

Examining a Conceptual Framework for Transition Experiences of Former Collegiate Women's Soccer Athletes

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Athlete transition from American collegiate sport participation, to non-sport careers or professional sport, has been a contemporary topic in sport science research but it is still not well understood, especially in female athlete populations. Informed by athlete transition and identity theory, the current study's purpose was to describe the transition experiences of former women's collegiate soccer athletes, including both positive and negative contributing factors. Using a deductive conceptual content analysis, results showcase both positive (i.e., social support, career goals, recreational sport play) and negative (i.e., lack of a team/support, lack of soccer/competition, lack of direction) contributors to the post-collegiate sport transition for female soccer athletes. The importance of athletic identity and potential transition resources were identified. Specifically, participants endorsed career guidance, physical activity/exercise, mentorship programming, and mental health resources as potentially helpful to future athletes. Study findings expand upon relevant transition theory and former female athlete research. Our study results may inform future research and program development efforts aimed at former female collegiate athletes from soccer and other sports.

Keywords: College sport, Intercollegiate athletics, Retirement, Transition, Women's sport

The National Collegiate Athletic Association (NCAA) annually sponsors organized competitive sport for more than 490,000 athletes (Irick, 2017). College sport participation involves exposure to both short- and long-term benefits (Armstrong & Oomen-Early, 2009; Berg et al., 2015; Weight et al., 2018) and risks to mental, physical, and social health and functioning (e.g., Brooks et al., 2014; Houston et al., 2016; Huang et al., 2007) resulting in differential experiential outcomes for former collegiate athletes ranging from adaptive to maladaptive. Yet, there exists a specific knowledge gap on how the experiences of athlete transition from collegiate sport participation may contribute to differences in post-career outcomes. Athlete tran-



sition is the termination of the athletic career in a transitional process that begins during the athletes' career and continues until sport career termination (Wylleman et al., 2004). Notably, individual athlete transition experiences have potential to explain differential outcomes between former collegiate athletes experiencing adaptive versus maladaptive post-sport health and well-being outcomes. To address this important concern, the current study utilizes athlete transition and identity theory to examine former women's collegiate soccer athletes' perceptions of their own sport transition experiences.

Relevant Literature

Athlete Transition Theory

Building on conceptualizations of transition common to the workplace, Taylor and Ogilvie (1994) developed a conceptual framework for athlete retirement/transition involving five stages. These stages include: 1) causes of retirement among athletes, 2) factors related to adaptation to retirement, 3) available resources for retirement adaptation, 4) quality of adaptation to athletic retirement, and 5) intervention for athletic retirement difficulties. According to this model, causes of transition include age, deselection, injury, and free choice. Pertinent to the current study, factors identified to influence transition adaptation include developmental experiences, aspects of identity (self and social), control perceptions, and other contributors. Whereas, available transition resources include coping skills, social support, and pre-retirement planning. Finally, both healthy (i.e., adaptive) or crisis (i.e., maladaptive) career transition outcomes are delineated as potential individual athlete differences in transition quality (Taylor & Ogilvie, 1994). Individual athlete transition quality is further described to result from the interaction of transition factors and available resources. Finally, potential cognitive, emotional, behavioral, and social areas for intervention are suggested to mitigate maladaptive transition experiences. Though no studies have tested athlete transition theory directly, it has informed specific athlete transition research efforts as well as broader work with a specific focus on former athlete health and well-being. Finally, athlete transition has also been described within other relevant (to transition) theories of sport injury (Wiese-Bjornstal, 2009) and former collegiate physical activity/exercise intervention (Reifsteck & Davis Brooks, 2018). These aforementioned theories also consider the importance of athletic identity to major transitions for highly competitive athletes.

Athlete Identity Theory

Identity theory (Mead, 1934; Stryker, 1968) describes how parts of the self are composed of meanings that a person attaches to life roles and merits specific discussion relative to its potential impact on transition quality for athletes (Stryker & Burke, 2000). Specifically, athlete identity has been defined as the extent to which an individual identifies with the athlete role (Brewer et al., 1993). Higher levels of identity are beneficial for athletic motivation and performance. Conversely, athlete endorsement of high levels of athletic identity may also be detrimental to athlete psychological health outcomes (e.g., stress, burnout; Coakley, 1992) as well as transition from

sport (Taylor & Ogilvie, 1994). Specifically, a foreclosed/unidimensional athletic identity may be maladaptive for overall psychological development as non-sport identities (i.e., academics, social relationships, career) may receive less attention/focus than sport participation (e.g., Coakley, 1992). As athletes seek to transition from sport to non-sport careers or life roles, a heightened athletic identity may make this transition more emotionally (e.g., negative affect associated with no longer participating in the athlete role), cognitively (i.e., hard to shift to a non-sport identity and associated life vision), and behaviorally (e.g., less pre-transition planning and post-sport motivation) difficult. Thus, athlete transition and identity theories informed the development of survey items as well as the interpretation of study results.

Former Collegiate Athletes

Studies informed by these models have examined athlete transition either indirectly via focus on former collegiate athlete health-related quality of life or directly via a focus on athlete transition itself. Studies investigating former collegiate athlete health-related quality of life have shown mixed results. For example, one study (Simon & Docherty, 2014) found former collegiate athletes ($n = 232$) reported worse scores on physical function, sleep, and pain interference, and better scores on depression and fatigue than non-athletes ($n = 225$). In contrast, another study (Kerr et al., 2014) found former college athletes ($n = 797$) to exhibit mental and physical health comparable to US population norms on most study outcomes.

For female athletes, younger athletes reported higher mental health than US population norms, whereas, older female athletes reported worse physical functioning than US age norms (Kerr et al., 2014). Finally, a recent meta-analysis (Snedden et al., 2019) compared current college athletes ($n = 842$) to general undergraduate students ($n = 1322$) with varying levels of physical activity participation. Results showed collegiate sport participation to be protective for participant mental (but not physical) functioning after controlling for athlete sex. Both male and female athletes reported higher mental and physical functioning scores than gender-specific US population norms with female athletes reporting significantly worse mental functioning than male athletes (Snedden et al., 2019).

Athlete Transition

Athletic identity and social support have also been specifically identified as important for athletes during career transition (Fuller, 2014), with higher levels of athletic identity associated with anxiety and depression during transition from sport (Giannone et al., 2017). Focusing on the transition experience itself, Erpič and colleagues (2004) examined the career termination process of 85 former elite Slovene athletes, finding the voluntary nature of career termination, individual perceptions of athletic achievement, athletic identity, education, and both athletic (e.g., coping resources, missing athlete lifestyle) and non-athletic transition factors (i.e., social relationships) to impact transition experiences. Relative to social support, Harry and Weight (in press) drew on interview data from primarily male former collegiate athletes ($n = 124$) to explore the role of a coach in athlete transition. Athletes having a smooth transition out of intercollegiate athletics described transferring their competitive drive/focus to

other areas, having strong social support, and having a plan for their transition. For those with difficult transitions, reported examples included not being ready to finish, and losing their purpose/identity, structure, and social support. Finally, career-ending injury has also been identified as a transition factor. Arvinen-Barrow and colleagues (2019), in a qualitative study of professional cricket athletes transitioning out of sport due to a non-musculoskeletal, career-ending injury ($n = 8$), demonstrated that healthy career transition was possible. Further, early career transition planning and internal and external stress reduction were found to aid athletes in adaptively transitioning from sport, despite injury.

Transition and Women's Sports

Most research on athlete transition has focused on both genders, and we are not aware of any studies that specifically focused on former female athletes. The experiences of female collegiate athletes are unique, suggesting their transition experiences and needs may be as well. Accordingly, aspects of career, family, and physical and mental health germane to the female athlete experience may be distinguishable from other athlete populations. For example, Rubin and Lough (2015) found there was a lack of resources for women's collegiate sports, such as not providing basic playing equipment like leather basketballs for the basketball team or access to medical supplies. These may be indicative of other deficits experienced during transition. Notably, few studies have focused specifically on the mental and/or physical health of current or former elite female athletes and none have focused on American collegiate athletes.

Three studies have looked at elite women's soccer athletes specifically, all with a focus on international, professional athlete populations. One study (Prinz et al., 2016) of German female soccer athletes ($n = 157$) found approximately one third of those sampled to report a prevalence of depression symptoms during their careers. Yet, only 1 out of 10 athletes sampled sought psychological support while playing. Following their careers, 1 in 4 needed psychological support with 9 out of 10 of those who needed support receiving it (Prinz et al., 2016). A second study (Prien et al., 2017) of former German female soccer athletes ($n = 157$) found the vast majority (70%) of respondents described their current health as good or very good; yet, over half of participants reported knee problems while exercising and one third reported physical pain during daily activities. Finally, in a recent study (Grygorowicz et al., 2019) of former female Polish Football Association athletes ($n = 93$), factors associated with career termination were examined with the most common reported reasons for career termination in this population being injury (30%), an inability to reconcile sport with studies (28%), becoming a wife and/or mother (11%), and losing motivation/interest in soccer (9%). Research into this population suggests a myriad of reasons precipitate career transition and that there are important post-career mental and physical outcomes for elite female soccer athletes, informing our current work.

Knowledge Gaps

Despite gains in the understanding of former athlete health, several gaps exist relative to athlete transition experiences. First, though health-related quality of life following

transition represents an important empirical focus, a relative dearth of research exists on the transition itself from collegiate sport. Second, very limited research on former collegiate athlete transition has focused on the lived experiences and perceptions of women's sports athletes. Collegiate women's soccer represents an ideal population to examine the sport transition of female college athletes. This is a popular and longstanding women's collegiate sport (the first NCAA championship held in 1982; Dick et al., 2007) involving competitive pressure, contact exposure, and lifespan health-related concerns (e.g., concussion) studied extensively in comparable men's collegiate sports (Guskiewicz et al., 2000; 2007). A targeted focus on perceptions of athlete transition from the perspective of former women's collegiate soccer athletes will help to elucidate potentially unique transition needs of this population. Such knowledge gaps merit continued examination informed by athlete transition (Taylor & Ogilvie, 1994) and identity theories (Stryker & Burke, 2000).

Study Purpose

Addressing these important knowledge gaps, the purpose of the current study was to describe the transition experiences of former women's collegiate soccer athletes. Specific research questions were informed by Taylor and Ogilvie's (1994) conceptual framework for athlete retirement and identity theory (Stryker & Burke, 2000). Five research questions correspond to the five stages outlined in the model. Specifically:

RQ1: What are the causes of athlete retirement? (Stage 1)

RQ2: What factors relate to maladaptive retirement experiences? (adaptation of Stage 2)

RQ3: What resources contribute to adaptive retirement experiences? (Stage 3)

RQ4: What was the general quality of adaptation to athletic retirement based on transition factors? (Stage 4)

RQ5: What interventions could mitigate maladaptive transition experiences? (Stage 5) Guided by athlete transition and identity theories, we hypothesized that participants would endorse a balance between positive adaptive and negative maladaptive transition experiences, and that athletic identity would be relevant to the transition experiences of athletes. This work has important implications for continued female athlete transition research and informs the development of transition programming designed to enhance the health and well-being of female collegiate athletes transitioning to non-sport life.

Method

Participants

We recruited a convenience sample of former women's soccer athletes ($M = 42.9$ years, $Median = 46.0$, $Range = 22-62$, $SD = 12.1$) from a large, Southeastern public university in the United States with an elite women's soccer program that competes in a "Power Five" NCAA conference. These data were collected in tandem with a broader survey of their mental, physical, social, and occupational functioning following their collegiate soccer experience. We received 124 total responses (36% response ratio), including 101 responses to the open-ended questions relevant to the

current study. The majority of participants ($n = 96$, 95%) identified as Caucasian with the remaining participants identifying as Black/African-American ($n = 4$, 4%), or Asian ($n = 1$, 1%). Ninety-nine percent of the participants completed a *baccalaureate* ($n = 60$, 59%) or postgraduate ($n = 40$, 40%) degree. Seventeen percent of participants played professional soccer after college. Participant demographics are relatively consistent with the demographics of women's collegiate soccer (NCAA, 2020).

Procedure

Following Institutional Review Board approval, this study was conducted using survey methodology with a sample compiled from an alumni database provided by university alumni services and the team's liaison to former players. Once the contact information was attained and organized, the survey was distributed to each participant via email with consent information embedded within the survey itself. The Qualtrics platform was utilized where the survey remained active for 84 days. Participants received three reminders to participate during this survey window for a maximum of four contacts altogether. For all study items, participants were informed that there were no correct or incorrect answers and were given the option to skip any survey questions they did not feel comfortable answering.

Design and Measures

A general survey of health and functioning was developed for the target population of collegiate women's soccer athletes including qualitative and quantitative items adapted from a previously established instrument intended for a similar population of elite athletes (Kerr et al., 2018). Validity measures included intensive content evaluation of the instrument with a panel of athletes, sport scientists, and sports medicine clinicians, a pilot study with $n = 9$ members of the population, and several rounds of revisions based on gathered feedback. As part of this broader survey of health and functioning, participants responded to demographic questions and open-ended questions about the transition from collegiate soccer. Participants were asked to think about all individuals, organizations, and/or resources that may have impacted (or will continue to impact) their transition from playing competitive soccer. Specific prompts relevant to the current study included:

1. "Describe your transition plan including whether or not you have thought about this before."
2. "Did you struggle with issues of identity/athletic identity as you transitioned from playing collegiate soccer? If yes, please describe your issues of identity/athletic identity?"
3. "Who, or what (if anything), made your transition from playing collegiate soccer easier?"
4. "Who, or what (if anything), made your transition from playing collegiate soccer difficult?" and
5. A closed response question, "What types of resources would have made your transition for playing collegiate soccer easier?"

Response options for this closed response question included medical care, mentorship program, transition training, mental health, physical activity/exercise, diet/nutrition, social support from teammates, social support from coaches, social support from family/significant others, career guidance, financial guidance, and other.

Data Analysis

We computed descriptive statistics for demographic variables, identity concerns in transitioning, whether athletic identity issues/changes occurred during transition, and desired transition resources. Next, we employed deductive conceptual content analysis (Elo & Kyngäs, 2007; Krippendorff, 1989) to analyze the open-ended response questions provided by former women's soccer athletes about their perceptions of transition from collegiate soccer. For each question, initial, overarching categories were specified based on prior knowledge of existing former athlete health and well-being (e.g., Snedden et al., 2019), athletic identity (e.g., Coakley, 1992), and sport transition literatures (e.g., Taylor & Ogilvie, 1994.). We further developed categories based on a priori literature and implications for practice. For example, physical activity/exercise/nutrition categories were combined based on previous theory, research, and potential practical applications (e.g., Guskiewicz et al., 2000; 2007; Houston et al., 2016). At the conclusion of the initial coding, a second coder reviewed each of the codes as presented in Tables 3-6. Inter-coder agreement of all analyzed data was 93%, yielding a Krippendorff's $\alpha = 0.866$, with $n = 399$ agreements, $n = 30$ disagreements, and 429 codes analyzed (see Tables 4 and 5). Percent agreement within the four questions ranged from 89% to 96%.

Results and Discussion

Causes of Athlete Retirement

The most common cause of athlete retirement was an exhaustion of eligibility (62%). The second most prevalent reason for transition cited by one in 10 athletes was medical retirement due to injury (10%). Other commonly cited factors included graduation (9%), personal reasons (5%), concerns about long-term physical (4%) or mental health (3%), and academic reasons (3%). A complete listing of transition reasons is provided in Table 1. The overwhelming majority of study respondents (63%) reported they had a plan for life after collegiate soccer prior to leaving college or have a plan for transition but are still playing professional soccer currently (10%).

Table 1

Frequency (%) of transition status, and causes of athlete retirement in (N = 101) former female collegiate soccer players

	<i>n</i>	%
Transition Status		
Not currently playing and I had a plan for life after soccer	63	63%
Not currently playing and I did not have a plan for life after soccer	25	25%
Currently playing and I have a plan for life after soccer	10	10%
Currently playing and I do not have a plan for life after soccer	2	2%
Missing	1	1%
Causes of Athlete Retirement/Transition*		
Exhausted eligibility	62	61%
Medical retirement due to injury	10	10%
Graduated before exhausting eligibility	9	9%
Personal reasons	5	5%
Concerned about LT physical health	4	4%
Concerned about LT mental health	3	3%
Academic Reasons	3	3%
Did not want to play sport anymore	2	2%
Chronic pain	2	2%
Was cut from the team	2	2%
Financial reasons	1	1%
Concerned about LT brain health	1	1%

*Some participants selected more than one reason for transition

LT = long term

Factors Related to Maladaptive Retirement Experiences

The most commonly endorsed factors making the transition from collegiate soccer more difficult for participants included a lack of support/team (32%), a lack of competition or missing the soccer environment (27%), having no plan or a lack of clear direction (24%), and changes to the athlete body and/or lack of support for continued nutrition and training (11%). All other specifically identified transition difficulties were endorsed by between 5% and 9% of respondents (See Table 2).

Table 2

Factors related to maladaptive retirement experiences in (n = 66) female former collegiate soccer players

	<i>n</i>	<i>%</i>
Lack of support/team	21	32%
Lack of competition/soccer opportunities	18	27%
No plan/lack of direction	16	24%
Changes to body or athleticism/lack of training or nutrition support	7	11%
Self	6	9%
Identity change	6	9%
Injury/pain	5	8%
Career/financial	3	5%
Other vague, neutral, or positive factors	16	24%

Just under half of the participants (47%) reported struggles with issues of identity following their collegiate soccer career. Of those respondents, the most commonly cited identity concerns involved soccer being their life and making it hard to find a new identity (40%), a lack of social connection (29%), and a lack of competition outlets/professional soccer opportunities (19%) (See Table 3).

Table 3

Retrospective perspectives on post-collegiate transition identity concerns in (n = 42) female former collegiate soccer players

	<i>n</i>	<i>%</i>
Identity Struggles Post Collegiate Career?		
Yes	47	47%
No	41	41%
Missing	13	13%
Identity Concerns		
Soccer was life - hard to find a new identity	17	40%
Lack of social connection	12	29%
Lack of competition outlet/professional soccer opportunities	8	19%
No longer a leader/no longer had social status	5	12%
Injury/physical change was hard	4	10%
Lack of schedule/structure	3	7%
Felt like a failure	3	7%
Other (e.g. general identity comments, impact of specific factors)	8	19%

Resources Contributing to Adaptive Retirement Experiences

The most mentioned factors which made the perceived transition from collegiate soccer easier for respondents included support from teammates/friends (30%), having a new career (18%), support from family (17%), and participation in recreational soccer or other sports (17%). All other specifically identified transition facilitators were endorsed by between 1% and 10% of respondents as listed in Table 4.

Table 4

Resources contributing to adaptive retirement experiences for (n = 88) female former collegiate soccer players

	<i>n</i>	%
Support from teammates/friends	26	30%
Career	16	18%
Support from family	15	17%
Rec soccer/other sports	15	17%
National team/pro soccer	9	10%
Marriage/starting a family	8	9%
Graduate/professional school	8	9%
Going into coaching	5	6%
Staying active/exercise/PA/nutrition	5	6%
Coach support	4	5%
Faith	3	3%
Collegiate team soccer involvement	3	3%
Self/did it alone	2	2%
Sport psychologist	1	1%
Other general plans	20	23%

PA = physical activity

Quality of Adaptation to Retirement

Of the 101 respondents, just under half (47%) reported struggling with issues of identity upon retirement contributing to a difficult transition experience, while 41% reported having a smooth transition. The most reported transition plans included entering the workforce (31%), finishing undergraduate work or pursuing a graduate or professional degree (25%), or participating in recreational soccer or other sports/exercise (20%). Eighteen percent of respondents suggested they had no clear transition plan and/or their plan was unsuccessful (See Table 5).

Table 5

Retrospective post-collegiate transition plans of (n = 85) former female collegiate soccer players

	<i>n</i>	%
Workforce	26	31%
Finish UG/Graduate/Professional school	21	25%
Rec soccer/other sports/exercise	17	20%
No plan/unsuccessful plan	15	18%
Coaching	11	13%
Professional soccer	11	13%
General plan	8	9%
Marriage/family	7	8%
Left soccer by choice	5	6%
Other (e.g. general comments/personal details)	9	11%

Desired Transition Resources

Respondents endorsed a variety of response options relative to resources they felt would make the collegiate soccer transition easier. The most endorsed desired transition resources included career guidance (46%), physical activity/exercise (42%), mentorship program (40%), mental health resources (29%), financial guidance (27%), and support from teammates (27%). All other resources were endorsed by between 13% and 26% of respondents (see Table 6).

Table 6

Desired transition resources to facilitate an adaptive transition in (N = 101) former female collegiate soccer players

	<i>n</i>	%
What types of resources would make college transition easier?*		
Career guidance	46	46%
Physical activity/exercise	42	42%
Mentorship program	40	40%
Mental health resources	29	29%
Financial guidance	27	27%
Social support from teammates	27	27%
Transition training	26	26%
Social support from family/significant others	25	25%
Diet/nutrition	24	24%
Social support from coaches	20	20%
Medical resources	13	13%
Other (e.g. faith, links to other soccer alumni)	2	2%

*Individuals could select all choices that apply.

The current study highlights former women's collegiate soccer athletes' experiences of transition with a focus on factors that may make this process easier or more difficult as well as the resources participants think may aid others during this process in the future.

Building on the specific stages of athlete transition outlined by Taylor and Ogilvie (1994), we updated and extended factors within each of the five stages to facilitate a deeper understanding of transition experiences. Additionally, we uncovered a 1-2 year window of adjustment wherein athletes struggled to transition their identities from athlete-first, sometimes described as a foreclosed athletic identity (Coakley, 1992). Understanding the prevalence, time, and struggle involved in identity-transfer can help athletes feel "normal" and understood during what Taylor and Ogilvie outlined as stages 1-4 of the transition process. We recommend eliminating the "stages" vernacular from the theoretical framework as elements of the transition process appear to be nonlinear. As such, study results are presented thematically rather than by research question which was organized by stage.

Results highlight the importance of support, successful identity transition, and physical activity and competition outlets following collegiate soccer. Additionally, participants endorsed support for mentoring and career exploration programming which may aid athletes in an adaptive transition. Results are described in detail relative to extant theory, research, and practice considerations.

Transition and Identity

Consistent with foundational research, nearly half (47%) of respondents struggled with identity change as they transitioned from playing collegiate soccer (Erpič et al., 2004; Reifsteck & Davis Brooks, 2018; Taylor & Ogilvie, 1994). As respondent #35 noted, "I was lost for a few years; I played sport year-round my whole life and when it was over I struggled for a few years and lost social connectivity." Discussing the prevalence of the issue, Respondent #42 mentioned:

I have discussed this topic with many people, and it is a very real struggle. We identify as the star soccer player/athlete our entire lives and when we lose that identity as we transition into the work world where that is no longer who we are, we are forced to reinvent ourselves in ways. I had to find out what makes me, besides soccer. It was really hard, but freeing in ways as well. Since I still work in soccer, it is still a part of me, but in a very different way than before. I am no longer the badass athlete, but the ex-athlete and there are pros and cons to that identity.

Several mentioned years of low confidence, depression, and social isolation (Prinz et al., 2016). Even for those who found fulfilling post-athletic careers and hobbies, the hollow haunt of who they no longer were was still palpable:

I value my athletic identity more than any of my other identities that I have. Not really being an athlete anymore decreases how much I value myself. I had

several years of severe depression after my collegiate playing career – most was not directly related to lack of playing, but it seemed that after finishing college, memories of abuse and trauma from early childhood came into consciousness for the first time in my life. Those memories made me think of myself as weak or vulnerable, things that I would never show as an athlete. (Participant #32)

Transition Facilitators

Echoing the ideas addressed relative to identity, transition facilitators were largely social, physical, and identity related. Support from teammates/friends, family, and coaches accounted for 52% of the factors making transition from collegiate soccer easier, and finding an outlet in recreational sport, professional soccer, coaching, physical activity, or involvement in their former team accounted for 41% of the facilitators. These issues could be addressed directly through the theoretically informed physical activity program for senior collegiate athletes designed by Reifsteck and Davis Brooks (2018), further supporting its need.

These findings very closely mirror the data Harry and Weight (in press) uncovered wherein social support was mentioned by 64% of the former collegiate athlete participants, and the transfer of competitive drive to physical activity/coaching was mentioned by 58%. Within the primarily male sample of the Harry and Weight study, however, transferring a focus to non-sport work was mentioned by nearly half of the participants while only 18% of female respondents addressed this, pointing toward a potential gender/sport-driven difference worth exploring in future research.

These social and focus-transferring facilitators are illuminated through athlete voices: “I went right into playing with the US Women’s National Team, so my transition was seamless. I had former teammates on the National Team that made the transition easier” (Participant #38); “Going into coaching and becoming obsessed with it made my transition from playing quite smooth. I also had some great friends to support me” (Participant #50). Being able to relate to others who had been through the transition appeared to ease the difficulty. Participant #84 described how valuable it was talking with her “older brother who had been through the same identity post athletics struggle” (Participant #84).

Extending the theoretical framework, we uncovered additional factors that influence transition. For example, consistencies between this and the Harry and Weight (in press) study emphasize the overarching importance of social support and a transfer of competitive drive/focus to other areas including some form of physical activity. While Taylor and Ogilvie (1994) addressed aspects of identity and social support as factors posited to influence transition adaptation, the physical aspects of transition unrelated to injury and the overarching importance of channeling competitive drive into avenues of focus also appear to be critical in adaptive transition for female college athletes (Reifsteck & Davis Brooks, 2018; Snedden et al., 2019).

Transition Detractors

Elements of maladaptive transition were noted by 66 participants and reflect the inverse of the transition facilitators. Lack of social support, lack of competition, identity changes and elements of physicality in changes to body/pain were mentioned as

transition detractors. A relatively prevalent factor noted by 24% of the respondents inhibiting a positive transition was the lack of direction/plan. This was emphasized by Harry and Weight (in press) as an element that served to smooth transitions – athletes who had a plan or had begun the transition of shifting focus and/or social circles prior to the conclusion of their competitive career noted much smoother transitions. In the current study, athletes who transitioned with “no plan or support” (Participant #3), described being “forgotten about and not relevant anymore” (Participant #22) felt an increased degree of loss and confusion throughout the transition. As participant #32 mentioned, it was difficult to move forward “not knowing what to do or what my skill sets were; not having any work experience to set myself up as a good hire, and not having a network outside of soccer.” The lack of plan and stress of transition to many was unexpected. Participant #64 mentioned the most difficult part was “Not being prepared for it. No one talks about how difficult it will be to lose who you are basically. I would have loved to have been prepared for it.”

Practical Implications

Consistent with the conceptual foundation, Taylor and Ogilvie (1994) recommended available transition resources of pre-retirement planning, coping skills, and social support. The current research supports the need for these resources with an emphasis on pre-retirement planning. When there is a plan that includes transferring the athlete’s competitive drive/focus to other areas coupled with social support and physical/nutrition outlets, many of the maladaptive behaviors/outcomes appear to be ameliorated (Erpič et al., 2004; Harry & Weight, in press). As a result of its link to mental health outcomes (Giannone et al., 2017), individual athlete athletic identity levels could be beneficial to consider in enacting such work. For example, different programming options tailored to those with high, moderate, and low levels of athletic identity could help to create athlete action plans that best facilitate optimal transition from collegiate sport. Such work represents a potentially fruitful applied research and practice effort.

Triangulating results from each of the aforementioned areas, foundational literature, and athlete insights, there are clear areas of contribution to theory and practice from the current study. Through examination of a sample of women’s soccer athletes in one of the top programs in the world, the generalizability of the experiences may be limited, however there exists heterogeneity in the current sample suggesting its potential to begin to inform the knowledge base on the transition experiences of female athletes. Potential cognitive, emotional, behavioral, and social areas for intervention are suggested to mitigate maladaptive transition experiences specifically including pre-transition planning that addresses redirecting the competitive focus (e.g., through an alternative pastime or career), physical activity/nutrition, social support, and mental/medical health resources. For example, setting up a transition program for female collegiate athletes which starts during their first collegiate semester and extends beyond their athletic careers has potential to be beneficial for long-term mental, physical, and social functioning. Focusing such programming on transition topics unearthed by the current study (and future work in other female athlete populations) has potential to be beneficial and may be of interest to potential funding

agencies including the NCAA and sport-focused non-profits. Moreover, based on participant endorsement, the inclusion of peer mentors in such work has great potential to facilitate adaptive transition experiences in this unique population. Consistent with broader sport science consensus, the development and careful evaluation of such transition interventions answers calls for holistic health and well-being care for athletes during this important developmental window (Chang et al., 2020).

Extension of Literature

These findings extend the foundational literature in several important ways. First, this is the first study to explore the transition period of former female student-athletes, and as such, is an important contribution to the severely under-researched area of female athlete lifespan health and well-being. Largely, the findings support previous studies involving former male or mixed-gender athletes with a few deviations (e.g., Harry & Weight, in press; Reifsteck & Davis Brooks, 2018; Snedden et al., 2019). Additionally, this study extends the aforementioned conceptual rationale for athlete transition (Taylor & Ogilvie, 1994). Specifically, the authors recommend adding a window of identity-adjustment during steps 1-4 of the transition process that can be addressed through social connections (e.g., mentoring, networking) and a transfer of competitive drive/focus to other areas including some form of physical activity (e.g., Harry & Weight, in press; Reifsteck & Davis Brooks, 2018). Moreover, it may be prudent to move away from the stage/step nomenclature altogether. Furthermore, we encourage the addition of a pre-retirement planning phase that involves discussions about the physical, social, and mental aspects of transition, coping skills, and social support.

Limitations

The current study has several limitations worth discussing which inform the design of future work. First, all participants were sampled from one women's soccer program, limiting generalizability to other programs, conferences, and NCAA divisions. Additionally, most of the sample identified as white. Though this is relatively consistent with the demographics of women's collegiate soccer (NCAA, 2020), data on the transition experiences of a more diverse sample of former collegiate athletes would be valuable and more representative of the overall demographics of collegiate sport. Key study concepts of transition and athletic identity were not formally defined for study participants, limiting the current study findings to participants' own perceptions of how they understood these concepts. Future work may benefit from an a priori definition of these terms for study participants. Finally, the retrospective nature of the current study design could lend itself to recall and/or social desirability/response biases. Yet, we feel these impacts may be somewhat tempered by the relatively young mean age (i.e., relatively close to their collegiate transition) of the sample.

Conclusions

The current study adds to the knowledge base on former female collegiate athlete transition by identifying factors, consistent with extant transition theory/research, that appear germane to promoting an adaptive sport transition in this population.

This represents an important scientist-practitioner finding with implications for transition programming development. This study is intended to inform and spark continued research efforts in this area with the goal to promote an adaptive transition from collegiate sport for female athlete populations.

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