## PROMOTION OF THERAPEUTIC GARDENING THROUGH SOCIAL MEDIA

A Thesis submitted to the faculty at Stanbridge University in partial fulfillment of the requirements for the degree of Master of Science in Occupational Therapy

by

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November 2022

I certify that I have read *The Promotion of Therapeutic Gardening Through Social Media* by Hannah De Silva, Michelle Elyashar, and Thao Nguyen, and in my opinion, this work meets the criteria for approving a thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Occupational Therapy at Stanbridge University.

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## Acknowledgments

We would like to thank our thesis advisor, Dr. Annette Hatala for her continual support, advocacy, encouragement, and guidance throughout our thesis study journey. We also would like to express gratitude to Stanbridge University faculty, family, and friends for their constant support throughout.

#### Abstract

We created an Instagram account called "GardeningAndOT," where we posted 3 separate videos displaying 3 different types of vertical gardens from start to finish. The first video focused on wall gardens, the second on tower gardens, and the last on milk crate gardens. The purpose of this project was to expose individuals to the vast benefits that therapeutic gardening has to offer. We sought out research to gain a clearer perspective on how occupational therapy, particularly therapeutic gardening, was portrayed on social media, if at all. Despite coming across studies on the ways in which occupational therapists used social media as a promotional platform, our findings showed a deficit of therapeutic gardening as an intervention. The question this project aimed to answer was as follows: Can Instagram be used to promote the benefits of therapeutic gardening as an occupational therapy intervention? We hoped to recruit participants from the public who were interested in the rapeutic gardening or could have benefited from the rapeutic gardening. Our goal was to introduce the benefits that therapeutic gardening has to offer to our followers and how they could derive benefit from engaging in this occupation. We also aimed to recruit occupational therapy practitioners who could have utilized our content to create their own content and further promote the field. We hypothesized that when we created our private account and developed videos related to our topic, the majority of views, likes, and interactions would be from other occupational therapy practitioners or individuals who were interested in the field of occupational therapy and therapeutic gardening as a means for therapy. Our results revealed that the amount of likes for each video posted increased over time. 6 people liked the first video, 8 people liked the second, and 10 people liked the final video. With each new video posted, though, the number of views per video fell. There were 51 views of the first video, 38

views of the second, and 37 views of the third. Our Instagram account had a total of 26 followers by the time our data collection phase was over.

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#### **Promotion of Therapeutic Gardening Through Social Media**

For our research study, we decided to post videos on Instagram to educate online users about therapeutic gardening and how it could be used as a modality of occupational therapy. The content of our videos consisted of explaining different components of therapeutic gardening such as how to create a new garden, how to maintain the plants, and the benefits of therapeutic gardening. The data that we collected measured how much engagement we received for each post including the number of likes, shares, and comments. We chose to incorporate occupational therapy concepts throughout our posts and hoped that our findings from our research would expand on the limited literature that was currently available about therapeutic gardening as a niche modality. Our goal was to collect enough data to gain a better understanding of what type of content Instagram users are most interested in and whether Instagram can be used as a tool to promote therapeutic gardening and occupational therapy. Additionally, we wanted our videos to encourage others to engage in therapeutic gardening and motivate other occupational therapy.

#### **Statement of Problem**

Due to being a niche modality of occupational therapy, there is a low level of awareness of what therapeutic gardening is from both occupational therapy practitioners and individuals from the general public. We believed that it was important to educate more people about what therapeutic gardening entails and how they could possibly benefit from it. In a study by Smidl et al. (2017), a therapeutic gardening project was created for a group of adults with severe mental illnesses in a community mental health facility. The therapeutic gardening project was organized by two occupational therapists with the assistance of four occupational therapy graduate students who helped with

project activities each week and staff members from the facility. Within the study, the 20 participants helped plan, build, and care for the raised-bed gardens. After the end of the therapeutic gardening project, participants reported feeling more energetic after gardening and increased emotional well-being including their sense of pride, self-worth, and happiness. Participants and staff members reported that the garden project helped people stay more physically active, led to positive changes in diet, and facilitated more opportunities for socialization. The findings from Smidl et al. (2017) demonstrated how therapeutic gardening could positively affect individuals both mentally and physically. However, since therapeutic gardening remains to be a niche modality, individuals are less likely to understand what it is and how beneficial it may be. Through the use of Instagram, we aimed to examine whether social media could be an effective tool to raise awareness about therapeutic gardening and occupational therapy.

#### **Literature Review**

Social media platforms are commonly used by the general public and by numerous healthcare professionals to engage in virtual networks and communities. However, in comparison to other healthcare professionals, there are few occupational therapists who are currently utilizing social media to promote their practice. When reviewing literature about the use of social media, a majority of the research findings that were available were focused on other healthcare professions besides occupational therapy. We believe that there is a need for further research about how occupational therapy practitioners can utilize social media as a promotional tool for this field.

Technology is highly used within our society where platforms are evolving with more than 50% of people becoming reliant on promotional strategies offered on the Web and 10% of people consulting a physician (Klietz et al., 2019). This makes social media a

useful context for healthcare promotion, as it would allow for clients to gain a better understanding of any health-related questions at the tips of their fingers. Within the studies we referenced in this literature review, the researchers wanted to gain a better understanding of how social media impacts communication in health. We were ultimately able to identify that healthcare providers have increasingly turned to social media as an outlet for distributing accessible medical information to the public. Moreover, several studies also indicate that medical information has, at present, become the most posted and viewed content category on social media.

There is an increased number of both users and professionals who are turning to social media. Studies have been done that emphasized the use of social media within the population to be about 80% of individuals who look up health related information on the internet (Alpert & Wombie, 2016). When we looked at how to utilize social media, Hussein et al. (2021) pointed out that it can be used for emphasizing health promotion, assisting clinical practice, and sharing health-related information to improve selfmanagement. Simply utilizing social media platforms— whether it be WhatsApp, Facebook, or Instagram—to communicate can increase healthy outcomes for patients around the world and help them gain knowledge regarding various diagnoses, communicate with others who may be facing the similar challenges, and keep track of their mental and physical health (Hussein et al., 2021). About 41% of patients stated their preferred choice in comfort to initiate communication was through social media instead of seeking information through hospitals, doctors, and medical facilities (Aplert & Wombie, 2016). The physicians targeted in this study were individuals that use Twitter to communicate to their patients and increase awareness. While Hussein et al.'s (2021) study focused on communication on various social media platforms, Aplert and

Wombie's (2016) study specifically examined Twitter as a means of communication. Since these studies showed how providers and users turn to social media, this demonstrates an opportunity for occupational therapists to use Instagram as a tool to promote therapeutic gardening.

#### **Themes**

An overarching theme found within these studies was promoting overall health and wellbeing through social media, and how social media can be used to raise healthcare awareness. Naslund et al. (2017) surveyed 240 social media users who self-identified as having a mental illness to learn about their use of social media for mental health. 85% expressed an interest in mental health programs delivered through social media, especially to promote overall health and wellbeing (72%) and for coping with mental health symptoms (90%). These results suggested the feasibility of reaching social media users struggling with a mental illness and could make evidence-based mental health services more available. This study found that participants who self-identified as having a mental illness were interested in having access to more sources on social media platforms that promoted overall health and wellbeing. A study conducted by Herrick et al. (2020) explored eating disorder recovery-related content and how it was shared on TikTok. The results discovered that the most popular type of eating-disorder recovery-related posts revolved around raising awareness and promotion. They analyzed other TikTok videos about eating disorders and discovered that the most popular theme throughout was awareness. These findings are consistent with the study by Naslund et al. (2017) which found that participants were most interested in content promoting overall health and wellbeing.

#### **Promotion of Occupational Therapy**

When we searched various social media platforms to better understand how occupational therapy was being presented and promoted over social media, we came across a TikTok account by Seoane (n.d.). Seoane is a pediatric occupational therapist who works in an outpatient pediatric clinic. She has a significant following of 439,000 followers on TikTok and has multiple posts that have accumulated a range of 1 to 3 million views each. Seoane's most popular videos discuss topics like what occupational therapy is and different activities that can be used with children in order to help them be more independent and functional. The overarching theme in all of these posts are promoting overall health and wellbeing, which is consistent with the findings from Herrick et al. (2020) and demonstrates how effective this kind of content can be. In a study by Naslund et al. (2017), the most desired content by social media users was about promoting overall health. Following the precedent set by Seoane, occupational therapists specializing in therapeutic gardening can utilize social media to help their audience in multiple areas of their life, including their physical and mental health.

#### Research Gap

A research gap we found was whether these findings would be able to correlate with how to raise awareness about occupational therapy and promote the benefits of therapeutic gardening. For example, research findings from Bellini et al. (2020) explained how organ transplant healthcare professionals utilize social media platforms and Klietz et al. (2019) analyzed how plastic surgeons and aesthetic doctors can make Instagram posts more appealing to their audience. However, while these studies provide more insight on how social media has been used by other healthcare professionals, we are still unaware of how effective social media can be at promoting therapeutic gardening and occupational therapy. To gain a better understanding of how successful social media can be at

educating online users about therapeutic gardening, we will utilize the findings from Bellini et al. (2020) and Klietz et al. (2019) to create our own content and analyze how our audience interacts with content about therapeutic gardening.

In addition to the previous gap, we also discovered an absence in research on the use of social media to promote both OT and therapeutic gardening. While the studies by Bellini et al. (2020) and Hussein et al. (2021) included health promotion, assisting clinical practice, and sharing health-related information to improve self-management on Facebook and Instagram, we were also interested in learning more about how occupational therapists use Instagram as a means to promote their niche areas. However, since Instagram is a popular platform, we believe that more research is needed to demonstrate how occupational therapy and therapeutic gardening can be promoted on Instagram.

#### **Social Media Content**

When we reviewed the content created by Seoane (n.d.), we discovered that her posts focused on raising awareness about the benefits of occupational therapy and educating the public on topics like sensory seeking behavior and age-appropriate developmental skills. While we found many accounts like Seoane's, which were promoting occupational therapy, we were unable to find any that specifically incorporated therapeutic gardening, nor did we find any Instagram accounts with this much engagement. Since there are many posts about occupational therapy that were able to gain traction and positive feedback from viewers, we believe that the use of social media, such as Instagram, can be used as a tool to educate the many benefits of therapeutic gardening in occupational therapy. Occupational therapists should analyze these studies to determine the best way to communicate to the public about the benefits of

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therapeutic gardening in occupational therapy. To increase awareness about occupational therapy, therapists need to post content that followers would want to see on their feed. Occupational therapists can use Klietz et al. (2019) to identify how to tailor their postings to be relevant to "aesthetics" and "disease," to increase views and provide content that would meet the consumer's needs. With the use of these studies, we can identify ways in which to create a successful social media platform. The TikTok account created by Seoane (n.d.) is an example of an occupational therapist using their social media platform to promote occupational therapy. By observing her profile, we learned that her most viewed posts were about educating the public. Occupational therapists can use this information to create an effective social media profile and teach concepts such as therapeutic gardening that can be used in everyday life, and potentially use this platform to inform occupational therapists about certification classes. Based on the studies by Alpert and Wombie (2016), Bellini et al. (2020), Herrick et al. (2020), Hussein et al. (2021), Sendall et al. (2018), Naslund et al. (2017), and Klietz et al. (2019), there is strong evidence for the presence of social media within healthcare, but none addressing the benefits of therapeutic gardening in occupational therapy.

More studies are needed that directly address the role of social media for occupational therapy and incorporation of therapeutic gardening. A common theme in the studies highlighted how social media is becoming a common source for communication and information for both healthcare providers and users. Another theme present in these studies is that many users are looking to social media for content that raises awareness about overall health and wellbeing. A research gap that we found in these studies was occupational therapy not being addressed and how social media can be used to highlight the benefits of therapeutic gardening. Another noticeable gap found was that Instagram

did not have many profiles that promoted occupational therapy and therapeutic gardening. Additionally, when searching on Instagram, we were unable to find any posts that showed how therapeutic gardening can be incorporated in occupational therapy. These studies provide a glimpse at how social media is being used by other healthcare professions, but more research focusing on occupational therapy is necessary. This is important because it will allow occupational therapists to make their content more client centered and better tailored to their audience's needs and interests while promoting their own respective niches, such as therapeutic gardening.

#### Statement of Purpose, Hypothesis, and Research Questions

Social media can be used as a powerful tool to help promote health and empower patients to take charge of their own health. In our study, we wanted to measure the efficacy of social media platforms in promoting occupational therapy and the benefits of therapeutic gardening. We predicted that our posts on social media would attract participants who had an interest in gardening, who wanted to improve their health, or those who had a background in occupational therapy. Our aim was to gain the attention of those who could benefit from the content we were presenting, as well as share our posts in order to spread more awareness about the benefits of therapeutic gardening.

Our PICO (Problem/Intervention/Comparison/Outcomes) question was whether posting videos on Instagram could be an effective method to promote therapeutic gardening and help reach individuals who could benefit from learning more about this niche modality. The population we were targeting were occupational therapists who wanted a better understanding of how to utilize therapeutic gardening and individuals who wanted a better understanding of the scope of our practice. The problem is that there is little awareness about the benefits of therapeutic gardening. The intervention was to

help promote therapeutic gardening within occupational therapy through social media. To do this, we created an Instagram account which addressed the benefits of therapeutic gardening. Once the account was created, we worked to promote our account through hashtags and shared it on personal Instagram accounts. We did a comparison between different healthcare professionals' posts on Instagram to determine how they receive engagement, the frequency of their posts, what they are targeting, and how they are educating their viewers. This method was useful for us to incorporate in our posts, to increase our chances of receiving more engagement and ultimately get a chance to display the benefits of therapeutic gardening within occupational therapy to as many individuals as possible. Finally, we hoped that our approach would lead to an increased understanding of occupational therapy among both those who were familiar with it and those who were not. We wanted to let people know that gardening can be used as a therapeutic modality and can be accompanied by numerous health benefits.

#### **Theoretical Framework**

We utilized the Person-Environment-Occupation (PEO) model, a client-centered practice that focuses on occupational performance (Cole & Tufano, 2020). The PEO model emphasizes the transactional interrelationship between the person, their environment, and occupation. This transactional interrelationship means that each component directly affects and influences one another. The targeted outcome of the PEO model is for the client to achieve optimal occupational performance which is the product of a cohesive interaction between the person, their environment, and the desired occupation. In the PEO model, the occupational therapy practitioner's role is to enable

occupation. The practitioner does this by using their clinical knowledge and skills to assist the client in performing desired occupations.

When we applied the PEO model to our research, the people that we were targeting included the general public who were using Instagram, occupational therapy practitioners who could have benefited from learning about therapeutic gardening, and individuals who could have benefited from therapeutic gardening as an intervention. For our research, we believed it was important to target both public users and occupational therapy practitioners, as it allowed us to raise awareness to individuals who either had no prior knowledge or limited knowledge about the scope of our practice. Since the PEO model utilizes a client-centered approach, it was crucial for us as researchers to understand how we could empower, support, and provide the necessary resources for this population in order to increase occupational participation. We came to a consensus that this could have been accomplished by creating video content that is relevant and meaningful to our Instagram viewers, maintaining a safe space for learning, and providing accurate information about the components and benefits of therapeutic gardening.

The environment of our research was conducted within a virtual context. Since one of our major goals was to raise awareness about therapeutic gardening, Instagram was used as a tool to expose users to therapeutic gardening. In order to create an optimal environment for our viewers, we aimed to build an account and curate a schedule of content to educate users about therapeutic gardening. In a study conducted by Naslund et al. (2017), 85% of participants indicated interest in mental health programs offered on social media. Consequently, we believed that using Instagram could help us further reach individuals who were both using the internet and interested in the benefits of therapeutic

gardening. Through our research, we sought to determine whether Instagram could be used as an effective tool and environment for spreading awareness about therapeutic gardening.

For the occupation component within the PEO model, we focused on promoting therapeutic gardening through the use of Instagram. When compared to other occupation-based models, the PEO model is unique because the client plays an active role and collaborates with the practitioner to design an intervention that is meaningful to them personally. In terms of our research, we curated a schedule of content that we believed was most interesting and relevant to the users viewing our videos and observed the engagement we received from each video. Through this observation, we hoped to gain a better understanding of how to effectively educate our viewers and ultimately raise awareness about therapeutic gardening with the use of social media. The PEO model focuses on the interaction between each component and how it can result in occupational performance. During our research, we considered how the environment we created on Instagram was influencing our viewers and made efforts to use Instagram to promote therapeutic gardening, while also educating users about the benefits associated with therapeutic gardening.

#### Methodology

When we began our research, we individually hand-picked 20-30 plants that were propagated at a garden located in the Veterans Administration Hospital in Long Beach, CA. We had the option of transferring our plants into milk crates, a wall, or a tower, depending on the size of our outside space at home. These three diverse gardening approaches demonstrated various plants growing in varied conditions as well as different gardening styles. Our goal was to promote therapeutic gardening and showcase the

benefits of therapeutic gardening to both the general public and occupational therapists alike. The inclusion criteria for our research study were that participants had to be at least 18 years old, and they had to have their own Instagram account. Participants who were unable to read English were excluded from our research study because we wanted to ensure that participants fully understood the explanations written in our captions.

We chose Instagram as our medium because it has become a popular social media platform for short videos. By utilizing short videos, we hoped it would maintain the attention of our audience and used hashtags and shares to help promote our posts. We used hashtags to help our audience categorize our videos and gain a better understanding about the focus on our content. Typically, hashtags are a technique to categorize videos, so if one searched "#gardening," only videos that have been hash-tagged with the term "gardening" would appear. However, since our account was private, only users who followed our account were able to view our posts and the hashtags included. Lastly, we used the captions feature to educate viewers about the benefits of therapeutic gardening and provided safety tips to be aware of while gardening.

We recorded, edited, and posted all of the Instagram videos Before posting any videos, we chose to publicize our private thesis account by posting a recruitment flyer (see Appendix A) on our personal Instagram accounts. Since the account was private, we used the flyer as a strategy to recruit more participants who may be interested in learning about therapeutic gardening and occupational therapy. Once users requested to follow our thesis Instagram account, they were asked to complete a Google Form and had the option to provide their informed consent to participate in our research study. Users were not able to follow our account until they completed the informed consent form and agreed to the

conditions. After publicizing our thesis Instagram account, we began posting our short videos.

We created three videos in total and each video focused on the different types of gardens, from when we initially picked the plants to when we closed the garden. The first video focused on demonstrating how to garden using a wall garden, the second video focused on garden towers, and the third video demonstrated gardening with milk crate gardens. When we posted the first video, we did not use any strategies to gain more views. In the second video, we included hashtags in the comment section as a strategy to appeal to more viewers and to provide them with a better understanding of our content. Lastly, the third video included hashtags in the comment section and a picture of our post was shared onto our personal Instagram accounts to further publicize our account. Each video highlighted how people can utilize this modality to work on skills like fine motor, gross motor, endurance, and grasps. Additionally, in the third video, we explained how therapeutic gardening can also help improve a person's emotional wellbeing and reduce stress levels.

We concluded our study one week after the third video had been posted and compared all of the data collected from each video post. On each video, we analyzed the number of views, likes, and comments that we gained from our participants. This allowed us to see if the use of hashtags, shares, and different content was able to garner more engagement on our account.

#### **Ethical and Legal Considerations**

We had our research proposal reviewed by the Stanbridge University Institutional Review Board. Our application received approval on August 30th, 2022, through our application number "Study#509" (see Appendix B). Once we received approval, we were

able to begin our study by promoting our social media flyers by posting on our personal Instagram accounts to gain followers on our research account (see Appendix C).

#### **Informed Consent**

The Instagram account in which we posted our supplemental videos were private. The term "private" means that in order for someone to view, like, or comment on our videos and account, they need to request access to our profile. Once a participant requested to follow our private account, we sent them a Google Form to fill out an online informed consent form to take part in our study (see Appendix D). The procedures for protecting the confidentiality and privacy of participants were addressed in a Google Form that let participants electronically agree to be a part of the study. By clicking "I agree" on the Informed Consent Form, they acknowledged that their username would appear on our posts if they liked, commented, or viewed any of our videos. After clicking "I agree", participants were directed to click "next" and then fill out a 4-question questionnaire (see Appendix E). Once participants completed and submitted the consent form, they were granted access to our private account. However, informed consent records will be retained for 3 years following the termination of our study in a password protected account.

#### Confidentiality

When we created these supplemental videos for our Instagram account, we needed to avoid recording any identifiable features of ourselves or others. When we completed the therapeutic gardening activities and demonstrated each vertical garden, we needed to ensure that we were concealing our identities by not filming or taking pictures of our faces or any identifiable features.

#### Risk and Prevention of Injury

If participants decided to create their own garden or if occupational therapy practitioners decided to incorporate therapeutic gardening into their practice, there were potential risks that can result from gardening that needed to be addressed. These safety concerns included accidental cuts and scrapes from working with sharp tools, potential slips and falls, potential heat stroke or sun burns from extended exposure to the sun, allergies, carrying heavy objects, and overexerting oneself. To minimize potential risks, we included safety information and tips in the caption of our videos such as how to safely handle tools, the importance of sun protection, and safe ways to lift heavy objects. We provided caution to our participants by giving them guidance to prevent injury or exacerbating an existing injury.

#### **Results**

As previously mentioned, before posting any videos, we recruited participants by posting our recruitment flyer onto our personal Instagram accounts to help spread awareness about our research project. Online users interested in participating were then able to request to follow our private account. Once online users sent a follow request, we sent them a private direct message on Instagram asking them to complete our online informed consent form. After informed consent was obtained, our participants were able to follow our private account and view our videos. The first video posted, which included no strategic design, described how to build a wall garden and explained how therapeutic gardening can target skills like sequencing, endurance, and balance. The second video, which utilized hashtags, showed participants how to build a tower garden and discussed different grasp patterns and what to do if a plant dies. For the third video, we posted a story on our personal Instagram accounts with a photo of a clip from the video and included the username of our therapeutic gardening account. This video reviewed a milk

crate garden, had hashtags, and explained how therapeutic gardening incorporates sensory exploration and how gardening can help boost mental health.

One week after posting our last video, we concluded our data collection. In terms of the engagement gained by each video, there was a gradual increase in the number of likes for each video posted. The first video received 6 likes, the second video had 8 likes, and the last video collected 10 likes. However, the number of views each video received decreased with each video posted. The first video received 51 views, the second video had 38 views, and the last video had 37 views. There were no comments left on any of the three video posts. By the time we concluded our data collection phase, our private Instagram account had a total of 26 followers. We had 8 additional online users who requested to follow our account; however, these users failed to complete our online informed consent form. As a result, their request to follow was not approved and they were not included in our research study.

#### **Discussion**

Our aim for this study was to develop an understanding of how therapeutic gardening was being promoted on social media. We investigated different occupational therapists on social media platforms and found that there were a limited number of occupational therapy accounts. The majority of occupational therapy accounts we did find were pediatric based. Moreover, throughout our search, we were unable to find promotions of niche areas of occupational therapy, particularly therapeutic gardening, on social media.

According to our findings and the information we compiled at the end of our study, we discovered that the number of likes increased with each post, which was consistent with our expectations. We were not anticipating, however, for the number of

views to decrease as we continued to post. Our first video, which focused on the creation of a wall garden, captured 51 viewers. The second video, focusing on tower gardens, ended up with a total of 38 views, and the last and final video which displayed milk crate gardens gathered 37 views. We believe that our likes increased with each post due to gaining more followers day by day, so when the last video was posted, we had more followers than when the first video went up. Although sharing the last video on our private Instagram accounts may have helped us gain more followers, it did not help increase our number of views. A possible explanation for our decrease in views can be due to the algorithm on Instagram, which prioritizes videos higher in the feed if they predict users will like it more. Another possible explanation is that viewers were not interested in the specific content that we chose for the following videos. More research is required to determine whether the use of hashtags and sharing can help online accounts recruit more engagement on their social media posts.

Our objective was to determine whether Instagram could be used as a platform to raise awareness about the benefits that therapeutic gardening has to offer. While one can argue that we did not amass a following as sizable as we may have hoped for due to the privacy of our page, we strongly believe that we were successful and completed what we sought out to do, which was to inform the public and advocate. We hope that the individuals who interacted with our page and gained knowledge from our videos will pass that information along to their friends and families in order to start a cycle. We believe that we educated our followers and shed light on the advantages that can be experienced by engaging in therapeutic gardening.

#### Limitations

We were able to pinpoint a few potential limitations on this research endeavor. First and foremost, we went into this research study aware of the fact that the way to build a following on social media was by posting often, building a recognizable brand, engaging with your followers, and engaging with other Instagram users. Given the nature of our research, we ultimately did not engage in these methods, which created a barrier. Consistency is the best way to be seen, so it was more challenging for us to build a sizable following or attract attention from the general public due to the fact that 3 videos were published over a 1-week period. When researching other health professionals on Instagram, it was evident that they posted two to three times per week respectively in order to keep a consistent following and receive likes, comments, and shares.

The consistency of posting, coupled with the general public reacting to each post is the type of engagement needed in order to build a sizable following list. Consistent posting is the key to attracting followers and engagement on social media because their growth typically takes time. Additionally, while we attempted to target an audience or specific population online, we struggled with this, as we were promoting a niche market. The lack of current knowledge on therapeutic gardening made it more challenging to promote the practice as a whole, as opposed to promoting a topic that was already trending and individuals searched for it on social media frequently. Because we set up a private account which required our permission to access, this made it more difficult for individuals to share our content. This caused a restriction, as it prevented those who followed our page from sharing it with friends and family who did not already follow us, as each individual would have to fill out the consent form in order to view and interact with our page.

Moreover, during the timeframe in which we were promoting our page and recruiting followers, we encountered a drawback which limited the progression of our study. Because our page required a request to access, this meant that our participants were asked to fill out consent forms in order to follow our Instagram account. A few individuals filled out the informed consent form, but did not request to follow our page, so we privately messaged these individuals, thanked them for filling out the informed consent form and taking the time to partake in our research study, and kindly reminded them to request to follow us. However, because these individuals did not already follow us, Instagram's algorithm likely hid our message in a 'hidden' folder, which essentially did not notify these individuals of our message, whereas Instagram users will receive an immediate banner notification when a user they *do* follow sends them a message. This resulted in eight individuals not having the chance to interact with our page, despite filling out the consent form. Similarly, once data collection was complete, there were still 8 individuals who were in our 'follow requests' page, though we were unable to grant them access to our page due to not filling out the consent form.

#### Conclusion

The primary objective of our research study was to use Instagram as a means to inform the general public about the advantages of occupational therapy and, in particular, the benefits of therapeutic gardening. Therapeutic gardening as a form of occupational therapy can be utilized by individuals with developmental or physical disabilities, mental illness, stroke, stress and anxiety, to name a few. We aimed to inform other occupational therapists who were seeking a better understanding of how to incorporate therapeutic gardening in their practice, educate the public on occupational therapy, as well as inform the general public, who were perhaps unaware of the vast benefits that therapeutic

gardening could have for them. Our goal was to shed light on the notion that gardening can be used as a therapeutic modality and can be accompanied by numerous health benefits which can go on to increase quality of life. We believe that we were successful in opening new doors and taking risks in order to advocate for and promote therapeutic gardening. Future research can build upon our findings, as well as use our findings to further investigate the therapeutic benefits of gardening.

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#### Appendix A

#### Social Media Recruitment Flyer

## Thesis Project Recruitment

**Thesis Title:** The Promotion of Therapeutic Gardening through Social Media

Researchers: Hannah De Silva OTS, Thao Nguyen OTS, Michelle Elyashar OTS Thesis Advisor: Annette Hatala, OTD, OTL



## What is therapeutic gardening?

Therapeutic gardening is a practice where plants and gardening are used as an occupational therapy intervention to improve both physical and mental health. For example, this can involve using activities like watering plants and scooping soil to strengthen either physical or cognitive impairments.

## Purpose of our study

The purpose of this study is to utilize instagram, a social media platform, to educate individuals about the benefits of therapeutic gardening and to promote niche specialities within occupational therapy.

How can you get involved?

## Follow us on Instagram

@GardeningAndOT

Participants in our research study will be asked to complete a 5 minute online consent form and questionnaire that will be provided after requesting to follow us on Instagram. The duration of our study will be 3 weeks. We will post a one-minute video each week where participants are welcome to view, like, or comment on any video that they want to. To be included in our study, participants must be 18 years or older and have an Instagram account. Individuals who are unable to read.



#### What we will be doing

In this study, we will be creating videos about therapeutic gardening using multiple gardening systems and posting it onto our private Instagram account for online users to watch. We plan to observe the engagement we receive from each video to gain a better understanding of what type of content users are interested in and to determine whether Instagram can effectively promote niche modalities of occupational therapy.

Stanbridge University's Masters of Science Occupational Therapy Program

## Appendix B

## **Institutional Review Board Approval**

Hello,

After review of your IRB Modification Application (9/01/2022) for Study ID #509 it has now been approved by the IRB and you may proceed with your study modifications as requested at this time. NOTE, this approval is limited to the activities described. Any anticipated further changes require submission of an IRB Modification Form, with subsequent IRB approval required, prior to initiation of those changes to the approved protocol or supporting study materials (including your approved recruitment materials, study instruments, and consent documents).

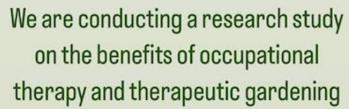
Sincerely,

Julie Grace, MS, MA | IRB Chair jgrace@stanbridge.edu | P. 949.794.9090 | F. 949.794.9094



Orange County | Los Angeles | Riverside

Appendix C **Promotional Post to Social Media** 





#### Appendix D

#### Online Consent Form

# The Promotion of Therapeutic Gardening through Social Media

Thank you for your interest in being a participant in our research study. The promotion of therapeutic gardening through social media. The purpose of our research study is to utilize Instagram to educate individuals about therapeutic gardening and to raise awareness about niche modalities of occupational therapy. As a participant in our study, you will have access to view our videos regarding different components of therapeutic gardening.

Your participation in this study is voluntary. If you choose to consent, please answer all of the questions on the following page. The questionnaire will take approximately 5 minutes to complete. The duration of this study will be 3 weeks. Each week, a one-minute video will be posted onto our private Instagram account. You are not required to watch every video from our account but will have the opportunity to watch, like, or comment on the videos that we post if you choose to. You must be 18 years or older to be included in our study, and must have an Instagram account to access our videos. Individuals who are unable to read English will unfortunately be excluded from our research study.

As our videos will be promoting gardening activities, a potential risk to participating in our study are any potential injuries that may result from gardening. Please follow the guidance and safety tips provided within our videos in order to prevent these injuries from occurring. You may withdraw from this study at any point by unfollowing our Instagram account. The data collected in our study will include the username of participants, comments posted by participants, and the number of likes and views each video receives. However, no other personal identifiers will be shared or stored.

Subsequent to our 3 one-minute videos being uploaded and all of the corresponding data being analyzed, our private Instagram account, along with the associated data will be deleted. However, we will keep records of participant consent forms for 3 years following the termination of our research study.

Thao Nguyen  Thaotvn123@gmail.com  Annette Hatala, OTD, OTL  Ahatala@stanbridge.edu
Annette Hatala, OTD, OTL
Ahatala@stanbridge.edu
If you have questions about your rights as a research participant, you may contact the Stanbridge University Institutional Review Board (IRB), which is concerned with the protection of volunteers in research projects. Please call the IRB Office at 949-794-9090 or via email at irb@stanbridge.edu.
If you do not wish to participate, please do not complete the questionnaire.
If you consent to participate, please fill out the following questionnaire.
gardenwithot@gmail.com (not shared) Switch account
Clicking "I agree" indicates that I have read the above Consent Form and agree to participate in the research study.
○ I agree
Next Clear form

## Appendix E

## Questionnaire

The Promotion of Therapeutic Gardening through Social Media		
<pre>     gardenwithot@gmail.com (not shared) Switch account * Required </pre>	<b>©</b>	
Can you read English? *		
○ Yes		
○ No		
What is your username on Instagram? *		
Your answer		
How old are you? *		
Under 18		
○ 18-24		
25-34		
35-44		
45-54		
<u>55+</u>		
Please select one that best applies to you: *		
Occupational therapy practitioner		
Occupational therapy student		
No background in occupational therapy		
Back	Clear form	