interact with advisors within the athletic department as well as advisors in academic units and career services offices. Despite close connections to the athletic–academic advising staff in planning their course schedules, student-athletes may find that the time demands of their sport and the other commitments associated with their athletic role interfere with their ability to explore academic and career options and appropriately attend to broader life-planning tasks. Because of the influence that sport participation may exert on a student-athlete's academic and career planning goals (Brown, Glastetter-Fender, & Shelton, 2000; Linnemeyer & Brown, 2010; Murphy, Petitpas, & Brewer, 1996), advisors may find it helpful to further explore the characteristics of this population.

Student-athletes represent a growing group of diverse individuals on college campuses of all sizes. The National Collegiate Athletic Association (NCAA) (2015) reported that in academic year 2014-2015 nearly 482,533 college students (209,472 females and 273,061 males) participated in NCAA-sponsored events. In addition, according to the 2010 NCAA "Student-Athlete Race and Ethnicity Report," which is based on data from student-athletes across all sports and all divisions, 70.4% of male athletes identified as Caucasian, 18.7% as African American, 4.3% as Hispanic/Latino, 1.5% as Asian, 0.3% as American Indian/Alaskan Native, and 0.2% as Native Hawaiian/Pacific Islander (NCAA, 2010). Furthermore, 77.2% of female athletes identified as Caucasian, 11.6% as African American, 4% as Hispanic/Latino, 1.9% as Asian, 0.4% as American Indian/Alaskan Native, and 0.2% as Native Hawaiian/Pacific Islander (NCAA, 2010).

Research indicates that approximately 1% of student-athletes will have a professional career in sports, which typically lasts 3–4 years (Martinelli, 2000; NCAA, 2012). Student-athletes have a number of responsibilities to manage, including practice, travel, play, and training. In trying to balance the dual roles of student and athlete, they may experience difficulty in formulating future goals and plans (Martens & Cox, 2000; Shurts & Shoffner, 2004; Sowa & Gressard, 1983). As a result, student-athletes need appropriate guidance and assistance with academic and career planning while progressing through their collegiate experience.

Review of Literature

Positive and Negative Effects of Athletic Participation

Previous literature provides insight into the ways sport participation affects college student-

athletes, both positively and negatively, and the potential impact of their athlete role on developmental tasks, including academic and career decision making. The benefits of sport participation include physical, personal, and psychological development (Richards & Aries, 1999; Shurts & Shoffner, 2004). Buzzetta, Cisneros, and Zucker (2011) reported that athletes acquire an ability to accept constructive criticism and possess a set of transferable skills relevant to their future success, including time management, goal orientation, and dedication. In addition, athletic participation can enhance individuals' social identity, as participants become members of a valued social group on campus (Richards & Aries, 1999). Previous studies (Richards & Aries, 1999; Shurts & Shoffner, 2004) documented the various benefits of sport participation for college student-athletes as well as articulated the way sport involvement can assist athletes in coping with key developmental tasks, including forming one's identity and setting appropriate goals.

Despite the positive aspects associated with college athletics, researchers have also documented some drawbacks associated with athletic participation. Specifically, they have noted that an athlete's academic and career planning progress may be hindered as a result of athletic participation (Kennedy & Dimick, 1987; Murphy et al., 1996). Some studies have suggested that athletes experience more difficulty in formulating future goals and plans compared to their nonathlete peers (Martens & Cox, 2000; Shurts & Shoffner, 2004; Sowa & Gressard, 1983). Student-athletes' role commitments may interfere with their ability to explore academic and career options, and they may struggle in appropriately attending to life-planning tasks such as setting goals (Brown et al., 2000; Linnemeyer & Brown, 2010). Although they may have mastered setting goals related to athletic competition, student-athletes may not have translated this focus to their academic and career goals.

Goal Instability

Research has shown that readiness to engage in future planning behavior is related to an individual's level of goal directedness (Robbins & Tucker, 1986). Robbins (1987) described goal instability as an individual's inability to formulate a plan of action for one's career. The inability to formulate and implement realistic life plans stems from a lack of goal directedness, motivation, and ability to initiate self-direction (Robbins & Patton, 1985). Bertoch (2010) examined the relationship between goal instability and negative thinking in 258 undergraduates enrolled in a career course and found that higher goal instability was significantly related to higher levels of negative career thinking. In other words, individuals with high levels of goal instability may experience difficulty engaging in the academic and career decision-making process as a result of negative career thoughts related to this process; these may be expressed in statements such as "I'll never find a field of study or occupation I really like." Blustein (1989) examined the relationship between goal instability and career exploration in a sample of 106 college students and found that goal directedness was positively associated with self-exploration in the career-development process. Blustein (1989) also found a strong relationship between goal directedness and career decision-making self-efficacy. Santos (2003) noted that high levels of goal instability were associated with lower vocational identity levels; that is, students with little clarity about their future plans may struggle with goal setting. High goal instability has also been associated with the inability to make a career decision following participation in a career course (Robbins & Patton, 1985). Martin and James (2012) stressed the importance of helping student-athletes formulate goals and plans for their lives beyond athletics.

Overall, research indicates that goal instability is related to a variety of career development constructs, including dysfunctional career thoughts, career decision-making self-efficacy, and vocational identity. On the basis of previous research, which showed that individuals with high goal instability experience dysfunctional thinking, lower levels of career decision-making self-efficacy, and lower levels of vocational identity, we surmised that goal instability may be a useful factor to consider in academic and career advising interventions designed to help the student-athlete population. Little is known about student-athletes' goal orientation, clarity, and motivation as factors in academic and career decision making.

Vocational Identity

According to Holland, Daiger, and Power (1980), vocational identity refers to an individual's self-perceptions of one's own goals, interests, personality, and talents. Vocational identity development shows a relationship with a number of factors that may influence college students.

Sampson, Peterson, Lenz, Reardon, and Saunders (1996) found that individuals with a clear sense of vocational identity have fewer negative thoughts related to career decision making than those with lower vocational identity levels. Furthermore, Solberg, Good, Fischer, Brown, and Nord (1995) surveyed 426 college students and found that higher vocational identity levels were positively correlated with career decision-making self-efficacy and negatively correlated with career-decision needs. Ackerman (2012) interviewed 14 NCAA Division I student-athletes to determine factors that contribute to the development of a student-athlete's vocational identity. Eight factors emerged as contributors toward vocational identity development: occupational engagement prior to college, parental support, personality characteristics such as determination and independence, involvement with other social groups, support from professors, support from coaches, tailored career resources, and understanding NCAA and university regulations. Although this earlier research demonstrated the relevance of vocational identity among student-athletes, further research on vocational identity is needed to explore differences that may exist within subgroups of student-athletes. With this information, interventions better tailored to students' unique needs can be developed. Finally, closely related to vocational identity, the extent to which student-athletes report having made a career decision that involves consideration of both fields of study and future occupational alternatives may prove important in helping them choose appropriate career paths.

Career Decision Making and College Student-Athletes

All college students need assistance with academic and career decision making, and some students need more concentrated help with this process because of their unique circumstances (Gordon, 2006). Student athletes experience complexities related to their various role commitments as competitors. Both identity foreclosure and athletic identity have been shown to inhibit career decision making in student-athletes (Brown et al., 2000; Grove, Lavallee, & Gordon, 1997; Houle, 2010; Lally & Kerr, 2005). Athletic identity involves the extent to which an individual identifies with the athlete role (Brewer, Van Raalte, & Linder, 1993). Identification with the student–athlete role may prevent athletes from thoroughly exploring options associated with a particular field of study or occupational area (Finch, 2007; Murphy et al., 1996). Previous research indicates that individuals with strong athletic identities are less likely to engage in career exploration and related decision-making processes (Brown et al., 2000; Grove et al., 1997; Houle, 2010; Lally & Kerr, 2005; Tyrance, Harris, & Post, 2013). Brown et al. (2000) surveyed 189 NCAA Division I student-athletes and found a relationship between identity foreclosure (strong identification with the athlete role) and low decision-making self-efficacy.

In summary, many studies have reported the relevance of goal instability, vocational identity, and career decidedness to students' academic and career planning. Because of the unique challenges faced by student-athletes in navigating the college environment (Leslie-Toogood & Gill, 2008; Lyons, Jackson, & Livingston, 2015), the research on student–athlete populations needs to extend to examination of variables across subpopulations of college student-athletes.

Purpose and Research Question

Previous studies of student-athletes were focused primarily on comparing athletes to their nonathlete peers (Martens & Cox, 2000; Shurts & Shoffner, 2004; Sowa & Gressard, 1983). However, the possible differences between student–athlete groups may help explain the processes student-athletes use for decision making and inform ways that advising and career planning interventions can be tailored to their unique concerns.

In our study, we compared goal instability, vocational identity, and career decidedness between two samples of college student-athletes. One group was comprised of athletes participating in a six-week educational program called *Summer Bridge,* which was designed to allow student-athletes, newly arrived on campus, the opportunity to engage in academic preparation courses, attend various types of workshops (related to academic and student services), and participate in mandated study halls, academic check-ins, and tutorial supports prior to athletic conditioning and weight training. The mission of the Summer Bridge program was described as follows: "To equip at-risk freshman student-athletes with the skills necessary to graduate from college" (Florida State University, Athletic Academic Support, 2013, p. 1). Student-athletes in the Summer Bridge program included at-risk college students who were admitted to the university during the summer term. These students received hands-on orientation

experience and academic support to assist with the transition from high school to college. Participants were selected for this program on the basis of recommendations from coaches or academic advising support staff as well as a review of their high school academic record and SAT scores.

By comparing student-athletes identified as at risk and selected to be part of a summer support program with student-athletes not identified as at risk, we sought to find any differences in goal directedness, vocational identity, and career decidedness. To address gaps in the literature, we proposed the following exploratory research question: Are there significant differences between two groups of student-athletes, those selected for a summer educational program and those admitted during the regular fall semester, with regard to goal instability, vocational identity, and career decidedness levels?

Method

Sample

Descriptive statistics for each group of student–athlete participants are presented in Table 1. The Summer Bridge group ($n = 31$) consisted of student-athletes on scholarship chosen to participate in the academic-support Summer Bridge program. The group consisted of 25 males and 6 females who self-identified as Caucasian ($n = 10$), African American ($n = 16$), Hispanic ($n = 3$), and biracial ($n = 2$). The majority of participants in the Summer Bridge group ($n = 22$) indicated high school as their highest year of formal education completed, but 9 reported completion of one year of undergraduate education and entered the university as transfer students. Participants in the Summer Bridge group represented nine different sports with the highest numbers in football ($n = 14$), basketball ($n = 5$), track/field ($n = 3$), baseball ($n = 2$), soccer ($n = 2$), and swimming ($n = 2$) (Table 1).

The Fall Only group ($n = 69$) consisted of student-athletes on scholarship who began college at the start of the fall semester and did not participate in the Summer Bridge Program. It consisted of 24 males and 45 females. The Fall Only group self-identified as Caucasian ($n = 55$), African American ($n = 6$), Hispanic ($n = 3$), biracial ($n = 3$), and Asian ($n = 1$); one individual did not report ethnicity. They were involved in 10 different sports, including swimming ($n = 18$), cross country ($n = 10$), track/field ($n = 10$), softball ($n = 8$), soccer ($n = 6$), baseball ($n = 5$), and golf ($n = 3$) (Table 1). The majority of participants in the Fall Only group ($n = 50$) indicated high school as their highest year of formal education completed, 15 completed one year of undergraduate education, two had completed three years, one completed five years, and one individual did not report highest year of education completed. Overall, participants' ages

Table 1. Demographic information on two student–athlete groups

	Program Status		
Characteristics	**Summer Bridge ($n = 31$)**	**Fall Only ($n = 69$)**	**Total**
Gender			
Male	25	24	49
Female	6	45	51
Ethnicity/Race			
Caucasian	10	55	65
African American	16	6	22
Hispanic	3	3	6
Biracial	2	3	5
Asian	0	1	1
Highest Education Completed			
high school	22	50	72
Undergraduate (1st year)	9	15	24
Undergraduate (3rd year)	0	2	2
Undergraduate (5th year)	0	1	1
Primary Sport			
Baseball	2	5	7
Basketball	5	0	5
Beach volleyball	0	6	6
Cross country	1	10	11
Diving	0	1	1
Football	14	1	15
Golf	0	3	3
Soccer	2	6	8
Softball	1	8	9
Swimming	2	18	20
Tennis	1	0	1
Track/field	3	10	13
Age (years)			
17	0	4	4
18	26	49	75
19	4	11	15
20	1	4	5
22	0	1	1

in both groups ranged from 17 to 22 years, with the mean age being 18 years.

Measures

A demographic form and two measures were utilized to collect data from participants in this study. The two measures were the *Goal Instability Scale* (GIS; Robbins & Patton, 1985) and the vocational identity (VI) scale of *My Vocational Situation* (MVS-VI; Holland et al., 1980). Career decidedness was assessed using the *Range of Considered Alternatives* (RCA; Gati, Kleiman, Saka, & Zakai, 2003), which was included on the demographic form.

The participants listed their age, gender, race or ethnicity, highest year of formal education completed, current or proposed field of study, and primary sport. A brief measure of career decidedness, the RCA (Gati & Levin, 2015) was also included in the demographic form. The RCA, a self-report measure, is used to assess the degree to which individuals have narrowed down the range of occupational alternatives under consideration, reflecting their decision status and the crystallization of their career plans. Scores on the RCA range from 1 to 6, with 6 suggesting the highest level of career decidedness. Participants choose from one of six statements to indicate their career decision status (Gati & Levin, 2015):

> I do not even have a general direction.
> I have only a general direction.
> I am deliberating among a small number of specific occupations.
> I am considering a specific occupation, but would like to explore other options before I make my decision.
> I know which occupation I am interested in, but I would like to feel sure of my choice.
> I am already sure of the occupation I will choose. (p. 195)

The RCA proves useful in investigating the adaptability of the way individuals make career decisions (Gati & Levin, 2014), assessing the effect of an Internet-based career intervention (Gati et al., 2003), and comparing methods for choosing among career alternatives (Amit & Gati, 2013).

The GIS (Robbins & Patton, 1985), a 10-item self-report instrument, is used to measure an individual's ability to initiate self-direction. Total scores range from 10 to 60, with higher scores indicating higher levels of goal directedness or low goal instability. Items are rated on a 6-point Likert scale: 1 = *strongly agree*, 2 = *moderately agree*, 3 = *slightly agree*, 4 = *slightly disagree*, 5 = *moderately disagree*, and 6 = *strongly disagree*. Sample items include "I don't seem to have the drive to get my work done" and "After a while, I lose sight of my goals." Test-retest reliability for GIS data collected over a 2-week interval was .76, and internal item consistency, calculated with Cronbach's alpha, was .81 (Robbins & Patton, 1985). Concurrent validity studies indicated that the GIS correlates significantly with a number of variables including self-esteem ($r = -.64$), personal competencies ($r = -.48$), and career decidedness ($r = -.22$). Predictive validity studies indicated that the GIS is a significant predictor of career decidedness following participation in a career course (Robbins & Patton, 1985). Confirmatory factor analyses have shown that GIS items measure a unitary construct of goal instability (Robbins, Payne, & Chartrand, 1990). Bertoch, Lenz, Reardon, and Peterson (2014) demonstrated further evidence of the concurrent validity of the GIS.

The MVS-VI (Holland et al., 1980) was used to measure vocational identity in this study. The VI subscale is composed of 18 true–false items used to measure individuals' perceptions of their own goals, interests, personality, and talents. The total score is obtained by summing the number of false responses, with higher scores indicating a clearer sense of vocational identity. Sample items include "I am not sure that my present occupational choice or job is right for me" and "No single occupation appeals strongly to me." A high degree of internal consistency (Kuder–Richardson Formula 20) was found for the VI subscale and ranged from .86 to .89 (Holland et al., 1980). Test–retest reliability scores for intervals of 1 to 3 months was .75 (Holland, Johnston, & Asama, 1993). Holland et al. (1980) reported evidence of the construct validity for the VI.

Procedure

Student-athletes selected for the Summer Bridge program were invited to participate in the research during their visit to the career center. Those who chose to participate completed the research forms prior to the start of program activities, classes, or interventions associated with the Summer Bridge program, including the career-center overview. The second group was recruited during the initial fall orientation meeting

for student-athletes, and each participant completed the research forms at the initial welcome meeting. None of the student-athletes in the Fall Only sample had attended the Summer Bridge program. Prior to collecting any data from participants, we reviewed consent information, explained the purpose of the study as well as the risks and benefits of participating, and addressed possible questions or concerns raised by participants. The students were informed that their participation was strictly voluntary, and no incentives were provided for participation. Individuals who expressed an interest in participating in the research study completed the informed-consent paperwork, a demographic form, and two brief measures—the MVS–VI and the GIS.

A one-way multivariate analysis of variance (MANCOVA) was utilized to examine differences in goal instability, vocational identity, and career decidedness levels in a sample of 100 college student-athletes. Participant gender status was controlled. Gender was selected as a covariate because the percentage of males and females significantly differed by group ($\chi^2 = 18.00$, $df = 1$, $p < .001$) (Table 1). Therefore, gender was added to the model as a covariate to partition any variation among the dependent variables attributed to gender. The MANCOVA statistic was selected as the omnibus test to ascertain whether a multivariate effect existed between groups.

Results

We sought to answer the exploratory research question: Are there significant differences between two groups of college student athletes, those selected for a summer educational program and those admitted during the regular fall semester, in regard to goal instability, vocational identity, and career decidedness levels? This question was examined using the GIS (Robbins & Patton, 1985), MVS-VI scale (Holland et al., 1980), and RCA measure (Gati et al., 2003). Means, standard deviations, and a correlation matrix depicting relationships between measures of goal instability, vocational identity, and career decidedness are presented in Tables 2 and 3. We found significant positive correlations between the VI and GIS scales ($r = .48$), indicating that high levels of vocational identity were associated with low levels of goal instability. In addition, we found significant positive correlations between vocational identity and career decidedness as measured by the RCA ($r = .41$), indicating that high levels of vocational identity were associated with high career decidedness scores. Although career decidedness was significantly related to vocational identity, it was not significantly related to goal instability ($r = .10$). This significant positive relationship suggested that the multicollinearity between the independent variables was not a threat for the model used (Table 3).

Table 2. Means and standard deviations for variables

Variable	Minimum	Maximum	*M*	*SD*
VI	2.00	18.00	11.88	3.88
GI	30.00	60.00	50.00	7.25
CD	1.00	6.00	3.82	1.47

Note. VI = Vocational identity (Holland et al., 2008); GI = Goal instability (Robbins & Patton, 1985); CD = Career decidedness (Gati et al., 2003)

The results of the one-way MANCOVA revealed a nonsignificant multivariate effect between groups (Wilks' $\lambda = .954$; F [3, 86] = 1.39, $p = .253$). In addition, the model accounted for 4.6% of the variation between groups. Despite a nonsignificant multivariate effect, the results of the univariate tests are presented in Table 4.

Discussion

In this study, we compared two groups of scholarship student-athletes on goal instability, vocational identity, and career decidedness. One group of student-athletes, who were identified as at risk, participated in the Summer Bridge educational program designed to orient them to campus and help them prepare academically in advance of fall semester. The second group of student-athletes were not identified as at risk, and they enrolled at the start of fall semester without attending the Summer Bridge program (Fall Only group). The study was designed to help address the research gap on the differences across selected career development factors within student–athlete groups.

Despite previous findings on the influence of sport participation on a college student-athlete's academic and career planning (Brown et al., 2000; Linnemeyer & Brown, 2010; Murphy et al., 1996), the results of the current study found average to high mean scores across all three measures used to assess the variables of interest: goal setting, vocational identity, and career decidedness. Student–athlete scores for both groups on the GIS were higher than published

Table 3. Correlations among variables

Variable	VI	GI	CD
VI	1.00	—	—
GI	.476**	1.00	—
CD	.414**	.102	1.00

Note. VI = Vocational identity (Holland et al., 2008); GI = Goal instability (Robbins & Patton, 1985); CD = Career decidedness (Gati et al., 2003)
**p<.01.

Table 4. MANCOVA comparisons of student-athlete groups by variable

	Summer Bridge ($n = 31$)		Fall Only ($n = 61$)			
Variable	***M***	***SE***	***M***	***SE***	***F***	**Sig.**
VI	11.34	0.77	12.28	0.49	.977	.326
GI	49.07	1.48	50.54	0.95	.648	.423
CD	4.09	0.30	3.66	0.19	1.372	.245

Note. VI = Vocational identity (Holland et al., 2008); GI = Goal instability (Robbins & Patton, 1985); CD = Career decidedness (Gati et al., 2003)

mean scores for college students enrolled in an undergraduate career-planning course: $M = 45.6$; $SD = 9.1$ (Bertoch et al., 2014); however, according to the data from Bertoch et al., participants enrolled in an undergraduate career-planning course reported greater goal instability than student-athletes in the current study. Previous research has indicated that college student-athletes experience more difficulty in formulating academic and career plans compared to their nonathlete peers (Kennedy & Dimick, 1987; Martens & Cox, 2000; Shurts & Shoffner, 2004). In contrast to previous findings, our study found that student–athlete participants in both the Summer Bridge and Fall Only groups possessed a sense of goal directedness. In addition, the findings indicate that while student-athletes were considering a specific occupation they were also interested in exploring other options before making a career decision.

The nature of athletic participation, which requires commitment to goal setting and achievement to become a scholarship athlete at a Division I university, may explain our findings. Bailey (1993) described a high school program for athletes that included a focus on setting goals and learning decision making. The initiative was based on the concept that athletes must make decisions about ways to balance their time, where to attend college to pursue their sport, and handle challenges by coaches to establish performance goals in their sport. Bailey's results pointed to the importance of building on these skills in the academic and career planning process, but they also suggested the need to include additional information on ways student-athletes can connect their self-knowledge to future options.

Implications for Practice

Learning more about the career aspirations, goals, and decision-making status of college student-athletes can provide valuable information to support their academic and career advising process. Gordon (2006) stressed the importance of advising programs that help students relate their interests, skills, and abilities to work options. The results from the RCA measure used in our study support the importance of assisting college student-athletes in learning about options outside their sport. For instance, participants in this study indicated that they were currently considering a specific occupation but were interested in exploring other options before they make a decision. Student-athletes who have identified an academic or occupational choice may need to confirm or clarify the appropriateness of their choice by contrasting it with other alternatives as well as exploring the implications for their academic planning. Advisors can work with student-athletes to help them expand their occupational alternatives and assist them in prioritizing their academic and occupational choices.

To expose student-athletes to additional career options and the relationship between fields of study, college campuses can offer events, jointly sponsored by the advising office and career center, during times that fit with athletes' schedules. An example includes a career transition panel presentation (Buzzetta et al., 2011; Lenz & Shy, 2003) where former student-athletes describe how they used their academic background and preparation in the workforce or in graduate school.

Gordon (2006) highlighted the importance of using the advising process to help students understand the skills needed to enter various work settings. Employer panel discussions in which participants describe the nature of the work and tips on résumés, interviews, and similar

topics might be offered in several discipline or industry areas (e.g., careers for liberal arts majors or nonprofit and government careers) (Lenz & Shy, 2003). Additional workshops focused on understanding academic and career planning (self-knowledge, options knowledge, connecting majors to occupations) and strategies for successful transitions after athletic participation, including stories of student-athletes who translated their skills developed in sports to job options, may prove engaging for students. Materials can be developed and shared on campus web sites that highlight the success stories of student-athletes who have made successful career transitions.

A recent career-planning survey administered to 131 freshman athletes attending a large southeastern university indicated that 58.8% desired more assistance in gaining experience related to their major and career interests (Foster, Buzzetta, & Lenz, 2013). Results from the current study reinforce these previous findings and point to the important role that academic and career advisors can play in educating student-athletes about the opportunities available to them outside of athletics (e.g., campus organizations, experiential learning opportunities such as internships or volunteer work, leadership training and development).

Furthermore, our research indicates the need to educate student-athletes on making effective career decisions (Linnemeyer & Brown, 2010; Smallman & Sowa, 1996). The results of our research suggest that student-athletes in both the Summer Bridge and Fall Only groups were interested in expanding their options prior to making a career decision. Campus advisors can draw on various theoretical approaches to integrate the exploration of options with academic and career decisions. Gordon (2006) highlighted several theoretical perspectives that advisors can apply to their work with students, including the cognitive information processing (CIP) approach (see also, Sampson, Reardon, Peterson, & Lenz, 2004). The CIP theory–based approach (Sampson et al., 2004), which includes a model for expanding and narrowing options and identifying a first choice, can assist student-athletes in their career transition and development (Rodriguez, 2012; Wooten, 1994). Academic and career advisors can use CIP theory (Peterson, Lenz, & Sampson, 2003) to assist student-athletes with current career choices as well as in developing the skills necessary for making future career choices (Reardon, Lenz, Sampson, & Peterson, 2017).

Limitations and Future Research

Several limitations are associated with our study. First, the two student–athlete groups significantly differed by gender. The same study on groups more alike by gender may have produced different results. Both groups also differed by ethnicity, with the majority of participants in the Fall Only group identifying as Caucasian and the majority of participants in the Summer Bridge group identifying as African American (followed by Caucasian). In addition, having a larger number of college student-athletes in the Summer Bridge group would have enhanced the statistical power and generalizability of the findings. Furthermore, some participants in both groups specified that they had completed one or more years of undergraduate work; others were transfer students from other institutions, including community colleges, and prior experiences at other colleges and universities may have affected their responses to the measures used in the research. Last, data collected from participants in this study may differ from the student–athlete populations at other types of schools, such as those in Division II or III as well as athletes in sports not identified by participants in our study.

Future researchers could explore a pretest–posttest control group design to assess the effects of a Summer Bridge–type program and determine the degree to which it influences student–athlete academic and career planning factors. Also, increasing the number of participants in future studies may enhance the validity and generalizability of the results. As previous research has focused primarily on comparing college student-athletes to their nonathlete peers, researchers may benefit from extending the literature on student-athletes by examining career development characteristics with students in other campus student organizations who experience similar demands, pressures, and time commitments (e.g., student government associations, Greek organization members, and performing arts students). In addition, the differences that exist within student–athlete groups need to be examined. Such an exploration might include research across a variety of demographic groups, sports programs (revenue and nonrevenue producing), playing statuses (varsity versus nonvarsity), and division affiliations.

Closing Remarks

In closing, academic advisors, in collaboration with campus career advisors, can better assist the student–athlete population by understanding its unique needs and career development factors, and then using this information in designing and delivering services and programs that contribute to student-athletes' successes during their time on campus and in their future life roles. Furthermore, academic and career advisors need to know specific career resources targeted to this population, including relevant career theories, decision-making models, assessments, occupational information materials, and related career and employment resources.

References

Ackerman, C. (2012). *Exploration of factors related to the development of vocational identity in collegiate student-athletes* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3504925)

Amit, A., & Gati, I. (2013). Table or circles: A comparison of two methods for choosing among career alternatives. *The Career Development Quarterly, 61*(1), 50–63.

Bailey, S. J. (1993). Issues in counseling athletes at the high school level. In W. D. Kirk & S. V. Kirk (Eds.), *Student athletes: Shattering the myths and sharing the realities* (pp. 25–34). Alexandria, VA: American Counseling Association.

Bertoch, S. C. (2010). *Goal instability in relation to career thoughts, career decision state, and performance in a career development course* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3483542)

Bertoch, S. C., Lenz, J. G., Reardon, R. C., & Peterson, G. W. (2014). Goal instability in relation to career thoughts, decision state, and performance in a career course. *Journal of Career Development, 41,* 104–121. doi:10.1177/0894845313482521

Blustein, D. L. (1989). The role of goal instability and career self-efficacy in the career exploration process. *Journal of Vocational Behavior, 35*, 194–203. doi:10.1016/0001-8791(89)90040-7

Brewer, B. W., Van Raalte, J. L., & Linder, D. E. (1993). Athletic identity: Hercules' muscles or Achilles heel? *International Journal of Sport Psychology, 24*, 237–254.

Brown, C., Glastetter-Fender, C., & Shelton, M. (2000). Psychosocial identity and career control in college student-athletes. *Journal of Vocational Behavior, 56*, 53–62. doi:10.1006/jvbe.1999.1691

Buzzetta, M., Cisneros, S., & Zucker, M. (2011, November). Celebrating and becoming a champion for diversity: Successful strategies for career professionals. *Career Convergence: Web Magazine*. Retrieved from https://www.ncda.org/aws/NCDA/pt/sd/news_article/52974/_PARENT/CC_layout_details/false

Finch, B. L. (2007). *Investigating college athletes' role identities and career development* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3281057)

Florida State University, Athletic Academic Support. (2013). *FSU athletic academic support Summer Bridge program*. Tallahassee, FL: Author. Unpublished manuscript.

Foster, M., Buzzetta, M., & Lenz, J. (2013). *FSU freshmen athlete Fall 2012 questionnaire summary.* Unpublished manuscript, Center for the Study of Technology in Counseling and Career Development, Florida State University, Tallahassee, FL.

Gati, I., Kleiman, T., Saka, N., & Zakai, A. (2003). Perceived benefits of using an Internet-based interactive career planning system. *Journal of Vocational Behavior, 62*, 272–286. doi:10.1016/S0001-8791(02)00049-0

Gati, I., & Levin, N. (2014). Counseling for career decision-making difficulties: Measures and methods. *The Career Development Quarterly, 62*, 93–113. doi: 10.1002/j.2161-0045.2014.00073.x

Gati, I., & Levin, N. (2015). Making better career decisions. In P. J. Hartung, M. L. Savickas, & W. B. Walsh (Eds.), *APA handbook of career intervention,* Vol. 2 (pp. 193–207). Washington, DC: American Psychological Association.

Gordon, V. N. (2006). *Career advising: An academic advisor's guide*. San Francisco, CA: Jossey-Bass.

Grove, J. R., Lavallee, D., & Gordon, S. (1997). Coping with retirement from sport: The influence of athletic identity. *Journal of Applied Sport Psychology, 9*, 191–203. doi:10.1080/10413209708406481

Harding, B. (2008). Students with specific advising needs. In V. N. Gordon, W. R. Habley, & T. J. Grites (Eds.), *Academic advising: A comprehensive handbook* (2nd

ed., pp. 189–203). San Francisco, CA: Jossey-Bass.

Holland, J. L., Daiger, D. C., & Power, P. G. (1980). *My Vocational Situation*. Palo Alto, CA: Consulting Psychologists Press.

Holland, J. L., Johnston, J. A., & Asama, N. F. (1993). The vocational identity scale: A diagnostic and treatment tool. *Journal of Career Assessment, 1*(1) 1–12.

Houle, J. L. W. (2010). *An examination of the relationship between athletic identity and career maturity in student-athletes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (Dissertation No. AAI3480642)

Kennedy, S. R., & Dimick, K. M. (1987). Career maturity and professional sports expectations of college football and basketball players. *Journal of College Student Personnel, 28*, 293–297.

Lally, P. S., & Kerr, G. A. (2005). The career planning, athletic identity, and student role identity of intercollegiate student athletes. *Research Quarterly for Exercise and Sport, 76*, 275–285.

Lenz, J. G., & Shy, J. (2003). Career services and athletics: Collaborating to meet the needs of student-athletes. *NACE Journal of Career Planning & Employment, 63*(3), 36–40.

Leslie-Toogood, A., & Gill, E. (Eds.). (2008). *Advising student-athletes: A collaborative approach to success* (Monograph No. 18). Manhattan, KS: National Academic Advising Association.

Linnemeyer, R. M., & Brown, C. (2010). Career maturity and foreclosure in student athletes, fine arts students, and general college students. *Journal of Career Development, 37*, 616–634. doi:10.1177/0894845309357049

Lyons, R., Jackson, E. N., & Livingston, A. (2015, April 24). Exploring advising models for effective student athlete advisement. *The Sport Journal*, 1–9. Retrieved from http://thesportjournal.org/article/exploring-advising-models-for-effective-student-athlete-advisement/

Martens, M. P., & Cox, R. H. (2000). Career development in college varsity athletes. *Journal of College Student Development, 41,* 172–180.

Martin, H., & James, S. (2012). 15 tips on the basics of advising student athletes. *Academic Advising Today, 35*(2). Retrieved from https://www.nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles/15-Tips-on-the-Basics-of-Advising-Student-Athletes.aspx

Martinelli, E. A. (2000). Career decision making and student-athletes. In D. A. Luzzo (Ed.), *Career counseling of college students* (pp. 201–215). Washington, DC: American Psychological Association.

Murphy, G. M., Petitpas, A. J., & Brewer, B. W. (1996). Identity foreclosure, athletic identity, and career maturity in intercollegiate athletes. *The Sport Psychologist, 10*, 239–246.

National Collegiate Athletic Association. (2010). *NCAA student-athlete ethnicity report*. Indianapolis, IN: Author.

National Collegiate Athletic Association. (2012). *Estimated probability of competing in athletics beyond the high school interscholastic level*. Indianapolis, IN: Author.

National Collegiate Athletic Association. (2015). *Sports sponsorship and participation rates report*. Indianapolis, IN: Author.

Peterson, G. W., Lenz, J. G., & Sampson, J. P., Jr. (2003). The assessment of readiness for student learning in college. In G. L. Kramer (Ed.), *Student academic services* (pp. 103–125). San Francisco, CA: Jossey-Bass.

Reardon, R. C., Lenz, J. G., Sampson, J. P., Jr., & Peterson, G. W. (2017). *Career development and planning: A comprehensive approach* (5th ed.). Dubuque, IA: Kendall Hunt.

Richards, S., & Aries, E. (1999). The Division III student-athlete: Academic performance, campus involvement, and growth. *Journal of College Student Development, 40*, 211–218.

Robbins, S. B. (1987). Predicting change in career indecision from a self-psychology perspective. *The Career Development Quarterly, 35*, 288–296.

Robbins, S. B., & Patton, M. J. (1985). Self-psychology and career development: Construction of the *Superiority and Goal Instability* scales. *Journal of Counseling Psychology, 32*, 221–231.

Robbins, S. B., Payne, E. C., & Chartrand, J. M. (1990). Goal instability and later life adjustment. *Psychology and Aging, 5*, 447–450. doi:10.1037/0882-7974.5.3.447

Robbins, S. B., & Tucker, K. R. (1986). Relation of goal instability to self-directed and interactional career counseling workshops. *Journal of Counseling Psychology, 33*, 418–424. doi:10.1037/0022-0167.33.4.418

Rodriguez, S. (2012). Social support and career thoughts in college athletes and non-athletes.

The Professional Counselor: Research and Practice, 2(1), 12–21.
Sampson, J. P., Jr., Peterson, G. W., Lenz, J. G., Reardon, R. C., & Saunders, D. E. (1996). *Career Thoughts Inventory: Professional manual*. Odessa, FL: Psychological Assessment Resources.
Sampson, J. P., Jr., Reardon, R. C., Peterson, G. W., & Lenz, J. G. (2004). *Career counseling & services: A cognitive information processing approach*. Belmont, CA: Brooks/Cole.
Santos, P. J. (2003). Goal instability, self-esteem, and vocational identity of high school Portuguese students. *Análise Psicológica, 21*, 229–238.
Shurts, W. M., & Shoffner, M. F. (2004). Providing career counseling for collegiate student athletes: A learning theory approach. *Journal of Career Development, 31,* 95–109.
Smallman, E., & Sowa, C. J. (1996). Career maturity levels of male intercollegiate varsity athletes. *The Career Development Quarterly, 44*, 270–278.
Solberg, V. S., Good, G. E., Fischer, A. R., Brown, S. D., & Nord, D. (1995). Career decision-making and career search activities: Relative effects of career search self-efficacy and human agency. *Journal of Counseling Psychology, 42*, 448–455. doi:10.1037/0022-0167.42.4.448
Sowa, C. J., & Gressard, C. F. (1983). Athletic participation: Its relationship to student development. *Journal of College Student Personnel, 24*, 236–239.
Tyrance, S. C., Harris, H. L., & Post, P. (2013). Predicting positive career planning attitudes among NCAA Division I college student-athletes. *Journal of Clinical Sport Psychology*, *7*(1), 22–40.
Wooten, H. R. (1994). Cutting losses for student-athletes in transition: An integrative transition model. *Journal of Employment Counseling, 31*(1), 2–9.

Authors' Notes

Mary Buzzetta is completing her doctoral degree in Counseling Psychology and School Psychology from Florida State University and will graduate August 2017. She is currently a psychology intern at the Texas State University Counseling Center in San Marcos, TX. Her research interests include exploring career development concerns with diverse populations and extending the application of theories, such as cognitive information processing, to military veterans, student-athletes, first-generation students, and students with disabilities. Correspondence should be directed to her at mbuzzetta@fsu.edu.

Janet Lenz is a senior research associate in the Center for the Study of Technology in Counseling and Career Development at Florida State University. She received her B.S. degree in Sociology from Virginia Commonwealth University. She received her M.S. degree in Student Personnel Administration and Ph.D. in Counseling and Human Systems, from Florida State University. Dr. Lenz is a national certified counselor and master career counselor. Dr. Lenz received the National Career Development Association (NCDA) Eminent Career Award in 2016. She is also an NCDA Past-President and NCDA Fellow. With colleagues Reardon, Peterson, and Sampson, she co-authored the text: Career Development and Planning: A Comprehensive Approach. *Dr. Lenz is also a co-author of the* Handbook for Using the Self-Directed Search. *Her research interests include the application of cognitive information processing theory to career counseling and services, the relationship of client characteristics to career constructs and interventions, and the connections between mental health and career issues.*

Emily Kennelly is Senior Assistant Director of Career Advising and Counseling at the Florida State University Career Center, a national certified counselor, approved clinical supervisor, distance credentialed counselor, and certified professional résumé writer. She trains and supervises professional career practitioners, graduate students, and doctoral-level career counselors-in-training. She received her M.S. and Ed.S. in Counseling and Human Systems with an emphasis in Career Counseling from Florida State University in 2011.