Exploring Occupational Therapy with Athletes Using Principles of Lifestyle Redesign® to Support Academic Success and Life Balance.

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Exploring Occupational Therapy with Athletes Using Principles of Lifestyle Redesign® to Support Academic Success and Life Balance.

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OCTH 802: Capstone Project

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Exploring Occupational Therapy with Athletes Using Principles of Lifestyle Redesign® to Support Academic Success and Life Balance.

Occupational therapy is a vast and diverse profession. Equipped with knowledge and a wide variety of skills, occupational therapists rely on evidence-based interventions which focus on meaningful occupations. Occupational therapy has been integrated into a variety of populations. However, the use of occupational therapy within a sports medicine team has had limited exploration. Collegiate student-athletes are challenged with balancing multiple demands of their sport and academics. Many student-athletes report feeling overwhelmed with their responsibilities, which can have a negative impact on their mental health and athletic performance. Throughout the current capstone project, occupational therapy practices were applied through the lens of Lifestyle Redesign®. Using principles of Lifestyle Redesign®, the Student-Athlete Wellness Program was created and implemented with student-athletes to support academic success and life balance.

This capstone project investigated the role of occupational therapy in athletics. The project focused on developing a program to promote mental health and academic success, research and create literature to increase awareness of occupational therapy’s role in athletics, and involvement within the teaching process of first-year occupational therapy students. Minimal research has been completed in this area of occupational therapy. Therefore, this project required significant collaboration with various professionals within the athletic department at the University of South Dakota. Through experience with advocacy, education, and creative problem-solving valuable experience was gained throughout this project.
OCCUPATIONAL THERAPY IN ATHLETICS

Literature Review

Student-Athlete Mental Health

Collegiate student-athletes experience significant demands both academically and athletically (Sudano et al., 2017). Student-athletes are expected to achieve success in the classroom, perform at a high level in their desired sport, and many are required to participate in activities that give back to the community (Sudano et al., 2017). The National Collegiate Athletic Association (NCAA; 2017) reported, Division I athletes spend approximately 37 hours a week in their sport and 35 hours a week completing academics responsibilities. These demands result in higher levels of stress, as compared to their peers. This stress can have a large effect on behavior and performance (Sudano et al., 2017). Athletes must manage their time effectively in order to balance schoolwork, long practices, traveling to competitions, and other personal responsibilities (Condello et al., 2019; Kroshus, 2016).

Athletes have enormous pressure to perform at a high-level (Lucidi et al., 2016). However, most of this pressure can come from the individual athletes themselves (Lucidi et al., 2016; Rice et al., 2019). Athletes are looked up to as individuals who are successful both on and off the field, however, many student-athletes struggle with the balance of their responsibilities which can have a profound effect on their mental health (Condello et al., 2019). The pressure that is placed on athletes is often seen as an asset to those around them (Rice et al., 2019). It is often used as a tool to push the athlete mentally and physically to make them more successful (Rice et al., 2019). Athletes are often praised for this mentality and are encouraged to stretch themselves even further (Rice et al., 2019). The pressure from coaches, themselves, and peers to perform at a high-level, builds onto the demands of their daily life and can highlight mental
health symptoms and even decrease quality of life (Lucidi et al., 2016; Condello et al., 2019; Rice et al., 2019).

When student-athletes experience increased stress and anxiety they are at an increased risk of injury (Putukian, 2016; Ivarsson et al., 2017). Psychological stress can cause the athlete to become easily distracted, limit their attention on a task, and increase muscle tension (Johnson & Ivarsson, 2017; Ivarsson et al., 2017). The side effects of this psychological stress can increase the risk for an athlete to experience an injury (Johnson & Ivarsson, 2017; Ivarsson et al., 2017). An injury can be a devastating blow to a student-athletes’ athletic career and can even affect the athlete outside of their sport (Putukian, 2016; Ivarsson et al., 2017). An injury can cause the athlete to have a decreased locus of control and, therefore, create more stress and lower quality of life even further (Houston et al., 2016; Holden et al., 2019). This can be a devastating cycle for an athlete and produces consequences beyond their sport (Houston et al, 2016; Putukian, 2016; Johnson & Ivarsson, 2017).

**Barriers**

When student-athletes become overwhelmed they can often feel as though they have nowhere to turn (McCarthy, 2019; Moreland et al., 2018). Only 39 percent of colleges have policies in place that help identify athletes who may be suffering from mental health problems (Kroshus, 2016). Furthermore, less than half of those institutions have appropriate screening tools to identify eating disorders, depression, and anxiety in athletes (Kroshus, 2016). If a college and university does have resources in place there are continual barriers present that may limit athlete participation (McCarthy, 2019; Moreland et al., 2018). Barriers to receiving services may include an athlete’s preference for counselors who do not have past athletic experiences, the institution’s inability to pay for the expense or find a counselor with athletic experiences, and the
athletes perceived expectation to remain “tough” in their sport (McCarthy, 2019; Moreland et al., 2018).

**Current Services**

Colleges and universities have a variety of resources available to student-athletes (National Collegiate Athletic Association [NCAA], 2021). Each university has different interprofessional members which perform a myriad of services. The members provided to student-athletes are heavily influenced by the budget and resources available to athletic programs (McEvoy, Morse, & Shapiro, 2013). Professions that are commonly associated with a sports medicine team include athletic trainers, sports psychologists, physical therapists, chiropractors, academic counselors, and mental health counselors (Gabbet et al., 2018).

Each professional has specific responsibilities within the sports medicine team (Gabbet et al., 2018). Athletic trainers are professionals who are specialized in the prevention and treatment of sport-related injuries and conditions (National Athletic Trainers Association, 2021). These individuals are the most common professionals within the sports medicine team (Gabbet et al., 2018). Sports psychologists are mental health professionals who are specialized in the mental performance and well-being of athletes (American Psychological Association, 2021). Physical therapists are health professionals that specialize in the optimal movement of the human body and work with athletes to prevent and recover from an injury (American Academy of Sports Physical Therapy, 2021). Chiropractors are health professionals with specialization in joint manipulation to treat or prevent injuries and relieve pain (Joint Chiropractic, 2021). Academic counselors are professionals who assist student-athletes academically, athletically, and personally to achieve success beyond their desired sport (Rubin, 2017). Mental health counselors are professionals that work with individuals, groups, and communities to promote mental health
and wellbeing (National Alliance for Mental Illness, 2021). These individuals are commonly available to all students at the college and university (National Alliance for Mental Illness, 2021). These professionals are commonly considered as resources for collegiate student-athletes. However, professionals available at a given university vary and are often limited due to budget constrictions (McEvoy, Morse, & Shapiro, 2013).

**Occupational Therapy in Athletics**

The profession of occupational therapy has had limited exploration within the athletic field. Although formal research is limited, the skills of an occupational therapist can be utilized to promote student-athlete success (Host & Mankie, 2018). Occupational therapists are qualified to appropriately assess and treat both physical and mental health conditions (Host & Mankie, 2018; Ikiugu et al., 2017). Equipped with this vast knowledge occupational therapists are qualified to treat various injuries, illnesses, and diagnoses within the student-athlete population (Host & Mankie, 2018). Some areas in which occupational therapy can thrive within this population are rehabilitation of upper extremity injuries, concussion management, mental health, and many more (Host & Mankie, 2018; Ikiugu et al., 2017). Occupational therapists are skilled in treating upper extremity injuries using manual techniques and modalities (Gart & Wiedrich, 2017). Additionally, with an emphasis in vision and sensory processing occupational therapists have the tools to facilitate a successful return to school and athletics following a concussion (Finn & Waskeiwiz, 2015; Hall et al., 2015).

Due to the many demands of being a student-athlete, mental health continues to be a growing concern in the student-athlete population (NCAA, 2018). Occupational therapists can identify and support athletes who may be struggling with a mental health concern (Ikiugu et al., 2017). Through meaningful activities, occupational therapists are trained in providing
interventions that improve the well-being and occupational performance of student-athletes (Ikiugu et al., 2017).

With a wide-ranging set of skills, occupational therapists can effectively treat a variety of conditions within the student-athlete population beyond what is mentioned above. However, some barriers to their introduction to the sports medicine team include budget and knowledge of the profession (McEvoy, Morse, & Shapiro, 2013; Host & Mankie, 2018). Athletic departments are likely hesitant to add another professional because of budgetary restrictions (McEvoy, Morse, & Shapiro, 2013). However, because of the wide range of skills occupational therapists possess, this profession can combine multiple services to support student-athletes holistically (Host & Mankie, 2018). To become more prevalent within this field, occupational therapists must advocate for the profession (Host & Mankie, 2018). Through advocating occupational therapists may be considered as regular members of the sports medicine team.

**Conceptual Framework**

**Person Environment Occupation Performance**

One theory that supported this project was the Person Environment Occupation Performance (PEOP) model. This theory contains four components which include the person, environment, occupation, and occupational performance (Law et al., 1996). The person has intrinsic elements including cognitive, physiological, psychological, and spiritual components. The environment, which surrounds the person, contains natural, cultural, and economic factors. Occupations are meaningful activities which the person participates. Lastly, the PEOP theory considers occupational performance and participation in occupations (Law et al., 1996).
This model was chosen for this project due to the connection between the person, environment, and its effect on performance. Due to the high demand for performance of student-athletes, this model was deemed appropriate because of the emphasis on occupational performance. Throughout the created Student-Athlete Wellness Program, the athlete environment was addressed to increase performance in and out of the classroom. The environments emphasized included the study environment and sleep environment. The PEOP model provided insight on the effects of the environment on student-athlete performance. With the use of this model, aspects of the person, environment, occupations, and occupational performance were addressed within the student-athlete population. The PEOP model impacted this project with its effort to view each participant holistically while giving special attention to their performance either athletically or in the classroom.

Model of Human Occupation

Another supporting theory utilized was the Model of Human Occupation (MOHO). This theory focuses on the impact of the environment on a person’s behavior (Keilhofner, 2008). The MOHO model views the person as an open system that is affected by the complex interaction with the environment. The input of the environment will then affect the person, which is comprised of volition, habituation, and performance (Keilhofner, 2008). When this continuous interaction between the person and the environment is dysfunctional, it affects the ability of the person to participate in meaningful occupations, can disrupt role responsibilities, and dismantle role performance (Keilhofner, 2008).

This interaction between the person and the environment and addressing motivation was key when utilizing this model throughout the project. The student-athlete environment can generate major effects on the person. Through the lens of this model this connection between the
person and the environment was addressed (Keilhofner, 2008). The program created emphasizes the effects elements throughout the environment can have on motivation, performance, and habits. Motivation was addressed specifically throughout a goal setting activity in the Student-Athlete Wellness Program. Using this activity to address motivation, allowed the student-athlete to determine the goals which are most meaningful to him or her. By identifying concrete steps to achieve these goals, student-athletes were able to directly address their motivation while viewing themselves as holistic beings. Using MOHO, the concept of a change in the environment affecting the daily life of student-athletes was achieved. This model sheds light on how motivation, habits, and performance can be shifted through this complex interaction of the person and environment (Keilhofner, 2008).

**Methods and Activities**

Six objectives were created to facilitate this professional growth through exploration and implementation of occupational therapy within the student-athlete population. The objectives guiding the project were as follows: 1) Learn the roles of interprofessional team members in student-athlete success in order to provide a program that will complement the roles of each profession, 2) increase understanding of the Lifestyle Redesign® program, 3) complete a needs assessment and administer a survey to student-athletes, 4) develop a Lifestyle Redesign® program specific to student-athletes, 5) teach concepts of Lifestyle Redesign® in order to demonstrate effective leadership strategies with first-year occupational therapy students, and 6) facilitate Lifestyle Redesign® sessions for USD occupational therapy students.
Needs Assessment

A needs assessment was completed through interviews and surveys with key stakeholders in the project to determine the need and interest of the program through the athletic department. Interviews were completed with athletic trainers, members of the academic success center, and a sport psychologist. The interviews determined the role of each profession and explored gaps in the care for student-athletes. Interviews provided the opportunity for collaboration to determine appropriate topics to discuss within each program. A survey was also distributed to student-athletes at the University of South Dakota through the service Survey Monkey. The use of the service allowed a mass of student-athletes to easily access the survey and provided anonymity to promote honesty in the answers. The survey provided student-athletes the opportunity to express interest in a program and their views on the current services that were provided.

Five interviews were conducted with professionals to determine their professional role, the gap in care, and need for the program. All individuals expressed their support for the proposed program. A large gap was discovered in individuals who may not outwardly appear to be struggling academically or mentally. These individuals may not perform poorly enough to alarm the student-athlete support team and may not be asking for assistance. Therefore, this program was targeted to provide preventative, confidential support to individuals who need assistance either academically or with life balance. During these interviews provided a time to collaborate on program layout and topic emphasis. Due to the COVID-19 pandemic, every sport at the University of South Dakota was in season. This placed increased time demands on student-athlete because of travel, practice, and schoolwork. It was recommended to create an online program that was easy to access and did not require a significant time demand on the
participants. Additionally, topics such as communication and stress management were suggested to address in each program.

The survey provided suggestions and interest directly from the student-athletes. This survey asked questions regarding their perceived ability to balance their responsibilities, desired layout of modules, and provided a space to leave suggestions to create a program that best suits their needs. A total of 150 student-athletes answered this survey. Out of 150 student-athletes, 48% agreed and 25% strongly agreed that they have felt overwhelmed with the responsibilities of their sport and academics. Most of the athletes reported that they would be more interested in participating if the program was online versus in person. Finally, 49% of the athletes answered that they would be interested in completing this program. The complete survey results can be found in appendix A.

The survey and interviews solidified the need for this program. Student-athletes reported a desire to have more easily accessible resources available to them to support academic success and mental health. The survey displayed that most of the athletes at the University of South Dakota have felt overwhelmed with their responsibilities, indicating a need for this program. The interviews provided insight into the resources available to student-athletes at the University of South Dakota and gave an opportunity for the faculty to make suggestions to the program based on their experiences.

**Student-Athlete Wellness Program**

The primary activity in the project was developing a program for student-athletes that supported academic success and life balance. Following the needs assessment, it was determined that an online format was preferred by athletes to increase participation. Each program consisted
of six modules which provided education on each topic and an interactive worksheet which
allowed the participants to apply the information to their daily life. To determine program
effectiveness a pre- and post-survey was created via Survey Monkey, which was taken before
and after completing the program, respectively. Additionally, a survey was embedded within
each module to discover the effectiveness of each module within the program. Participants were
asked to email interactive worksheets to the creator to further distinguish the suitability of each
module.

The website was created via Squarespace. After completing research on various platforms
this website platform was determined to be the most user-friendly and visually appealing for the
cost. Creating a user-friendly website was pivotal for the success of the program. With each
technical barrier, risked a potential for an athlete to drop out of the program. Due to constant
exposure to the internet, it was important to make the website visually appealing to draw more
voluntary participation. Athletes had the opportunity to complete the entire program online or
complete modules in-person with the facilitator independently or with a group.

This program used principles of Lifestyle Redesign® (Clark et al., 2015). To increase
understanding of the core concepts and implementation of the program continuing education was
completed within this topic, found in appendix B The module topics were determined by the
creator alongside collaborators such as Kylea Sheley, MA, LAT, ATC, and Colleen Evens,
Director of Student-Athlete Success at the University of South Dakota. Using the lens of
occupational therapy module topics were developed with additional assistance through the
Occupational Therapy Practice Framework. Viewing the elements of the occupations, it was
clear how the stress associated with being a student-athlete can affect multiple occupations and
roles. Using various worksheets from the Lifestyle Redesign® program and worksheets created
through further academic research, the interactive component of the modules was created. Through the marriage of Lifestyle Redesign®, the occupational therapy practice framework, interprofessional collaboration, and lived experiences of student-athlete life, the program was developed to address the demands stressors of being a student-athlete. A brochure including a program summary and module outline can be found in appendix D.

The academic success program was created with the target population of individuals who may be struggling with their academic demands. Student-athlete academics are extremely important in the collegiate athletics area. Not only is education an essential reason for the athlete to compete in sports, but there are many regulations in place to ensure this success in the classroom. Division 1 student-athletes must take make specific progress towards their degree each semester and maintain grade point average (GPA) requirements according to the school’s standards for graduation (NCAA, 2021). This can be challenging for many student-athletes, especially because of the additional athletic demands placed on them. This program’s modules included: goal setting, time management, study environment, professional communication, sleep participation, and stress management. Participants were asked to create meaningful goals for themselves to create a vision to work towards while completing these modules. Through these modules, participants were guided in creating study schedules or plans, establishing the most effective learning environments, developing professional relationships, introducing sleep hygiene methods, and implement coping strategies for increased stress.

The life balance modules were directed toward student-athletes who may had a difficult time balancing the multiple demands of being a student-athlete. This program was not designed to diagnose or treat mental health conditions. Rather, it was created to help athletes introduce healthy habits and routines which promote awareness of their own mental wellbeing. The life
balance modules included: goal setting, sleep participation, mental health symptom check, stress management, communication management, and nutrition. Again, participants were asked to create meaningful goals to facilitate involvement within the modules. The life balance modules facilitated participants in establishing proper sleep hygiene techniques, educating on symptoms of various mental health conditions, provided resources for individuals who may be experiencing these symptoms, and encouraged the development of coping strategies to manage stress.

Additionally, these modules introduced communication strategies between teammates and coaches. Finally, student-athletes were educated on how the food we consume can affect mental well-being and gave strategies to promote healthy eating. A module outline can be found in Table 1.

Once this online program was completed, marketing was essential to introduce athletes to the program. A flyer was made to increase awareness, which can be found in appendix C, which was sent to all the coaches at the University of South Dakota. Many of the coaches expressed support for the program and passed the information to their athletes. A virtual presentation to the Student-Athlete Advisory Committee (SAAC) was given to further awareness. This group consists of athletes from every sport on campus, therefore, this presentation gave an opportunity for student-athletes to be exposed to the program directly with hopes to pass on the information to their peers. Verbal referrals to the program were provided from members of the Student-Athlete Success Center and Athletic Training Staff. Finally, short presentations were given at athlete study halls about the program, and regular attendance to study halls was initiated to facilitate face-to-face interaction with student-athletes.
Table 1

*Program Module Outline*

<table>
<thead>
<tr>
<th>Academic Success Program</th>
<th>Life Balance Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1</td>
<td>Goal Setting</td>
</tr>
<tr>
<td>Module 2</td>
<td>Time Management</td>
</tr>
<tr>
<td>Module 3</td>
<td>Study Environment</td>
</tr>
<tr>
<td>Module 4</td>
<td>Communication</td>
</tr>
<tr>
<td>Module 5</td>
<td>Sleep</td>
</tr>
<tr>
<td>Module 6</td>
<td>Stress Management</td>
</tr>
</tbody>
</table>

**Occupational Therapy Student Wellness Program**

Although the Student-Athlete Wellness Program was generated to assist student-athletes, occupational therapy students often experience similar stresses and demands as the student-athlete population. Therefore, this program was opened to occupational therapy students at the University of South Dakota. Following informal conversations with fellow occupational therapy students of various years, it was determined to keep the same layout as the student-athlete program. Occupational therapy students voiced that they wished to complete the program online to increase accessibility and to limit time demand. The program for the occupational therapy students remained the same as the program for the student-athletes. However, the occupational therapy students were required to take separate pre- and post-test surveys. A Lunch and Learn presentation was provided to promote the program to this population. Additionally, program
promotion was done with first-year occupational therapy students through the teaching experience.

**Teaching Experience**

To facilitate various areas of professional development, a teaching experience was included in the project. Due to the heavy influence of Lifestyle Redesign® throughout the project, it was deemed appropriate to become involved with teaching this program to first-year occupational therapy students. A one-hour lecture on the concepts and principles of Lifestyle Redesign® was given in the OCTH 725 class. This lecture focused on the influence of the Well-Elderly Study, core concepts of the Lifestyle Redesign® program, and implementation of Lifestyle Redesign®. The project associated with this class includes implementing a Lifestyle Redesign® session with an older adult. This project consists of four parts including finding an older adult to participate in the project, interviewing the participant, implementing a Lifestyle Redesign® session, and demonstrating competency in the project through a presentation and paper.

Advising the class on the beginning of their project was an influential part of this capstone project. Due to time constraints during the tail end of the project, occupational therapy students were aided when building parts one, two, and three. First-year occupational therapy students were encouraged to meet for assistance at least one time throughout their project. After submission, the papers were emailed for review and comments. Following the review, the papers were returned to the leading professor to distribute grades. With this opportunity to teach, advise, and grade first-year occupational therapy students on this project, a valuable teaching experience was gained.
Project Outcomes

Instruments

To determine program effectiveness surveys were determined to be an appropriate measurement. Due to the online nature of the program, the surveys were embedded into the program website for easy access. Additionally, survey links were provided in various reminder emails to encourage participation. Surveys were created using the platform Survey Monkey. This platform provided a user-friendly service that allowed for the creation of original surveys and easy access to participants. By using this platform, the anonymity of participant responses was maintained.

Surveys were originally created, to provide information directly based on participant experience using this specific program. Pre- and post-module surveys were created to determine student-athlete growth throughout the program. Meanwhile, additional surveys were embedded within individual modules to provide further feedback on the modules themselves. Pre- and Post-module surveys used a Likert-scale system, with answers including strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. Answers were ranked on a scale of one to five, with strongly disagree equating to a score of one and strongly agree equating to a score of five. These scores were added to determine differences between pre- and post-module participants. Therefore, a higher score is synonymous with agreement to the statement whilst a lower score is synonymous with disagreement to the statement.

Life Balance Program Evaluation

Sixteen student athletes were recruited for the Life Balance program Surveys indicate that participants found value in the modules which were completed. Based on the survey results, the
module that was completed the most was Module 1: Goal Setting. It is likely that the module was completed first, then participants may have forgotten to complete other modules or did not wish to complete additional modules.

Ten participants took the pre-module survey, and four participants completed the post-module survey. The decrease in follow-through created difficulties to determine program effectiveness. Athletes continued to report increased pressure to perform athletically and academically, however, indicate that they now have tools to handle this stress. One individual stated that they will continue to use the worksheets within the modules to cope with the demands of being a student-athlete. Results from the pre- and post-module surveys can be found in Table 2. Five males and four females took the pre-module survey. Of these athletes three were freshmen, two were juniors, three were seniors, and one was a fifth-year senior.

Table 2

Life Balance Program Results

<table>
<thead>
<tr>
<th>Statement</th>
<th>Pre N</th>
<th>M (SD)</th>
<th>Post N</th>
<th>M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel overwhelmed with the demands of being a student athlete.</td>
<td>35</td>
<td>3.5 (0.5)</td>
<td>9</td>
<td>3.3 (1.0)</td>
</tr>
<tr>
<td>I feel like I can balance my athletic, academic, and social demands well.</td>
<td>37</td>
<td>3.7 (0.6)</td>
<td>9</td>
<td>3 (1.2)</td>
</tr>
<tr>
<td>I feel that it is difficult to balance my athletic and academic responsibilities.</td>
<td>31</td>
<td>2.9 (1.2)</td>
<td>10</td>
<td>3.5 (1.0)</td>
</tr>
<tr>
<td>I feel significant pressure to be successful in school and in my sport.</td>
<td>42</td>
<td>4.2 (0.6)</td>
<td>13</td>
<td>4.3 (0.5)</td>
</tr>
<tr>
<td>I feel welcome to talk about my mental health to my teammate, coaches, advisor, or athletic trainer.</td>
<td>39</td>
<td>3.3 (1.1)</td>
<td>12</td>
<td>4 (0.5)</td>
</tr>
<tr>
<td>I have been provided the tools to cope with the stress of being a student athlete.</td>
<td>35</td>
<td>3.5 (0.9)</td>
<td>13</td>
<td>4 (0.8)</td>
</tr>
<tr>
<td>Statement</td>
<td>N</td>
<td>Mean (SD)</td>
<td>SD</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>----</td>
<td>-----------</td>
<td>-----</td>
<td>-----------</td>
</tr>
<tr>
<td>I feel capable of handling conflicts respectfully within my team.</td>
<td>39</td>
<td>3.9 (0.9)</td>
<td>11</td>
<td>3.5 (0.6)</td>
</tr>
<tr>
<td>I understand how to balance my life to promote my own mental health.</td>
<td>35</td>
<td>3.5 (1.0)</td>
<td>11</td>
<td>3.5 (1.3)</td>
</tr>
<tr>
<td>I have a plan in place in case I get too overwhelmed with my responsibilities.</td>
<td>30</td>
<td>3.5 (1.0)</td>
<td>9</td>
<td>3.8 (0.5)</td>
</tr>
</tbody>
</table>

*Note. Higher scores indicate increased agreement with the proposed statement. Highest possible score is 5, most agreement, lowest is 1, least agreement.

Academic Success Program Evaluation

The Academic Success program included five participants. All five participants took the pre-module survey providing a baseline prior to completing the program. However, none of the participants completed the final post-module survey. Without post-test information, determining program effectiveness was not possible. The individual module surveys indicate the program was well-received by the participants. Participants report increased benefits from each module and did not leave suggestions for program improvement. One participant indicated the benefit they received from the module, which signifies a program’s success.

Program Suggestion Survey

Following the implementation of the Student-Athlete Wellness Program, a secondary survey was sent to student-athletes at the University of South Dakota. This survey aimed to find the gap between the expressed need from the student-athletes for this project and the decrease in participation and follow-through. Thirty-three student-athletes participated in the Program Suggestion Survey, via Survey Monkey. The survey revealed, despite numerous marketing attempts, that many student-athletes at the University of South Dakota (75.8%) were not aware of this program. Many reported that they would have been interested in the program but were unaware of its implementation. Student-athletes continue to report the need for mental health
services with over 36% stating that there are not adequate resources available to promote student-athlete mental health. When asked if an online program was adequate for their needs, 42% of the student-athletes reported that an online format was sufficient while 51% reported that an online program would not be satisfactory. These results show that student-athletes continue to express the need for a program specific to their needs. However, the program should be heavily promoted throughout the athletic department and be provided in-person and online to service a variety of needs.

**Occupational Therapy Program Evaluation**

Although the Student-Athlete Wellness Program was generated to assist student-athletes, occupational therapy students often experience similar stresses and demands as the student-athlete population. Therefore, this program was opened to occupational therapy students at the University of South Dakota. Following informal conversations with fellow occupational therapy students, it was determined to keep the same layout as the student-athlete program. Occupational therapy students voiced that they wished to complete the program online to increase accessibility and to limit time demand. The program for the occupational therapy students remained the same as the program for the student-athletes. However, the occupational therapy students were required to take separate pre- and post-test surveys. A Lunch and Learn presentation was provided to promote the program to this population. Additionally, program promotion was done with first-year occupational therapy students through the teaching experience.

Occupational therapy students were asked to take separate surveys, with questions created specifically for their population. The Student-Athlete Wellness Program attracted five occupational therapy students to the program, all females. Each of the participants completed the Life Balance modules. All five of the participants contributed to the pre- and post-module
surveys. The results indicate that this program was well-received within this population. The modules with the program benefited the occupational therapy students and provided tools to promote life balance and mental health. However, due to the small sample size, results are not predictive of the effect of this program on the entire population of occupational therapy students. Pre- and post-module survey results can be found in Table 3.

Table 3

*Occupational Therapy Life Balance Results*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Pre N</th>
<th>M (SD)</th>
<th>Post N</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel overwhelmed with the demands of being an occupational therapy student.</td>
<td>18</td>
<td>3.6 (2.4)</td>
<td>15</td>
<td>3 (0.7)</td>
</tr>
<tr>
<td>I feel like I can balance my academic, personal, and social demands well.</td>
<td>15</td>
<td>3 (0.6)</td>
<td>20</td>
<td>4 (0.6)</td>
</tr>
<tr>
<td>I feel that it is difficult to balance my academic and personal responsibilities.</td>
<td>18</td>
<td>3.6 (2.4)</td>
<td>15</td>
<td>3 (0.9)</td>
</tr>
<tr>
<td>I feel significant pressure to be successful in school.</td>
<td>24</td>
<td>4.8 (0.4)</td>
<td>24</td>
<td>4.8 (1.6)</td>
</tr>
<tr>
<td>I feel welcome to talk about my mental health to my classmates, teachers, or advisor.</td>
<td>19</td>
<td>3.8 (0.9)</td>
<td>21</td>
<td>4.2 (0.4)</td>
</tr>
<tr>
<td>I have been provided the tools to cope with the stress of being an OT student.</td>
<td>18</td>
<td>3.6 (0.5)</td>
<td>21</td>
<td>4.2 (1.5)</td>
</tr>
</tbody>
</table>
I feel capable of handling conflicts respectfully within my personal life.  

|       | 18 | 3.6 (1.0) | 19 | 3.8 (0.7) |

I understand how to balance my life to promote my own mental health.  

|       | 18 | 3.6 (2.4) | 19 | 3.8 (0.4) |

I have a plan in place in case I get too overwhelmed with my responsibilities.  

|       | 14 | 2.8 (1.0) | 23 | 4.6 (0.5) |

*Note. Higher scores indicate increased agreement with the proposed statement. Highest possible score is 5, most agreement, lowest is 1, least agreement.

**Teaching Outcomes**

Expanding on various areas of professional development was essential throughout this capstone project. To provide teaching feedback a survey was created, via Survey Monkey. A survey was deemed appropriate due to the limited time available from the occupational therapy students and the project lead. This survey determined the comfort level of first-year occupational therapy students with the concepts and implementation of Lifestyle Redesign®. The pre-survey was given prior to the Lifestyle Redesign®, while the post-survey was given following their development of a Lifestyle Redesign® session. Again, the survey was designed with a Likert-scale model, with answers ranging from strongly disagree (1) to strongly agree (5). Survey results can be found in Table 4.

A total of 27 first-year occupational therapy students participated in the pre-survey, and 23 students participated in the post-survey. Through survey results it is evident that the first-year students gained knowledge of Lifestyle Redesign®. First-year students report a greater understanding of the Well-Elderly Study and its impact on the field of occupational therapy, further knowledge of the Lifestyle Redesign® concepts, increased comfort when implementing a
Lifestyle Redesign® session, and more interest in implementing Lifestyle Redesign® in their future practices. The students were also provided the opportunity to provide direct feedback through a comment box. One student expressed that it would be beneficial to complete a lab using the Lifestyle Redesign® worksheets to increase understanding and comfort with Lifestyle Redesign® implementation.

**Table 4**

*Teaching Survey Results*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Pre N</th>
<th>M (SD)</th>
<th>Post N</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand the implications of the Well-Elderly Study.</td>
<td>60</td>
<td>2.3 (1.0)</td>
<td>91</td>
<td>4.0 (0.9)</td>
</tr>
<tr>
<td>I understand the impact the Well-Elderly Study had on the field of occupational therapy.</td>
<td>48</td>
<td>2.2 (1.0)</td>
<td>100</td>
<td>4.3 (0.7)</td>
</tr>
<tr>
<td>I understand the concepts of Lifestyle Redesign.</td>
<td>48</td>
<td>2.2 (1.0)</td>
<td>98</td>
<td>4.3 (0.7)</td>
</tr>
<tr>
<td>I would feel comfortable implementing Lifestyle Redesign with a client.</td>
<td>48</td>
<td>1.8 (0.9)</td>
<td>92</td>
<td>4.0 (0.8)</td>
</tr>
<tr>
<td>I am interested in implementing Lifestyle Redesign in my future practice.</td>
<td>92</td>
<td>3.4 (1.0)</td>
<td>88</td>
<td>3.8 (0.9)</td>
</tr>
</tbody>
</table>

*Note.* Higher scores indicate increased agreement with the proposed statement. Highest possible score is 5, most agreement, lowest is 1, least agreement.
Discussion

Reflection

This capstone project was incredibly impactful for my personal and professional development. I was able to merge my two greatest passions, occupational therapy, and athletics, into my final capstone project. This project gave me the opportunity to discover a vastly undiscovered unexplored area of practice within the field of occupational therapy. Each objective provided the opportunity to expand my knowledge on the topic and develop professional relationships within this area. I was given the time and ability to introduce the field of occupational therapy into athletics, on a small scale. Along with this, I was able to experience working with occupational therapy students in a teaching role. Teaching and advising these students provided insight into the academia side of occupational therapy, which I could not have gotten without this project.

Many things throughout this project did not go as planned. During the early stages of this capstone project development, I envisioned this program with much more face-to-face interactions and group work. However, following the interviews and needs assessment, I decided to have the program online with the option to meet with me in person. I believe that this attracted more students to the program and made the program more marketable. However, many did not request appointments with me and because the program was online and self-paced, there was very little accountability to complete the modules. Additionally, because of the timing of my capstone project and the OCTH 725 class, I was unable to advise the students throughout their entire Lifestyle Redesign® project.
Although not all went as planned, I was able to adapt and execute an impactful capstone project. Throughout the entire project, I felt incredibly supported by the athletic staff. Every person who I spoke to about this project felt like it was valuable and needed. Because of this support and through extensive marketing I was able to get 20 student-athletes and two occupational therapy students involved in this program. Those who completed the program, reported positive feedback and felt as though this program could make an impact on many students.

I greatly enjoyed this project. It gave me the opportunity to explore my passions and create a program that has not been done before. This project gave me confidence as a future occupational therapy practitioner because I was forced to think outside of the box of what is known. The very little research in this area made me explore other avenues with various professionals. This gave me the confidence to know what I can bring to the table as an occupational therapist and how these skills are valuable with many different populations, including student-athletes.

**Revision of Selected Theories**

The driving theories behind this capstone project were PEOP and MOHO. These two theories were selected due to the emphasis on performance, and the impact of the environment on the ability to participate in meaningful occupations. An additional model that could have been considered for this capstone project is the Ecology for Human Performance (EHP). This model also has an emphasis on an individual’s ability to perform within their environment. However, EHP places increased emphasis on the number of tasks a person can perform rather than how effectively the person can perform these tasks. By using PEOP and MOHO, athlete performance with multiple tasks could be assessed.
Implications and Recommendations

The project research demonstrates the quality and care that occupational therapy can bring to the athletic field. Although occupational therapy can provide numerous services for student-athletes, this area has very limited exploration. Occupational therapy can provide holistic services including mental health interventions (Ikiugu et al., 2017), concussion management, upper extremity rehabilitation, and many more (Finn & Waskeiwiz, 2015; AOTA, 2014). However, additional research is recommended to further progress and implement occupational therapy within this population. Advocacy and growing relationships with athletic departments are key to displaying the effect of the profession’s skills with student-athletes.

To continue to the Student-Athlete Wellness Program, it is encouraged to provide services in-person with those who may benefit. The facilitation of an online program provides students the platform to gain information on their own time. However, with in-person sessions, athletes may gain more skills and have the accountability to complete the modules. Although the initial need assessment expressed that student-athlete had an interest in an online program, follow-through in participation was limited. It is assumed that this program would have been more successful if sessions were completed in-person in conjunction with the online format to provide supervision and facilitation of activities. Continuation of marketing would benefit the exposure of the program to attract more student-athletes. In addition, this program could be beneficial for student-athletes transitioning into collegiate athletics. It is recommended that freshman or transfer students are encouraged when entering in the fall semester to provide these tools immediately within their career. With early implementation of the program, student-athletes will have the skills to be successful on and off the field.
Conclusion

This project explored the role of occupational therapy within the athletic field and introduced the Student-Athlete Wellness Program which was grounded in the principles of Lifestyle Redesign®. Occupational therapy within the athletic arena has limited investigation; however, occupational therapy can provide holistic services to student-athletes that are not currently available. Building a project to support student-athlete academic success and life balance is a small insight into the services that occupational therapy can bring to the sports medicine team. Using Lifestyle Redesign® as a guide, this program gave athletes the tools need to be successful. The project brought new references to the field of occupational therapy and encouraged further exploration and application of services. This capstone project brought personal and professional growth while giving new insight into the quality holistic care that occupational therapy can provide to student-athletes.
References


https://digitalcommons.odu.edu/hms_fac_pubs/25


https://10.1136/bjsports-2015-095586


### Appendices

#### Appendix A: Needs Assessment Survey Results

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Answer Choices</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have felt overwhelmed by the demands of my sport and academics.</td>
<td>Strongly Agree</td>
<td>38 (25.33%)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>73 (44.67%)</td>
</tr>
<tr>
<td></td>
<td>Neither Agree Nor Disagree</td>
<td>20 (13.33%)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>19 (12.67%)</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>2 (1.33%)</td>
</tr>
<tr>
<td>I have been unable to focus on my sport because of my academic schedule.</td>
<td>Strongly Agree</td>
<td>11 (7.33%)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>36 (24.00%)</td>
</tr>
<tr>
<td></td>
<td>Neither Agree Nor Disagree</td>
<td>47 (31.33%)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>50 (33.33%)</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>6 (4.00%)</td>
</tr>
<tr>
<td>I have been unable to focus on my academics because of the demands of my sport.</td>
<td>Strongly Agree</td>
<td>5 (3.33%)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>39 (26.00%)</td>
</tr>
<tr>
<td></td>
<td>Neither Agree Nor Disagree</td>
<td>44 (29.33%)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>56 (37.33%)</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>6 (4.00%)</td>
</tr>
<tr>
<td>COVID-19 has impacted my ability to manage my athletic and academic demands.</td>
<td>Strongly Agree</td>
<td>29 (19.33%)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>56 (37.33%)</td>
</tr>
<tr>
<td></td>
<td>Neither Agree Nor Disagree</td>
<td>31 (20.67%)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>31 (20.67%)</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>3 (2.00%)</td>
</tr>
<tr>
<td>I feel like I have a good balance between my sport, academics, and social demands.</td>
<td>Strongly Agree</td>
<td>15 (10.00%)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>82 (54.67%)</td>
</tr>
<tr>
<td></td>
<td>Neither Agree Nor Disagree</td>
<td>32 (21.33%)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>----------</td>
<td>-------------------</td>
</tr>
<tr>
<td>I feel like I have someone to talk to when I feel overwhelmed.</td>
<td>19 (12.67%)</td>
<td>2 (1.33%)</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>48 (32.00%)</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>72 (44.00%)</td>
<td></td>
</tr>
<tr>
<td>Neither Agree Nor Disagree</td>
<td>14 (9.33%)</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>11 (7.33%)</td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>5 (3.33%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I feel like I have resources easily available to me when I feel overwhelmed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Neither Agree Nor Disagree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

| I would consider participating in a program to help me create a more effective life balance to help me be successful. |
|--------------------------------------------------------------------------------|------------------|
| Strongly Agree                                                                  | 19 (12.67%) |
| Agree                                                                           | 66 (44.00%) |
| Neither Agree Nor Disagree                                                       | 40 (26.67%) |
| Disagree                                                                        | 22 (14.67%) |
| Strongly Disagree                                                               | 3 (2.00%)     |

| Would you be more willing to participate in the program if it was in a group setting or self-guided online? |
|-------------------------------------------------------------------------------------------------------------|------------------|
| I would be more willing to participate if it was self-guided online                                        | 74 (49.33%) |
| I would be more willing to participate in a group setting                                                 | 57 (38.00%) |
| I would not be willing to participate                                                                      | 19 (12.67%) |
Please leave any suggestions you may have to help make this program successful for USD athletes.

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Category</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excitement</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COVID</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Current Resources</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Online Structure</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Note. Responses were surveyed and categorized to project interest in this program by the student athletes.
The USC Mrs. T.H. Chan Division of Occupational Science and Occupational Therapy presents this

Certificate of Completion to

Michaela Dendinger

for completion of the professional learning course entitled

Life Management Series: Introduction to Lifestyle Redesign®

Instructor: Chantelle Rice Collins, OTD, OTR/L, CDE

and is awarded .6 CEUs (6 contact hours; 7.5 PDUs for NBCOT) on January 14, 2021.

Grace Baranek, PhD, OTR/L, FAOTA
Associate Dean, Chair, and Mrs. T.H. Chan Professor of Occupational Science and Occupational Therapy

[Logo of Approved Provider of Continuing Education]
The USC Mrs. T.H. Chan Division of
Occupational Science and Occupational Therapy
presents this
Certificate of Completion
to
Michaela Dendinger
for completion of the professional learning course entitled
Life Management Series: Lifestyle Redesign®
for Mental Health
Instructors: Tracy Jalaba, OTD, OTR/L and Marissa Marchioni, OTD, OTR/L
and is awarded .3 CEUs (3 contact hours; 3.75 PDUs for NBCOT) on
January 18, 2021.
Appendix C: Recruitment Poster

STUDENT ATHLETE WELLNESS PROGRAM

The student athlete wellness program was designed for student athletes to promote mental health, life balance, and wellbeing. This program provides the tools to help you be successful in the classroom, on the field, and in life.

CHOOSE THE OPTION THAT BEST FITS YOU!

Academic Success
Provides tools to help you be more productive and balance your academic and athletic responsibilities.

Life Balance
Promotes wellness and mental health by focusing on how to achieve a healthy life balance.

Visit
www.studentathletewellnessprogram.squarespace.com
for more information or scan the QR code!
Appendix D: Program Brochure

**CHOOSE WHICH PROGRAM BEST SUITS YOUR NEEDS**

**Life Balance**
Promotes wellness and mental health by focusing on how to achieve a healthy life balance.

**Academic Success**
Provides tools to help you be more productive and balance your academic and athletic responsibilities.

Each online program has six modules to help you be successful, which you can work through at your own pace.

**VISIT**
www.studentathletestwellnessprogram.squarespace.com
or scan the QR code!

**STUDENT ATHLETE WELLNESS PROGRAM**

The student athlete wellness program was designed for student athletes to promote mental health, life balance, and academic success.

This program provides the tools to help you be successful in the classroom, on the field, and in life.

**ACADEMIC SUCCESS**

**Module 1 - Goal Setting**
It all begins with a vision. This module will discuss the importance of goal setting and help you make clear goals that will help you succeed.

**Module 2 - Time Management**
As a student-athlete, you are juggling a lot. You will need to make the most out of your time. This module will help you learn how to use your time more effectively.

**Module 3 - Study Environment**
Your environment can affect your focus and energy while studying. This module helps you discover your most optimal study environment.

**Module 4 - Communication**
You are now paying for your education. There are many people who can help you succeed. This module explores the need for communication and how to best communicate with the professionals around you.

**Module 5 - Sleep**
Sometimes what we need is rest. This module explores the importance of sleep for both your body and mind. It will help guide you through how to get to sleep faster and stay asleep.

**Module 6 - Stress**
Being a student-athlete is stressful. This module helps you learn how to identify stress early and how you can efficiently cope with stress.

**Life Balance**

**Module 1 - Goal Setting**
It all begins with a vision. This module will discuss the importance of goal setting and help you make clear goals that will help you succeed.

**Module 2 - Sleep**
Sometimes what we need is rest. This module explores the importance of sleep for both your body and mind. It will help guide you through how to get to sleep faster and stay asleep.

**Module 3 - Symptom Check**
Recognizing symptoms is the best way to stay on top of your mental health. This module will give you the tools to help identify potential negative symptoms and how to combat those symptoms.

**Module 4 - Stress**
Being a student-athlete is stressful. This module helps you learn how to identify stress early and how you can efficiently cope with stress.

**Module 5 - Communication**
Communication is key! This module will guide you through how to communicate effectively with your teammates, coaches, trainers, etc.

**Module 6 - Nutrition**
You are what you eat! The food we eat not only affects our body but our mind too! This module will focus on how you can fuel your mind to help you be successful in both the classroom and on the court.

**The Modules**

Each online module takes approximately 10-15 minutes to complete and have similar layouts.

** Worksheets**
Following information on the topic, most modules have a worksheet which is the key to applying the information to your daily life.

**Surveys**
In order to determine how effective the program is, there is a short online survey before and after you complete the modules. In addition, there is a short survey at the end of each module so you can tell us if the module worked for you!