

Proposal Narrative

a. Problem Statement

College athletes are vulnerable due to cumulative stresses related to competitive sport and academics (Papanikolaou, Nikolaidis, Patsiaouras, & Alexopoulos, 2003). These challenges include transitioning into college level curriculum and athletics, coping with injuries, redshirting, deselection, the evolving athlete identity and moving into a career beyond sport. The NCAA highlighted mental health concerns of student-athletes as an area requiring attention citing an increase in the type, percentage, and severity of depression in young adults (Neal, Diamond, & Goldman, 2013). Sacramento State's 5-Year Strategic Plan 2013-2018, states: "the impact of a successful athletics program extends beyond the playing field to include supporting the well-being and success of student athletes, both on and off the playing field".

Although the pressure-producing experiences of college athletics challenge the student-athletes psychological, emotional and physical systems, bringing forth stress and anxiety, they can also bring forth resilience and growth (Mikal-Flynn, 2012; 2018; Tedeschi & Calhoun, 2004). Improving one's response to those challenges may be a matter of shifting one's mindset (Crum, Salovey, & Achor, 2013). To encourage a positive shift, increase resilience, support student athlete's mental health, and well-being, an innovative program proposes development and use of podcasts created by and for current and former student-athletes. Utilizing peer education, is a widespread mode of health education on college campuses, (Boyle, Mattern, Lassiter, & Ritzler, 2011) and the popularity of podcasts provide a convenient and beneficial means to share former competitors' experiences and insights to support well-being, encourage resilience and growth, and in guiding the student-athletes transition out of sport.

b. Project Description

Using peer-podcasts to *Develop and Strengthen Resilience in Student-Athletes (DSR)* is an innovative program designed to develop create and produce 12 podcasts using interviews of current and former Sacramento State student-athletes. Podcasts were chosen as a content delivery method for several reasons: 1) college students are technology-capable consumers; 2) they find listening to podcasts accessible, enjoyable, and entertaining; and 3) frequently share them with their peers (Swanson, 2012). Currently, students use podcasts to address a variety of issues and topics associated with college (Hausmann, 2016). Additionally, due to the availability of media support on most campuses, along with the encouragement of athletics directors, athletics trainers and sports psychologists, the opportunity and feasibility to replicate this program on other campuses is highly probable.

The proposed podcasts will be used to provide support and enhance the well-being of all collegiate athletes during participation as well as after graduation. This innovative 12-podcast series specifically focuses on well researched problems and issues associated with college athletics (Neal, Diamond & Goldman, 2013). In addition, it addresses the challenging issues student-athletes experience throughout their careers and after graduation to help students recognize potentially troubling issues early on (Stambulova, 2009, 2010). Finally, it offers ideas on how to cope while revealing and encouraging a student-athlete's pre-existing resilience, strengths and capacity for growth as they face interference in playing time, injuries and identity crisis with the eventual retirement from college sport (Wylleman, 2010, Kaier, Cromer, Johnson, et.al., 2015). The podcasts will address six themes: 1) transitioning into collegiate athletics; 2) transitioning into college level academics; 3) transferring to another institution; 4) the athlete identity; 5) coping with injury, redshirting, and deselection; and 6) transitioning out of athletics (Agergaard & Ryba, 2014; Falls & Wilson, 2013).

The Sacramento State Media Center will provide the studio and equipment to tape the podcasts. Current and former student athletes identified by athletics department staff will be asked to participate in an interview for the podcast. The six aforementioned themes are the podcast focus. Athletes will be invited and vetted to address one of the six themes. The interview participant selection is guided by athletics department staff (coaches, athletic trainers, sport psychologists) to incorporate genders, sport variety, timing of competition, as well as the athlete's insights, expertise and experience to address the specific topic or theme. Prior to the podcast, each interviewee will be contacted to review the theme/content and provided the interview structure to be followed by each podcast. Each podcast taping session will last 45 to 50-minute, again, structured and podcast consultants and the PI will then edit the podcasts to keep them within the 20 to 25-minute timeframe. The entire series will be taped, edited and produced prior to podcast release.

This project has three goals:

1. Creation of 12 podcasts, 20-25 minutes in length (college students prefer podcasts of 15-30 minutes; Swanson, 2012), using current and former student-athletes, addressing the aforementioned six themes to provide guidance and insight on navigating challenges.
 - a. Podcasts will address multiple sports and genders to support an array of student-athletes.
 - b. Podcasts will address the unique and challenging issues associated with college sports with an intended focus on the athlete's strengths, resilience, and opportunity for growth resulting from the stress and adversity associated with college athletics; and in completion, revealing how these attributes and characteristics positively influence their marketability (Tyrance, Harris & Post, 2013, Smith, 2015).
2. Assess use of DSR podcast program effectiveness in; a.) invoking a growth mindset and b.) enhancing resilience through participation in college athletics.

3. Upon completion, making data and podcasts available to other interested NCAA member institutions as well as providing the precise blueprint of how they were created, produced and delivered.

c. Program Evaluation Plan

Procedure

A pool of 60 interested candidates, from a variety of sports, genders and academic backgrounds, will be invited to participate in this pilot study by athletic administration. Once identified, each will be randomly assigned into one of two groups: 30 participants will be assigned to the intervention group and will receive access to the DSR podcast programming, 30 participants in a control group will not. Participants in both groups will be asked to complete: a pre and post survey (Appendix A), the Stress Mindset Measure [SMM] and the 10-item Connor-Davidson Resiliency Scale [CDRISC] prior to release of podcasts, 4 weeks into the semester and at the end of the semester. All participants will continue their academic, sport, and training schedules. Participants will be monitored as per Sacramento State's research and IRB protocol and will be directed to appropriate resources if triggered emotionally by the covered material and provided appropriate care according to standard treatment procedure and counseling practices. Both groups will be subject to all assessments at the same time points throughout the study.

This semester (4-month) longitudinal investigation has two research goals: 1) to explore relatively stable individual differences potentially influencing the efficacy of peer-to-peer features of the podcast program; and 2) to assess whether the intervention is effective in positively influencing stress mindsets (stress-is-enhancing) scores and resilience as evidenced by both within-group and between-group analyses.

Specifically, we hypothesize that within the treatment group, participants will demonstrate improvements in targeted assessments of each domain across time, and that between the treatment and control groups, those receiving the intervention will demonstrate change in perceived challenges at a later data collection time point. Data collection will occur at three points over the course of approximately four months (September-December 2019). Results of the study will be used to adjust themes, enhance future podcasts production, delivery and, most importantly, if found to encourage a growth mindset and resilience, will become available to all student-athletes at Sacramento State and at all NCAA member institutions.

Time point	Name and Measures administered	Elapsed Time Since Start	Assessment Delivery
T1	Baseline Assessment (<i>Pre-Survey, SMM, CDRISC</i>)	--	In-person
T2	Follow-Up Assessment 1 (<i>SMM, CDRISC</i>)	4-6 weeks	e-mail, In-Person
T3	Follow-Up Assessment 2 (<i>Post-Survey, SMM, CDRISC</i>)	4 months	e-mail, In-Person

Measures

Three research instruments will be used to provide feedback and measure effectiveness of *DSR* program. Pre and post surveys will include demographics (age, gender, ethnic background, academic year, sport), insights into podcast delivery, use and relevancy of content/themes. Additionally, the 8-item Stress Mindset Measure [SMM] (Crum, et. al., 2013) and the 10-item *Connor-Davidson Resiliency Scale* [CDRISC] will be used to measure ‘stress-is-enhancing mindset’ and resilience. The SMM and CDRISC are highly reliable and valid. They are opportune and efficient involving little time and effort thus avoiding fatigue and ensuring completion by participants.

Membership Deliverables

This proposal identifies 3 specific deliverables, all will be available to share with NCAA membership institutions to facilitate adoption and adaptation of these resources.

1. Creation of a 12-series; 25-minute podcasts based on relevant and well-researched themes to address, support and encourage the mental health for student-athletes, making them available to other NCAA member institutions.
2. Research the DSR podcast programming specifically measuring two behaviors that can positively influence student – athlete mental health: resilience and growth mindset.
3. Provide the specific blueprint, including themes, content, podcast structure, etc. for other NCAA member institutions to replicate the DSR program. A guidebook will be made available to provide the program structure including how to create, develop content and produce podcast as well as conducting research to measure effectiveness of program on student-athlete resilience and growth mindset.

Guidebook will include best practices for:

- i. Recruiting former or current student-athlete interview guests
- ii. Podcast interview outlines per theme
- iii. Podcast editing resources
- iv. Recruiting podcast participants
- v. Marketing and delivering podcasts to student-athletes
- vi. Ideas for integrating podcasts in student-athlete health and well-being programming at the institutional level

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Career Readiness Challenge: Development of an online platform to support the translation of professional competencies learned through athletic participation to career readiness

Proposal Narrative

a. Problem Statement

Recent trends have transitioned career services from traditional career counseling to a more significant element embedded throughout the student experience (Dey & Cruzvergara, 2014). As a result, career services are assisting students with demonstrating their career readiness: “the attainment and demonstration of requisite competencies that broadly prepare college graduates for a successful transition into the workplace” (NACE, 2018). For the student-athlete, the ability to translate competencies learned through athletic participation into real-world applications outside of the athletics context is a high-impact practice (Bell, 2018).

However, athletic and academic responsibilities may limit the student-athlete’s ability to engage in career service activities (Buzzetta, Lenz, and Kennelly, 2017; Brown, Glastetter-Fender, & Shelton, 2000). Furthermore, studies acknowledge the role that athletic identity plays when considering future career pathways and career maturity (Houle & Kluck, 2015; Cabrita et al. 2014). Specifically, it is possible for a student-athlete to have a high athletic identity separate from their career domain identity (Brown et al., 2000). This compartmentalization of identities can potentially make it difficult for student-athletes to translate their athletic competencies to career readiness competencies.

The objective of this project is to develop a “Career Readiness Challenge” (CRC) that will enhance attitudes towards career planning and support the translation of athletic competencies into the career context. This work will address the following research questions: **RQ1.** How do student-athletes engage in the CRC?, **RQ2.** How does participation in the CRC affect career planning attitudes?, and **RQ3.** How do perceptions of career readiness competency relate to student-athlete identities?

b. Project Description

The Career Readiness Challenge will be designed to promote positive attitudes toward career development and support student-athlete translation of competencies learned through athletic participation into career readiness competencies. The CRC will be designed as an online course that utilizes an asynchronous blended-modality of activities (Table 1) in a gamified format. The asynchronous blended-modality will accommodate time constraints that student-athletes face by allowing student-athletes to work when time is available. The gamified aspect will enhance the motivation to engage in activities that will support their development of career readiness competencies.

Table 1. Types of activities in the blended modality CRC

Modality	Description
Video	Five minute videos that address career readiness competencies and how it relates to the student-athlete's experience.
Worksheet	Completing worksheets that assist with individual reflection on the student-athlete's competencies.
Peer-to-peer Interaction	Posting discussion board, contained within the CRC platform, that will facilitate the sharing of perspectives among the student-athletes.
One-on-one Consultation	Scheduling meetings with career services personnel for discussion on career readiness competencies and review of artifacts.
Campus Workshops	Attendance at any of the campus workshops or information sessions offered to all students.

i. Career Competencies and Skills

As a guide, the Career Readiness Challenge will operationalize career competencies as defined by the National Association of Colleges and Employers (NACE) shown in Table 2.

Table 2. List of NACE career readiness competencies (NACE, 2018)

Critical Thinking/ Problem Solving	Teamwork/Collaboration	Career Management
Oral/Written Communications	Digital Technology	Global/Intercultural Fluency
Leadership	Professionalism/Work Ethic	

Each of these competencies will be addressed in activities throughout the program, ensuring that student-athletes are focusing on how their athletic experiences translate into the specified competencies. The activities will focus on developing skills and acquiring tools required when seeking employment. These skills include career planning, market research, navigating career fairs, networking, resume development, LinkedIn profile development, cover letters, interviewing, evaluation and negotiation, supervisor evaluations, and job offer negotiation. As a means to support the translation of the competencies to professional contexts, additional activities will encourage student-athletes to become more involved in their academic discipline.

ii. Design of a Gamified Experience

Gamification is defined as “the use of game design elements in non-game contexts” (Deterding, 2011). Gamification or “gameful learning” is grounded in self-determination theory (Deci & Ryan, 2002). The theory posits that motivation to engage in an activity is driven by experiences associated with *autonomy* in the selection of tasks, a sense of *competency* in ability to complete the tasks, and *relatedness* with others who are engaging in the same activities. Game elements rely on autonomy, competency, and relatedness to enhance the motivation to engage in the activity (Werbach & Hunter, 2012). The CRC uses game elements to drive the motivation to engage in activities that will develop career readiness competencies.

Game elements include game dynamics, game mechanics, and components (Werbach & Hunter, 2012). Game dynamics include the constraints, rules, and narrative that users of the experience must follow. Game mechanics encourage the user to move through the game and persist in the applications use. Several examples of game mechanics include rewards, chance, competition, cooperation, and feedback. Components are specific initiations of both mechanics and dynamics (i.e., points, badges, leaderboards, and teams). In the design of the CRC, we will utilize the Gamification Design Framework specified by Werbach and Hunter (2012):

1. Define Objectives
2. Delineate Target Behaviors
3. Describe Players
4. Devise Activity Loops
5. Deploy Appropriate Tools and Don't Forget the Fun

When describing the players, we will use the Marczewski (2015) user types hexad (Figure 1). These user types include players, achievers, socializers, free spirits, philanthropists, and disruptors (Figure 1). Each of these players are motivated differently to engage in the activity. At the beginning of the project, the User Type Hexad Scale (Tondello et al., 2016) will be given to the participating student-athletes in order to characterize the range of users and understand their motivation to participate in the Career Readiness Challenge. The selection of appropriate tools will coordinate with the game mechanics and structures that align with the user types as specified by Marczewski (2015).



Figure 1. User types hexad and user motivations (Marczewski, 2015).

iii. Participants

During the Spring 2019 term, four athletic teams will participate in the CRC and accompanying evaluation. Both the men's and women's teams for the sport will participate in the CRC. Additionally, one set of teams will be in their competition season during the Fall 2019 term and one set of teams who will be out-of-competition.

iv. Implementation

The Career Readiness Challenge will be implemented in the Fall 2019 semester. Within the first two weeks of the term, student-athletes will be informed of the CRC and provided onboarding about how the program will work. Several components of the CRC are intended to be completed by the Career Fair at the end of October. However, due to the asynchronous and autonomous aspects of the CRC, participants will be allowed to participate in the program throughout the academic year. To ensure participation from student-athletes of all grade levels, the design of the CRC will tailor some of the activities around the participants' academic year.

c. Program Evaluation Plan

i. Justification

Identity development is important for all college students as they begin college and transition from seeing themselves as high school students to undergraduates. Identity development is also important for college students as they finish college and transition from identifying as students to professionals. Many traditional college-aged students (i.e., 18-21 year olds) go through a stage of "identity vs. identity confusion," where students try to determine who they are as individuals (Pascarella & Terezini, 2005). For college students who have multiple or intersecting identities, such as student-athletes, the transition process into and out of college can be complex. Student-athletes must begin to explore professional careers and ponder a sports exit strategy.

Many college students have opportunities to engage in "educationally purposeful" activities on their campuses (Pascarella & Terenzini, 2005). However, older students with spouses or children, students with jobs, and students who play a collegiate sport have less time to participate in "educationally purposeful" activities. For example, due to time constraints, student-athletes report interacting with students other than teammates more often than any other type of engagement (Gayles and Hu, 2009). Student-athletes also report participation in student groups and organizations less often (Gayles and Hu, 2009). Furthermore, student-athletes in low profile sports reap more educational benefits from attending college than student-athletes in high profile sports (Gayles & Hu, 2009). Given the diverse experiences of student-athletes, more work is needed to understand how student-athletes transition into and out of college. Additional knowledge is also needed concerning the type of engagement student-athletes have in "educationally purposeful" activities and how student-athletes develop an identity as professionals in their respective degree fields.

ii. Evaluation

This study evaluates the effectiveness of the Career Readiness Challenge by measuring student-athlete engagement in the program and how student-athlete participation affects career planning attitudes. In order to evaluate the effectiveness of the program a mixed-methods approach will be used (Table 3)

Table 3. Summary of Career Readiness Challenge evaluation

Research Question	Data Collection	Data Analysis
RQ1. How do student-athletes engage in the CRC?	Activity records of CRC engagement	Daily average use Volume of activity
RQ2. How does participation in the CRC affect career-planning attitudes?	Survey: Career Futures Inventory (control/experimental; pre/post)	ANOVA
RQ3. How do perceptions of career readiness competency relate to student-athlete identities?	CRC artifacts Interview (pre/post)	Critical ethnography, Interpretative phenomenological analysis

Since the CRC will be designed to be a gamified platform that uses game mechanics to increase motivation to participate in the program, evaluation of engagement will be measured by average daily use and volume of activity, as specified by Werbach and Hunter (2012). The volume of activity will be measured by how many points, levels, and badges the participants receive throughout the program.

The evaluation of how the CRC affects career-planning attitudes will be assessed using the Career Futures Inventory (CFI). The CFI is a 25-item survey that measures an individual's career adaptability, career optimism and perceived knowledge of the job market (Rottinghaus, Day, & Borgen, 2005). At the start of the Fall 2019 term, prior to the release of the CRC (*pre-test*), the CFI will be administered to the teams that are participating in the career readiness challenge (*experimental group*). Toward the end of the Fall 2019 term, 14 weeks after the first survey (*post-test*), the CFI will be re-taken by both the experimental and control groups. Two additional teams, who are not participating in the CRC (*control group*), will also complete the CFI at the same times as the experimental group. Analyses will include a statistical comparison between the control and experimental groups of the change in student-athlete responses from the pre-test to the post-test.

The CRC's focus on articulating competencies provides an opportunity to further understand how competencies student-athletes obtain through athletic participation translate to competencies associated with career readiness. Specifically, research has shown that perceptions of identity can affect one's perception of their own competencies. In order to research this phenomena among student-athletes, a subset of CRC participants will be requested to participate in a semi-structured interview. During the interview, student-athletes will self-evaluate their competencies (i.e., based on NACE, 2018) with respect to how they identify as a student, athlete, and individual. At the end of the term, the same student-athletes will be interviewed again to identify changes in their perception. The interview participants will be recruited to ensure diverse representation across sex, race, and academic discipline. Interviews will be analyzed using critical ethnography and interpretative phenomenological analysis (Smith & Osborn, 2004).

d. Membership Deliverable

The Career Readiness Challenge will be offered to ERAU student-athletes through the learning management system (LMS), Moodle with the LevelUp add-on. Moodle was selected because it is a free LMS available to any educational institution. The LevelUP add-on offers the availability of game structures and mechanics to a traditional LMS.

The entirety of the Career Readiness Challenge will be open-source and exported through the Moodle backup file (.mbz). The backup file will be made available to other NCAA institutions with links to the created videos so that they may copy the course to their own Moodle site and enroll their own student-athletes.

An additional user guide will accompany the Career Readiness Challenge back-up file that provides instructions on how to set up the course. It will also provide insight into how the course and the activity loops can be changed and adapted to their specific institutions context and career service resources.

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