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THERAPY DOG PRESENCE IN AN UNDERGRADUATE NURSING PROGRAM

ABSTRACT: *Research supports the use of animal-assisted interactions and pet therapy in various settings. Undergraduate nursing students experience high levels of stress and anxiety which often continue as they become professional nurses. Entering the workforce equipped with positive coping strategies may help newly licensed nurses to combat stressors. This qualitative descriptive study examined the experiences of undergraduate nursing students with the presence of a therapy dog. Four major themes regarding the role of therapy dogs were identified: as a coping strategy, as a mood moderator, as a positive distraction, and for community building.*

KEYWORDS: *animal-assisted interactions, nursing, nursing education, pet therapy stress*



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Undergraduate nursing students experience high levels of stress and anxiety stemming from course loads, frequent high-stakes testing, and clinical requirements (Anderson, 2018). Maintaining well-being requires development of positive coping strategies (McDonald et al., 2016). The Christian educator is charged in 2 Corinthians 1:3-4 to comfort others with the comfort we ourselves receive from God; we may do so by caring for students and by modeling stress management strategies.

We examined students' experiences with pet therapy, specifically a therapy dog, in an undergraduate nursing program in a 4-year public university in the southeastern United States. The researchers aimed to identify and describe the meanings that participants constructed through their interactions with a therapy dog. The primary research question asked: How do undergraduate nursing students describe the experience of having a therapy pet in their class sessions?

BACKGROUND

A vocational calling to nursing education requires Christian nurse educators to provide care, guidance, and protection. This can be analogized as shepherding students through the frequently harsh landscape of high-stakes learning. Scripture describes how a shepherd provides pasture and cool water, rest, protection, and comfort (Psalm 23). We follow the model of Jesus, the Good Shepherd, who calls his own sheep by name... he goes on ahead of them and they follow him because they know his voice (John 10:1-4).

Limited biblical references to shepherd dogs appear in the Bible, though there is a long history of shepherds using dogs in the Middle East (Presberg, 2008). Herding dogs must be alert, gentle, intelligent, obedient, and protective, working as a teammate with the shepherd to ensure the flock's safety and

cohesiveness. The work of the certified therapy dog team in this case study is reflective of the relationship of shepherd and shepherd dog, in which human and canine work together to ensure the safety and well-being of the vulnerable flock (students).

An assistant professor of nursing desired to help students learn coping skills to manage the stress in nursing school as well as in future career stress. She chose the use of pet therapy dogs. Therapy dogs must be certified through various organizations that require testing, on-site observations, support, insurance, and registry. Teams consisting of the human handler and the dog are certified, not individual dogs. Best practices of dog/pet therapy are implemented by the certified teams. In this case study, a Golden-doodle named Minnie and her handler were the certified team.

LITERATURE REVIEW

Pet therapy is part of an overall category of therapy known as animal-assisted interactions (AAI), defined as

the use of animals for educational and/or therapeutic interventions with humans (Brelsford et al., 2017). Animal-assisted interactions have been used profitably in physical and emotional therapy, K-12 education, higher education, and healthcare settings, both acute and long-term. Dogs are most commonly used (Mandra et al., 2018). Beetz et al. (2012) reviewed 69 studies involving AAI. Positive correlations with effects of AAI included mood, physical stress-related parameters, and self-perceptions of anxiety. This review was not limited to specific fields or areas of practice; it included multiple areas such as therapy, education, and healthcare. Pet therapy emerged as a positive coping strategy in many areas under study.

The literature demonstrates that AAI is a strategy that can facilitate inclusion, social engagement, and a sense of community (Beetz et al., 2012; Bould et al., 2018; Maharaj, 2016); this inclusion and increased engagement were found between members of different communities as

well as between youth and those who could be considered their superiors.

Students in higher education, especially undergraduate students, have reported higher levels of perceived stress than the general population (Tollefson et al., 2018). The use of therapy dogs on college campuses has been shown to reduce anxiety levels during times of high stress (Barker et al., 2017; House et al., 2018; Jalongo & McDevitt, 2015; Jarolmen & Patel, 2018). For this reason, pet therapy is commonly used in higher education environments (Barker et al., 2017).

House et al. (2018) examined the use of therapy dogs in a college counseling center. The authors found less anxiety and homesickness reported by students who interacted with the dogs during the pet therapy sessions. Jalongo and McDevitt (2015) conducted a study through academic libraries on a college campus, finding that 95% of students surveyed reported lower stress following time with the therapy dog. Finally, Jarolmen and Patel (2018), using blood pressure readings as the

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indicator of stress, observed a significant decrease in blood pressure, thus in stress, of students who interacted with a therapy dog before and/or after an exam.

Though little research exists regarding pet therapy in health-related fields (outside of healthcare settings), new research is occurring. Norton et al. (2018) found that the presence of a therapy dog in the library of a medical school offered medical students stress reduction and relaxation. Johnson (2020) discovered that, although pet therapy did not reduce the difficulty of adjusting to occupational performance or the graduate student role, occupational therapy students did report decreased stress and anxiety with AAI. Finally, Hill et al. (2021) noted that paramedic students reported improved emotional well-being with the presence of a therapy dog.

Despite the findings in literature related to pet therapy in other disciplines, a paucity of literature is linked to the value of pet therapy in undergraduate nursing education. Young (2012) and Anderson (2018) determined that pet therapy prior to exams resulted in decreased test anxiety. Although Hall (2018) observed a significant decrease in self-reported symptoms of anxiety among undergraduate nursing students, little is known of pet therapy's effect on overall perceived stress and coping mechanisms.

METHOD

Design

A descriptive study using basic interpretative qualitative research based on a case study with a therapy dog was conducted. A case study examines a bounded system and uses multiple data sources to generate knowledge about an individual or specific case while also generating knowledge about the problem in general (Merriam, 2001). Merriam's case study methodology was chosen over later references for case study because of the underlying epistemological thinking and qualitative methods. As Merriam (2001) suggested, case studies aim to build in-depth understanding of processes

within given contexts. Using symbolic interactionism as a lens, the authors sought to identify and describe the meanings that participants constructed through the process of interactions with a therapy dog.

Symbolic interactionism (SI) examines how meaning is crafted through the use of symbols, such as objects, events, and actions (Prasad, 2018) and within social situations, all while centering an individual's self, both subjectively and objectively, in the meaning-making experience (Crotty, 1998; Hewitt, 1976; Prasad, 2018). According to Prasad (2018), SI seeks to understand the "meaningfulness of ordinary lives in every day local situations" (p. 23) as individuals construct and assign meaning to

situations. In this case, the imagery provides a Christian context of Christ's shepherding for the work of a certified pet therapy team with a cohort of nursing students.

Participants

This study's sample (N = 15) constituted junior- and senior-level undergraduate nursing students enrolled in the Bachelor of Science in Nursing (BSN) program as well as in the Accelerated Bachelor of Science in Nursing (ABSBN) program. All students enrolled in the BSN and the ABSBN programs in the Spring 2019 and Fall 2019 semesters were invited to participate.

Near the end of each semester during which data were generated, an announcement posted in the online



STUDENTS NAMED MINNIE'S PRESENCE AS A COPING STRATEGY THEY USED WHEN THEY FOUND THEMSELVES IN STATES OF DURESS.

objects and events. As this study sought to understand participants' experience with and the meaning derived from their interactions with Minnie, a therapy dog, SI is an appropriate lens through which to examine this phenomenon. Furthermore, SI encourages the use of symbolic imagery, such as that of the shepherd and shepherd dog as protectors and guides of a vulnerable flock, to ascribe meaning to ordinary life in everyday

learning management system invited all undergraduate nursing students to participate in a focus group interview and/or in a written reflection. Prospective participants were asked to sign up for a focus group by emailing the second author. Participants received no incentives.

Data Collection

Following Institutional Review Board approval, data were collected in

the Spring 2019, Fall 2019, and Spring 2020 semesters. Data sources included classroom observations, focus groups, individual participant written reflections, individual participant interviews, an interview of the first author by the second author, and field notes by both authors. Additionally, the authors verified the therapy dog certification and received administrative approval from the College of Nursing and Health Sciences.

Beginning in Spring 2019 semester, the nursing faculty member who was Minnie's owner/handler began bringing Minnie to each class session. Minnie roamed freely through the classroom, but was removed during exams. Minnie's presence continued into the Spring 2020 semester, prior to COVID-19. Focus group interviews, written reflections, and field notes of observations of Minnie with the students were used as data from which themes emerged.

Focus Group Interviews and Individual Written Reflections

The second author conducted five focus groups involving 15 participants. The focus group interviews used semi-structured, open-ended questions, asking participants to reflect broadly on their experiences in the nursing program as well as to reflect narrowly on their experiences with Minnie. Each focus group interview lasted between 45 and 60 minutes and was audio-recorded and transcribed. Transcriptions were cleaned and stripped of identifying information.

Following the first round of focus group interviews, three participants' individual written reflections were collected, stripped of identifying information, and included in the data analysis.

Observations

In addition to focus group interviews, the second author performed multiple observations of Minnie's presence with students. Two 1-hour observations were conducted in the classroom during regular class time as well as immediately before an exam. Additionally, informal interaction observations were conducted in the hallways and study rooms.

Author Interview/Field Notes

The authors also collected data through the second author's interviewing of the first author and field notes. The first author kept field notes of her observations in class sessions and class breaks. These data were used two ways: First, data helped identify personal assumptions surrounding the phenomenon, and two, data helped to further describe individual and joint understandings of what was understood of the data.

Data Analysis

In analyzing the data, the goal was to center the participants' voices in how they experienced Minnie's presence. To that end, each author analyzed the focus group transcripts and written reflections; then the authors reviewed the data collaboratively. In vivo coding, which uses participants' words and phrases as initial codes, was used as first-round coding and foregrounds participants' voices (Saldaña, 2016). Using the recursive practice of constant comparison, four major themes were identified: *Minnie as a coping strategy*; *Minnie's presence as a mood moderator*; *Minnie as a positive distraction*; and *community building*.

Trustworthiness and rigor were established through the use of an audit trail, analytical memoing, long-term observation, field notes, and interrater reliability. Furthermore, peer review of the emerging findings was utilized.

RESULTS

Among the five focus groups conducted, 15 students participated, with two participating twice. Three participants, all of whom participated in the focus groups, also submitted written reflections. From these data, four major themes were identified.

Pet Therapy as a Coping Strategy

Participants frequently named Minnie's presence as a coping strategy they used when they found themselves in states of duress. The duress stemmed from the pressure of achieving high grades, the responsibility of caring for human lives, and general anxiety related to the demands of the nursing program.

Participants described Minnie's presence as helping to cope with pre-test anxiety. Anna,* who reported a history of test anxiety since middle school, said, "Minnie calms me down" before an exam. Anna attributed this to sitting with Minnie and "just loving on her...it makes me feel better." Jenny* echoed this: "When Minnie comes in [to the classroom], it's like a relief and I've noticed when she comes in before an exam, I've been scoring better this semester versus last semester when we didn't have her [Minnie]." Jenny continued, "It's just kinda calming...you don't have as much anxiety and I'm able to sit down for a test and do better."

Dena* shared her experience of "freaking out" after a poor test performance. She said, following an exam when she sat on the floor petting the therapy dog, Minnie "helped me feel better." Kristen* noted her interaction with Minnie helped her step out of "nursing student mode" to "gather" herself. Mona* said, "We've gotten kind of used to a constant state of stress...so it's kind of like she gives a little momentary relief."

The ABSN program begins each academic year in the summer semester. Participants in the ABSN program remarked how they wished Minnie had been available their first semester—a summer term with two tests per week. Jules* wondered what Minnie's presence could have afforded them: "Maybe we would all have a little bit better mentality...thinking all more positively, because we [would] have never gotten used to sitting down and having those negative thoughts about tests."

Animal's Presence as a Mood Moderator

Some participants interacted with Minnie as a coping strategy. Others described how Minnie's presence affected mood, both of individuals and of the classroom environment. Participants described feeling "happy" when interacting with Minnie and reported observing how Minnie's presence affected the classroom mood.

India* said she felt "less stress" when Minnie visited: "I guess [time with Minnie] impacts my mood more than

anything.” Anna* added, “She’s just a happy little dog, and she makes me happy too.” The apparent change in mood may have affected participants’ performance in classes, as Scarlett* noted after being with Minnie. “I’m in a better mood...I feel like I perform better and I’m not as hard on myself as I typically would be.”

The apparent impact on individuals appeared to extend to the classroom environment. “It’s definitely a more relaxing environment...when Minnie’s there all the time versus like our other classes. [Minnie’s presence] just breaks that tension,” said Kamela.* This is supported in Kamela’s description of a typical day:

We have four-hour classes and everyone’s just kind of down and we’re like “we’re gonna have to sit through another four hours.” But then Minnie will come in and everyone would just swap moods and will get more excited...it just kinda rubs off on everyone even if they’re not dog people.

Therapy Dog Presence as a Positive Distraction

Participants also described Minnie’s presence as a positive distraction, a way to “take a mental break” from lengthy lectures. Jasmine* explained, “I like those little distractions...every now and then she’ll [Minnie] just start running back and forth in the middle of class. It’s fun and cute.”

Nella* expressed, “When you have a lot of steam built up, [Minnie’s presence] just lets it out a little bit. Like I can relax just a little bit.” Similarly, Jules* noted, “Even if you’re not petting [Minnie] you’re still...like, ‘Oh, look at that dog’ you’re not thinking about all the stress that you have sitting in front of you.”

Community Building

The final identified theme was community building, as participants frequently described unexpected interactions with fellow students that centered around Minnie. Participants recounted how students gathered

around Minnie before and after classes or during breaks. As the participants noted, students, who may not have known fellow students well or who may not have had much interaction with one another, talked with each other through their shared interest in Minnie. Participants described these occurrences as “breaking barriers.” Natalia* said, “People are friendlier; [they] come together. It’s [Minnie’s presence] like a magnet. Everyone comes towards her and we’re like, ‘Oohhh, so happy!’ It’s a good time.” Natalia explained that petting Minnie helped her meet students from other cohorts as they gathered around Minnie in the halls between classes.

Participants also remarked how their interactions with Minnie fostered interactions with faculty. Cara* stated that Minnie’s presence led her to being more likely to “engage in class and comprehend what I’m reading” as well as more likely to “interact with my professors. I’ll talk to [faculty] about Minnie and then it leads into other things. I normally wouldn’t go to my professors...I’ve never had that relationship until this semester.” Cara summarized the interactions among students and with faculty as “a bridge to a relationship.”

can have a dramatic effect on individuals as well as for patients in their care and the work environment as a whole. Minnie’s presence as a mood moderator is consistent with literature in other fields (Beetz et al., 2012; Kumazaka et al., 2017). Students’ ability to recognize how mood can be moderated, and more importantly, improved, is a valuable tool to facilitate navigation and perseverance in both nursing school and the work environment.

The third theme was Minnie’s presence as a positive distractor. Students encounter multiple emotional and challenging experiences in nursing school. The ability to take time out and step back enables them to recalibrate and diffuse potentially charged emotions. The findings of this study are consistent with other environments in which AAI has been implemented. This therapy has been found to provide a time-out from stressful thoughts, which facilitates learning (Friesen, 2010). Additionally, Barker et al. (2017) showed that not only did pet therapy provide distraction resulting in lower perceived stress, but also that AAI is a low-cost intervention that can produce a positive learning environment.

Therapy dogs are a valuable living resource for educators to enhance student coping, ease anxiety, moderate mood, and provide distraction by

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DISCUSSION

Overall, students described their experiences with Minnie as positive. Consistent with the literature, the identified themes suggest Minnie’s presence served as a positive coping strategy as participants sought time with Minnie to ease anxiety. Desiring time with Minnie supports that nursing students recognized their need for self-care and stress management. This skill is critical to protecting their emotional well-being as they enter the nursing workforce.

Implementing a coping strategy with potential to alter a person’s mood

helping students feel calm and safe, and to experience a sense of relief. The therapy dog’s presence opens opportunities for students to take a mental break; this is reflective of the certified therapy team’s providing safety and protection for the vulnerable student flock as Psalm 23 describes Christ’s care for his people: “He makes me lie down in green pastures, he leads me beside quiet waters, he refreshes my soul. He guides me along the right paths for his name’s sake” (verses 2-3, NIV).

Minnie’s presence helped bridge relationships among students and

faculty. This finding is meaningful as relationships have a positive correlation with well-being. Minnie's facilitation of community building among students is reflective of the way a shepherd dog assists the shepherd to keep the flock together, collecting sheep that may become dispersed and driving them forward once they are together (Natural Environment Research Council, 2014).

Limitations


The primary researcher in this study was both the handler of the therapy dog and a nursing faculty member. Students who participated may have responded in ways they assumed were expected by the faculty and the researchers. Despite the reassurance that a decision to participate or not participate would not impact students' grades and/or evaluation in any manner, students still may have not felt comfortable being completely honest. Students may have had negative perspectives but were uncomfortable verbalizing them. Students' prior experiences with dogs may have affected not only who chose to participate, but also how participants responded.

Nursing Implications

Creating healthy learning environments is critical to facilitating learning and promoting students' well-being. Although the stress of nursing school cannot be eliminated, faculty can effectively help students to identify and incorporate strategies to manage stress. Stress management and coping strategies comprise one facet of self-care, a facet of nursing practice that is best addressed early in the career trajectory. In addition to the self-care benefit, introducing students to the positive effects of AAI may result in a broader perspective, as nurses, of complementary and integrative therapies for patients.

CONCLUSION

Undergraduate nursing students experience high levels of stress and anxiety. Stressors and anxiety continue as students enter professional practice.

Nurses as well as students need positive coping strategies. With this case study, the presence of a therapy pet was identified as a positive strategy for coping with the stress and anxiety experienced in undergraduate nursing education. The symbolism of the teacher as a shepherd, and in this case the therapy pet team as caring for a flock, may be a meaningful analogy that educators can apply in nursing and other settings. 

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Web Resources

- **Animal Assisted Intervention International**
<https://aai-int.org/>
- **Canine Therapy Corps**
<https://www.caninetherapycorps.org/>
- **Pet Partners**
<https://petpartners.org/>

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