

Original Article

Manuscript: effects of bereavement on graduate students: a qualitative study

Manuscrito: efeitos do luto em pós-graduandos: um estudo qualitativo

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Abstract

Introduction: Bereavement can be characterized by the loss, through death, of a significant person. Individuals who experience bereavement can experience changes in their roles, habits, and routines. In addition, individuals can experience changes in their occupations, such as social and leisure participation and in their activities of daily living. **Objective:** This research aimed to identify graduate students' needs and problem areas following the loss of a loved one to better inform the role of occupational therapy in assisting students during the bereavement process. **Method:** This study utilized a mixed-methods approach. The survey developed and distributed to participants contained qualitative and quantitative data to understand better the relationship between grief, occupational participation, and academic performance. **Results:** This study reviewed the students' needs and problem areas after losing a loved one and determined the areas that impact students' daily living. **Conclusion:** This study demonstrated that losing a loved one affects students' academic performance and ability to perform daily activities.

Keywords: Grief, Students, Underachievement, Activities of Daily Living.

Resumo

Introdução: O luto pode ser caracterizado pela perda, por morte de uma pessoa significativa. Indivíduos que vivenciam o luto podem experimentar mudanças em seus papéis, hábitos e rotinas. Além disso, as pessoas podem experimentar mudanças em suas ocupações, tais como na participação social, no lazer e nas atividades da vida diária. **Objetivo:** Identificar as necessidades e áreas problemáticas dos alunos de pós-graduação após a perda de um ente querido para melhor informar o papel da terapia ocupacional na assistência aos alunos durante o processo de luto. **Método:** Este estudo utilizou uma abordagem de métodos mistos, com dados qualitativos e quantitativos, para melhor entender a relação entre luto, a participação ocupacional e o desempenho acadêmico. **Resultados:** as necessidades dos alunos e as áreas problemáticas após a perda de um ente querido foram revisadas e determinadas as áreas que afetam a vida diária dos alunos.

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Conclusão: Este estudo demonstrou que a perda de um ente querido afeta o desempenho acadêmico e a capacidade dos alunos em desempenhar as suas atividades diárias.

Palavras-chave: Luto, Estudantes, Baixo Rendimento Escolar, Atividades Cotidianas.

Introduction

The death of a loved one is an experience that all individuals encounter throughout their lifetime, which can cause them to experience grief. It is difficult to provide the exact prevalence of grief in the United States. However, approximately 2.5 million individuals in the U.S. die annually, leaving behind many individuals to grieve over their loss (Krull, 2020). With the number of deaths that occur in any given year, the number of individuals who suffer may be as high or even higher due to an immeasurable number of friends and family affected by the loss of the deceased individuals. According to Mash et al (2014) bereavement process is different for every person and can cause an individual to experience various symptoms related to grief.

Current literature on the effects of loss indicates that bereaved individuals can experience changes in their physical, emotional, spiritual, and mental health, as well as changes in their daily occupations, roles, routines, and habits (Mash et al., 2014; Hoppes & Segal, 2010; Stroebe et al., 2007). For example, “[...] sleep disturbance is common in bereaved individuals and may lead to poor physical and mental health outcomes” (Monk et al., 2008, p. 5). In a study on recently widowed individuals, more than half of the participants reported experiencing sleep disturbances and difficulties concentrating on everyday tasks following the demise of their loved one (Utz et al., 2012). Another study revealed that individuals might develop a new physical or mental health illness after losing their loved one (Ott, 2003). Evidence also shows an increased prevalence of depression and anxiety among grieving young adults and the use of negative coping strategies, such as substance abuse (Mash et al., 2014; Kaplow et al., 2010). Mash et al. (2014) identifies young adulthood as ages 18 to 29. This project will describe young adulthood as 18 to 35 (Hayslip Junior et al., 2015). Furthermore, individuals can experience changes in their work or academic performance following their loss due to reports of decreased motivation and concentration levels (Jackson, 2016; Walker et al., 2012). A review of the currently available literature identified only one article exploring the impact of grief on graduate students, but there is literature available exploring the effects of grief on undergraduate students (Balk, 2001; Balk, 2008; Balk et al., 2010; Cupit et al., 2016; Dalton & Hammen, 2018; Hardison et al., 2005; Servaty-Seib & Hamilton, 2006; Varga, 2016; Walker et al., 2012).

Following the death of a significant individual, it has been shown that undergraduate students may experience changes in their academic performance. One study reported that the degree of closeness with the deceased was a key predictor of changes in academic performance and mental health (Cupit et al., 2016). Students are at a higher risk of experiencing decreased academic performance, as shown by reduced grade point averages around the time of their loss (Servaty-Seib & Hamilton, 2006). Changes in undergraduate students' study habits, test performance, the time needed for tests/assignments, and motivation and concentration levels were also reported (Walker et al., 2012). Varga (2016) conducted a study on 1,575 graduate students, wherein 26% of the participants experienced

the loss of a significant individual within 24 months of participating. These students reported experiencing “emotional, physical, cognitive, behavioral, and interpersonal changes,” which can impact their occupational and academic performance (Varga, 2016, p. 180).

Occupational therapy could be beneficial for bereaved individuals because occupational therapists (OTs) are knowledgeable about engaging clients in the participation of activities that are commonly impacted following the loss of a loved one. For example, the decline in academic or work performance and impaired sleep quality (Jackson, 2016; Utz et al., 2012; Walker et al., 2012). Occupational Therapists can also provide services tailored toward the promotion of health and wellness, which is impacted following a significant loss (American Occupational Therapy Association, 2020; Kaplow et al., 2010; Utz et al., 2012). However, a minimal amount of published literature directly relates to occupational therapy's role during the bereavement process in all life stages, specifically in young and middle-aged adults. Dahdah & Joaquim (2018) conducted a meta-synthesis to identify how OTs recognize and address the bereavement process. However, only eight qualitative articles were included in the meta-synthesis, of which only a few were directly linked to the role of occupational therapy in assisting bereaved individuals. The AOTA has published a fact sheet on grief and loss and occupational therapy's role in bereavement. Still, it is specifically tailored for OTs who work with children in kindergarten through the 12th-grade public school system (American Occupational Therapy Association, 2012). Despite the lack of evidence directly discussing bereavement and occupational therapy, there is published literature discussing occupational therapy's role in assisting with the common areas that can be impacted during loss, such as decreased sleep quality (Ho & Siu, 2018).

According to the American Occupational Therapy Association (2017a, 2017b), approximately 2% of OTs identify as working in the mental health setting. However, occupational therapy practitioners utilize their background in psychology to “address the mental health needs of all clients in all practice settings” to promote mental well-being and assist in coping with life changes (American Occupational Therapy Association, 2016, p. 4). Occupational Therapists can play a significant role in helping graduate students transition through this challenging phase to improve their occupational well-being and academic performance. Occupational therapists can be effective by using their ability to assist in common problems faced by individuals during bereavements, such as decreased mental health, impaired sleep quality, and high levels of stress (American Occupational Therapy Association, 2013a, 2013b; Ho & Siu, 2018).

The theoretical basis of this project is supported by the Model of Human Occupation (MOHO). This model emphasizes the dynamic relationship between external and internal factors that impact an individual's occupational performance and participation, which will develop an understanding of how grief affects graduate-level students. The internal factors influencing an individual's occupational performance are volition, habituation, and performance capacity (see Definition of Terms). The external factor is the environment, including physical and social elements (Cole & Tufano, 2019, p. 127). According to MOHO, humans seek balance in their lives for self-preservation. However, if even one of the variables MOHO focuses on is disrupted, it can lead to disorder within an individual. Likewise, if one of the components is restored, an individual can experience a sense of satisfaction and order (Cole & Tufano, 2019). Individuals who experience the loss of a loved one experience changes in their social environment, roles, routines, and habits (Hoppes & Segal, 2010). These changes to their environment and habituation can disrupt the other MOHO-related factors.

Another supporting theory is the Person-Environment-Occupation-Performance (PEOP) model. This model consists of four variables that influence an individual's performance/participation in daily activities and well-being: "occupations, occupational performance, person factors, and environmental factors" (Cole & Tufano, 2019, p. 127). The PEOP model assumes that the person, environment, and occupational performance interact and influence each other in determining an individual's participation and well-being. This model also believes that "the environment is made up of external factors and characteristics that influence occupational performance and are equal to person factors ... and may support or limit performance, participation, and well-being" (Cole & Tufano, 2019, p. 130). Changes to an individual's social environment and social support are external factors that can impede occupational performance/participation and well-being. This concept forms the basis of this project, as the death of a significant individual can impact an individual in various ways, which can hinder occupational performance/participation.

Statement of Problem

Individuals who experience grief through the loss of a significant person can experience changes in their roles, habits, and routines. In addition, individuals can experience changes in their occupations, such as social and leisure participation, and their activities of daily living (ADLs) (Mash et al., 2014; Hoppes & Segal, 2010). Young adults who attend undergraduate school and have experienced a drastic loss have reported changes in their mental health and impact on their academic performance (Cupit et al., 2016; Lancel et al., 2020; Mash et al., 2014). However, the literature appears to omit the impact of grief on occupational participation and academic performance among graduate-level students following a thorough literature review. It is crucial to gain a deeper understanding of the occupational and educational changes this population encountered following a loss to identify their needs and improve their well-being.

This research aims to increase awareness and knowledge of the impact of losing a loved one on occupational participation and academic performance by providing information on common problem areas that bereaved graduate students encounter. By gaining this knowledge, OTs can identify different ways to assist students and increase their overall well-being following the life event of losing a significant individual (e.g., wellness program, education on positive coping strategies). The effects of grief on undergraduate students and their academic performance have been investigated (Balk, 2008; Balk et al., 2010; Cox et al., 2015; Cupit et al., 2016; Servaty-Seib & Hamilton, 2006; Walker et al., 2012). However, the impact of grief on occupational performance, participation, and graduate-level students' academic performance is under-researched, as evidenced by the identification of only one article discussing the effects of grief on graduate students (Varga, 2016). With this project, attention can be brought to this area to increase bereaved graduate students' well-being and academic performance through occupational therapy interventions.

Research question

The research question guiding this study is as follows: Are occupational participation and academic performance impacted by graduate-level students following the loss of a loved one?

Methods

Design

This study was designed to evaluate young adults attending graduate school, ages 18-35, and their experiences with how bereavement impacted their ability to participate in occupations and academia. This study utilized a mixed-methods approach as the survey that was developed and distributed to participants contained questions seeking qualitative and quantitative data to understand better the relationship between grief and its impact on occupational participation and academic performance. This approach was beneficial for this study as it incorporates different perspectives, allowing a complete understanding of the assessed variables. The specific mixed-methods strategy, called a convergent mixed-methods design, is described as collecting both qualitative and quantitative data in a single phase (Creswell & Creswell, 2018).

Sample

This study consisted of USAHS students who experienced a significant loss while enrolled in their graduate-level program. Twenty-seven participants (25 females & 2 males) completed the study.

This project's inclusion criteria included participants who experienced a bereavement process while actively enrolled at USAHS or within six months of starting the program. Students were informed that participation in the study was entirely voluntary, and the survey was anonymous to protect personal information.

Recruitment procedures

Participants of this research study were recruited utilizing convenience sampling, which is described as the recruitment of individuals based on their convenience and availability (Creswell & Creswell, 2018). Due to the time constraint of this project, which was only 14 weeks, this sampling method was the most appropriate. To meet the time constraint, the primary investigator only recruited faculty and graduate students from USAHS. Participants were recruited utilizing email outreach. The primary investigator sent an email to USAHS faculty and students containing the project's purpose and significance, the inclusion criteria, the website link, the survey, and the principal and primary investigator's contact information for any questions or concerns. The school's administration distributed the email to USAHS faculty and students. The primary investigator also developed a flyer to gain participants, displayed on the USAHS Student Hub private Facebook group page.

Ethics

After receiving exempt approval from the USAHS institutional review board (IRB), the recruitment of participants began. The informed consent document was displayed at the beginning of the survey for the participants to review. The participants also provided consent to participate in the study. Participants agreed to participate in the research by answering "yes" to the consent question, which allowed them to proceed with the survey. However, if the participant answered "no," they were directed to the end of the study.

Data source and collection

This project consisted of collecting primary data sources, which is information gathered and analyzed directly by a researcher, such as via a survey (University of Minnesota, 2023). Two surveys were developed and distributed through email using the online software SurveyMonkey.

Instrumentation

The primary investigator created the data collection tool with assistance from the principal investigator. The data tool incorporated specific questions for participants to respond to their perceived occupational participation in particular categories of occupations during a bereavement process, including ADLs, instrumental activities of daily living (IADLs), rest and sleep, education, leisure, and social participation (American Occupational Therapy Association, 2020).

The tool created by the author also incorporated questions to understand the students' perceived academic performance changes and if they utilized any support services following their loss. The instrument is composed of 28 statements designed to measure effective and ineffective coping strategies during a stressful life event, such as bereavement. The participants rated each comment on a 4-item Likert scale ranging from 1 = "I haven't been doing this at all" to 4 = "I've been doing this a lot." The instrument consists of 14 different coping reactions (2 items per reaction): self-distraction, active coping, denial, substance use, emotional support, instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame (Carver, 1997). These coping reactions were further categorized into either avoidant coping or approach coping. However, humor and faith do not fall into either category (Eisenberg et al., 2012).

For this project, the authors developed a survey consisting of open-ended questions that allowed participants to discuss their unique experiences with grief. In addition, the Brief Coping Orientation to Problems Experienced (COPE) inventory instrument was incorporated to gain numerical data to measure the participants' use of effective and ineffective coping strategies after their loss.

The needs assessment survey circulated among USAHS faculty and phone interview consisted of questions to gain information on faculty perspectives on how grief impacts students' ability to participate in academics and the services available for students successfully. The student survey contained questions to achieve qualitative and quantitative insights into how the participants' loss(es) has impacted their occupational participation, academic performance, and well-being (Appendix A).

Data analysis

The collected data was analyzed following the convergent study analysis design, which occurs in three phases (Creswell & Creswell, 2018). During the first phase, qualitative data were analyzed by coding the survey responses to identify common themes among participants. The next step involved analyzing the quantitative data to determine the results. The third phase combined the two data sets to draw inferences if the information gathered supported or contradicted each other, which was completed through a side-by-side comparison approach (Creswell & Creswell, 2018). The Dedoose software and SurveyMonkey's analysis tool were

utilized to assist in data analysis of the needs assessment and the student survey. The results gathered from data analysis are described in the subsequent sections.

Results

Student survey results

Demographic overview

A total of twenty-seven (27) occupational therapy graduate students participated in the research study: 25 females (93%) and two males (7%). The majority of participants, 59%, were between the ages of 25-34 (n=16), 37% were between 18-24 (n=10), and 4% were between 35-44 (n=1). In addition, 48% of participants reported that they lost a grandparent (n=13), 15% lost a parent (n=4), 11% lost a friend (n=3), 11% lost multiple family members (n=3), 11% lost an uncle or aunt, and 4% lost a significant other (n=1). The participants also reported losing their loved ones at various points in the program. However, most participants (n=22) reported losing their loved ones within their first year at USAHS. Two participants reported losing their loved one within six months of starting the program, and one reported multiple times of loss.

Occupational participation

Participants were asked to discuss any changes they experienced in their occupational participation following the loss of their loved one(s). Several occupations among bereaved graduate students were commonly impacted, including rest, sleep, and social and educational participation. Some participants reported either a loss of motivation or an increased drive to complete their daily occupations. Some individuals reported no changes in their ability to participate in their daily occupations and routines. Over 60% of participants reported a difference in the following occupations following their loss(es). Student survey results posted in Table 1. Study participants will be referred to as Participants 1-27 when their responses are discussed to maintain confidentiality.

Rest and Sleep. Twenty-four participants reported changes in their sleeping and resting habits following losing their loved one(s). Seventeen participants reported difficulty falling asleep at night and sleeping less overall. Participant 13 stated that they had insomnia for two months after their loss. The following are additional quotes from study participants:

Yes, it was difficult for me to sleep. I missed my loved ones most at night. I felt a lot of guilt for not being able to attend my grandfather's funeral. Additionally, I craved my family's affection during the grieving process. I felt alone in a new city (Participant 9).

Within the first month, I relived my mom's death and thought about her being gone every time I laid down and closed my eyes. It felt more difficulty falling asleep, and I felt sad lying in bed (Participant 24).

Three individuals reported sleeping more overall. Four participants reported sleeping more during the day but having difficulty falling asleep at night. Participant 2 stated:

I was lazier and slept much more during the day but couldn't sleep much at night (Participant 2).

Social Participation. Seventeen participants reported changes in their social participation levels following their loss(es). Eleven individuals said that they experienced a decrease in their social participation. Participant 19 stated:

I isolated myself from my friends at times. Most of my social participation occurred with my family. I was angry at a lot of people (Participant 19).

Participant 12 & 20 reported:

I was much more isolated and had little interest in social participation (Participant 12).

Yes. I avoided social engagement with peers in the program and stayed home and away from other students. I felt this was an exciting time for my peers, and I did not want to burden them with the worst time of my life. I felt very misunderstood and isolated myself as a result (Participant 20).

Three of the seventeen participants reported an increase in their social participation levels. Participant 6 stated:

I was more inclined to hang out with others since I didn't want to be alone (Participant 6).

Participant 13 reported that they increased their social participation to distract themselves from the reality of their situation. One individual reported a change in the quality of their social interactions as they were more emotional around their peers and professors. In addition, two participants reported that they initially isolated themselves but then increased their social participation.

At first, I did not want to spend as much time with friends. But as time went on, I wanted to spend more time because I don't like being alone, and I wanted to be able to talk about my mom a lot (Participant 24).

The first couple of days, I just wanted to be alone, but my friends continued to show support by bringing me food/snacks or getting me out of the house, even if it was for a drive or to go to the grocery store (Participant 2).

Education. Twenty-four individuals reported changes in their ability to engage in academics, including completing coursework and engaging in informal activities or courses at USAHS. Twenty study participants reported difficulty engaging in academics for various reasons, including feeling unmotivated, disorganized, or isolated.

Participation in educational activities became extremely stressful to me during this time. I had no desire to finish my classes and no strength to push myself. Plus, having difficulty concentrating and focusing made it that much harder to complete assignments and take exams (Participant 12).

Yes, I experienced a change with education participation. I was far less motivated. It was hard for me to focus during the grieving process. Especially since the grandparents who passed away were two of my biggest academic cheerleaders. We were very close (Participant 9).

In addition, three study participants reported they were more engaged in their education after their loss for various reasons. Participant 20 & 2 said:

I still participated in my schoolwork as best as possible as I was motivated by my mom's wishes to complete the program (Participant 20).

I became even more engaged in schoolwork to keep my mind off it. However, some of the topics discussed during the second term would cause me to step away from participation during class (Participant 2).

Additionally, one individual stated that they initially required extra time to complete their assignments but could still attend their classes and remain engaged.

Table 1. Survey results.

Occupations	Changes after the loss of a loved one(s)	
	# of participants that experienced - Change	# of participants that experienced - No Change
ADLs surveyed		
Rest & Sleep	24	3
Leisure	10	17
Social Participation	17	10
Education	24	3

Academic performance

Study participants were asked to discuss any changes they experienced to their academic performance and if they requested assistance from their professors following their loss(es), such as an extension on assignments or a later test date. Many participants reported changes to their study habits following their loss(es) but did not notice a significant difference in their grades.

Study Habits. Twenty-one participants reported changes in their study habits during their bereavement process. Many individuals reported decreased motivation and difficulties focusing, which caused them to experience changes in their ability to study for exams and complete assignments. One participant reported changing their study routine to visit family during bereavement. However, the majority of study participants reported decreased participation in their academics. Participant 18 wrote:

I lost the motivation to participate and had to find the self-discipline to get back into the right habits (Participant 18).

Participant 12 & 24 reported:

I could not concentrate or retain the information I was studying (Participant 12).

I was not completing school work ahead of time like I normally would. I was putting off doing things. I could not focus as well and had to re-watch the material. I needed to give myself more breaks instead of just knocking things out in one sitting (Participant 24).

Grade Changes. Despite the decreased motivation and difficulties in focusing reported by students, half of the study participants (n=13) did not notice any changes in their grades following their loss(es), and one participant reported performing better overall. Participant 12 & 9 said:

I did not experience a change because I communicated with my professors and was given extensions for some assignments (Participant 12).

There were no changes. I'm in awe of this, honestly. My grandfather passed the morning of my very second practical in graduate school. I was not myself, but adrenaline kicked in, I suppose, and I made it through that day – passing (Participant 9).

However, seven participants reported a minor change in their grades, such as a lower performance on one or a few exams. Participant 2 wrote:

There were no drastic changes, but I believe they were slightly lower than they would have been if the loss did not happen (Participant 2).

Participant 10 stated:

The week after I lost my aunt, I had two exams which were my worst exams of the trimester, but other than that, nothing major changed (Participant 10).

In addition, six individuals reported a significant change in their grades following their loss. Participant 13 said:

I fell behind and had to drop a class. I also went from an A/B student to a B/C student (Participant 13).

Assistance from Professors. Sixteen individuals reported reaching out to their professors to assist them during the bereavement process. Most study participants (n=13) said they asked their professors for extensions on assignments or later test dates, and three individuals reported only asking for an excused absence.

I tried to accomplish as much as possible without asking for an extension, but I couldn't complete everything on time. I asked for a 3-day extension on some quizzes and homework. Teachers were willing to offer me a few days (Participant 8).

I took two leaves of absence during my MOT program. Before starting the following term, I requested to take finals from a distance or later. I extended my course work to reduce my load, splitting 4th term into two terms (Participant 20).

However, 11 participants stated that they did not ask for assistance from their professors. Participant 2 wrote:

I don't like people to worry about me, so I did not request any extensions. I also wanted to keep myself occupied on school tasks to not think about the loss too much (Participant 2).

Participant 19 said:

I did not ask for any because I did not want that to be their first impression of me (Participant 19).

Well-being services

Student participants were asked whether or not they utilized USAHS well-being services following their loss(es). All 27 study participants reported that they did not use USAHS counseling services for various reasons. However, the main reason students reported not utilizing this service was not knowing it was available (n=12). The other reasons students reported not using USAHS services were: not being comfortable with counseling (n=1), did not think it would be beneficial (n=2), did not think it was necessary (n=5), not having time (n=2), having supportive peers (n=2), received counseling elsewhere (n=1), or did not think about it (n=1). Additionally, one participant reported trying to utilize this service but was unsuccessful in contacting the provider. One of the participants said that they did not believe this service would be beneficial. The participant stated:

You only get three sessions, and that is not enough. I don't think I would be able to accomplish what I need through counseling in just three sessions (Participant 24).

Additional finding

Student participants were asked if they would have been interested in participating in an occupational therapy-based program that focuses on assisting with occupational and academic participation following a significant loss. Twenty-four participants reported that they would have been interested in participating if such a program had been made available.

Losing a loved one is never easy, and everyone experiences and copes with death differently. I think the development and implementation of a program to assist with occupational and academic participation post-loss would help students feel more supported while in school - since family is often far away (Participant 4).

In addition, 15 students reported that they believe schools should provide more assistance to students to guide them during the bereavement process. Nine of these 15 participants said they wished faculty and staff were more sympathetic toward them.

Graduate school is hard without additional variables, but it is tough when dealing with grief and personal trauma. More grace and understanding for students could go a long way. Please don't assume that we aren't doing our best just because we fail a

practical test or even ask for help. More education on mental health is needed for staff in my opinion (Participant 9).

I believe that USAHS could be more lenient in their bereavement policies, as it is not easy to get extensions on assignments or excused absences after a death of a significant person, especially if that person is not immediate family. I was fortunate to be given excused absences and extensions due to my good reputation among professors, but not all professors agreed that I should have been given leniency (Participant 26).

Additionally, four study participants wish they had been aware of the counseling services available at USAHS. One participant stated that there need to be more opportunities available for bereaved students besides the current USAHS counseling services, such as providing them with available resources in the community, as many students are unfamiliar with the area. Additionally, one student reported that faculty and staff should check in on grieving students more often to ensure their well-being following their loss, as it can be challenging to ask for help.

Discussion

The primary purpose of this mixed-methods study was to determine if graduate-level students impact occupational participation and academic performance after losing a loved one. The results of this study show that experiencing the death of a loved one while attending graduate school can impact students' ability to participate in their daily occupations, specifically rest and sleep, social, and education participation.

These results are consistent with the existing literature regarding academic performance among bereaved students. The occupational responses following the loss of a loved one cannot be compared to the literature, as there is a lack of evidence discussing the effects of grief on occupational participation in undergraduate and graduate students. However, there is some evidence on how stress impacts college students' occupational participation, which will be compared to this study's results, as losing a loved one can be considered a stressful life event.

This is consistent with the literature, as evidence shows that bereaved students have reported significantly lower grades around the time of their loss (Servaty-Seib & Hamilton, 2006). In addition, the literature indicates that bereaved students can experience changes in their study habits, motivation, concentration levels, and test performance, which is consistent with this study's findings (Cupit et al., 2016; Walker et al., 2012). However, it is essential to note that this may be because 48% of study participants stated they asked their professors for assistance, such as taking exams later.

Minimal literature discusses how stress has impacted occupational therapy students' well-being and occupational balance after losing a loved one in undergraduate and graduate students. However, stress has been shown to affect occupational therapy students' ability to have occupational balance as well as affect students' familial and social relationships (Grab et al., 2021). Also, stress has impacted students' rest and sleep quality (Ickes et al., 2015). This is consistent with this study's results, as participants reported disruptions in their social participation (n=17) and rest and sleep (n=24).

Despite the study participants experiencing changes to their academic performance and occupational participation, 100% of students reported they did not utilize USAHS well-being services. This was due to various reasons, but the most common was the lack of

knowledge regarding available services among 44% of participants. In addition, 56% of study participants reported that more assistance must be provided to students during the bereavement process, including more knowledge of the current services available (15%) and more sympathy from faculty and staff (33%). Furthermore, most study participants (89%) reported that they would be interested in participating in a program tailored toward bereaved students to work on their occupational participation and academic performance.

Based on the results, it is evident that there needs to be increased awareness regarding the topic of grief and how to assist students during this challenging period. Additionally, the results suggest that additional resources must be available for bereaved students, such as an occupational therapy-based program to help with their daily activities and academic performance to maintain their well-being.

Strengths

As mentioned, there is a lack of evidence regarding the impact of grief on graduate-level students regarding their occupational participation and academic performance. A literature review identified one article discussing loss in graduate students. However, this article discusses the effects of grief and the services available to them (Varga, 2016). This research study is the first to examine the impact of grief on graduate students' occupational participation and academic performance. This study will shed some light on postgraduate students' adversities after losing a loved one. This study intends to utilize the findings to extend more resources to graduate students to help them transition through the bereavement period.

Limitations

Several limitations were identified throughout the conduction of this research study. Firstly, the needs assessment results are limited due to a low response rate to the request for faculty participation. This can restrict the generalizability of the results obtained, as it may not concretely portray faculty perspectives on the effects of grief on students. Due to the time constraint of this project, students and faculty were recruited only from USAHS campuses. This can affect the generalization of the results across the graduate student population. A study bias is that the survey asked occupational therapy students about occupations.

Additionally, due to COVID-19 online survey was determined to be the best option for gaining participants to maintain safety. However, the survey contained 49 open- and closed-ended questions, which may have caused survey fatigue. It is also important to note that due to Covid-19, participants who lost a loved one during the global pandemic may have experienced high occupational, social, and emotional impact due to the need for social isolation. Lastly, the lack of pre-existing research in this area may have created difficulty in developing the methods utilized.

Implications for Occupational Therapy

All the participants' occupations were impacted after losing a loved one, specifically rest and sleep, social participation, and education. Communication management and bathing/showering were also commonly affected following the loss. Additionally, study

participants reported changes to their academic performance following their loss(es), specifically to their study habits; almost half of the study participants either reported minor or significant modifications to their grades. OTs can help bereaved students in multiple ways to utilize positive coping strategies, manage stress, and develop routines, to ensure success in school. Further, providing bereaved students access to a formal program can provide a space for students to be around peers who are experiencing similar situations, which can support and increase social participation among students. Finally, OTs can use the information gathered from this study and potential future studies to advocate for the role of occupational therapy with bereaved graduate students.

Future Research

For future research, it would be insightful to replicate this study with graduate students and faculty at other institutions to compare the results among various colleges and universities and have a larger participant pool. It would also be beneficial to examine multiple demographic factors such as gender, ethnicity, and program of study to see if there is any link between these variables and the impact of grief on graduate students. In addition, conducting a survey focused on gaining the perspectives of faculty and staff at varying institutions can provide insights into their experiences with bereaved students and the differences in services available. Furthermore, additional research on the use of varying coping strategies and their impact on academic performance and occupational participation would be insightful to determine if there is any correlation between these variables. Finally, the effectiveness of occupational therapy-based programs in assisting bereaved students with the ability to participate in their daily activities and performance in school would be beneficial better to inform the role of occupational therapy with this population.

Conclusion

This study provides initial insights into the effects of losing a loved one on graduate students' occupational participation and academic performance. This study demonstrated that losing a loved one can impact students' academic performance and ability to perform daily activities in some capacity. Overall, there are similarities in the effects of stress on undergraduate students and occupational participation. Based on the results of this study, additional resources should be made available to graduate students at universities to assist bereaved students during a difficult period to ensure their well-being and maintain their occupational participation and academic performance as best as possible. Additional research on this topic is needed to understand how grief affects graduate students across varying colleges and universities and various programs of study to see if the results are similar to this study.

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Author's Contributions

Amanda Lee was responsible for initial draft of manuscript and created student survey questions. Lakeisa Boykin was responsible for research, revisions, and edits. All authors approved the final version of the text.

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Appendix A. Survey questions

Student survey questions

Thank you for your participation. Your input is important to us! This research study aims to gain knowledge regarding the impact of losing a loved one on graduate-level students. With this information, the role of occupational therapy can be better informed.

1. Do you consent to participate in this anonymous research study?
2. What is your age?
3. What is your sex?
4. Whom did you lose while attending USAHS?
5. How far into the program were you when you lost your loved one?

Questions 6-14 are intended to gather information regarding your personal loss's impact on your occupational participation. If you have experienced any changes (positive or negative) to the following categories, please explain your experience. If you did not experience any changes, please respond with "no changes."

6. After the death of your loved one, did you experience any changes (positive or negative) to the following: bathing/showering, personal hygiene and grooming, dressing, and sexual activity?

7. After the death of your loved one, did you experience any changes to feeding (setting up and bringing food from plate to mouth) or personal device care (using, cleaning, and maintaining care items)?

8. Following your loss, did you experience any changes to the following: care of others, care of pets, and child-rearing?

9. Following your loss, did you experience changes in communication management (sending and receiving information), driving and community mobility, and financial management?

10. Following your loss, did you experience any changes to the following: health management and maintenance, home management and maintenance, meal preparation, religious/spiritual participation, and shopping?

11. Did you experience any changes in your rest and sleep following the death of your loved one? (e.g., sleeping more, changes in sleep schedule, napping, not sleeping at all).

12. Following the death of your loved one, did you experience any changes in your leisure exploration or participation? (i.e., exploring new leisure activities or participating in already established activities).

13. After the death of your loved one, did you experience any changes in your social participation?

14. After the death of your loved one, did you experience any changes to your education participation, including completing coursework, extracurricular involvement, and engagement in informal activities/courses?

Questions 15-17 are intended to gather information regarding your academic performance following your loss. If you experienced any changes (positive or negative) to the following, please explain. If you did not experience any changes, please respond with "no."

15. After your loss, did you experience any changes in your study habits?

16. After your loss, did you notice a change in your grades?

17. After your loss, did you request assistance from your professors (e.g., extensions on assignments)?

Questions 18-21 are regarding services that can be utilized following the loss of a loved one.

18. Following your loss, did you utilize the USAHS counseling services?

19. Please explain why you answered “no” to the previous question.

20. Do you believe there is anything USAHS could have done to assist you following the loss of your loved one? Please explain.

21. If USAHS were to develop and offer a program to assist with occupational and academic participation post-loss, do you believe you would be interested?

Note: survey questions created by author Amanda Lee.