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Stepping On - Virtual Fall Prevention for Older Adults

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STEPPING ON: VIRTUAL FALL PREVENTION FOR OLDER ADULTS

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A doctoral project submitted in partial fulfillment
of the requirements for the

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Abstract

Three student learners in a doctoral physical therapy program completed a service-based learning project dedicated to reducing falls in the elderly. The program, called Stepping On, is a fall prevention initiative supported by the Wisconsin Institute for Healthy Aging (WIHA) whose goal is to identify risk factors for falls in the older population and provide exercises and recommendations to reduce falls. The eleven volunteer participants in this student learners' Stepping On program completed online fall prevention classes and provided feedback at the completion of the program. Participants reported being more conscientious while walking and noted improved balance and flexibility.

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Introduction

Older adults generally have more underlying health conditions compared to their younger counterparts, so sustaining a fall can have devastating consequences in this group. Unintentional falls are the leading cause of both fatal and nonfatal injuries among adults aged 65 and older (Houry et al., 2016). In addition to the physical trauma, falls can leave older adults with feelings of insecurity and even hopelessness (Clemson et al. 2004). With approximately 10,000 Americans turning 65 each day, falls are of critical concern to the United States and its aging population (CDC, 2020). The CDC estimates that the incidence of falls in the US will increase from 36 million in 2018 to 73 million by the year 2030 (CDC, 2020). The cost of these falls for Americans is an astounding \$50 billion each year, according to the CDC (CDC, 2020). Despite devastating effects on the older population and the high cost to the US, many states are ill-prepared to make a difference in these concerning statistics.

According to the United States 2021 census, Nevada is home to about 500,000 adults aged 65 and older (US Census Bureau, 2021). The CDC estimates about one in four older adults will fall each year, which is expected to cost the state nearly \$300,000,000 (CDC, 2020). There is a clear need for older adults in Nevada to have access to fall prevention resources. The National Council on Aging website lists many viable evidence-based fall prevention programs for states to employ (National Council on Aging, 2022). One accessible to Nevadans is the Stepping On Fall Prevention Program (Wisconsin Institute for Healthy Aging, 2020).

Stepping On is an exercise-based fall prevention program designed to reduce falls in older adults and has been shown to reduce falls by 31% (Clemson et al. 2004). In addition to providing functional exercises, the program is designed to facilitate participant discussions

regarding fall prevention techniques including supportive and well-fitting footwear, medications' effect on balance, and identifying the fall risk factors in each participant.

Purpose

The service-learning project's (SLP) primary goal was providing older adults with the knowledge, resources, and exercises to reduce falls. The SLP also provided educational and professional development opportunities for student learners, as well as an opportunity to give back to the community.

Methods

Three student learners enrolled in a doctorate of physical therapy program in Las Vegas, Nevada completed a service-learning project by implementing the Stepping On program. Because in-person gatherings could pose a health hazard to the participants due to the COVID pandemic at the time, a virtual format of Stepping On was utilized. The success of the program was measured through attendance and participant feedback at the completion of the program. Self-reflections were completed by the student learners throughout the project to ensure goals were being met and to continually evaluate the quality of their program.

Stepping On Program

Stepping On consists of a two-hour session each week for seven weeks. Each session has an educational portion in which participants are guided through weekly topics taught by the student learners and/or guest experts, followed by an exercise session focusing on skills to reduce falls. Each session also contains group discussions. Week 1 includes introductions and sharing fall and near-fall experiences; week 2 reviews the barriers and benefits of exercise; week 3 covers when to modify or upgrade your exercises, as well as how to identify hazards in the home; week 4 discusses appropriately fitting footwear with adequate traction and avoiding long clothing that could cause a trip and fall, and has an optometrist discussing the role of visual impairments in falls; week 5 reviews medications that may increase the risk of falls, bone health and sleeping better; week 6 covers how weather conditions could lead to falls; lastly, week 7 reviews the key educational points and skills learned during the exercise portion. Participants were given homework assignments at the end of each session that provided reinforcement of strategies learned in class, as well as balance and strength exercises. Three months after

completion of the Stepping On program, the participants underwent a final session to discuss achievements, barriers, and how to continue best practices.

Student learners began the project by completing a one-hour virtual training program offered by the Centers for Disease Control and Prevention, called *Stopping Elderly Accidents, Deaths, & Injuries (STEADI) toolkit*. This training provides tools and resources for health care providers on how to help prevent falls and help keep their patients active and healthy. The skills learned in this training were used during the recruitment phase of the project to help identify older adults that would benefit from participating in the Stepping On course. Student learners then completed the virtual Stepping On leader training, which consisted of 22 hours with a master trainer from WIHA, learning facilitating techniques, and course content. Student learners were trained on how to teach the Stepping On program and how to identify potential candidates.

Participants were recruited in one of two ways - they were either already known to the student learners, or they were recruited through collaboration with a group dedicated to reducing falls in Nevada called the Nevada Goes Falls Free Coalition during an in-person fall risk screening. The screenings were performed at UNLV's occupational therapy training center during National Falls Prevention week in September 2021. Each screening consisted of the Stay Independent Questionnaire (Rubenstein et al. 2011) and 3 functional measures: Timed Up and Go (TUG) (Podsiadlo et al. 1991), 30-second chair stand (McCarthy et al. 2004), and the 4-stage balance (Bishop et al. 2013). The Stay Independent Questionnaire is a series of twelve fall related questions that assess one's fall risk. A score of four or greater indicates a concerning risk for falls. The TUG measures the time required for the individual to stand up from a chair, walk ten feet in a straight line, then return to their seat. Taking longer than twenty seconds to complete this task is considered to indicate a fall risk. The 30-second chair stand assesses how many times

an individual can rise and return to a seated position in 30 seconds. Cut off scores for this vary based on the participants age and gender. For example, men between the ages of 65-70 who completed fewer than 12 sit-to-stands in 30 seconds would indicate they are at an increased risk for falls. The four-stage balance test evaluates an individual's ability to hold four progressively more challenging positions. The stances in order of increasing difficulty are standing with feet side by side as close together as possible, semi tandem stance, tandem stance, and single leg stance. The participant must be able to hold the stance for at least ten seconds in order to progress to the next stance. If an older adult is unable to hold the tandem stance for at least ten seconds, they are considered to be at an increased risk for falls. In addition to the fall risk screening, participants were evaluated for cognitive deficits with the Mini-Cog exam (Mini-Cog©, 2022). The Mini-Cog is a screening tool designed to detect cognitive impairments in older adults. The assessment takes approximately three minutes and includes a 3-item recall portion, in which an individual is given three words at the start of the exam that they will later be asked to recall. The participant receives one point for each recalled word. The second component of the assessment asks the individual to draw a clock demonstrating a specific time. One point is given for placing all of the numbers on the clock correctly, and another point is given if they place the hands on the clock to indicate the correct time. A total score of less than four can be indicative of cognitive impairment. Participants who demonstrated a heightened fall risk as determined by the TUG, 30 - second chair stand, and the 4 - stage balance test and who did not have a cognitive impairment based on the Mini-Cog met Stepping On's inclusion criteria outlined by the WIHA and were recruited for the Stepping On program.

Prior to starting the program, each participant met via Zoom, (Zoom Video Communication, Inc. 55 Almaden Boulevard, 6th Floor, San Jose, California 95113) with student

learners to ensure that they understood the risks and process of participating, and to ensure their full consent. During that meeting, the student learners also recommended that participants with a Stay Independent questionnaire score of 6 or greater had standby assistance during the exercises. The student learners discussed with the participants they would need access to a working webcam and computer. Also, the participants were informed that there would be a student learner available virtually to assist them during all the sessions should any technical issues arise. After the meeting, a set of adjustable ankle weights, Stepping On manual, and a webcam (if they did not have access to a webcam) were delivered to each participant (in person by the student learners, other than one participant whose supplies were mailed).

Attendance was taken each session to monitor retention within the program. Participants were encouraged to attend every meeting and were incentivized with a \$20 gift card at the end of the program if they had one or fewer absences. Email reminders were sent each week in an effort to retain participants and to remind them about homework due at the beginning of next class.

All sessions were recorded via Zoom for quality improvement purposes. Student learners reviewed the recordings to re-assess the quality of the lecture and to obtain verbatim feedback from the participants. Participants had been asked questions such as “What have you taken away from the Stepping On program?”, “What are you going to change because of the Stepping On program?”, and “What are some strategies that you may implement in your lives to reduce the risk of falling?”

The student learners used self-reflections throughout the SLP to review the quality of the program and to facilitate personal and professional growth. These self-reflections were performed at the completion of several milestones (STEADI training, Stepping On training,

recruitment of participants, screening sessions, first class and the seventh week program, and after the 3-month follow-up class). In each self-reflection, the student learners determined whether the methods used were in alignment with the core values established by the American Physical Therapy Association (APTA) and the UNLV Graduate College's guiding principles. The APTA's core values are accountability, altruism, collaboration, compassion and caring, duty, excellence, inclusion, integrity, and social responsibility (APTA, 2021) and the UNLV Graduate College's guiding principles are excellence, equity, diversity, opportunity, and impact (UNLV, 2022).

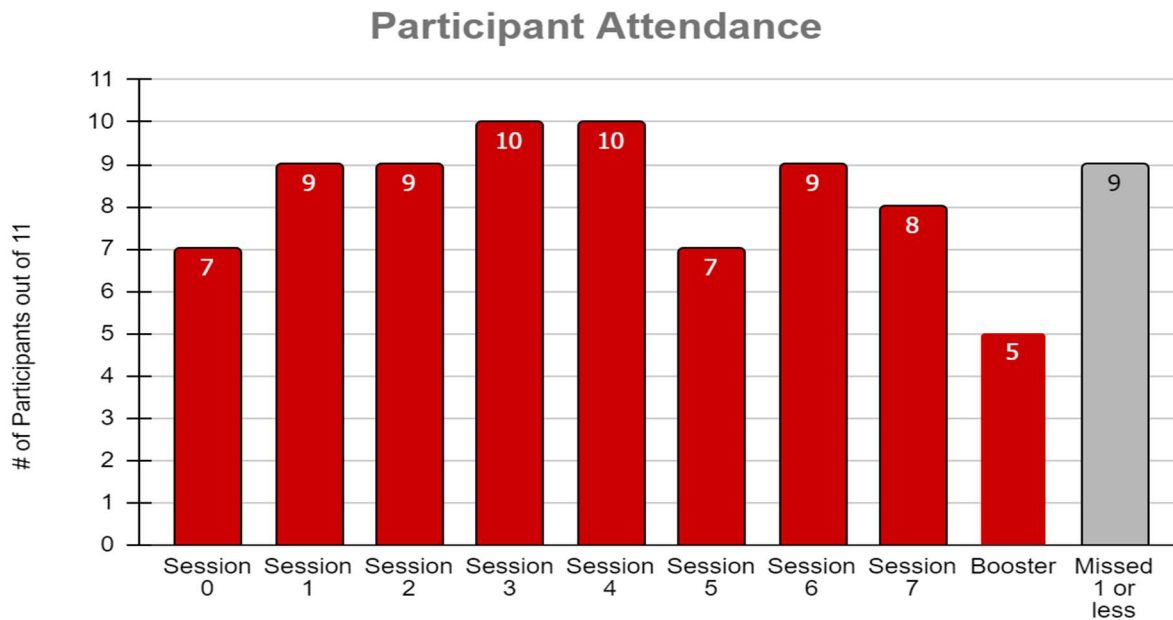
Measuring Success

Student learners measured the success of the Stepping On program in multiple ways - attendance (as a means of objectively measuring whether the participants felt the program was worthwhile), participant feedback, and self-reflections with emphasis on whether the sessions demonstrated APTA's and UNLV's core values. After the seventh session and 3-month follow up session, participants were asked for their feedback on the program, including if the participants had benefited from the course, how so, and if they had implemented changes to reduce falls. The student learners reflected on any improvements to the course that could be made and incorporated them as the program progressed.

Outcomes

The Service-Learning Project's (SLP) primary goal (providing older adults with the knowledge, resources, and exercises to reduce falls) was measured through participants' attendance as well as feedback. The student learners were aiming to have 15 participants in the program but much fewer were recruited by the fall risk screening event (only eight were recruited through the fall screening event). After contacting friends and family who could benefit from the program, the number of participants increased to eleven. Attendance was taken each session (Figure 1) as a means to objectively determine whether the participants felt the program was worthwhile. Attendance in the student learners' Stepping On program was higher than average for national Stepping On programs (only one participant in this student learners' program missed more than one session, and that participant missed only two sessions).

Figure 1.



The participants provided only positive feedback at the end of the program. Participants had been asked what they learned and what changes they had made as a result of the program. One goal of the program was to make the participants feel safer and more confident when walking. One participant said, “I used to just jump up and go ahead and do what I have always done, whereas now I take off more slowly from a chair, and I find that I am doing better.” Another participant commented, “I pick up my dog’s toys at night now, because many times I’m

up early in the morning, and now I don't have that tripping hazard.” Although participants did not specifically state they felt safer as a result of the program, their comments about being more aware of fall risks and making adjustments to reduce falls would seem to increase safety while walking.

Several participants noted improved balance or flexibility as a result of the exercises provided in the program. One participant commented, “My balance has improved a lot. When we did that fall screening, I wasn’t able to stand heel to toe, even for a second or two, and that is much improved now. I don’t need as much tweaking of the muscles to stand still.” Another participant had stated, “Even with my scoliosis and kyphosis I am able to reach a little bit higher than at the beginning of the program. It's great!”

Participants said they found the resources provided by the program helpful. One participant said “I didn’t realize that medication could be a reason for my falls until we learned about it with the pharmacist. So, I decided to contact her program in Reno and have them look at my medications to see if that could be my problem.” Another participant mentioned “I love that you gave us this log and basic things to do, because we look it up on the internet and there are thousands of classes to join, and I never know what is actually going to help.” Another participant commented, “[Stepping On] helped connect me to enough resources that I can find many of the answers out myself.”

The student learners faced several logistical obstacles during the course of the program. Perhaps the most notable was the online format of the program. With the online format arose barriers not encountered in the traditional in-person Stepping On program. The largest of these barriers was that all participants would need a computer with adequate internet speed and the

confidence to do the program virtually. Census estimates show that 90% of Nevada residents own a computer, and more than 80% have access to high-speed internet. To help relieve technical insecurities in the participants, a student learner was available during all the sessions to help the participants with any technical issues they encountered. A separate meeting was also conducted with the participants to review what equipment they would need and the process of the online course. A Zoom software was also purchased as opposed to using a free version because it was felt by the student learners that the software program would be more user friendly for the participants. Lastly, webcams were not only provided to those participants who could not access or afford one, but they were dropped off directly at the participants' houses by the student learners to eliminate any barriers to accessing them, such as lack of transportation or concerns about COVID-19 by leaving the house.

There were a few other limitations to the program and evaluation of its success. The sample size was small and was smaller than the goal despite efforts to recruit more participants. There were small incentives given for attendance, as well as email reminders sent each week. Also, three participants personally knew a student learner, which could in theory affect the feedback they provided.

Reflections

The student learners journaled several times throughout the program to ensure growth in the values set out from the APTA and the UNLV Graduate College (Figure 2). The values have been chosen by the professional organization and the university because they have been shown to be key qualities of success. The APTA and UNLV core values are reviewed below, along with a discussion of how the student learners applied each value to the Stepping On service-learning project in order to achieve personal and professional growth.

Figure 2.



Accountability

The APTA defines accountability as “active acceptance of the responsibility for the diverse roles, obligations, and actions of the physical therapist and physical therapist assistant including self-regulation and other behaviors that positively influence patient and client outcomes, the profession, and the health needs of society” (APTA, 2021). The student learners noted significant growth in this area as the program progressed. Through self-reflections it was discovered that earlier in the program, not enough time for preparation of the sessions was being used, and that the quality of the early sessions was suffering. Therefore, the student learners prioritized session preparation and dedicated significantly more time in this area. As they did,

they observed marked improvement in the quality of the sessions. This served as an important reminder to the student learners that in order to make a difference and potentially improve the quality of their patients' lives, they need to dedicate sufficient time and energy to the cause, and that when they do not do so their patients' outcomes and health may suffer.

Altruism

Altruism is defined as “the primary regard for or devotion to the interest of patients and clients, thus assuming the responsibility of placing the needs of patients and clients ahead of the physical therapist’s or physical therapist assistant’s self-interest” (APTA, 2021). The Stepping On program was a large undertaking for the student learners. They dedicated significant time to the program, oftentimes in the evening or on weekends when they would otherwise be spending time with their families or pursuing other activities they find meaningful or that contribute to their wellness. The program was a priority to them not just for their education but because they understand and frequently see first-hand the implications of falls (many of which could have been prevented) have on this vulnerable population. They therefore dedicated significant time towards the program as they felt it was in the interest of the participants and community, oftentimes making personal sacrifices to do so.

Collaboration

Collaboration is defined as “working together with patients and clients, families, communities, and professionals in health and other fields to achieve shared goals” (APTA, 2021). The student learners collaborated with an ophthalmologist, pharmacist, and police officer during this project. An ophthalmologist provided insights on types of visual impairments that increase one’s fall risk and the importance of regular vision screenings so patients are aware

if they have visual impairments that could increase their risk of falls. A pharmacist provided a phone number for participants to call to speak to a pharmacist who can review their medication list and discuss with them if their medications increase their risk of falls and provide counseling. A police officer gave examples of situations out in the community that increase one's risk of falls, such as walking in parking lots, crosswalks, or walking at nighttime. Multidisciplinary collaboration with this group allowed the student learners to provide practical information and resources they had previously been unaware of.

Compassion and Caring

Compassion is “the desire to identify with, or sense something of, another’s experience; a precursor of caring” (APTA, 2022), whereas caring is, “the concern, empathy, and consideration for the needs and values of others” (APTA, 2022). Self-reflections showed that this was one of the strengths of the student learners. All the student learners had commented in their reflections that one reason they went into this profession was because they genuinely care for others and feel a desire to improve others’ lives. Each had intentionally chosen a service-learning project that involved working with people because it aligned with this value. Even so, some growth in this field was noted as the program progressed because the students connected with the participants on a deeper level through hearing their recounts of falling and their concerns about future falls.

Duty

Duty is defined as, “the commitment to meeting one’s obligations to provide effective physical therapist services to patients and clients, to serve the profession, and to positively influence the health of society” (APTA, 2021). Many people have been affected by falls, either by falling themselves or through a loved one falling. One student learner’s spouse had lost her

grandmother days after a fall due to complications from the fall. Another student learner's mother was one of the participants in the program because she was suffering frequent falls and was worried about becoming disabled from a fall. Like many, the student learners felt a duty to not just their loved ones but to the community to prevent falls. The student learners wanted to educate the vulnerable about fall risks and evidence-based fall prevention strategies. This sense of duty grew stronger as the program progressed because the student learners heard directly from participants their concerns about having complications from falls and the implications it would have on them and their families.

Excellence

Excellence, as defined by the APTA, is using “current knowledge and skills while understanding personal limits, integrating the patient or client perspective, embracing advancement, and challenging mediocrity” (APTA, 2021). All three student learners noted significant improvement in this area as the program progressed. WIHA was reviewing the recordings of the sessions by the student learners to monitor their quality and noted concerns in the early sessions. They expressed concerns about the flow and transitions in the earlier programs. The student learners therefore dedicated significantly more time to making sure the presentations had smooth transitions between topics. One critical component to ensuring better flow was improving the collaboration between the student learners. They realized early on they had been delegating responsibilities but not spending enough time coordinating with one another to make a cohesive presentation. Once this was brought to their attention it became a priority. In later sessions both the student learners and WIHA noted significant improvements and WIHA was satisfied with the later sessions.

Inclusion

Inclusion occurs “when the physical therapist and physical therapist assistant create a welcoming and equitable environment for all. Physical therapists and physical therapist assistants are inclusive when they commit to providing a safe space, elevating diverse and minority voices, acknowledging personal biases that may impact patient care, and taking a position of anti-discrimination” (APTA, 2021). Self-reflections by the student learners revealed concerns that the group of participants was predominantly Caucasian and therefore not an accurate representation of the Las Vegas community. Most people at the fall screening were Caucasian, which made the participants in the Stepping On program mostly Caucasian. While recruitment for the fall screening was done by another organization, the student learners learned if they host such events in the future, they need to be conscientious about advertising in a way that more accurately represents the diverse Las Vegas population. Future Stepping On groups would benefit from having more backgrounds represented.

Integrity

Integrity means “steadfast adherence to high ethical principles or standards, being truthful, ensuring fairness, following through on commitments, and verbalizing to others the rationale for actions” (APTA, 2022). This was a relative strength even early on for the student learners. When it was brought to their attention that WIHA had concerns about the quality and flow of early sessions, the student learners quickly made changes in order to correct this. Significantly more time was dedicated to the project and collaborating within the group was made a high priority because it was apparent these would be necessary to deliver high-quality presentations.

Social Responsibility

Social responsibility is, “the promotion of a mutual trust between the profession and the larger public that necessitates responding to societal needs for health and wellness” (APTA, 2021). Given the statistics regarding falls (as stated in the introduction), there is a clear need for fall prevention strategies. The Stepping On program delivered by the student learners sought to provide free and accessible resources to the aging population of Las Vegas. All three student learners had noted in their reflections the global as well as local need for such services. Care was taken by the student learners to ensure that the program was as effective and accessible as possible (such as providing webcams and technical support to participants). It was also a priority for student learners to remain professional and to inspire participants to become involved in other physical therapy programs that they could benefit from.

Equity

Equity is defined as “the policy or practice of accounting for the differences in each individual’s starting point when pursuing a goal or achievement, and working to remove barriers to equal opportunity, as by providing support based on the unique needs of individual students or employees” (Merriam-Webster, 2018). The Stepping On program is typically done in person at a community center or other similar location. Because the student learners’ Stepping On program occurred during the COVID-19 pandemic, the program was run virtually. As noted earlier in the paper, having the program virtually did pose potential barriers. With the older population participating, one concern was that some people may not participate due to issues with technology. Specifically, some potential participants may not have access to a computer with fast internet. Although the Stepping On program could not purchase computers or internet

programs for these potential participants, it was able to budget to provide webcams for those participants who did not have one. There was also a student learner available during all the sessions to help the participants with any technical issues that arose during the program. The students also offered to go to the homes of participants to help set up the webcam and the Zoom software. One of the student learners also purchased a Zoom software license instead of using the free version, in order to provide a better experience for the participant. Although there is no way to remove all barriers to accessing the program, thoughtful consideration was given in order to remove as many barriers as feasible.

Diversity

With diversity in mind, the student learners defined diversity as “the inclusion of individuals representing more than one national origin, color, religion, socioeconomic stratum, sexual orientation” (Merriam-Webster, 2020). As discussed earlier in the section on inclusion, the student learners discovered during their self-reflections that the participant pool in their program was not an accurate representation of the diverse backgrounds in Las Vegas. Strategies to prevent this in the future were contemplated, including advertising the program in multiple locations. The student learners also believed it is important to include participants of all socioeconomic backgrounds. For this reason, webcams were provided free to participants who could not afford one or easily access one. Participants were also encouraged to think about whether there is a computer outside their home they would be able to use so that they could participate in the program, such as at a relatives’ house.

Opportunity

Dictionary.com defines opportunity as “a situation or condition favorable for attainment of a goal.” The student learners had all in one way been affected by the fall of a loved one. The Stepping On program provided the opportunity for them to apply something they are passionate about in order to benefit their community. They used their knowledge from school, collaboration with one another as well as others outside of physical therapy, and feedback from WIHA to make a program that was both meaningful to them as well as impactful for the community. As described above, they demonstrated significant growth in particular areas/values as a result of their self-reflections, which should serve them in their careers as professionals in healthcare.

Impact

Impact can be defined as “the force exerted by a new idea, concept, technology, or ideology” (Merriam-Webster,2021). The Stepping On program benefited the participants as well as the student learners. The participants stated in their evaluation of the program that they found the resources provided particularly helpful. One participant had used a resource provided to speak with a pharmacist and have his medications reviewed to see if any were increasing his fall risk. Another participant said she was overwhelmed by the plethora of information online and found the concise and simple information provided by the program helpful. Based on comments by the participants during the discussions, it was clear they had understood and retained most of the information taught in the program. The student learners also discovered they had developed more mature presentation and speaking skills based on their feedback from WIHA.

Participant Perceptions

The second measure of success for this program was through participant feedback obtained in the seventh and 3 month follow up sessions. Participants had been asked what they learned and what changes they had made as a result of the program. Many stated they were more aware of fall risks in their surroundings and made appropriate adjustments. Several participants had noted improved balance or flexibility as a result of the exercises. Participants found the resources provided by the program helpful, especially the phone number for a pharmacist who can review their medications and discuss which may increase risk of falls and why.

Participants indicated they found the virtual format of the program beneficial and practical. One participant said, “I think it makes the access to the program easier because you don’t have to leave your home, especially if you're having issues walking. In some places it can be quite a trip just getting in the building. So, I really appreciate the option of having it online.” Another remarked, “For me it is nice because I don’t have to drive anywhere or find someone to take me.” Another stated, “For me, doing this thing remotely, I don’t think we have lost anything in translation, I don’t know if I would feel any more progress if we were sitting in the same room instead of doing this online.” One participant said, “I really appreciate the option of having it online. I always think there should be that option.” None of the participants had negative comments about the program being online. The student learners asked the participants if any would have preferred the program be delivered in-person or felt like the online format was restricting. All the participants said no and stated that they preferred the virtual method.

Conclusion

The primary objective of the service-based learning project was to equip older adults with the knowledge, resources, and exercises to reduce their falls. This goal was measured through participant attendance and feedback. The attendance for the student learners' Stepping On program was higher than the average for this program nationwide, with only one of the eleven participants missing more than one section. The participants provided only positive feedback, stating they were more aware of their fall risk factors, had implemented changes to reduce falls, had improved balance and flexibility, and found the resources provided helpful.

The secondary goal was to provide the student learners with professional development and an opportunity to give back to the community. While growth was noted in several areas by the student learners, the most notable was in collaboration. The feedback from WIHA as well as their self-reflection allowed the student learners to grow in several areas, while providing a meaningful and beneficial program for the community.

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Curriculum Vitae

Sean Conners, PT, DPT
sean.conners1@yahoo.com

Education

DPT	University of Nevada, Las Vegas – Las Vegas, Nevada 2020 – Present	Physical Therapy
BS	University of Nevada, Las Vegas – Las Vegas, Nevada 2016 – 2019	Kinesiology

Certifications

- Stepping on Certified Facilitator (2021)
- OTAGO Certified Provider (2021)
- CPR Certificate (2021)
- Blood-borne Pathogens Training Certified (2020)
- HIPAA Certified (2020)

Employment / Clinical Experience

Associated Experiences:

Jun 2021 – Jul 2021 – Optimal Therapy – Paseo Verde

SPT responsible for patients in the outpatient orthopedic setting. Responsible for evaluation, design and execution of plan of care, and discharge.

Jul 2022 – Sep 2022 – St Rose Dominican Hospital – San Martin Campus

SPT responsible for patient care in the acute hospital setting with a focus on ICU, IMC, and Med surge floors. Responsible for evaluation and treatment with the ultimate goal of guiding appropriate discharge planning.

Sep 2022 – Dec 2022 – Sunrise System – Sunrise Hospital and Medical Center

SPT responsible for caring for outpatient pediatric population. This setting included treatment of long term patients with the population primarily consisting of children with Trisomy 21 or developmental delays.

Jan 2023 – Mar 2023 - Sunrise System - Mountain View Hospital

SPT responsible for the evaluation/treatment/discharge planning for inpatient rehab patients. This setting focuses on optimal rehabilitation with preferred safe discharge back to prior living setting with guidance on continuation of care and resources upon discharge.

Other Employment:

May 2015 - May 2016	Tesla (Solar City) – Solar Consultant
Jan 2013 - Feb 2015	Caesars Entertainment – Assistant Casino Manager
Mar 2009 - Nov 2012	US Bank – 24HR Banking Customer Service Manager
Nov 2006 - Nov 2008	Walmart – Connections Center Department Supervisor
Jun 2000 - Aug 2004	Joy Outdoor Education Center – Camp Counselor

Membership in Professional Organizations

- Member American Physical Therapy Association (2020 to Present)
- Member Nevada Physical Therapy Association (2020 to Present)
- Member Neurology Section of the American Physical Therapy Association (2020 to Present)
- Member Pediatric Section of the American Physical Therapy Association (2020 to Present)

Service / Volunteer Activity

- Stepping on Service-Learning Facilitation (2021)
- Volunteer – Community Fall Prevention Screening (2021)
- Advocated against CMS-2021-0119-0053

Honors and Awards

- 2019 – Magna Cum Laude – UNLV BS Kinesiology
- 2016 – 2019 – Deans List – UNLV School of Allied Health Sciences

Tyler Greener, PT, DPT

Tylergreener7@gmail.com

Education

Doctorate of Physical Therapy <i>University of Nevada, Las Vegas</i> <ul style="list-style-type: none">• 3.79 GPA	June 2020- May 2023 <i>Las Vegas, Nevada</i>
Bachelor of Science in Exercise Physiology <i>Brigham Young University-Idaho</i> <ul style="list-style-type: none">• 3.82 GPA	September 2016- Dec 2019 <i>Rexburg, Idaho</i>

Licensure

Idaho State Board of Physical Therapy
Graduation: May 2023
License pending graduation

FIFA Medical Diploma	January 2023
American Heart Association, BLS for Healthcare Providers	March 2021- March 2023
The Otago Exercise program: Falls Prevention Training	November 2021
STEADI Fall Prevention Toolkit	October 2021
Stepping On Facilitator Training	September 2021
HIPAA Training Certified	October 2020
Blood-borne Pathogens Training Certified	October 2020

Employment/ Clinical Experience

Outpatient- Student Physical Therapist <i>Wright Physical Therapy</i> <ul style="list-style-type: none">• Current clinical experience.	January 2023- March 2023 <i>Boise, Idaho</i>
Inpatient Rehabilitation Student Physical Therapist <i>Saint Luke's- The Elks Rehabilitation</i> <ul style="list-style-type: none">• Prescribed appropriate exercise progressions for patients that addressed pathological issues with current evidence.• Educated patients and caregivers on rehab protocol to optimize functional capacity .• Advocated for patients who required mobility equipment or extended stays in the rehabilitation unit.	September 2022-December2022 <i>Boise, Idaho</i>
Acute Care Student Physical Therapist <i>Veterans Affairs - Boise Medical Center</i> <ul style="list-style-type: none">• Collaborated with a comprehensive health care team to create an optimal healing environment for patients.• Instructed patients about adaptive techniques to allow for safe and appropriate home discharge.• Performed safety evaluations and determined discharge recommendations and equipment needs.	July 2022- September 2022 <i>Boise, Idaho</i>

Outpatient- Orthopedic Student Physical Therapist**June 2021- July 2021***Fyzical Therapy and Balance Center**Las Vegas, Nevada*

- Addressed patient's questions in a thoughtful and considerate manner meant to empower the patient.
- Identified and treated musculoskeletal pathologies, using manual therapy skills and personalized exercise progressions.
- Provided research based interventions to optimize recovery outcomes for patients.

Teaching Aid/ Instructor**December 2018- January 2020***Brigham Young University- Idaho**Rexburg, Idaho*

- Helped design, edit, and teach a class for advanced athletic training skills with an emphasis on taping techniques.
- Coordinated on-field emergency simulations and instructed about university protocol.
- Implemented a balance program for athletes that were recovering from a concussion.

Sports First Aid Coordinator**December 2018- January 2020***Brigham Young University- Idaho**Rexburg, Idaho*

- Performed on field first aid treatment and preventative taping for competitive sports.
- Mentored student volunteers in the use of rehabilitative tools and manual therapy techniques.
- Conducted holistic evaluations for competitive athletes and developed return to sport treatment plans.

Other Employment**Small Business Co-Owner****April 2020- Present***Greener Leaves Co.**Las Vegas, Nevada*

- Oversaw business budget planning and administration, accounting functions, and purchasing.
- Developed beneficial relationships with international suppliers and customers.
- Studied market to determine optimal pricing of goods and to capitalize on emerging opportunities.
- Resolved customer complaints and concerns to help maintain brand integrity.

Memberships**American Physical Therapy Association****October 2020- Present****American Academy of Sports Physical Therapy****October 2020- Present****Service/ Volunteer Activity****Stepping On****February 2022***Nevada Goes Fall Free Coalition**Las Vegas, Nevada*

- Facilitated a seven-session holistic fall prevention training for community dwelling older adults.

Fall Prevention Screening**September 2021***Nevada Goes Fall Free Coalition**Las Vegas, Nevada*

- Performed cognitive and functional screens for seniors in the Las Vegas area, and connected them with appropriate resources for their individualized issues.

Peer Mentoring

July 2021

BYUI Pre-PT/OT club

Rexburg, Idaho

- Instructed an undergraduate Physical Therapy club about the entrance process into Physical Therapy school, and how to stand out from other applicants.

Full-Time Volunteer Representative

July 2014- July 2016

The Church of Jesus Christ of Latter-day Saints

Albania, Kosovo, Macedonia

- Led a group of 80 volunteers across multiple countries and trained them in effective communication skills and teaching styles.
- Helped successfully organize a gathering of over 1,500 individuals across multiple countries including setting a venue, coordinating travel arrangements, promoting the event, and securing food.

Continuing Education Attended (last 2 years)

American Physical Therapy Association Combined Sections Meeting	February 2022
American Academy of Sports Physical Therapy Team Concept Conference	December 2021
The Otago Exercise program: Falls Prevention Training	November 2021
STEADI Fall Prevention Toolkit	October 2021
Stepping On Facilitator Training	September 2021
American Academy of Sports Physical Therapy Team Concept Conference	December 2020

Kaitlyn Johnson
EMAIL: kattyjayy1729@gmail.com

Education

University of Nevada, Las Vegas – Las Vegas, Nevada DPT 2020-2023

University of Nevada, Las Vegas – Las Vegas, Nevada BS 2012-2018

Licensure

Nevada State Board of Physical Therapy Examiners - License Pending Graduation May 2023

Certifications

CPR certified, June 2011 – present

Employment / Clinical Experience

Clinical Experience

January 2023- March 2023 -University of Utah Health care – Craig H Neilsen Rehabilitation Hospital

Evaluated and treated patients in the inpatient rehabilitation setting. This facility specializes in the treatment of patients with disorders of consciousness (DOC), spinal cord injuries, and other complex conditions. I worked mainly on the traumatic brain injury team. I spoke at team conferences to coordinate the care of patients on my team with other healthcare providers. Additionally, I utilized the facilities CMILL and ZERO-G technologies in patient care.

September 2022- December 2022 – Valley Health system – Spring valley hospital

Evaluated and treated patients in the acute care setting. I treated patients in the ICU, post orthopedic procedures such as hip and knee replacements, and worked largely on the med surg floor. Additionally, I collaborated with other health care professionals to coordinate patient care.

July 2022- September 2022 -Student clinical rotation outpatient setting, VA- Southern Healthcare System

Evaluated and treated veterans in outpatient/underserved setting. On average I evaluated and treated 8 to 9 patients a day. I treated veterans with orthopedic conditions for 60-minute time slots each. Additionally, I coordinated patient care with physical therapist assistants.

June 2021 – July 2021 - Student clinical rotation outpatient setting, Mesa View Physical Rehabilitation.

Evaluated and treated patients in rural/underserved outpatient setting. On average I would see 7 patients a day, each treated for 60 minutes. The clinic saw a large variety of diagnosis, as this was a rural setting with only two outpatient orthopedic offices in town. Collaborated with other professions to provide the best care to the patients.

Employment

May 2017- August 2017 - Kelly Hawkins Physical Therapy Technician.

Guided patients through their exercises. Applied modalities as instructed. Cleaned the facility at the end of each day.

Membership in Professional Organizations

Member of American Physical Therapy Association, 2020 to present.

Service / Volunteer Activity

January 2022 University of Nevada, Las Vegas (UNLV) Department of Physical Therapy interview day

Talked with potential UNLV PT students, answering any questions they may have had about our program. Assisted in cleaning up after the event.

January 2022 wheelchair rugby tournament

Assisted in time keeping and score keeping for the wheelchair rugby tournament, for a six-hour time period.

December 2021 Rock Steady Boxing

Assisted with two Rock Steady boxing classes, which are designed to improve the function of those with Parkinson's disease.

September 2021-November 2021, Stepping on Fall Prevention class instructor

Assisted community dwelling older adults in learning strategies to help prevent falls, including pharmacological management, strengthening, and balance exercises. Instructed the course with two other colleagues for a duration of 7 weeks. Class was held once a week for two hours.

September 2021, fall prevention and memory screening event

Screened individuals in Las Vegas for fall risk and memory deficits, provided resources for them to assist with their needs.

July 2018- 2020, volunteer at University Medical Center (UMC)

Observed the Physical Therapists at UMC in various settings, including Wound Care/ Acute care, Trauma, Pediatrics, and Outpatient burn care. Assisted with preparing dressings for the wound vacs and observed the process of applying them. Assisted PT's in getting equipment or bedding for the patients. Assisted in adjusting walkers, restocking the wound-vac cart, and cleaning the outpatient gym. Additionally, I gave a tour of the facility to Touro PT students.

August 2018 – May 2019, President of Lambda Kapa Delta (Pre-Physical Therapy Honor Society, UNLV)

Oversaw LKD's executive board. Presided over each of our bi-monthly meetings. Scheduled speakers for each of the group's meetings. Managed LKD's email, and processed applications. Set up events in our student union for public outreach.

August 2017-December 2018, volunteer at Opportunity Village events

Assisted in annual Halloween and Christmas events. Directed guests into the events, and onto the rides. Took part in setting up and breaking down events. Helped assemble goody bags for charity events. Volunteer hours totaled to 19 hours.

October 2018, volunteer at Cleveland Clinic's fall and memory screen

Assisted in balance testing to assess for fall risk in participants. Instructed participants on how to perform each balance test and recorded their results.

August 2017 – May 2018, Chair of Fundraising for Lambda Kapa Delta (Pre-Physical Therapy Honor Society, UNLV)

Organized fundraisers at various restaurants, as well as set up a bake sale to raise funds for LKD's charities. Spoke to new coming students about LKD at various events.

Honors and Awards

Dean's list - UNLV 2017-2018

Service Learning

December 2020- May 2023, Stepping on Fall Prevention service-learning project.

Attended stepping on leader training to be certified as a trainer, to teach virtual classes to community dwelling older adults. At each step of my journey with the service-learning project, I

would journal to reflect on the experience thus far. Facilitated 7 classes over a course of 7 weeks, to reduce the fall risk of Nevada residents.

Continuing Education Attended (last 3 years)

CSM San Diego California 2023

CSM San Antonio Texas 2022

November 2021 - OTAGO training

August 2021- STEADI training

August 2020 - Blood pathogen safety