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SUBMITTING RESEARCH GRANT APPLICATIONS TO FUND A STUDY EXAMINING THE EFFECT OF EQUINE-ASSISTED THERAPY ON COMPASSION FATIGUE IN CAREGIVERS

Briana Minette Kent

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SUBMITTING RESEARCH GRANT APPLICATIONS TO FUND A STUDY EXAMINING THE
EFFECT OF EQUINE-ASSISTED THERAPY ON COMPASSION FATIGUE IN CAREGIVERS

By

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for the degree of

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2023

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This scholarly project, submitted by Briana Kent in partial fulfillment of the requirements for the Doctor of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

Nicole Harris, EdD, OTR/L
Nicole Harris, EdD, OTR/L

4/17/2023

Date

PERMISSION

Title: Submitting Research Grant Applications to Fund a Study Examining the Effect of Equine-Assisted Therapy on Compassion Fatigue in Caregivers
Department: Occupational Therapy
Degree: Doctor of Occupational Therapy

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Briana M. Kent

Briana M. Kent

April 17, 2023

Date

Table of Contents

Approval	iii
Permission	iv
Acknowledgments	vi
Abstract	vii
Chapter:	
I. Introduction	8
II. Literature Review	11
III. Methods	19
IV. Product	23
V. Summary	25
References	27

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Abstract

Caregivers are expected to provide the best care possible to their patients, no matter the circumstances. Depending on the need of the individual being cared for, a caregiver's job can cause an abundance of stress at various levels and can even lead to decreased mental health. This is often accompanied by a lack of self-care, poor health, and overall diminished wellness, otherwise known as compassion fatigue. Occupational therapists can address poor mental health due to compassion fatigue in caregivers by introducing a variety of important skills, habits, routines, and activities that patients need or want to engage in on a daily basis. Equine-assisted services (EAS) involve equine activities that can be combined with therapy professions, such as occupational therapy, by incorporating horses to address both the mental and physical health of individuals through occupational function, activity, and participation (Palsdottir et al., 2020). Occupational therapy in the EAS environment provides an animal-assisted therapy (AAT) approach that can address and improve mental health conditions by incorporating occupation-based horse activities into therapy sessions. While researchers have linked AAT to improved occupational engagement and decreased mental health disparities in other populations, they have yet to examine the impact of occupational therapy in the equine environment on caregivers experiencing compassion fatigue. Animal-based research foundations, such as the Horses and Humans Research Foundation (HHRF) and the Human Animal Bond Research Institute (HABRI), offer grant awards for research studying the effectiveness of AAT services on individuals who struggle with significant mental health illnesses (HHRF, 2022; HABRI, 2022). This scholarly project has utilized the 2023 HHRF Innovation Grant Applicant Guidelines and Information, and the HABRI 2023 Proposal Guidelines, to format grant applications introducing a proposed research project studying the effects of EAS on caregivers experiencing compassion fatigue.

Chapter I

Introduction

Caregivers are expected to provide the best care possible to their patients, no matter the circumstances. Due to this significant responsibility, it is common for caregivers to forget about their own challenges and become easily stressed, putting a strain on the caregiver-patient relationship. This is often accompanied by a lack of self-care, poor health, and overall diminished wellness. A result of these negative impacts includes a combination of secondary traumatic stress and burnout, also known as compassion fatigue (Lee et al., 2019). Caregivers who experience compassion fatigue not only lack the compassion they once had but are also unable to continue working at the capacity they once did (Lee et al., 2019). Depending on the need of the individual being cared for, a caregiver's job can cause an abundance of stress at various levels and can even lead to decreased mental health. While observing in an equine-assisted occupational therapy setting, the author saw a significant need for mental health-based services in a variety of client populations, including those experiencing compassion fatigue.

Many pediatric clients with chronic neurological conditions and cognitive delays participate in equine-assisted services (EAS) within the Casper, Wyoming community. Most of the clients are completely dependent on parents and/or other informal caregivers to help them complete simple daily routines. Because these children typically depend on another person, options are presented to their caregivers about the government resources available in the state of Wyoming that would provide support to the caretaker by offering childcare throughout the day. This is known as respite care. When approached with this option, many interesting responses came from caregivers refusing to accept this type of help, leaving the author to consider an important question: who is looking after these caregivers? Through a review of literature, it was ultimately determined that this population was overlooked and underserved when it came to receiving mental health treatment, indicating the need to look further into caregivers experiencing compassion fatigue as a population in need of effective intervention.

Because the author was intrigued by the idea of combining occupational therapy with EAS as a form of treatment in mental health practice, literature was reviewed to find out if there was any evidence

supporting this treatment method for caregivers who have developed mental health conditions due to compassion fatigue. While completing a literature review, the author was unable to locate published studies examining EAS as an intervention to promote self-care in personal caregivers experiencing compassion fatigue. It was determined that applying for a research grant would be beneficial for expanding evidence-based practice in the EAS and occupational therapy field.

As the literature review progressed, it was discovered that the Horses and Humans Research Foundation (HHRF) would be offering a 2023 grant to fund organizations interested in performing research studies that address mental health through the interactions between horses and humans, ultimately measuring the quality of life for vulnerable individuals who experience disabilities on a daily basis (HHRF, 2022). Along with the HHRF, the Human Animal Bond Research Institute (HABRI) was also offering to fund research in 2023 examining the mental health effects of animals on humans (HABRI, 2022). Applications were submitted to both grants in hopes of receiving funding for a future research project examining the impact of EAS through an occupational therapy lens on the underserved population of caregivers experiencing compassion fatigue.

The Person-Environment-Occupation (PEO) model was utilized to guide the grant applications by examining personal and environmental factors that would determine participants' occupational performance and engagement. When using the PEO model, the theory concludes that environmental factors can equally impact the person's ability to perform the task that they have been given, whether that means switching up the setting or changing the activity to increase the chance of participation and success. Compassion fatigue relates to the PEO model because it is defined as a gradual condition developed by caregivers due to prolonged, continuous contact with suffering individuals in a high-stress environment (Lee et al., 2019). This is a common consequence of the caregiver role that needs to be considered as a personal impact on occupational performance, as it can be detrimental to the mental health of both the caregiver and the individual being cared for.

It is important to note that throughout the years, using horses in medical treatment has been referred to using various terms. The most common term referred to in past literature is the term equine-

assisted therapy (EAT), which is defined as a specific type of therapeutic intervention that can be combined with the occupational therapy profession to incorporate horses as a tool to address both the mental and physical health of individuals through the valuable occupations of horseback riding and horse care (Palsdottir et al., 2020). More recently, literature refers to this type of therapy as equine-assisted services. Equine-assisted services (EAS) include mounted and unmounted equine activities that can be combined with therapy professions by incorporating horses to address both the mental and physical health of individuals through occupational function, activity, and participation (Professional Association of Therapeutic Horsemanship International [PATH Int.], 2022). Because the meaning behind each term is similar, these terms are used interchangeably throughout this chapter. Today, occupational therapy in the equine environment is the preferred language to use when referring to occupational therapy interventions in combination with equine-assisted therapeutic activities (PATH Intl. 2022). Throughout the next four chapters, literature focusing on utilizing horses as part of mental health-based occupational therapy treatment for caregivers experiencing compassion fatigue will be reviewed; examples and supporting literature of what it looks like to use EAT, EAS, and occupational therapy in the equine environment will be discussed; and research within the occupational therapy field will be expanded. This will be followed by a brief overview of the grant-writing process, proposals, suggestions, and next steps.

Chapter II

Literature Review

Caregivers are at the center of helping professions and the job of caregiving ranges from untrained family members to trained healthcare specialists. They all have one common goal, and that is to offer compassionate care to individuals in need. With this responsibility, it is common for caregivers to exhibit symptoms of burnout, such as compassion fatigue. Compassion fatigue can be caused by a build-up of small stressors interfering with their daily life, such as restriction of daily routines, limited social interactions, increased responsibility for another person, and exposure to unfamiliar trauma. Sometimes the impact of compassion fatigue is so great that many caregivers develop mental illnesses such as anxiety and depression, interfering with participation in meaningful daily activities (Lee et al., 2019). In addition to mental health stressors, Lee et al. (2019) also mentions that some circumstances require caregivers to continue compassionate care even when there are physical stressors such as a shortage of caregivers, unmanageable schedules, a lack of resources, and a poor working environment. The combination of physical and emotional stress can sometimes be too much, and this is when caregivers fold and compassion fatigue sets in.

Compassion fatigue not only has a negative impact on the quality of work provided by caregivers, but also on the quality of life of the clients in their care (Lee et al., 2019). This is why it is important for caregivers experiencing compassion fatigue to engage in meaningful occupation-based activities provided by occupational therapy professionals. Occupational therapy can provide mental health treatment that addresses important skills, habits, routines, and activities that patients want or need to engage in daily to help individuals regain occupational performance. Occupational therapy practitioners are trained to address mental health by engaging individuals in valuable occupations (Palsdottir et al., 2020). Throughout this chapter, evidence will be provided behind the success of these interventions in combination with occupational therapy and findings will be used to apply for funding of a potential program that treats compassion fatigue in overwhelmed caregivers.

Occupational Therapy in the Equine Environment

Occupational therapy has been proven useful in the treatment of mental health disorders by encouraging participation in meaningful daily occupations. Throughout the literature, occupations are defined as activities people want or need to participate in. Occupational therapists are trained to provide restorative or adaptive strategies to individuals who are unable to perform meaningful occupations, such as caregivers who want to provide adequate care to an individual in need. Occupational therapy in the equine environment provides an approach that can address and improve mental health conditions by incorporating occupation-based horse activities into therapy sessions.

Laverdure and Beisber (2021) examined the effectiveness of occupation-based and activity-based interventions for improving the physical and mental health of individuals through occupational participation and found that occupational engagement in activity-based tasks would support overall health and wellness. Occupational therapy in the equine environment uses basic horsemanship, groundwork, horse care, and stable management as intervention ideas for clients to participate in (PATH Intl., 2022). Kirsh et al. (2019) suggested that addressing client performance skills will support future occupational success, especially if the intervention is provided in a learning and working environment. This type of therapeutic activity qualifies as an occupation for individuals with mental health disorders because it addresses the completion of a routine, functional mobility/activity, and self-care techniques (Laverdure & Beisber, 2021).

According to Palsdottir et al. (2020), equine-assisted therapeutic activities have been used as a form of treatment for mental and physical health dating back to the 17th century. Originally, horses were used in caring for soldiers who had experienced trauma in World War I and World War II (Palsdottir et al., 2020). Florence Nightingale was the first individual to record the use of horses as a therapeutic treatment, while in the 1950s, Elspeth Bodker began using equine activities to treat atypical neurological development in children (Palsdottir et al., 2020). After the 1960s, equine services were increasingly professionalized and researched to determine whether they would be effective for other various illnesses and disorders (Palsdottir et al., 2020).

Experts at Washington University in St. Louis (2021) have been advocating for the use of horses as a treatment strategy in the occupational therapy field because of the impact equine activities have proven to have on individuals with cognitive and mental health disorders. Based on findings from supporting literature, using horses in occupational therapy practice is beneficial because occupational therapists think in a way that considers what is best for the client and create a way to achieve client goals regardless of the obstacles, while simultaneously encouraging occupational engagement (University of Washington in St. Louis, 2021). This is beneficial to the caregiver population because compassion fatigue is commonly overlooked and requires professionals to think outside the box.

Animal-Assisted Therapy (AAT) As A Treatment Tool

Occupational therapy in the equine environment can also qualify as an occupation-based and activity-based intervention when supporting participation in a meaningful activity that requires an emotional connection to an animal. According to Weston (2010), animal-assisted therapy (AAT) “utilizes the human-animal bond in goal-directed interventions as an integral part of the treatment process,” and can be incorporated into any type of professional therapy (pp. 344). Findings from reviewed literature suggest that AAT benefits mental health through the human-animal relationship where the animal offers a calm, relaxed presence that can help improve emotional regulation and overall mood (Weston, 2010). Kirsh et al. (2019) found that AAT was beneficial for individuals with mental health conditions by offering them the ability to take care of and connect with the animal. Emotional impacts that were seen in participants after engaging in AAT interventions included improved mental health by being able to have a trusting relationship with another living being (Scopa et al., 2019).

Llambias et al. (2016) found that using animals as an intervention tool had a positive effect on individuals and influenced motivation to engage in therapy sessions. The incorporation of animals in therapy was found to boost the immune system by positively impacting hormonal imbalances in the body, which offers a solid evidence base behind using animals for caregivers experiencing compassion fatigue from both mental and physical stressors (Weston, 2010). This is an important goal for caregivers with mental health disorders to strive for, as those who have experienced inner trauma find it difficult to

emotionally connect with others, impacting their social environment and leading to negative feelings of isolation (Muela et al., 2017). This is likely what leads to the declining relationship between the caregiver and patient during compassion fatigue.

According to Muela et al. (2017), AAT is the overarching term for incorporating animals into therapeutic interventions. Based on this definition, equine-assisted services can be considered an adequate type of AAT. The authors also discussed that using animals who have been specifically trained to facilitate a therapeutic process by being available for interaction, providing unconditional love, being loyal and affectionate, and promoting non-threatening behavior toward humans, is the most successful use in AAT (Muela et al., 2017). Under these circumstances, horses would qualify for this type of therapy because research has stated that individuals who engage in equine-based interventions significantly increase activities of daily living (ADL) performance, and leisure participation, and are better able to generalize what they learn to various environments (Laverdure & Beisber, 2021). With horses having such a large role in the therapeutic relationship, it could suggest that AAT used as an intervention for compassion fatigue improves the occupational engagement of caregivers in meaningful activities.

Benefits of Occupational Therapy Combined with AAT

According to supporting literature, occupational therapy in combination with AAT has been proven to effectively treat mental health disorders that stem from stress (Kirsh et al., 2019). Reynolds (2009) found that EAT is commonly used in combination with healthcare treatments to help with relationship-building, establishing boundaries, communication, and self-esteem-building, allowing those who have felt betrayed by human encounters with people they thought they could trust, to become reoriented to how healthy relationships work. Harvey et al. (2020) suggested that during EAT, the horses should be a part of the team working with the clients to build coping skills through relationship bonding that naturally occurs between horses and humans. Working with horses can produce a calm feeling in clients reducing emotional absence, anger, and aggressiveness, therefore suggesting the ability to provide a safe environment (Harvey et al. 2020). A similar study revealed results of individuals reaching autonomic regulation through horseback riding, meaning they showed a decreased heart rate and blood

pressure allowing for a relaxed mood after completing a session (Palsdottir et al., 2020). Both of these physiological outcomes are important for initiating and sustaining stress reduction and could be useful for caregivers experiencing compassion fatigue from chronic stress.

Washington University in St. Louis (2021) suggested that more research is necessary to prove the effectiveness of equine-based activities before becoming an accepted occupational therapy intervention reimbursed by insurance. The study argued that there was a positive impact of therapeutic equine interactions from an occupational therapy expert's perspective. Experts in the field have advocated for occupational therapy to be able to use this type of therapeutic intervention as an acceptable treatment plan because of the impact occupational therapy in the equine environment has had on individuals with cognitive impairments and mental health disorders (Washington University in St. Louis 2021). In addition to AAT, occupation-based therapeutic interventions have been repeatedly proven in research to be effective against caregiver stress leading to compassion fatigue. Laverdure and Beisber (2021) concluded that occupational engagement through therapeutic intervention provides an opportunity for the development of performance skills including motor, processing, and social skills. This could positively correlate with EAT interventions because Palsdottir et al. (2020) explained that in EAT, the valued occupation is one's ability to take care of horses and tolerate weekly participation in equine-based activities.

Palsdottir et al. (2020) also looked closely at participant health, social function/learning, and participation in daily activities through an AAT lens by introducing valuable occupational engagement in mounted and unmounted equine activities. Results of the study determined that participants engaging in EAT perceived themselves to be performing a meaningful occupation when interacting with an equine, inevitably finding more motivation to engage in other daily occupations (Palsdottir et al., 2020). EAT was qualified as an occupation-based and activity-based intervention supported in AAT, as the activities engaged in encourage participation in meaningful activity and require physical work to participate. Research has also found that individuals who participated in EAT rated themselves at a higher level of overall health and well-being due to this occupation-based intervention. Caregivers need to be

reintroduced to the concept of self-care through familiar engagement in activities to generalize what was learned during therapy into other environments. Occupational therapy in combination with AAT is essential to caregivers with compassion fatigue because it offers the opportunity to practice caring for another living being while simultaneously practicing self-care.

Personal Vs. Professional Caregiver Roles

Many of the clients attending occupational therapy or EAT struggle with significant mental health disorders, which is why daily supervision and care are required and typically provided by family and/or close friends. This is the role of a personal caregiver. Personal caregivers provide ongoing care to individuals such as family members, friends, or neighbors who reside close to them and are available to help the individual in need. Even though caregivers feel responsible for their family and friends, being a caregiver sometimes means caring for an individual all day, every day, and typically for multiple days at a time. Compassion fatigue sets in when a caregiver's responsibilities begin to impact personal time and ability to care for oneself (Kelly et al., 2017). While personal caregivers may be close to patients, it does not eliminate their own needs for self-care and wellness. The symptoms of compassion fatigue can even interfere with caregivers' activities of daily living (ADLs) by affecting their ability to practice daily self-care strategies.

Compassion fatigue is easy to identify within the professional workplace through various measurable behaviors such as increased absenteeism, high turnover rates, and tension between workers (Kelly et al., 2017). The cause is typically a combination of chronic stress and prolonged exposure to - and/or continuous responsibility for - someone cared for who is suffering (Liao et al., 2022). While compassion fatigue amongst healthcare professionals working in a clinical setting is well documented, compassion fatigue in family caregivers is not as commonly addressed. Very little research is available to advise caregivers on how to care for themselves while caring for someone else. While there is a lack of research regarding compassion fatigue in personal environments, the studies summarized throughout this chapter prove that equine-based services are beneficial as a clinical treatment in OT.

Equine Impact on Caregiver Mental Health

Experiencing trauma from stressful situations can cause individuals to struggle with a variety of mental health problems that interfere with meaningful daily activities (Tsantefski et al., 2017). Cooper et al. (2015) discussed using horses in treatment to improve the quality of life in clients who have experienced trauma, indicating that it was typical for social participation, environmental factors, and ADLs to be positively impacted by EAS and for participants to experience an increase in occupational performance. It was determined by Scopa et al. (2019) that while the horse is not a caregiver, horses can recognize human emotions and create a trusting bond. Some commonly found results in the literature discussed that horses are sophisticated and have cognitive skills that can recognize human behavioral cues. According to Harvey et al. (2020), working with horses can produce a calm feeling in clients reducing anger, lack of emotions, and aggressiveness, suggesting the importance of EAS in a safe environment that encourages positive behaviors. Scopa et al. (2019) addressed the importance of the client being in an appropriate mental state to positively interact with a horse. This would benefit compassion fatigue in caregivers by offering an opportunity to build a relationship with another living being while also encouraging participation in self-care through bonding activities performed with the horses.

How This Study or Project Will Fill the Gap in Occupational Therapy

Reviewed literature supports the idea that EAS used in combination with OT can increase one's perception of health and wellness/quality of life through active participation in occupations. Palsdottir et al. (2020) indicated how engagement in an equine activity can be generalized to engagement in activities of daily living (ADLs). According to the American Hippotherapy Association, Inc. (2015), all therapists involved in equine intervention sessions must know the details of a session such as what equipment is needed, the fit between the horse and the equipment, guidelines regarding safety precautions, and the ability to match a horse with the client being treated. It is assumed that research foundations would support grant funding for an occupational therapy-based research project incorporating the use of EAS as a mental health occupational therapy intervention if the occupational therapy practitioner was also a certified EAS provider (HABRI, 2022).

The literature in this chapter has been collected and reviewed as part of a grant application process completed by the author in hopes of getting funded to perform research on occupational therapy being used in the equine environment. The idea behind applying for these grants is to advocate for caregiver health and quality of life by using equine-assisted interventions. The population included in the proposed research involves caregivers with poor mental health who experience compassion fatigue due to past trauma that interferes with their ability to participate in daily occupations. The hope is that a research foundation supporting funding towards animal-based or mental health-based research will accept the application and fund a pilot study that will provide evidence behind occupational therapy practitioners using EAS to improve occupational engagement and self-care of caregivers, advancing occupational therapy in the mental health field and research. With so much literature supporting the benefits of EAS combined with occupational therapy, the next step would be to identify potential funding opportunities for completing a research study. The following chapters will describe the process used to find appropriate grants that would be willing to fund such a project.

Chapter III

Methods

With prior interest in equine-assisted services (EAS) and Level II fieldwork being completed within the equine environment, the author saw an opportunity to advance research for occupational therapy in mental health practices. Originally, children with mental health and cognitive disorders were considered the population most in need of occupational therapy in the equine environment. Through further observation during fieldwork and a review of literature, it was determined that these children were already proven to benefit from EAS in research and that is why many of the clients in the pediatric population were being referred to this type of therapy. The author decided that an alternative way to improve mental health in the occupational therapy field was to support a population that was not as commonly served and offer a program introducing occupational therapy in the equine environment that addresses self-care for caregivers by confronting their feelings of burnout and fatigue and discussing the important concept of self-care.

While completing a literature review, the author found many articles addressing caregiver burden and burnout in the healthcare system, along with multiple supportive interventions available to improve working environments and reduce stress. Although caregiver burden was widely addressed in the healthcare environment, there was a significant lack of research available concerning the role of informal caregivers in taking care of family members and friends. There was also a gap in literature regarding available resources for this type of caregiver to take care of themselves outside of the extra work they already put in. This rendered a concern and encouraged a search for ways to improve caregiver quality of life and compassion fatigue in the caregiver population. Because the author found proof of occupational therapy in the equine environment helping children with occupational engagement in daily routines, it was hypothesized that a similar benefit would come from addressing the compassion fatigue of patients' caregivers.

By applying for grants supporting research funding for studies of individuals with preventable mental health conditions, the author advocated for evidence-based practice in the occupational therapy

field. After seeing a need for research incorporating AAT as an intervention in the occupational therapy field, the author looked at places in the Casper community that offered such services. Finding a newly established occupational therapy clinic utilizing EAS as a main treatment approach, it was determined that the occupational therapy staff would benefit from grant funding to broaden the population of clients. While the author was not part of the staff and would not be participating in the research beyond applying for the grants, the facility owner and main occupational therapist agreed to carry out the project if funding was approved. By attempting a search for government grants, many grant opportunities supporting mental health were discovered but required the researcher to be part of a non-profit organization. It was determined that the Horses and Humans Research Foundation (HHRF) and the Human Animal Bond Research Institute (HABRI) would be the best organizations to submit applications to because their funding was given to individuals and/or organizations studying the human-horse relationship by implementing interventions supporting underserved populations (HHRF, 2022; HABRI, 2022).

Using the Person-Environment-Occupational (PEO) model developed by Law et al. (1996) and Cole's 7 Steps approach to group therapy created by Cole (2018), the author submitted a research proposal explaining the process of how EAS as an occupational therapy intervention would be utilized to improve self-care in caregivers experiencing compassion fatigue (Law et al., 1996; Cole, 2018). The PEO model is a client-centered approach that measures the transaction between an individual's personal, environmental, and occupational factors so that they create an intervention plan that best fits the individual (Law et al., 1996; Andelin et al., 2021). PEO considers each component to create an optimal opportunity for occupational performance in the task that the client has been asked to do, whether that means switching up the environment or changing the activity to increase the chance of participation and success (Law et al., 1996). Andelin et al. (2021) reports that when all three factors are equally adequate, the client's occupational performance improves, ultimately improving independent participation in daily activities and tasks. PEO in combination with Cole's 7 Steps, a professional, holistic, and client-centered approach to group leadership, will allow for collaboration between a practitioner and client to determine a

best-fit environment for adequate occupational engagement from each participant (Cole, 2018; Law et al., 1996).

The author collaborated with a certified occupational therapist and equine specialist to develop and explain the need for intervention in the caregiver population, plans for carrying out the intervention sessions, and the budget required to implement such a program. A detailed literature review of occupational therapy and mental health practices in the equine environment was completed using the University of North Dakota's School of Medicine and Health Sciences (UND SMHS) advanced research database to find evidence behind the correlation between compassion fatigue of caregivers and mental health concerns. Keywords and phrases were used to find peer-reviewed articles providing evidence behind the need for a research project benefitting caregivers with compassion fatigue. Inclusion and exclusion criteria were determined based on the diagnoses of participants in the study.

During the review for evidence, key phrases such as 'occupational therapy', 'occupational therapy settings', 'mental health disorders', 'compassion fatigue', 'caregiver burden', and 'personal caregivers' were used as inclusion criteria. Keywords and phrases regarding the best occupation-based model to use for writing this type of research grant included 'occupational therapy models', 'occupational therapy settings', 'theoretical frameworks', 'person, environment, occupation', 'government guidelines for hippotherapy', 'animal-assisted therapy', and 'equine-assisted therapy and interventions'. The literature review included criteria such as mental health impacts of EAS, the role of occupational therapy in mental health, theoretical frameworks in occupational therapy, EAT interventions, mental health interventions, caregiver burden, and compassion fatigue of personal caregivers.

Based on the guidelines reviewed in the literature, grant proposals were written for this research project to improve the occupational therapy field by incorporating equine-assisted services (EAS) within occupational therapy sessions for caregivers experiencing compassion fatigue. If the grant proposals are approved, certified equine instructors and licensed occupational therapists trained to provide equine-assisted services will carry out the research project. If funding is approved by either the HHRF or HABRI, the instructors carrying out the research will go through an approval process with the

International Review Board (IRB) and the Institutional Animal Care and Use Committee (IACUC) to ensure the ethical treatment of all participants, both human and animal. This process will consist of applying for ethical approval by the IRB and IACUC and will require researchers to partake in ethical training to ensure appropriate treatment of all study subjects.

Chapter IV

Product

The final product consisted of two full grant applications including research and implementation plans for an occupational therapy-based program incorporating EAS interventions to encourage self-care for caregivers experiencing mental health disorders due to compassion fatigue. The two grants were submitted to the HHRF and HABRI. These organizations were chosen because they both supported innovative research ideas incorporating animals into therapy (HHRF, 2022; HABRI, 2022). Each foundation had similar requirements for what should be included in the submitted application, but the detailed guidelines, such as maximum page numbers, appropriate fonts, and appendices, varied between them.

The HHRF required applicants to include all of the following sections in the application with a maximum count of eight pages total (excluding any appendices): a cover page introducing the title of the project; an introduction of the research idea; background and review of literature; objectives supporting the research plan; materials and methods used during project planning; a full experimental design; a timeline for completing the study; ethical approvals for ensuring the safety of both humans and animals; expected impacts of the completed research project; a proposed budget for supplies, equipment, and services; and any literature cited throughout the application (HHRF, 2022). Overall, the final product was a total of 10 full pages, including all appendices (See Appendix A for the full proposal).

HABRI required applicants to provide similar sections with various maximum page counts. The proposal guidelines for HABRI included the following: a title and abstract page; a glossary page for abbreviations and acronyms; a five-page study proposal (explaining the literature review, experimental design, research methods, data analysis plan, objectives, and timeline); a justification for using humans and animals in the project; facilities and equipment that will be needed to complete the project; a two-page budget and justification; biographical data of the researcher(s); and two pages worth of references (HABRI, 2022). In addition to these directions, HABRI provided an itemized form for what would be supported by the budget and a participant form calculating the randomization of the participants (HABRI,

2022). Overall, the final submitted product consisted of 15 full pages (See Appendix B for the full proposal).

It is important to note that the grant writing process was guided through a PEO lens. This model was selected because it has a broad classification and has been commonly used in other occupational therapy research when discussing similar diagnoses. Using PEO in occupational therapy practice includes evaluating the client's response when faced with therapeutic stimuli and determining how that response can impact the surrounding environment, or how the environment can impact such a response, ultimately determining overall occupational performance and engagement (Andelin et al., 2021). It is expected that this research proposal will assess participants' personal factors, such as their social and cognitive abilities when processing input from an equine environment while engaging in self-care interventions, to determine the impact on occupational performance and create a generalizable, best-fit environment for the individual (Ashby et al., 2017).

Short- and long-term impacts are expected to be made once funding is approved. The goal of the project is to improve compassion fatigue in the Casper community by expanding equine-assisted services through an occupational therapy lens, increasing the number of healthy caregivers in the community, and advancing the field of occupational therapy. The rural community of Casper, WY needs this project due to the higher risk of compassion fatigue from the lack of trust that caregivers have shown towards resources offered to provide some relief from the burden.

The purpose of applying for both of these grants at the same time was to increase the chances of the proposed research project being funded and completed. According to the guidelines, applicants were required to wait at least two to four months before hearing back about whether their project will be funded or not. One month after retrieval of the application, the HHRF notified the author that the project would not be funded by their foundation due to a lack of program details available in the proposal. With that, the author is still waiting for HABRI to provide their response and is hopeful that funding can still be provided to implement the research project.

Chapter V

Summary

Personal caregivers experiencing compassion fatigue are commonly overwhelmed with responsibility and are still an underserved population throughout the country. Caregivers of individuals with mental health and cognitive disorders are at increased risk of compassion fatigue due to the emotional demand of their job, leading to a higher percentage of mental health conditions in the caregiver population. Research has shown promising data that EAS can be combined with occupational therapy to positively impact individuals experiencing mental health problems, and further research examining occupational therapy in the equine environment would provide caregivers with evidence-based strategies to recognize their own need for self-care and wellness.

A review of literature was completed to determine the level of impact EAS could have on the caregiver population through an occupational therapy lens. The author also researched common guidelines for grant writing and considered any literature about receiving grant funding to ensure competency of the final product. Both grant applications were edited and submitted before the end of February 2023, and acknowledgment of each application was confirmed by both the HHRF and HABRI within a few days.

Limitations

While comments from the HHRF were provided on how to improve the application and resubmit for future funding opportunities, rejection of the proposed research project introduced a limitation of research because materials, salaries, and services cannot be provided without the backing of a grant, meaning that the research project will not begin until adequate funding is provided. The HHRF recommended that the application include more explanation of the intervention and less review of the literature, to ensure the success of the program with the resources available. Unfortunately, there continues to be a gap in the literature when addressing compassion fatigue of informal caregivers. The lack of evidence supporting a need in this population is what likely lead to the HHRF rejecting the proposal, which is why advocacy is so important for research in the occupational therapy profession.

Recommendations

It is recommended that future grant proposals introducing similar concepts for similar populations should incorporate current statistics and first-hand accounts of caregivers throughout the Casper community. As caregivers continue to be needed in all types of settings, recorded literature is what shows that their own self-care continues to be a secondary priority in their minds, which has been proven to lead to caregiver burnout and compassion fatigue. It is important for researchers to prove that EAS can be beneficial in the occupational therapy field for increasing caregiver satisfaction so that programs can be supported for funding and implemented in other communities.

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