# INCREASING SELF-EFFICACY WITH MENSTRUAL MANAGEMENT FOR YOUNG ADULTS EXPERIENCING HOMELESSNESS USING THE INCLUSIVE "U N ME" EDUCATION PROGRAM

By

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Occupational Therapy Doctorate

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# **Doctoral Project Approval**

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### Abstract

The purpose of the study was to increase self-efficacy with the occupation of menstrual management in young adults experiencing homelessness using the "Understanding and Navigating Menstrual Experience" or "U N ME" program. The objectives of this study were a reported increase in self-efficacy with menstrual management, the development of the U N ME program, and to promote the spread of accurate information to other menstruators in the community.

This study was a convergent parallel mixed-method study rooted in a phenomenological approach. The intervention featured four weekly workshops featuring education, group discussion, and an activity to tie the topic of the day to action. N = 22 participants.

A pretest/posttest design was employed using a Modified General Self-Efficacy scale supplemented with data from open-ended responses from group discussions. A Wilcoxon Signed-Rank test was conducted on the pre-workshop questionnaire (M = 3.89) and post-workshop questionnaire (M = 4.86) and found that there was evidence for a statistically significant difference between the two total scores, W = 68, z = -2.12, p = .034. Common themes found in the qualitative measures included comfort in discussing the topic of menstruation, a desire to learn more about menstruation, and the link between misinformation leading to negative experiences around menstruation.

Results suggest the U N ME program increased participant's understanding of and self-efficacy in menstrual management.

**Keywords**: *Menstrual management, self-efficacy, gender inclusive, homelessness, education* 

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# **Dedication**

This is project is dedicated to the menstruators, the members of the LGBTQ+ community, and anyone who gives voice to the voiceless. You are seen, heard, and valued.

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### Chapter I

### Introduction

Increasing Self-Efficacy with Menstrual Management for Young Adults Experiencing

Homelessness Using the Inclusive "U N ME" Education Program

"I feel like I'm dying", "I just want to go home and lay on my bed", and "I have so much to do, but I physically and mentally cannot" are some common feelings that can be heard from females about their experiences with menstruation (K. Granum, A. Merill, M. Morell, personal communication, 2023<sup>1</sup>). Menstruation, can be known as a menstrual cycle or a period, is a natural physiological occurrence that individuals who were assigned female at birth, or born with female anatomy, experience for at least 40 years in a lifetime (Michel et al., 2022). Although menstruation is traditionally a "feminine" experience, there exists a population of non-binary, non-gendered, and transgendered individuals who continue to experience menstrual cycles and are often overlooked in current literature (Casola et al., 2021; Lane et al., 2022; Sommer et al., 2020). Throughout this paper, individuals who experience menstruation will be referred to as "menstruators" and those do not experience menstruation are "nonmenstruators" to increase inclusivity (Lane et al., 2022).

Knowledge and guidance for menstruators experiencing menstrual cycles come from a variety of sources. Traditionally, the first source of information for young menstruators experiencing menarche, or their first menstrual cycle, are older relatives such as mothers, aunts, and teachers (Casola et al., 2021; DeMaria et al., 2020). For those born in the 1990s, the iconic American Girl reference book entitled, "The Care and Keeping of You: The Body Book for Girls" was a popular source of information for understanding menstruation (Schaefer, 1998).

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<sup>&</sup>lt;sup>1</sup> Pseudonyms used for confidentiality.

Menstruators also rely on public education regarding puberty and the menstrual cycle (Kuhlmann 2020; 2022). Recently, phone apps such as TikTok, and social media accounts such as Twitter, and Instagram include menstruation knowledge with this generation of young menstruators (Choi, 2020). One virtual app content creator, Nadya Okamoto, created a series of videos on her TikTok platform with videos reaching over at most 2.6 million views entitled "Period 101" to educate menstruators experiencing their menstrual cycle for the first time (Nadya Okamoto, n.d.). Moreover, according to Mihm et al. (2011) as menstruators mature, menstruation changes as well, thus generating new concerns, questions, and experiences. There are a variety of sources for menstrual management knowledge, however, the vast resources may not be accessible, applicable, or acceptable for menstruator use.

### Menstruation

There are many different names and terms for the menstrual cycle such as "periods", "time of the month", and the "visit from Aunt Flo". The process of menstruation occurs through the interactions of the body as dictated by hormones and can last between 24 and 38 days to prepare the body for reproduction and pregnancy (Cleveland Clinic, 2022; Mihm et al., 2011; Reed & Carr, 2015). Although there are four phases within the menstrual cycle (menses phase, follicular phase, ovulation, and the luteal phase), menstruation is markedly known for the "menses" phase or shedding of the uterine lining that results in the bleeding from the vagina and is experienced and understood differently by every menstruator (Cleveland Clinic, 2022; Mihm et al., 2011; Reed & Carr, 2015). Throughout this paper, the menses phase will be referred to as the "menstrual cycle" and "menstruation" interchangeably.

There are multiple methods of collecting and disposing of blood shed during the menstrual cycle experience. A menstruator will lose approximately 30mL of blood during the

shedding process (Reed & Carr, 2015). Disposable personal care products like tampons, a product inserted directly in the vaginal canal, or a menstrual pad, an absorbent product placed on the underwear of the menstruator to soak up the expressed blood and replaced every four to eight hours (American College of Obstetricians and Gynecologists [ACOG], 2021). Other menstrual products used include reusable menstrual cups, menstrual discs, and period underwear, all of which are products created to collect menstrual blood and then sanitized for repeated use (ACOG, 2021; Cleveland Clinic, 2022; Ramsay, et al., 2023). The selection of menstrual products is influenced by the menstruator's familiarity, comfort, preferences, and access to the products.

Common symptoms menstruators experience during menstruation include cramping pain in the pelvis, abdominal, and lower back area, bloating, sore and tender breasts, headaches, and fatigue (Cleveland Clinic, 2022; Mayo Clinic, 2022). In addition to physical symptoms, there are psychological changes including an increase in anxiety, depression, mood swings, and poor concentration because of the change in hormones in the body (Cleveland Clinic, 2022; Mayo Clinic, 2022). While many similarities in symptoms and experiences accompany the menstrual cycle, it is a highly variable event that differs from one menstruator to the next and can be influenced by body composition, hormonal balances, age of menstruator, stress, and nutrition amongst other contexts (Mihm et al., 2011). In some instances, menstruators may intentionally suppress their menstrual cycle through medicinal methods such as oral contraceptives to improve mental health and overall quality of life (Andrist et al., 2004; Moussaoui et al., 2023). Despite the suppression of the menstrual cycle, an understanding of the general cycle is important for the menstruator to keep track of their health (Gunter, 2019). The tasks required to manage the menstrual symptoms described are considered "menstrual management" (Trant et al., 2022;

Sommer et al., 2020). It is because of the many differences between the menstruator's experiences that individualized guidance and education on this process is often difficult to receive. Menstruators may benefit greatly when given knowledge catered to individualistic needs on how to manage menstruation (DeMaria et al., 2020; Schmitt et al., 2021).

### **Period Poverty**

Globally, approximately 500 million menstruators do not have access to menstrual products and hygiene facilities (Geng & Yockey, 2021; Michel et al., 2022). The inability to obtain menstrual products is a phenomenon known as 'period poverty'. Period poverty also encompasses the lack of resources, education, and products needed to maintain healthy menstrual management (Cardoso et al., 2021; Kuhlmann et al., 2022). The menstrual experience can be challenging and feelings of unpreparedness may add to emotional and psychosocial challenges. Period poverty can occur in populations where basic needs are unmet such as individuals who are incarcerated, immigrants or migrants, and low-income students (Casola et al., 2023). Although other factors determine whether a menstruator has access to the products needed, financial resources are a critical factor in overall accessibility.

The homeless young adult population is a marginalized group that may experience resource and housing insecurities, as well as period poverty. Approximately 16.9 million menstruators in the United States were living in poverty as of 2021 and it is estimated that one in five menstruators experience period poverty in the United States (Casola et al., 2022; 2023; Geng & Yockey, 2021; Michel et al., 2022). As of January 2023, the Southern Nevada Point-in-Time count reported that 6,566 individuals were actively experiencing homelessness, of that, 14% of them are between the ages of 0-24, this is an over 900 count increase from 2022 (Nevada Homeless Alliance, n.d.). The population of menstruators who experience homelessness in the

Las Vegas area are individuals who may not effectively meet menstrual needs and may be illequipped with the lack of education and resources to do so.

Bandura described the term "self-efficacy" to refer to the self-perception of an individual in their ability to achieve behaviors and control life events in a specific and satisfactory manner (Bandura, 1977; Lopez-Garrido, 2023). The facilitators to increased self-efficacy include having positive, successful experiences completing a task, perception of others being successful in completing a task, being made to believe they are capable of completing the task, and being in a confident and positive mood (Bandura, 1977). Self-efficacy can also be increased when the selfconfidence of the individual is improved, especially as it relates to the task at hand (Hunter et al., 2022). This concept of self-efficacy is crucial for individuals to meet an already demanding task of menstrual management while facing the burdening obstacle of period poverty. The following study aimed to answer, "Will the development of the 'Understanding and Navigating the Menstrual Experience' (U N ME) program improve the self-efficacy of menstrual management for young adults experiencing homelessness?". The proposed solution was to develop and implement the "Understanding and Navigating the Menstrual Experience" or the "U N ME" program at Shannon West Homeless Youth Center, further referred to as "Shannon West", located in Las Vegas, Nevada. Lastly, through the achievement of the prior two goals, the inspiration of sharing menstrual knowledge was imparted to the participants of the U N ME program.

### **Significance to Occupational Therapy**

Occupational therapists [OTs] aim to improve or maintain a client's quality of life to ensure clients can function with as much independence as possible by using meaningful occupations to promote health as outlined in the Occupational Therapy [OT] scope of practice

(American Occupational Therapy Association [AOTA], 2020). The different activities that individuals are required to do and desire to complete daily are referred to as "occupations" (AOTA, 2020). By addressing occupations with a holistic approach, OTs ensure clients feel empowered to participate in activities of daily living (ADL) tasks that contribute to the client's well-being in a manner that is appropriate to their environmental contexts and lifestyle (AOTA, n.d; 2020). OTs collaborate with clients to ensure that they have the correct resources, knowledge, and understanding to complete daily routines and one of those routines is menstrual management.

Occupational therapists use the Occupational Therapy Practice Framework [OTPF] (AOTA, 2020) to define the scope of practice and as for menstruation management, this can be found under toileting hygiene tasks. Although many tasks for menstrual management occur on the toilet such as the collection and disposal of menstrual blood, the effects of menstruation can be seen beyond a bathroom setting, particularly with prominent symptoms such as menstrual cramp pain (Boden et al., 2023). Period poverty and poor menstrual management affect other areas of occupation such as ADLs, work and school performance, and socialization (Boden et al., 2023). OT intervention can address pain management skills and strategies for menstruators significantly affected by their pain. Heightened emotions may influence the menstruator's responses and direct the conversation to a negative route. OTs can address this concern by educating and implementing emotional regulation strategies with these clients. Menstruation management is an ADL in and of itself, however, it becomes a significant recurring event in menstruators' lives and should not be overlooked by OTs.

The occurrence and intensity of the menstrual symptoms such as menstrual cramp pain, fatigue, and headaches is beyond the menstruator's control, yet their ability to adapt to their

bodily experiences can be remedied with the proper resources, granted they have access to resources (Boden et al., 2023; Cotropia, 2019; Schmitt et al., 2021). Occupational injustice is the label for circumstances where individuals or groups are unable to participate in occupations as a result of social, cultural, and institutional constructs in the environments they find themselves in and the experience of period poverty would fall under those circumstances (Durocher et al., 2013; Nilsson & Townsend, 2014; Whiteford et al., 2021). The experience of period poverty is found globally and is another compounding factor that affects menstruators' abilities to engage in daily activities. The philosophical base of OT is to ensure clients have the right to engage in their meaningful occupations (AOTA, 2017). The lack of appropriate materials and knowledge to manage menstrual health and hygiene causes an occupational injustice that menstruators face and directly opposes the values of occupational therapy.

The development of an inclusive menstrual education program follows the values of the AOTA as it respects the diversity, equity, and inclusion (DEI) initiative by including menstruators of all gender identities and cultural backgrounds (AOTA, n.d.). Currently, there has been a rise in more gender-inclusive discussion regarding menstruation, however, gender-diverse menstruators experience unsatisfactory or ill-fitted healthcare attention regarding menstrual health (Lane et al., 2022). OTs operating within the value of client-centered care, will find use of correct inclusive language and providing gender-affirming care continues to position the client at the center. The intent of the U N ME program is to support the preventative arm of the American Occupational Therapy Foundation research agenda, as proper menstrual health and hygiene practices can prevent infection, skin breakdown, and improve the overall comfort and cleanliness of the menstruators by establishing healthy habits with menstrual management (American Occupational Therapy Foundation, n.d.; Hennegan et al., 2017; Kuhlmann et al., 2020). The

development of this program is in alignment with the values and concerns of occupational therapists based on their core values of the profession of client-centered and holistic care.

### **Statement of the Problem**

Negative feelings toward menstrual management can range from slight annoyance to a debilitating monthly event and OTs have the skills to approach this effectively through client-centered care, education, and advocacy (AOTA, 2020). Factors such as knowledge and confidence in menstrual management, cultural backgrounds, and access to resources can impact the perception of the menstrual management experience. Being cognizant of these cultural differences and potentially harmful misconceptions allows health professionals to address menstrual health and hygiene to ensure a more positive experience of menstruation and the safety of the menstruators (Fennie et al., 2022). A specific skill set of the OT profession allows practitioners to provide client-centered care while operating with cultural humility, or flexibility and understanding when working with individuals with different cultural backgrounds from oneself (Agner, 2020). Menstruators seeking help with their menstrual experiences require an approach that is conscious of the impact that culture has on an individual's actions and experiences to address their concerns with a level of sensitivity and effectiveness (Agner, 2020).

Homeless youth are at high risk for infection, unhygienic practices, and disregard of dignity because of resource insecurity and lack of information (Lahme et al., 2016; Trant et al., 2022; DeMaria et al., 2020; Hennegan et al., 2017). Without proper guidance and support, these menstruators must learn through available resources (i.e. information from word of mouth and various free educational materials) that may not address all the concerns that suit their unique circumstances or are not accurate (Sommer et al., 2020). They might lack a method to analyze

the health information acquired online or socially among peers, contributing to potentially hazardous misinformation being spread (Boden et al., 2023; Sommer et al., 2020).

It is paramount to address barriers in the lives of menstruators experiencing period poverty that affect their ability to participate in their occupations and impact their overall well-being by utilizing an OT holistic approach. Menstruators experiencing both homelessness and period poverty can lead to a decrease in dignity and self-esteem as basic health and hygiene needs are unmet (Boden et al., 2023; Sommer et al., 2020). Through OT intervention, the gaps in knowledge of menstrual health and hygiene can be addressed for these menstruators while considering their individual contexts to foster a sense of control and confidence in menstruation management.

Following a Google search of a "menstrual education in Nevada" and through discussion with current health care practitioners in the city, there were no known relevant programs identified similar to the U N ME program for menstruators experiencing homelessness. Thus, the development of this capstone project was inspired by the lack of menstrual education programs in Southern Nevada. According to Nevada's Department of Education curriculum standards, topics regarding puberty and menstruation begin as early as in 5th grade and continue to some extent until the 12th grade, however, current literature states that the knowledge from these sources remain unsatisfactory for menstruators (DeMaria et al., 2020; Nevada Department of Education, 2021). Interventions to address period poverty in young adults experiencing homelessness have been conducted in developing countries such as India and Uganda, but not in Nevada (Sommer et al., 2020, Trant et al., 2022). Although Project Marilyn and Project Dot are organizations in Nevada that provide menstrual products to those in need, the knowledge to manage menstruation is often not provided alongside the products (Project Dot, n.d.; Project

Marilyn, n.d.). For individuals experiencing homelessness, shelters may provide menstrual products as well. However, at Shannon West, a menstruator will only obtain to menstrual pads and tampons after they ask the staff to retrieve it for them in the maintenance closet that only employees have access to, limiting the access from those who are too shy or embarrassed to ask for them (Cotropia, 2019).

The target population for this study were menstruators experiencing homelessness in Nevada. The optimal age range for this study was 18-25 years old. Menstruators who were interested in learning more about their menstrual cycle and were willing to speak about their menstrual experiences were targeted for this study. The goals of this study were to increase self-efficacy in menstruation management for young adults, the development and implementation of an inclusive menstrual health and hygiene education program, and to inspire the participants to educate other menstruators in the community.

### **Chapter II**

### **Literature Review**

Limited evidence was found on the experience of period poverty and homelessness in the United States. Databases used to obtain these articles included Academic Search Premier, Child Development and Adolescent Studies, CINAHL, LGBTQ+ Source, PsycINFO, and Women's Studies International. Search terms included "menstruation", "menstrual management", "LGBTQ+ menstruation", "menstrual education", and "menstruation attitudes". Articles were selected based on their relevancy to the topic and date of publishing (within 10 years). Although relevant and locally conducted studies within the United States were limited, common threads were identified such as criticism of menstrual health and hygiene expertise, prejudices experienced by menstruators, and menstrual products as a barrier to completing menstrual hygiene tasks. The goal of increasing self-efficacy with menstrual management for young adults by creating an inclusive menstrual education program that also promoted the spread of accurate information throughout the community of menstruators were supported by the literature reviewed.

### **Addressing Self-Efficacy with Menstrual Management**

An increase in self-efficacy, by definition, allows the individual to have the confidence to problem solve and achieve their goals and for menstruators, the problem of period poverty might be the first obstacle to a high level of self-efficacy. Period poverty can present as inaccessibility to water and soap to cleanse oneself of blood, not having a private space to change menstrual products, not having access to a laundry machine to clean clothes that have been soiled by period blood, lack of tampons and pads, or not having the knowledge to address menstrual pains (Cardoso et al., 2021). Experiences of period poverty can increase difficulty in maintaining a

hygienic and clean appearance, adhering to school and work attendance, and lead to impaired or avoided social interactions (Boden et al., 2023; Geng & Yockey, 2021; Kuhlmann et al., 2022; Sommer et al., 2020). By increasing the perceived capability of menstrual management, menstruators will be able to successfully complete this monthly responsibility despite experiencing period poverty.

A key aspect of the experience of period poverty is the inability to procure appropriate menstrual products needed to manage menstruation. Menstruators who are experiencing homelessness or otherwise living under the poverty line may find themselves with additional challenges (Cotropia, 2019; Kuhlmann et al., 2023). Although schools, homeless shelters, and other programs are available in the community for individuals experiencing homelessness to have access to menstrual products it only addresses one aspect of the issue (Kuhlmann et al., 2023). In studies that examine the needs of individuals who do have access to these products, the context they find themselves in still does not support this occupation. A qualitative study explored school-aged menstruators' facilitators and barriers to menstrual management in St. Louis through surveys and found that often the products made available to these menstruators are not appropriate to their needs. One participant reported that the free pads and tampons were designed to handle light to regular amounts of period blood flow when they are experiencing heavier amounts of blood flow (Kuhlmann et al., 2020). Other studies reported similar situations in which the provision of reusable sanitary items was not properly considered in the individuals' contexts. For example, schoolgirls in urban areas of developing countries were provided reusable menstrual pads but they still lacked access to clean water (Hennegan et al., 2017). Additionally, some girls reported dissatisfaction with the introduction and use of reusable products and they reverted to their previous methods without having a proper method to hygienically clean and dry

the product (Hennegan et al., 2017). Although this qualitative study intended to address the need in rural Uganda, similar situations may be found the United States where clean water is still an unmet need such as Flint, Michigan (National Center for Environmental Health, 2020). The provision of reusable menstrual products only addresses a singular part of the challenges with period poverty.

If a menstruator finds themselves without menstrual products to prevent the visible leakage of menstrual blood through clothing, they are fearful of colleagues witnessing their appearance, often leading to menstruators leaving or avoiding school or work altogether (Casola et al., 2023; Kuhlmann et al., 2020; Lahme et al., 2018; Trant et al., 2022). For school-aged menstruators, the distraction of discomfort or debilitating menstrual cramp pain alters the learning experience and impairs the ability to learn and participate in the school day (Boden et al., 2023; Sommer et al., 2020). One menstruator was "calling [her] mom every month" and asking, 'Can you come get me [from school]?' due to unbearable cramps (DeMaria et al., 2020). Midol, Tylenol, and acetaminophen are all pharmacological methods of pain relief that are an option for these menstruators, given they have access to these treatments (Reed & Carr, 2015). Without this resource, menstruators are expected to carry on responsibilities, leaving them to ignore menstrual cramp pain for hours during the day and affecting overall performance. Menstrual management includes the ability to maneuver symptoms that pose a barrier to school and work, by increasing self-efficacy, these menstruators would be able to independently find solutions to these problems when faced with period poverty.

Although period poverty compounds the stress that the monthly menstrual management responsibilities bring, when given the opportunity to increase self-efficacy incorporating proper,

client-centered, assessment of environmental contexts grant menstruators the ability to confront this situation to success.

### **Program Development Solution**

Although period poverty is not specific to individuals experiencing homelessness, there is a high likelihood that these two experiences will happen concurrently. Menstruators experiencing homelessness also experience lowered self-esteem and loss of dignity, therefore the creation of an empowering inclusive program to increase their self-efficacy can reduce these effects. According to a qualitative study done in New York City, period poverty leads to menstruators using their creativity to meet menstrual management needs such as the use of rolled-up toilet paper in lieu of proper sanitary and absorbent products or using McDonald's bathrooms to address these needs, at the expense of their health and dignity respectively (Sommer et al., 2020). Participants were faced with cyclical challenges as they attempted to use public spaces to be clean and presentable to society, however, were deemed too unsightly to use the facilities (Sommer et al., 2020). The creation of a program that improved previous solutions to period poverty issues with education and resources and further empowered the participants despite their past, less than favorable experiences from moments of desperation benefit this population of menstruators.

It was crucial to establish a nonjudgemental environment for the menstruators to gather and learn, which can be contrasted from previous loss of dignity. As evidenced by the qualitative findings of Boden et al. (2023), the lack of access to menstrual products and private bathrooms left menstruators experiencing homelessness to reusing old clothes or used menstrual products, or not change at all due to feelings of being unsafe in public restrooms. A facilitator to menstrual management for these women is the sense of community with other menstruators experiencing

homelessness with sharing information and products to properly address menstrual health needs. Addressing the attitudes of the menstruators to move away from a feeling of indignity as well as improving their resourcefulness may improve their menstrual experiences. Highlighting a sense of community through the sharing of experiences and a safe learning environment will increase self-efficacy of menstruators as well as address the positive experiences pillar of Bandura's self-efficacy theory.

### **Ideal Learning Environment**

In households, in school, and even within popular media, periods are depicted to be an "embarrassing", "gross", and "shameful" experience, thus a controversial topic of menstruation requires a level of tact and intentionally with any approach to address it (Boden et al., 2023; Cotropia, 2019; DeMaria et al., 2020; Lahme et al., 2016; Tan et al., 2017). The education of menstrual management required an inclusive and open learning environment, especially with the presence and prevalence of stigmas of menstruation (Cotropia, 2019; Tan et al., 2017). While some cultures may celebrate the menstrual cycle with parties, other cultures shame menstruators for this naturally occurring event (Tan et al., 2017). Following the interview responses in a study exploring women's menstrual experiences through a lifetime, it was reported that these stigmas that follow menstruation often prevented them from seeking assistance needed and they dreaded these experiences monthly (DeMaria et al., 2020). Similarly, while some discomfort is known and expected with experiencing the menstrual cycle, some individuals experiencing true menstrual disorders are often overlooked because their discomfort is written off as typical menstrual discomfort when in actuality it can be the debilitating pain of a serious underlying issue such as endometriosis, a pain disorder in which the uterine tissue develops outside of uterus (Mayo Clinic, 2023.; Kennett et al., 2016). Due to menstruation being a discomforting

experience and the general inadequate knowledge of menstruation, these diagnoses are frequently missed. Additionally, when menstruators are fearful of the judgment they may experience when they are struggling with menstrual symptoms, they will avoid getting the help and assistance needed (Cotropia, 2019; Tan et al., 2017). For example, when high school-aged menstruators completed a survey, they reported feeling "ashamed" to ask for menstrual products from their school administration partly to avoid appearing "unprepared" and partially due to having a male-dominated administration (Cotropia, 2019). Keeping these perspectives in mind when addressing menstrual management concerns is critical to ensure that menstruators are encouraged to ask for help and getting the support needed.

The menstrual experience can be an isolating event as menstruators are hesitant to discuss concerns and nonmenstruators are not willing to hear. Menstruators who are struggling to cope with their symptoms and are finding themselves without assistance needed must persevere and carry on with their activities with additional barriers. It is important to help menstruators find some familiarity/comfort in speaking about their menstrual cycles in order for them to advocate and perform their daily tasks as optimally as possible. The initial step towards destignatizing the experience for menstruators was the deliberate construction of a non-judgmental and safe learning environment.

### **Increasing Access to Knowledge for All**

Following the construction of the safe learning environment, it was crucial to include all genders in the learning process to improve stigmas with menstruation and to address the needs of all menstruators. Menstruation occurs for individuals who were born with female anatomy and persists throughout the reproductive years regardless of their gender identity when left untreated with hormone suppressants such as an oral suppressant or surgical intervention like gender-

reassignment surgery (Andrist et al., 2004; Lane et al., 2022; Moussaoui et al., 2023). Lane et al. (2022) explored the challenges of transgender and non-binary menstruators' experiences and found societal and systematic aspects that jeopardize the mental and physical health of these menstruators. The concept of 'gender dysphoria', or the mismatch of a person's body to their gender identity, prevents these menstruators from getting the healthcare and education that they need. Gender-diverse menstruators experience barriers to their health when their healthcare providers are not familiar with treating transgender or non-binary individuals. This leads to feelings of isolation and an unsupportive environment for menstruators when their questions and concerns cannot be addressed.

A rising solution to the cognitive dissonance that a traditionally "feminine" experience imposes on gender diverse individuals is to intervene in menstrual cycles medically or surgically. Methods such as menstrual suppression and its effects on gender diverse individuals have limitedly been researched (Schwartz et al., 2023). Utilizing retrospective chart review of 101 transgender and gender diverse adolescent patients, Schwartz et al (2023). examined the outcomes of menstrual management, in terms of suppression and stopping menses through various methods. The patients reported improved menstrual related symptoms (i.e. pain, bleeding, moodiness, and menstrual related dysphoria) and satisfaction at both points of data collection (1-6 months and 1 year later). Overall, there was satisfaction and observed improvement in the patients that were educated on and provided counselling with gender affirming care and treatment. For the gender diverse menstruators who are unable to improve their quality of life with menstrual suppressants, addressing menstruation management techniques with inclusive language and adapting the task to their comfort is crucial. Although the menstruation management described in this study is slightly different from the management

discussed previously, it is still important for individuals to be educated and aware of the options they have as a current menstruator to improve their mental well-being.

Transgender and gender diverse menstruators have been explored in the literature to support gender-affirming care and menstrual suppression purposes. In the literature reviewed, options for coping with gender dysphoria without the help of suppression methods were not present. Transgender and gender diverse menstruators face an increased risk to anxiety, depression, and suicidal thoughts because of the dysphoria felt with continued menses (Lane et al., 2022; Schwartz et al., 2023). Seeking methods to quantify and address these individuals' menstrual concerns need to be explored and addressing menstrual management for menstruators cannot be achieved without including all menstruators, despite gender identity.

### **Decrease the Spread of Misinformation**

Inaccurate knowledge can be passed along unknowingly when formal sources of knowledge are not adequately implemented. It is this lack of general menstrual knowledge that encourages misinformation from being accepted and uninformed decisions regarding personal health being made, despite the options available. Though menstrual health and hygiene knowledge is often passed down from older females. dissatisfaction with the type of information and level of information exists (DeMaria et al., 2020; Schmitt et al., 2021; Trant et al., 2022). DeMaria et al. (2020) found that misinformation was typically unchallenged and misconceptions of menstruation management common (DeMaria et al., 2020). Cultural background and or overall discomfort with the topic of menstruation, highlights even more need for increased available educational support (Agnew & Gunn, 2019; DeMaria et al., 2020; Jarrahi et al., 2020; Kuhlmann et al., 2022; Phulambrikar et al., 2019; Schmitt et al., 2021; Tan et al., 2017; Trant et al., 2022). More conservative households may find shame and embarrassment in discussing the

realities of menstruation, leaving new menstruators without a solid foundation of menstrual management knowledge. In some cultures, the taboo of menstruation prevents any information from being shared with new menstruators as the discussion of it is considered "crude" (DeMaria et al., 2020) The wide range of attitudes towards this shared experience expand beyond personal beliefs as the topic of menstruation also appears in religious belief systems and exists on spectrum of it being a gift from the gods to punishment for sins (Tan et al., 2017). Although many menstruators find knowledge through the passed-down information, this may not be the case for many others leaving them without proper knowledge and preparation with menstrual management. This can lead to blindly accepting any knowledge they could possibly obtain, without ensuring the credibility of said knowledge.

Formal menstrual education through the education system is another common source of information for menstruators, however, the generalizability of these lessons is not so applicable to individual needs and experiences with managing menstruation. Trant and colleagues (2022) interviewed both medical providers and their adolescent menstruating patients and found that the participants were discontent with the puberty lessons from school. Discontentment also stemmed from the timing of said lessons. A pattern emerged to suggest that menstrual education lessons were received "too late" or "too early" and were insufficient to prepare the menstruator for their first menstrual cycle. Further, through the completion of this study, the need for a comprehensive menstrual education led by a medical health professional opportunity has risen. Through surveys and interviews, Schmitt et al. (2021) investigated the perceptions of menstruators' experience with education from these two sources and found that a common mishap of parents expecting the school to provide education and vice versa leave menstruators with inadequate guidance is a possibility.

While education regarding menstruation can be taught informally at home and formally in school, professional health education and discussion at various times may be more beneficial as it is a phenomenon that occurs across a lifespan. Young adult menstruators may no longer have those support systems and are expected to understand the ins and outs of managing their menstrual cycles however, the qualitative findings regarding knowledge about menstrual cycles report that menstruators desire an improved understanding of this process. Without these educational supports, menstruators turn to potentially inaccurate sources of knowledge, thus contributing to the spread of misinformation. The qualitative studies included highlighted the types of gaps in knowledge for these menstruators, however, no treatment had been applied to address these gaps. The lack of treatment applied in these studies begs for more attention and research in the area of comprehensive menstrual education to ensure correct menstrual management information is available to these menstruators to improve their experiences.

### **Role of Occupational Therapy**

Every month, menstruators experience their menstrual cycle which increases ADL demands that are not always present when they are not actively experiencing vaginal bleeding. During the menstrual cycle, the frequency in which a menstruator needs a restroom or similar private space and the amount of time required to maintain hygiene during menstruation may be increased to do tasks such as disposing of menstrual blood and changing or refreshing menstrual products (Boden et al., 2023; Hennegan et al., 2017; Sommer et al., 2020). For menstruators experiencing homelessness, although they might have access to public restrooms, there is no guarantee that those facilities are safe, private, and clean for usage (Boden et al., 2023; Sommer et al., 2020). Additionally, the onset of menstrual cycles can lead to increased laundry tasks for soiled garments (Sommer et al., 2020). Through OT intervention, menstruators lacking these

resources can be guided through available options and increase problem-solving abilities when faced with these challenges. Menstruators experiencing homelessness may already have difficulties meeting basic needs daily and find themselves with additional challenges every menstrual cycle with the extra demands.

The pain that menstruators experience from menstrual cramping may be so intense that it prevents menstruators from completing household management tasks like cleaning, focusing on studying for an upcoming test, and going out to lunch with friends on account of menstrual pain (Boden et al., 2023; Trant et al., 2022; Schmitt et al., 2021). The increased emotional experiences that menstruators might feel as a result of hormonal changes during the menstrual cycle may impact social interactions between menstruators and others (Boden et al., 2023; Schmitt et al., 2021). OT intervention can address these barriers to occupations utilizing problem-solving collaboration with menstruators while ensuring relevant and reputable information is being delivered to improve their confidence, thus self-efficacy, in menstrual management.

The effect of period poverty can leave menstruators hesitant to socialize in public spaces (Kuhlmann et al., 2020; Lahme et al., 2016). Another common symptom of menstruation is the effect that hormonal changes in the body have on the menstruator's emotional responses, which may contribute to them avoiding social situations with loved ones (DeMaria et al., 2020). Cultural beliefs around menstruation may also impact menstruator socialization. In countries such as Nepal and Indonesia, some believe menstruators should avoid leaving their rooms or are even sent to separate living quarters for the duration of the menstrual cycle (Tan et al., 2017). Some cultures prohibit the entering of religious institutions during menstruation and others are isolated or even shunned out of society (Fennie et al., 2022; Tan et al., 2017). The occupation of

socialization is significant to contribute to an individual's well-being and OTs can focus on achieving socialization despite internal and external barriers (AOTA, 2020).

Occupational therapy is a field that aims to improve or maintain the quality of life for clients using their meaningful daily activities (AOTA, n.d.; 2020). OTs also ensure that their clients are viewed holistically and take their internal and external contexts into consideration when treating them (AOTA, 2020). The literature reviewed failed to consider additional contexts that OTs would consider such as access to all resources needed to manage menstruation and ensuring that menstruators are fully educated on their use. While OTs are often seen treating diagnoses and symptoms of diagnoses, menstruation is an ongoing occurrence for almost half the menstruator's life that can be debilitating for some. The impact of poor menstrual management can affect the individual's physical and mental health, often leading to a lack of confidence and disempowerment (DeMaria et al., 2020, Sommer et al., 2020). OTs ensure their clients are successful in completing their daily occupations by motivating and empowering the clients (AOTA, 2020). Menstruators experiencing period poverty and homelessness benefit from OT intervention to ensure they obtained the knowledge, confidence, and resources needed in order to successfully manage their menstrual cycles.

### Conclusion

Throughout the literature review, there was little research in the areas of homelessness and the menstrual experience in the United States. Also noted was the gap in OT intervention addressing the needs of individuals who menstruate. Lack of resources, navigating the stigmas, and inclusion of all individuals who experience menstruation are all well within the OT scope to address the menstruating population. The aim of increasing self-efficacy in menstrual management, creation of an inclusive and comprehensive education program for menstrual

management, and the goal of promoting the spread of information addressed the needs of these menstruators was fortified in the literature reviewed.

### **Statement of Purpose**

The purpose of this study was to create an inclusive menstrual health and hygiene education program to improve self-efficacy of menstrual management in young adults experiencing homelessness at Shannon West in Southern Nevada. To fill the gaps identified in the literature review, this was the first known program of its kind established in the city of Las Vegas. Following the findings from the literature reviewed, the program was inclusive, educational, and empowering for the participants involved.

### **Objectives**

The first objective of this study was to increase participant's self-efficacy with menstrual management. Through the creation of a comprehensive and inclusive menstrual health and hygiene educational program, participants gained the knowledge they might have missed or forgotten about their menstrual cycle. Equipping participants with an adequate level of knowledge would be the first step to elevating self-efficacy with menstruation management. Through participation in meaningful activities such as the creation of a personal reusable menstrual pad and selecting methods of tracking menstrual symptoms based on preference, the participants will increase their comfortability, confidence, and competence in menstruation management.

The second objective of this study was the development of the U N ME program. The lesson plan for the U N ME was modeled after the "A Period Positive National Curriculum For England" (Quint, 2022) as it provided key points and topics that menstruators of all ages should know and outlined an approach to keep the lessons inclusive, open, and positive. The U N ME

program featured evidenced-based information as well as encouraged participants to scrutinize any information they find when receiving information pertaining to menstrual management.

Lastly, the final objective of this study was the promote the spread of accurate menstrual knowledge throughout the community. The U N ME program included opportunities to share and discuss menstrual management experiences that the participants could listen and learn from each other within the present group at the time. The promotion of sharing knowledge intended to advance the self-efficacy of the participants to a level wherein they are empowered to share their expertise with other menstruators who might have similar experiences to them.

### **Hypothesis**

 Participation in the U N ME program will increase self-efficacy as measured by a modified General Self-Efficacy scale of young adult menstruators with menstrual management.

### **Theoretical Framework**

The theoretical framework used to guide this capstone project was the Model of Occupational Empowerment. The Model of Occupational Empowerment was established for women and children who find themselves in unfavorable living conditions (i.e. experiencing homelessness) that lead to unhealthy habits and a negative occupational identity (Fisher & Hotchkiss, 2008). The stigmas around menstruation and the experience of homelessness lead to disempowerment and further, occupational deprivation for the menstruators. The U N ME program was developed utilizing core principles in the Model of Occupational Empowerment. Through the use of educational goals for the participants, including aspects that fostered social support among the participants and encouraging positive client engagement participants will experience a formation of a positive occupational identity. Additionally, the activity portion of

this project encouraged feelings of empowerment using occupations related to menstrual management.

The learning theory that was implemented for the development and while conducting the program is the Humanistic Learning Theory. The humanistic learning theory places student needs at the focus of the lesson to create a student-centered lesson (Gandhi & Mukherji, 2023). Implemented in the program were many opportunities for the participants to contribute input on the topics discussed and the activities involved. Prior to the beginning of the program workshops, the student researcher gathered comments and suggestions from the clients at Shannon West via a physical written and anonymous comment box as well as a virtual comment box via a QR code to Google Forms (See Appendix H and Appendix I). Additionally, feedback was gathered during each workshop to improve the subsequent workshops to facilitate the development process. Critical aspects of this learning theory are self-esteem, motivation, and autonomy (Gandhi & Mukherji, 2023). By allowing participants to take control of the topics and knowledge gained from these programs, a positive sense of empowerment was fostered. The focus of this program was to change the attitudes and experiences of the participants with their monthly menstrual cycles despite their current circumstances. Using a learning theory that prioritized the participants' needs and desires demonstrated success in the learning aspect.

### **Chapter III**

### Methodology

### **Agency Description**

The development of the U N ME program capstone project took place at Shannon West. This is a non-profit organization that provides various services to individuals between the ages of 16 and 25 years old who are at risk or currently experiencing homelessness, referred to as "clients". Shannon West does not discriminate based on race, religion, and sexuality and exemplified their support for the LGBTQ+ clients by providing LGBTQ+ events for the clients as well as through visual representation (e.g. rainbow pride flags show in common areas). Shannon West holds 150 beds for clients to assist them in transitioning to independent living as adults. This mission is achieved through providing opportunities and services for the clients to find and maintain jobs, to learn how to manage their own money to pay bills, and job-specific training in a supportive and inclusive environment for all individuals regardless of their status in the employment process, their gender, or sexual orientation (Help of Southern Nevada, n.d. -a). Services and programs provided by Shannon West include intensive case management, assistance in transitioning to independent living, and mental health services amongst others (Help of Southern Nevada, n.d. -b).

### **Study Design**

This study was a convergent parallel mixed-method study rooted in a phenomenological approach. This study received institutional review board [IRB] approval (UNLV-2023-452) from the University of Nevada, Las Vegas. Data was collected via physical copies of questionnaires as well as through narrative non-identifiable data collected from workshop discussions. Qualitative

data has supplemented the quantitative data from the study to support self-efficacy scores with reported levels of ease with menstrual management.

The quantitative aspect of this research was used to understand the effect that participation in the educational workshops would have on the self-efficacy of menstrual management for the participants. Qualitative data was collected to highlight the participants' menstrual experiences and supplement the quantitative data to show any effect on self-efficacy from the U N ME program. Utilizing a phenomenological approach with this study allowed the researcher to gain a better understanding of the participants' lived experiences navigating period poverty with homelessness (Tenny et al., 2022).

This study design was selected to examine the wide range of possible variables in this diverse population who experience menstruation. Due to the limited literature available for individuals who experience period poverty here in the United States, the purpose of this study was to increase self-efficacy in menstruators with menstrual management and to contribute to the OT profession with respect to menstrual management.

#### Sample Design

The sample design for this study was a non-probability convenience sampling and snowball sampling in the community. Due to the differences in the clients' schedules with work and school, participation in the U N ME program was non-committal and participants were able to join workshops as their schedule allowed. The sample was variable weekly due to schedule conflicts and the selection of the non-probability convenience sampling increased the likelihood of participants within this setting as well as gather the most information from this diverse population.

#### **Participants**

#### Recruitment

Recruitment occurred at Shannon West through convenience and snowball method. Initial recruitment was conducted through physical printed flyers (See Appendix B). Printed physical flyers were posted at the resident assistant information desk located at the end of the hallway on each floor at Shannon West. These areas were selected due to the increased foot traffic as each client would pass it on their way out of the building, to their floor's respective laundry room, and to the common dining hall. Physical flyers were also handed to the youth during their lunch and dinner mealtimes. A schedule of activities was printed on the backside of the flyer and distributed as well to stimulate interest from clients to participate.

The student researcher additionally verbally invited participants for the snowball and word-of-mouth recruitment during the nighttime meal in the cafeteria in the hour prior to the beginning of workshops. The shelter has a curfew policy of 6:00 pm for the clients to encourage them to eat dinner in the common area at the same time. To generate interest as well as interact and build rapport with the clients, the student researcher was present in the dining hall during the dinner service at Shannon West. This provided an opportunity for the student researcher to introduce herself and to address any questions and concerns before the beginning of the workshop. This method of recruitment set the tone for the open and welcoming environment that was emphasized during the workshop for the participants.

#### Inclusion and Exclusion Criteria

Any individual was welcome to join the workshops as per the Shannon West inclusion directive, regardless of whether they were a menstruator or a nonmenstruator upon meeting. The inclusion and exclusion criteria were selected to accurately capture the menstrual experience of

individuals experiencing homelessness (See Appendix C). This criterion was inclusive of individuals who identify as genders other than "female" such as transgendered and non-binary individuals. The decision to include all gender identities was to encapsulate potential differences in how experiences of menstrual management are for cis-gendered females (i.e. individuals who identify with the same sex they were assigned to at birth) and gender-diverse individuals (i.e. non-binary, non-gendered, and transgendered individuals; Lane et al., 2022).

#### **Informed Consent**

Informed consent was collected at the beginning of each workshop. Physical printed copies of the informed consent form were distributed upon the arrival of the workshop (See Appendix D). Informed consent was read out loud to the participants. Upon the completion of reading the consent out loud, the participants signed the paper. Informed consent forms were collected and the workshop commenced.

#### **Data Collection**

#### Instruments

Demographic questions, a modified General Self-Efficacy [mGSE] questionnaire, and open-ended questions were printed on paper and handed out as participants arrived at the workshop (See Appendix E). Demographic questions included: age, education level, and gender identity to provide descriptive information about the sample and to meter education material to the appropriate level of education. The mGSE questionnaire measure was modeled by the General Self-Efficacy scale and featured 10 questions (Jerusalem & Schwarzer, 1995; Schwarzer & Jerusalem, 1995). The General Self-Efficacy scale questionnaire has a high reliability (between  $\alpha = .75$  and .94) and validity (retest reliability between .47 and .75) (Romppel et al., 2013). The scale was adapted to reflect participant responses toward their menstrual management

experiences specifically. For example, the original statement of "I am confident that I could deal efficiently with unexpected events" on the General Self-Efficacy scale was adapted to "I am confident that I could deal efficiently with unexpected events with menstruation" in the mGSE. Additionally, the number of answers on the Likert Scale questionnaire was increased from a scale of 1-4 to a scale of 1-5 to include a neutral answer ("Somewhat Confident"). This adaptation allowed participants to indicate neutrality towards the statement, thus allowance for feelings of not yet having an opinion to express. Open-ended questions were asked such as "How comfortable are you with the topic discussed today?", "How do you feel about today's topic?", and "What would you like to learn about today's topic?". These questions will be included on the printed handout for the participants to write in their answers before and after the intervention to reflect any changes influenced by the participation in the workshop.

#### Quantitative Data Instruments

- Demographic questionnaire (See Appendix E)
- mGSE questionnaire (See Appendix F)

#### Qualitative Data Instruments

- Open-ended questionnaire on printed forms (See Appendix E)
- Anonymous narrative data from discussion portions

#### **Intervention Procedure**

At the start of each workshop meeting, informed consent was obtained. The student researcher read the informed consent questions aloud and all who agreed signed the consent prior to the start of the workshop. The workshops consisted of four topics presented on a weekly basis. The topics are Menstrual Health and Hygiene, Menstrual Resourcefulness, Coping strategies and Managing Symptoms, and Nutrition and Physical health with menstrual management. These

topics were selected based on feedback from client menstruators in the community and through the organization of information gathered from research into menstruation. There were two opportunities within the week on Tuesday and Thursday evenings for participants to join to accommodate the work schedules of the participants.

The workshop presentation was conducted using Google Slides presented on a television in one of Shannon West's common entertainment rooms and physical handouts with main points and information was be provided to the participants. Snacks (i.e. candy) were offered to the participants during the workshop. The education portion of the workshop took 20-30 minutes. This was followed by discussion prompts including: "Can you think of a time when this information would have been helpful before today? What happened?" and "Have you heard this information presented today before? Where?". The natural flow of the discussion beyond these two questions were followed and noted on the student researcher's iPad device. The student researcher asked follow-up questions related to responses from the participants to stimulate further discussion as seen fit. The discussion responses were captured in a written narrative by the student researcher, de-identified, and included as data to understand the participants' menstrual experiences and attitudes towards menstruation. The discussion was open to any of the workshop attendees to participate on a volunteer basis and took approximately 10-15 minutes. In the case of nonmenstruators being present, the student researcher encouraged participation from them to share secondhand experiences, however, emphasized the importance of bringing menstruators to the focus of the conversation.

The discussion portion was followed by various activities related to the topic of the workshop to elevate the learning process and to contribute to the increase in successful task completion as supported by Bandura's Self-Efficacy Theory (Bandura, 1977). Activities included

creating a collage based on participants' feelings toward menstruation, construction of a reusable menstrual pad for the participants to keep, exploring various methods for tracking menstrual cycles, and participation in a mindfulness meditation. The use of collages and art was selected as a meaningful activity as it allows the participants to reflect on their feelings towards menstruation and can further generate new ideas and feelings about menstruation with the intentional creation of the collage as a visual representation of internal struggles, concerns, and current ease with menstrual management (Chilton & Scotti, 2014). The construction of the reusable menstrual pad allowed for the participants to experience the success of meeting their need of menstrual products with their personalized pad, thus increasing their self-esteem and increasing their ability to meet further challenges (Bandura, 1997). By facilitating the exploration of symptom tracking, the participants were given the opportunity decide based on their preference to increase a sense of autonomy, following the teaching aspects of self-efficacy (Bandura, 1997). Lastly, the mindfulness meditation gave the participants an evidence-based option to meet future challenges with the pain symptoms of menstrual management (Lustyk et al., 2011). Activity alternatives were offered to the participants based on their preference and abilities. For example, some participants did not want to do the collage, the student researcher then offered them paper and markers for them to draw their feelings towards menstruation instead and this alternative was well received. These alternatives were important to ensure accessibility to participation as well as ensuring a positive learning environment to support the increase of self-efficacy (Bandura, 1977). These activities ranged from 15-45 minutes. Following the completion of the activity, a post-workshop questionnaire was administered with the same mGSE scale and open-ended questionnaire that was presented at the beginning of the workshop.

#### **Data Analysis**

The data collected from the demographic data and mGSE were inputted into and analyzed using Microsoft Excel. Descriptive statistics of the demographic data was computed using the Excel program to examine the study participants and to provide descriptions of the sample. Inferential statistics was conducted on the data collected from the mGSE data. The data from the mGSE pre-workshop and post-workshop survey was run through the non-parametric Wilcoxon signed-rank test to see the differences in the means and thus determine whether there was a significant change between pre and post scores from participation in the program on self-efficacy with menstrual management (DATAtab Team, 2024). Lastly, an Odds Ratio test was completed on the mGSE data to see the probability of at least 3.5 average score on the mGSE scale (indicating a level of self-efficacy) occurring following the participation of the U N ME workshops (Tenny & Hoffman, 2023). p < .05 was considered statistically significant in this analysis. The qualitative data collected from open-ended survey questions and the anonymous narrative data from group discussions was manually thematically coded.

#### **Results**

#### Sample Demographics

Although there was a variety of individuals who attended the U N ME workshops, there were a total of n=22 participants throughout all four weeks of the intervention that completed both a pre-workshop and post-workshop questionnaire. Half of the participants were aged 18-20 (n=11) while the other half were aged 21-24 (n=11). While all gender identities were welcome to sit in for the education portion of the intervention, all but one study participant identified with the female gender (n=21). The last remaining participant identified as a transgendered individual who was born with female anatomy but identifies as a male and suppressed their menstruation by medical means (n=1). Nonmenstruators (i.e. males) were involved in the workshop but had not completed the questionnaires because the mGSE items did not apply to them (n=17).

**Table 1:** Demographic Characteristics of the Participants

Sample Characteristics					
Age					
18 - 20	2	2	3	4	
21 - 24	6	3		2	
Level of Education Comple	eted				
High School	6	4	3	5	
Undergraduate	2				
Postgraduate		1		1	
Gender Identity					
Female	7	5	3	6	
Transgender	1				
Total Menstruators	n = 8	n = 5	n = 3	n = 6	
Total Nonmenstruators	n = 6	n = 5	n = 2	n =4	

#### Modified General Self-Efficacy Scale

To examine the change in self-efficacy using pre- and post-mGSE data, a Wilcoxon Signed-Rank test was conducted. Due to the failure to meet the test for normality, small sample size and skewed distribution, this non-parametric test was deemed appropriate to analyze this study data. On average, the participants indicated higher levels of self-efficacy following the U N ME workshops (M = 4.86) than before (M = 3.89). The results of the Wilcoxon Signed-Rank test supported this claim as statistically significant, W = 68, z = -2.12, p = .034. Cohen's d was conducted to determine the effect size of the data and found that there is a small effect, d = .23.

#### Open-ended Survey Question Responses

The responses collected from the written open-ended survey questions before and after participation in the workshop emerged several themes. The common themes are indicated in Table 2. Prior to the delivery of the workshop, 75% of participants reported multiple levels of comfortability with the coordinated topic discussed and 30% of the responses reported openness towards explaining the subject matter to someone else. However, there was diversity in the

emotions towards the topic at hand, ranging from "nervous" to "excited". Additional questions prior to the start of the workshop were topics that were already incorporated into the program, whereas two specific questions were not. In the post-workshop survey responses, 100% of participants reported more ease in the topic, openness to explaining to others, and overall positive feelings towards the subject matter. This change in response themes represented a positive change as a result of participation in the workshop.

**Table 2:** Themes emerged from pre-workshop and post-workshop open-ended responses

Sample Size: n =	22		
	ole are you with today's topi	c? (Would you be	able to explain it to
someone else?)" Pre-Workshop		Post-Workshop	
Some level of	Comfortable	Some level of	Comfortable
ease	<ul> <li>Very comfortable</li> </ul>	ease	<ul> <li>Very comfortable</li> </ul>
	<ul><li>Extremely comfortable</li><li>100%</li></ul>		
	Confident and comfortable		
Neutral levels	• I am fine.	Positive	<ul> <li>Good</li> </ul>
of ease	• I feel ok.	feelings	<ul> <li>Great</li> </ul>
	Am cool with it.	<b>C</b>	
Confidence in	<ul> <li>I could explain this to</li> </ul>	Confidence in	• Yes, I would be able to
ability to	someone else	ability to	explain it to someone
explain	• I will be able to explain on how it works	explain	else
	• I'd love to explain it.		
"How do you fee	el about today's topic? (Angi	ry, sad, excited, ne	rvous, etc.)?
Pre-Workshop		Post-Workshop	
Positive	• Excited	Positive	• Excited
feelings	<ul> <li>Appreciative</li> </ul>	feelings	<ul> <li>Satisfied</li> </ul>
	<ul> <li>Happy</li> </ul>		<ul><li>Happy!</li></ul>
			<ul> <li>Good</li> </ul>
Anticipatory	<ul> <li>Appreciative to be</li> </ul>	Desire to learn	• I feel more interested
feelings	invited to a space to	more on topic	<ul> <li>Curious to learn new</li> </ul>
	talk about the subject		information
	<ul> <li>I feel I would like to</li> </ul>		
	know new information.		
	<ul> <li>Interested</li> </ul>		
	<ul> <li>Excited towards the</li> </ul>		
	teaching portion of		
	todays topic		
Feelings of	<ul> <li>Very confused</li> </ul>		
confusion	<ul> <li>A bit confused</li> </ul>		
"What would yo	ou like to know about today's	s topic?"	
Pre-Workshop	•	Post-Workshop	
Managing	How to understand	Satisfaction	Learned all I needed to
emotional	womens emotions on	with	<ul> <li>Learned everything</li> </ul>
symptoms	their menstrual cycle	knowledge presented	, ,

	<ul><li>What causes the emotions we go through</li><li>Managing sadness</li></ul>		
General	<ul> <li>How, why, what makes</li> </ul>	Desire to learn	• I would like to know
knowledge of	our period	more	on what other things I
menstrual health and	<ul> <li>Menstrual management and resources</li> </ul>		can use while on my menstrual cycle
hygiene	<ul> <li>Whatever there is to</li> </ul>		Menstruation
	learn		management
	• Everything!		G
Knowledge of	Better products that		
menstrual	create less mess		
products	<ul> <li>How to make reusable</li> </ul>		
	pads		
	<ul> <li>Different products</li> </ul>		
Interest in	• How to eat, what to eat,		
nutrition	how to keep myself		
	healthy		
	Some good foods to eat		
C : C: -	during my cycle		
Specific	What makes us have		
interests not	excess blood clots		
included in	• Sex		
program			

#### Discussion Responses

To gain deeper understanding of the participant's level of knowledge, their experiences as menstruators, and their acquisition of menstruation management knowledge, two open discussion questions were asked out loud for participants to respond based on their comfort.

31.25% participants reported seeking guidance from their mothers for information, while 31.25% stated sometimes turning to their fathers, siblings, and teachers when their mothers were not available. 37.5% of the responses reflected that the participant's lack of knowledge and desire to learn more about the different menstrual products they could use, especially as they were younger, newer menstruators, but notably now as young adults. The more negative responses from the participants were ones that described their menstrual experiences as "horrible" and reported feelings of isolation (i.e. "felt by myself"). Participants also shared anecdotes about more concerning health information that has since been dispelled as they discovered more about their personal health and through participation in the program. The responses from the group discussion indicated that the participants experienced situations of lack of knowledge, misinformation, and appreciation for the U N ME workshops.

**Table 3:** Themes emerged from Group Discussion Responses

Sample Size

Menstruating Participants (n = 22)

## "Can you think of a time when this information would have been helpful before today? What happened?

## Reliance on mothers for information

- Heard from their mom that cranberry juice helped [UTIs]
- Mom is from older generation, would recommend home remedies for vaginal health
- "mom didn't say anything" to warn about period
- Requested help from their dad because mom was not home at the time
- Their mom was not open to talk about periods with them

Reliance on sources other than mothers for information

- High school teachers
- Dad
- Sibling
- Older sister

Lack of knowledge with menstrual products

- Appreciative of "product options" for product shopping
- It would have been helpful to know proper things like the soap to use
- They were gifted a menstrual cup that they gave away because they did not know how to use it
- This information would have been helpful the first time they put in a tampon
- Wanted to know the "options" and it would have been helpful to find menstrual products that work for them
- For first year of menstrual cycles, they would bleed onto their clothing and hide soiled garments mixed in with other laundry

Negative experiences from lack of knowledge

- "it really messed up my self-esteem"
- "most horrible day" regarding their first day of menstruation, they stated they felt "by [themselves]"
- "anxiety"
- They would "sit on the floor and bleed"

- Felt "all the emotions" first day of menstruation
- They preferred "hiding" during menstrual cycle
- Not excited for their first period
- Deny ownership of bloodied clothes found in laundry out of fear and embarrassment

#### Negative experiences regarding pain and cramping symptoms

- Managing pain symptoms topic was most helpful
- They experienced very painful cramps
- Recalled having "a lot of pain" during first menstrual cycle
- When they were younger they didn't get cramping as bad as when they turned 18, did not know that period experiences change over time
- "I didn't know that eating chocolate can actually help with cramps"

#### Misinformation for more serious and potential health concerns

- Surprised cranberry juice does not help with UTIs and this information would have been helpful before when dealing with multiple UTIs
- Mom would recommend internally cleaning with vinegar and peroxide
- They were under the impression that you automatically had to go on birth control
- They were 20 years old when they discovered they were allergic to common menstrual products and had commonly experienced bacterial vaginosis following menstrual cycles because of it
- They reported taking numerous amounts of ibuprofen for the menstrual pain

#### "Have you heard this information presented today before? Where?"

#### Learning from school

- "high school"
- "middle school"
- They remembered how the class split boys and girls up, "no one was paying attention to it" and they talked and joked about it during recess

#### Learning through selfdiscovery

• Did not hear about this information but taught themselves through trial and error

• Found this information for their specific needs through trial and error

Online sources for information

- They recently learned about a lot of this information from a YouTuber account that is open to talking about menstruation and there is a video that went through different menstrual products and it gave them a better understanding
- Learned about yoga on YouTube

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

The topics discussed in the U N ME program may have been difficult for those from a certain culture or background to be a part of. Another consideration was that it is not uncommon for individuals experiencing homelessness to have experienced trauma (i.e. emotional, physical, sexual). Some people might have had some adverse responses due to that trauma. Occupational therapists have a responsibility to meet the needs of these individuals with the tact of considering these aspects with menstrual management and education and it has not yet been documented in Las Vegas. These aspects have been considered to avoid potential adverse events, which are defined as circumstances that may happen to a research subject as a result of the study intervention and have been addressed via IRB approval (University of Nevada, Las Vegas Division of Research, n.d.).

#### Limitations

This study was developed and implemented singularly in one facility in Las Vegas. The data may not be applicable to the population experiencing homelessness in another big city such as Los Angeles, let alone the greater Southern Nevada population. Shannon West is placed in the heart of the city of Las Vegas and the culture from the urbanized city to the rural areas of Nevada

may differ in acceptance of the topic of menstruation and inclusion of gender diverse menstruators. While Shannon West is not exclusive in their services and resources to the LGBTQ+ population, the population may have been.

#### **Discussion**

The purpose of this study was to increase the self-efficacy with menstrual management in young adults using the inclusive U N ME program. By being mindful of the different cultures, identities, and backgrounds of the participants, an open and inviting environment fostered learning and empowerment through participation in the U N ME program. Menstruators perceived their menstrual cycles in a new light and felt more confident with their menstruation management. There is evidence that self-reported self-efficacy scores as measured by the mGSE pre-workshop and post-workshop increased following the participation in the U N ME program workshops.

#### Sample Demographic

The sample was representative of the targeted population as female-identifying menstruators between the ages of 18 and 25 were participated in the research. Throughout recruitment, many clients in Shannon West stated that they already know everything about their periods. However, as evidenced by the responses of the participants, there were concepts learned from the workshop that they would not have learned otherwise. Each participant indicated completing at least a high school education. While the public school system in Nevada does offer the health subject of puberty and menstruation, the depth of these topics are not indicated by the statewide curriculum, nor is there a continuum of education following these menstruators as they and their bodies mature (Nevada Department of Education, 2021). Participants may have been under the impression that they were knowledgeable in the topic of menstruation at a previous

point in time from the classes that were made available to them due to an ignorance to more indepth and updated knowledge. This phenomenon was reflective of many menstruators not being prepared for menstruation management adequately throughout a lifespan (DeMaria et al., 2020). While there was an adequate amount of data collected from the sample, it may not be completely reflective of the population as there were participants who submitted responses more than once. For example, there were participants who had attended the workshops every week, while some participants only attended once or twice in the program. There were multiple data collected from the same menstruator, but data that indicated no change between a participants' pre-workshop and post-workshop score was excluded from the data analysis.

#### **Self-Efficacy With Menstrual Management**

The responses in the study reflected an increase in self-efficacy with menstrual management from mGSE data collected pre-workshop and post-workshop. To supplement this finding, the data collected from the written discussion questions shows the shift from 75% of the responses reporting ease and positivity towards the topics discussed in the corresponding workshop to 100% of the responses reflecting ease and positivity following the workshop. The non-positive responses towards the topic at hand may be due to uncertainty towards discussion of the topic. It is far from uncommon for individuals to be uncomfortable with the topic of menstruation, especially if they are from backgrounds or social groups where these discussions rarely happen, if ever (Boden et al., 2023; DeMaria et al., 2020; Lahme et al., 2016; Tan et al. 2017). The deliberate easygoing nature of the U N ME workshop structure may have eased the participants into more positive and comforted feelings.

#### Development of the UN ME

The development of the U N ME program was inspired by the need to share accurate knowledge of menstrual management with menstruators experiencing homelessness and secondarily to create a sense of community with this population of menstruators. In accordance with the guiding theories of this project, Model of Occupational Empowerment and the Humanistic Learning Theory, the U N ME program highlighted autonomy and client engagement to encourage developing healthy habits through occupations (Fisher & Hotchkiss, 2008; Gandhi & Mukherji, 2023). As the clients participated in multiple workshops in the program, the clients introduced themselves to other clients and the group discussions were observed to flow naturally as a conversation amongst themselves. The revelation of genuine relationship forming amongst the clients was a formidable achievement. The transient nature of the population of individuals experiencing homelessness often lead to avoidance of meaningful relationships. The literature reviewed stated the importance of a sense of community with menstruators experiencing period poverty as both information and resources can be shared with each other, especially when perception of others' success improves self-efficacy (Bandura, 1977; Boden et al., 2023).

The intentionality of opening workshop attendance to gender identities other than females that menstruate provided an opportunity for the participants to be educated on the importance of inclusion for the gender-diverse menstruators as well as for the gender-diverse menstruators to be included in a safe learning environment. Unfortunately, due to the unfamiliarity that many healthcare providers still have with treating gender-diverse individuals, the U N ME workshops might have been the first time that these menstruators were given education that did not refer to them as "females" or "women" (Lane et al., 2022). The transgender participant in the study had

approached the student researcher following the workshop attended and expressed their gratitude for an opportunity to learn in the U N ME workshop environment.

#### **Sharing of Knowledge**

The responses collected from the open discussion following the U N ME workshops were in line with many of the experiences found in the literature reviewed. The influence of the mothers sharing knowledge with the new menstruator to guide them through their first menstrual cycle as well as the tendency for the information passed to be based on false pretenses are common experiences for menstruators (DeMaria et al., 2020; Schmitt et al., 2021; Trant et al., 2022). Also present were the unfortunate negative experiences that menstruators experience as a result of unsatisfactory comprehension of their menstrual cycles. The understanding gained from mothers, sisters, or other older relatives may be supplemented by their formal education, however, because of the discomfort with approaching the subject, both sources of knowledge may fail the new menstruator (Schmitt et al., 2021). The responsibility of learning fall on either the families or schools, sometimes that responsibility gets neglected entirely based on the expectation that what relatives cannot teach, the school can provide and vice versa (Schmitt et al., 2021). Participants shared experiences in which the knowledge specifically discussed in the U N ME workshops would have been beneficial, supporting the feelings of unpreparedness in past despite access to these sources of knowledge.

A discovery within this study was the willingness for nonmenstruators to share the information with their loved ones. Although nonmenstruators (i.e. the males who did not menstruate) abstained from completing questionnaire data due to the lack of experience with menstrual management, several approached the student researcher to share their intentions of educating their loved ones who did menstruate (e.g. sisters, friends, girlfriends, and daughters).

This disclosure of intent was also received from the one formally female to male transgender participant who no longer experienced menstruation but had a younger sibling who did and would benefit from the knowledge that the participant gained from the workshop. Menstruators and nonmenstruators alike indicated the intent to utilize and share the knowledge for menstrual management gained from the U N ME program.

#### Conclusion

#### Summary

The development of the U N ME program aimed to fill the gap within the limited research into this intervention as well as initiate a response to the community of Las Vegas. The intention behind this program was not necessarily to make menstruation an exciting event that every menstruator should love, but to make it another routine task to be completed so that they can focus on living the life that they want to live.

#### Recommendations

The targeted population was achieved, however, a more gender diverse sample would have been more ideal, as gender diverse menstruators such as transgendered or non-binary individuals have low prevalence in the literature reviewed (Lane et al., 2022). One participant in the study did identify as transgender but reported that they were no longer menstruating because of menstrual suppressants, a recurrent choice among gender diverse individuals. The information was still applicable to them as they still experienced shame over their bodily functions and had previous experiences that needed clarity. This participant shared that they valued the ability to share the learned information with their younger sibling. Additionally, nonmenstruating clients who participated in the education portion of the workshop also shared their appreciation of the education as they had sisters, significant others, mothers, and other loved ones who menstruate

and enjoyed a better understanding of the process. As outlined by Period Positive founder, Chella Quint, the inclusion of all genders and education to the general population can help achieve a more positive menstruator experience as menstruation becomes more familiar and less stigmatized (Quint, 2022). Future considerations for addressing the needs of menstruators would benefit from remaining open with the participants as the spread of period positivity and menstrual knowledge can be direct or indirect through loved ones.

#### **Implications for Research**

Further research for menstrual health and hygiene for menstruators experiencing homelessness should be conducted. While the U N ME was developed to address menstrual health and hygiene in this population, this trajectory can be expanded to other age groups. There is an opportunity to examine the best method for educating menstruators. This education can also be addressed prior to the first menstrual cycle as well as through a lifespan of time. The need to progress research on improving body literacy, especially for menstruators, can optimize health in a preventative manner. This would be beneficial, particularly to individuals who lack the resources and finances for frequent medical assistance.

#### **Implication for Practice**

Although menstrual management has been established as an ADL within the OT scope of practice, this study provides further insight into the approach and considerations needed to address it in sessions with clients (AOTA, 2020; n.d.). As with many other personal concerns for patients, understanding the impact that their background, race, and culture has on their perception of their occupations will ensure better rapport and success in sessions. Discussion of the sensitive topic of menstruation is both sensible and can be empowering for clients.

#### **Implication for Occupational Therapy**

The population of individuals experiencing homelessness and pelvic health are both emerging areas of practice for the profession of occupational therapy. While menstruation management has been recognized as an ADL, occupational therapists have the skill set to collaboratively address it with their clients if need be. Increased exposure and exploration into these areas can improve the health and quality of life outcomes for the clients in Las Vegas.

#### **Appendices**

#### Appendix A

#### **UN ME Flyer for Participant Recruitment**

## **UNLV Occupational Therapy Program Research** UNDERSTANDING AND **NAVIGATING THE MENSTRUAL** EXPERIENCE

**Learn About and Discuss Menstrual Experiences** 

**ALL GENDERS** WHO **MENSTRUATE** WELCOME

0

We are looking for volunteers to participate In the "Understanding and Navigating the Menstrual Experience" or the "U N ME" program research to learn and discuss menstruation hygiene, menstruation management, and resourcefulness and to collect your feedback before and after each workshop. This is a four week program; attendance for all workshops is not required, come as you are available!

Snacks will be provided!

Create your own reusable menstrual pad!

> Menstration gift pouches: soap, sanitary wipes, and nenstrual cup or disc

#### **Participants Must Be:**

- Aged 18-24
- Residents of Shannon West Homeless Youth Center
- Experiencing or at-risk of experiencing homelessness

4 weekly workshops, 2

opportunities each week,

1-2 hours per workshop

- Assigned female at birth (cisgender females, nonbinary, transgender individuals)
- Must have experienced their first menstrual cycle
- Willing to discuss menstrual experiences

If you're interested in participating or have any further questions, please contact us!

Donnamarie Krause, PhD, OTR/L, donnamarie.krause@unlv.edu ignace1@unlv.nevada.edu

Edellene Ignacio OTD/S,

#### Appendix B

#### **UN ME Schedule for Participants**



Show up to any weekly topic

Snacks provided You do not have to attend all 4 topics

6 TUES

7 PM

Menstrual Health and Hygiene

Come create collage art!

FEB 8 THURS

7 PM

Menstrual Health and Hygiene

Come create collage art!

TUES

Menstrual Resourcefulness

Create a reusable menstrual pad!

15 THURS

Menstrual Resourcefulness

Create a reusable menstrual pad!

**20** 

Coping Strategies and Managing Symptoms

TUES 7 PM Explore cycle tracking options!

**22** 

**THURS** 

7 PM

Coping Strategies and Managing Symptoms

Explore cycle tracking options!

**27** 

Nutrition and Physical Health

TUES 7 PM Create an ideal "menstruation menu"! **29** 

Nutrition and Physical Health

THURS 7 PM Create an ideal "menstruation menu"!

Appendix C
Inclusion and Exclusion Criteria for U N ME Research

Inclusion Criteria	Exclusion Criteria
<ul> <li>Ages 18-24 years old</li> <li>English speaking</li> <li>Must have experienced menarche (first menstrual cycle)</li> <li>Assigned female at birth (have female anatomy)</li> <li>Willing to discuss their menstruation experiences</li> <li>Experiencing or at risk of experiencing homelessness</li> </ul>	<ul> <li>Under the age of 18 years old</li> <li>Over the age of 24 years old</li> <li>Does not experience menstruation</li> </ul>

#### Appendix D

#### **Informed Consent**



#### INFORMED CONSENT

#### **Department of Brain Health**

#### TITLE OF STUDY: DEVELOPMENT OF THE U N ME PROGRAM

INVESTIGATOR(S): EDELLENE IGNACIO

For questions or concerns about the study, you may contact Edellene Ignacio at ignace 1@unlv.nevada.edu.

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted, contact the UNLV Office of Research Integrity – Human Subjects at 702-895-0020 or via email at IRB@unlv.edu.

It is unknown as to the level of risk of transmission of COVID-19 if you decide to participate in this research study. The research activities will utilize accepted guidance standards for mitigating the risks of COVID-19 transmission: however, the chance of transmission cannot be eliminated.

#### PURPOSE OF THE STUDY

You are invited to participate in a research study. The purpose of these study is to develop the Understanding and Navigating the Menstrual Experience program and increase confidence with menstrual management.

#### **PARTICIPANTS**

You are being asked to participate in the study because you fit this criteria: over the age of 18, someone who menstruates, willing to discuss menstrual experiences, and a resident of Shannon West Homeless Youth Center.

#### **PROCEDURES**

If you volunteer to participate in this study, you will be asked to do the following: sit in and learn from educational presentation, participate in the discussion, engage in the hands-on activity, and complete the survey before and after the workshop. Upon the participation in the final workshop of the program, there will be offered a zippered pouch with soap, towelette wipes, and the option of a reusable menstrual cup or menstrual disc.

#### BENEFITS OF PARTICIPATION

There may be direct benefits to you as a participant in this study. Through the participation of this four week program, there is potential for an increase in your confidence with menstrual management. Additionally, materials will be provided to construct a personal reusable menstrual product.

TITLE OF STUDY: Development of the U N ME Program	

#### RISKS OF PARTICIPATION

There are risks involved in all research studies. This study may include only minimal risks. Some risks include possible discomfort with the topics and questions, anxiety due to the public setting for the workshop, potential offense to non-inclusive language, and risk of identity being made known.

#### COST/COMPENSATION

There will not be financial cost to you to participate in this study. The study features 4 weekly workshops with 2 opportunities to attend and each workshop lasting 1-2 hours in duration. The study will take 240-460 minutes of your time.

#### **CONFIDENTIALITY**

All information gathered in this study will be kept as confidential as possible. Due to the group nature of this research, there is still a slight risk of identity being known and full confidentiality cannot be guaranteed. No reference will be made in written or oral materials that could link you to this study. All records will be stored in a locked facility at UNLV for 3 years after completion of the study. After the storage time the information gathered will be destroyed.

#### **VOLUNTARY PARTICIPATION**

Your participation in this study is voluntary. While this is a four week program, you may attend between 1 and 4 workshops as your schedule allows. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with UNLV. You are encouraged to ask questions about this study at the beginning or any time during the research study.

#### PARTICIPANT CONSENT:

I have read the above information and agree to participate in this study. I have been able to ask
questions about the research study. I am at least 18 years of age. A copy of this form has been given to
me.

Signature of Participant	Date
Participant Name (Please Print)	_

## Appendix E

## **Physical Questionnaires**

	Please write your age:					
	Please check the box for the highest level of schooling you've completed  Elementary School (Kindergarten-5th grade)  Middle School (6th - 8th grade)  High School (9th - 12th grade)  Undergraduate (College)  Postgraduate (Graduate, Masters, and Doctorate)  What is your gender?  Female  Male  Non-binary  Transgender  Other (Please Specify:)					
		Γ				
		Not at all confident	Slightly confident	Somewhat confident	Quite confident	Extremely confident
1.	I can always manage to solve difficult problems with menstruation if I try hard enough.					
2.	If someone opposes me, I can find means and ways to get what I want.					
3.	It is easy for me to stick to my aims and accomplish my goals with menstruation management.					
4.	I am confident that I could deal efficiently with unexpected events with menstruation.					
5.	Thanks to my resourcefulness, I know how to handle unforeseen situations with my menstrual cycle.					
6.	I can solve most problems if I invest the necessary effort.					
7.	I can remain calm when facing difficulties because I can rely on my coping abilities.					
8.	When I am confronted with a problem with menstruation management, I can usually find several solutions.					
9.	If I am in trouble, I can usually think of something to do.					
10.	No matter what comes my way, I'm usually able to handle it.					

Please write your answers in the space available.

How comfortable are you with today's topic? (Would you be able to explain it to someone else?)
How do you feel about today's topic? (Angry, sad, excited, nervous, etc.)
What would you like to know about today's topic?

## Appendix F

## **Modified General Self-Efficacy Scale**

		Not at all confident	Slightly confident	Somewhat confident	Quite confident	Extremely confident
1.	I can always manage to solve difficult problems with menstruation if I try hard enough.					
2.	If someone opposes me, I can find means and ways to get what I want.					
3.	It is easy for me to stick to my aims and accomplish my goals with menstruation management.					
4.	I am confident that I could deal efficiently with unexpected events with menstruation.					
5.	Thanks to my resourcefulness, I know how to handle unforeseen situations with my menstrual cycle.					
6.	I can solve most problems if I invest the necessary effort.					
7.	I can remain calm when facing difficulties because I can rely on my coping abilities.					
8.	When I am confronted with a problem with menstruation management, I can usually find several solutions.					
9.	If I am in trouble, I can usually think of something to do.					
10	. No matter what comes my way, I'm usually able to handle it.					

# Appendix G Schedule of Workshops and Activities

	Workshop Topic	Workshop Activity
Week 1	Menstrual Health and Hygiene	Picture collage creation for feelings towards menstruation
Week 2	Menstrual Resourcefulness	Creation of reusable menstrual pad
Week 3	Coping Strategies with Menstrual Symptoms	Exploration of cycle tracking options
Week 4	Nutrition and Physical Health with Menstruation	Creation of an "ideal menstrual menu" for nutrition

#### Appendix H

#### **QR** Code for Electronic Feedback

# Any questions about your period? Let me know!

Scan here, type the link provided below, or write down your questions and place in the box!



Questions will be addressed in the "U N ME" workshops!



https://qrco.de/beipX9

#### Appendix I

#### **Google Forms for Electronic Feedback**

## Questions about menstruation and periods Please type in any questions you might have about periods/menstruation. I will take these questions and answer them to the best of my abilities in the "Understanding and Navigating Menstrual Experience" program. Examples of questions include: - Can someone get pregnant on their period? - Is it true that period/menstrual blood can attract sharks? - How much is too much blood? - Should I eat certain foods when I'm on my period? ignace1@unlv.nevada.edu Switch account $\odot$ Not shared What would you like to know? Your answer Submit Clear form

#### Appendix J

#### Google Slides Presentation for Week 1

## Menstrual Health and Hygiene

Workshop #1 of U N ME Program

Presented by Edellene Ignacio, OTD/s (She/her/hers)

## Content Warning and Disclaimer

The following content included in this lecture may bring participants feelings of discomfort or stress.

Content related to the following will be included:

- Menstruation, periods, bodily functions, and blood
- Gender, sex, and sexuality

If at any point you feel discomfort with the topics, you are very welcome to leave the room and return based on your comfort.

If you have comments or concerns with my professionalism and my delivery of the topics, please feel free to speak with me directly or submit an anonymous note.

## Table of contents



#### Importance and Taboos

History, Cultural Understanding, and Purpose



#### Anatomy/Processes

Understanding the process



#### Health and Hygiene

Take charge and take care

## **About Me**

- She/Her/Hers
- Future Occupational Therapy Doctorate
- I love reading, music, video games, and my pets
- LGBTQ+
- Menstrual struggles growing up
  - PCOS
  - Irregular periods



#### Common Myths

- Sharks can smell menstrual blood
- You shouldn't swim, take a bubble bath, or exercise while you're on your period.
- You can't get pregnant if you have sex on your period.
- The bleeding stops when you're pregnant.
- I have to be on the pill like everyone else.
- I've synced up with my roommates/friends/coworkers.

#### What is menstruation?

- Preparation for reproduction/pregnancy
- There's many things that can affect a person's menstrual cycle
  - Hormones, nutrition, stress, sleep, medications, etc.
- It's commonly known for the "menstruation period" or the "period"... the time of the month that menstruators bleed
- Someone who menstruates/has periods: "menstruator"
- Someone who does not mensturate/does not have periods: "non-mensturator"

#### **Importance**

- Menstruation is an ongoing part of your life
  - Bleeding or not, the processes and science is there
- Society and culture's influence
  - Commercials, companies, and control
  - Some cultures celebrate, some cultures hide
- It's a natural process that does not define you, but it is a part of you
- Menstruation is a vital sign
- "Understanding and Navigating Menstruation Experience" or the "U N ME" program

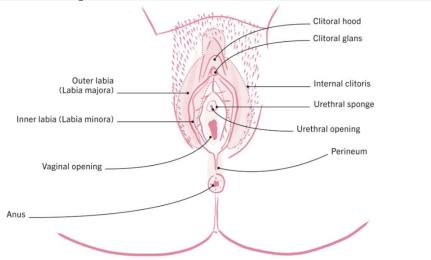
#### **Taboos**

- Historically
  - The blood is evil
  - It will "dirty" everything
- Menstruation is something that you should hide
  - Discreet designs
- Periods are dirty
  - Floral, freshness, "hygiene"
- "Menstruation is a sickness"/"menstruation is not a sickness"
  - Maternity leave = menstrual leave?

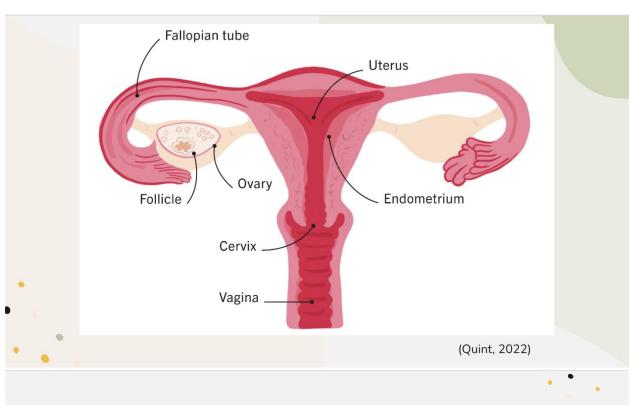
# Pause

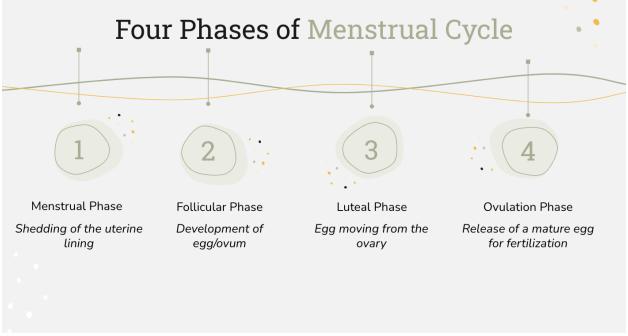
The following slides will have diagrams of the vagina and the uterus. If this is an uncomfortable sight for you, please feel free to leave the room and return at your comfort.

#### Anatomy



(Quint, 2022)





#### **Common Symptoms**

- Migraines/headaches
- Tender/swollen breasts
- Changes in body temperature
- Cramps
- Acne breakouts
- Changes in mood
- Changes in appetite
- Changes in sleep
- Changes in sexual libido

#### How can I take charge of my health?

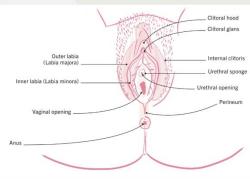
- Understand the processes
- Track your symptoms
  - Know what your "normal" is
- Make your choices based on facts

#### Birth Control

- Pills, injections, implants, natural cycle tracking
- You do not have to be on a medicated birth control
  - Use of condoms is still strongly recommended
- Many different uses for birth control
  - Manage and regulate periods
  - Manage period pain
  - Not yet ready to be a parent

#### Hygiene

- Remember these two phrases:
  - "Less is best"
  - "Your vagina is not a pina colada"
- Products such as Vagisil, Summer's Eve, and douching = NO
- Underwear
  - Choice is yours



#### Cleanliness

- Prevent UTIs/Irritation
- Wash your hands before and after any management tasks
- Cleaning blood stains: use **cold water**, hot water stains
- Properly sanitize reusable menstrual products
  - Boiling water method

## Thanks

Do you have any questions?

ignace1@unlv.nevada.edu or submit anonymously







Please keep this slide for attribution

CREDITS: This presentation template was created by Slidesgo, and includes icons by Flaticon, and infographics & images by Freepik

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# Discussion

I will be asking the group questions and writing down notes of how the conversation will go. I will NOT be writing down your names or any information that can reveal who said what. Participation is optional, but highly encouraged.

# Activity

Please create a "collage" to show your feelings towards menstruation. This is a no judgement zone. You can use your art to describe how your feeling right now about it, how you felt before, how you want to feel, things you like or dislike during your period, etc. There is an opportunity to share what you've created at the end, participation is optional but highly encouraged. I will set a timer for 10 minutes.



#### Appendix K

#### Google Slides Presentation for Week 2



(Lira, 2019)

Understanding and Navigating the Menstrual Experience "U N ME"

### **Menstrual Resourcefulness**

Workshop #2 of U N ME Program Presented by Edellene Ignacio, OTD/s (She/her/hers)

#### **Content Warning and Disclaimer**

The following content included in this lecture may bring participants feelings of discomfort or stress.

Content related to the following will be included:

- Menstruation, periods, bodily functions, and blood
- Gender, sex, and sexuality

If at any point you feel discomfort with the topics, you are welcome to leave the room and return based on your comfort level.

If at any point you have concerns with my professionalism or comments on my delivery of the topics, please feel free to speak with me directly or submit an anonymous note.

#### **Table of contents**

O1
Review, Recap &
Myths
Questions from last
week

O3
Pros and Cons
Pros and cons of each type of popular product



O2
Menstrual Product
Overview

O4
Pain Management
How to handle cramps
like a champ





#### What is menstruation? (Review)

- Hormonal process to prepare the body for reproduction/pregnancy
- There's many things that can affect a person's menstrual cycle
  - (hormones, nutrition, stress, sleep, medications)
- It's commonly known for the menstruation period" or the "period" – the time of the month that menstruators bleed
- Someone who menstruates/has periods: "menstruator"
- Someone who does not mensturate/does not have periods: "non-mensturator"

#### **Recap from Last Week**

#### Blood clots

- Typical, make up of menstrual blood
- Size, shape, and frequency

#### Babies

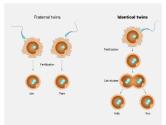
- Where do they grow?
- How do twins work?

#### Specific Hormones during cycle

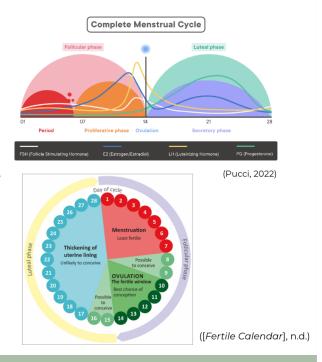
- How "long" is the cycle?

#### Eggs

- Menstruators are born with millions of eggs at birth
- Menstruators do NOT produce more eggs
- You can run out of useable eggs



(Leja, 2024)



#### **Common Myths**

- Putting in a tampon will take away your virginity.
- The "right" pad will help make your vagina smell better.
- The product brand affects how well the blood is absorbed.
- Menstrual blood is dirty and disgusting.
- You can only use one type of products at a time choose wisely!

#### Let's Talk Products

- There's a variety of products that can be used during your period
  - External and Internal
  - Disposable and Reusable
- Tampons, pads, period underwear, liners, menstrual cups, menstrual discs
- "Luxury of choice"
  - Cultural
  - Financial

#### **Pros and Cons: Tampons**

#### Pros

- Less noticeable when wearing
- Can swim with them
- Convenient (retrieval and disposal)





#### Cons

- It is internal (hygiene and comfort)
- "Toxic Shock Syndrome"
- Potential exposure to toxins
- Change every 6-8 hours



#### **Pros and Cons: Pads**

#### Pros

- External
- Can usually be found in product dispensers
- Can wear overnight
- Can be disposable/reusable



#### Cons

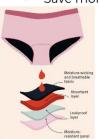
- Does not always fit every body/underwear
- Can get too moist
- Contact dermatitis



#### **Pros and Cons: Period Underwear**

#### Pros

- Feels like wearing regular underwear
- Save money down the line





#### Cons

- You have to carry it around when it is to full
- Lose absorbancy over time
- Initial cost is high



#### **Pros and Cons: Menstrual Cups**

#### Pros

- Reusable
- Eco friendly
- Can be worn for up to 12 hours
- Save \$\$\$
- Can be used to measure menstrual blood



#### Cons

- Internal (more physical space needed)
- Cleaning
- Cannot use with IUD
- Trial and error period



#### **Pros and Cons: Menstrual Discs**

#### Pros

- Can have intercourse with it
- "Hands-free" emptying
- Both reusable and disposable types
- Can go to OBGYN with one in

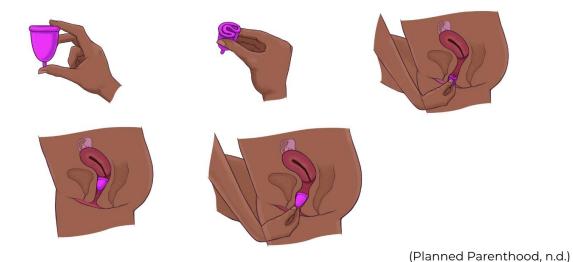
#### Menstrual Disc Demo

#### Cons

- Very internal, very involved process
- Trial and error process



#### **Insertion Demo**



#### **General considerations**

- Allergies and sensitivities
  - Chemicals used to make pads and tampons may cause irritation
- Products are not one size, fits all
  - Free =/= best practice
- Packaging
  - Environmentally harmful
  - Psychologically harmful

#### **Using and Cleaning Menstrual Products**

- Properly sanitize to extend life of product and protect yourself
- Follow the directions
- Do not share





#### Which one is the best one?

- Your choice
- Your comfort
- Your convenience

# Local Resources for Menstrual Products

- Here at SWHYC
- Contacting Nevada 211
- Project Marilyn
- Project Dot
- Ask around

#### **Products for Pain**

- Solutions for heat packs: rice in a sock, warm water bottle
- Medicine: difference between Midol and Acetaminophen?
- Medicine alternatives:
  - Movement (yoga, stretching, cardio): blood flow, endorphins released
  - Relaxing bath
  - Meditation, deep breathing exercises
  - Doing things you enjoy

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# Discussion

I will be asking the group questions and writing down notes of how the conversation will go. I will NOT be writing down your names or any information that can reveal who said what. Participation is optional, but highly encouraged.





We will be making reusable cloth pads. Knowledge of sewing is not required, but highly recommended.

Please be warned that there will be sharp objects included (sewing needles and scissors), please be respectful of the materials and others around you.

Feel free to discuss with me if you would like an alternative to today's activity.







# Thanks!











#### Appendix L

#### **Google Slides Presentation for Week 3**

Understanding and Navigating Menstrual Experience

# Coping Strategies and Managing Symptoms

Workshop #3 of U N ME Program

Presented by Edellene Ignacio, OTD/s (She/her/hers)

#### **Content Warning and Disclaimer**

The following content included in this lecture may bring participants feelings of discomfort or stress.

Content related to the following will be included:

- Menstruation, periods, bodily functions, and blood
- Gender, sex, and sexuality
- Mental health and suicide

If at any point you feel discomfort with the topics, you are very welcome to leave the room and return based on your comfort.

If at any point you have concerns with my professionalism or comments on my delivery of the topics, please feel free to speak with me directly or submit an anonymous note.

#### **Table of contents**

01 02 03

Review/Myths Symptoms Talking to doctor

04 05 06

Health Habits Discussion Activity

#### What is menstruation? (Review)

- Hormonal process to prepare the body for reproduction/pregnancy
- There's many things that can affect a person's menstrual cycle (hormones, nutrition, stress, sleep, medications)
- It's commonly known for the "menstruation period" or the "period" the time of the month that menstruators bleed
- Someone who menstruates/has periods: "menstruator"
- Someone who does not mensturate/does not have periods:
   "non-mensturator"

#### **Common Myths**

- I can't schedule anything around my period.
- I can't have fun, I'm on my period.
- It's JUST period cramps, you'll be fine.
- My period turns me into a monster.
- I can't do yoga during my period.
- I can't have sex on my period.
- Bears can smell your period blood.

# What are your symptoms?

#### "Typical" Symptoms

- Cramping
- Increased/Decreased appetite
- Headaches
- Fatigue/Extra Tiredness
- Elevated emotions
- Bloating

#### Why is it important to track symptoms?

- Awareness to YOUR normal
- Understand your health
  - Body literacy
- Preparedness to handle your symptoms
- Giving your doctor as many pieces to the puzzle
- "Milestones"
  - Celebrate the changes in your body?



- Pain
  - Location
- Appetite
  - Cravings
- Mood
- Energy levels
- Blood
  - Amount of blood
- Gas/Bowel Movements
- Ovulation
  - Temperature
  - Cervical mucus/discharge

#### **Most Basic To Track**

- First day of <u>heaviest</u> day of bleeding ("Day 1" of your cycle)
- Number of days between "Day 1" and next "Day 1"
- Number of days of bleeding
- Amount of blood (menstrual fluid) lost
- Cervical fluid/discharge
- Pain

Briden, 2018)

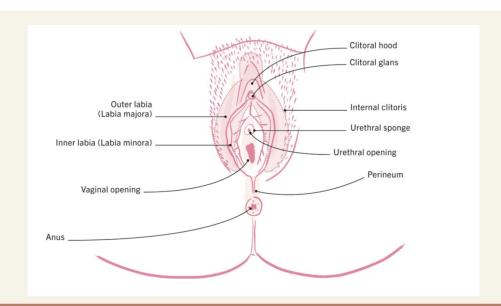


#### **Atypical Symptoms**

- Physical pain that affects your daily life
  - Throbbing, burning, searing pain lasting many days
- Excessive bleeding (changing a heavy flow product every 2 hours)
- Thoughts/feelings of suicide during PMS
- Effects on your relationships (romantic, friendly, professional)
- Pain during insertion (sex, putting in a tampon, etc.)
- Pain while urinating
- No periods at all
- Bad smelling discharge

#### How to talk to a doctor?

- Use symptom language first
  - Avoid claiming a diagnosis
  - I have pain, I'm itching, it feels like it's burning
- Be as descriptive as possible
  - Burning, itching, tingling, stabbing, dull pain
  - When it happens, how long it lasts, if anything makes it feel better or worse



#### Take a picture!

#### **Managing Pain Symptoms**

- Sleep
  - Pain = Bad sleep and Bad sleep = More pain
- Movement
- Meditation
  - Mindfulness meditation
- Distractions
- Medications
- "Doctor, it hurts when I do this"

#### **Managing Emotions**

- Be kind to the menstruator first
  - They're going through a lot of changes and discomfort, it happens
- Speak to your partner, friends, family
  - Help give them some understanding, prepare them
  - Refrain from bringing menstruation at the focus
- Personal work
  - Calming strategies, stepping away, etc.
- Finding support (professional, social)

#### **Managing Hunger**

- Go for it! Everything in moderation
- Maintain healthy blood sugar level
  - Incorporate more protein into your meals, including breakfast
- Dark chocolate (in small healthy amounts) can help ease menstrual cramps
- Consider small snacks during period

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# Discussion

I will be asking the group questions and writing down notes of how the conversation will go. I will NOT be writing down your names or any information that can reveal who said what. Participation is optional, but highly encouraged.

# Activity

We will spend time looking over options for cycle tracking. Participation is voluntary. If you choose to leave, please fill out the Post-Survey Questionnaire before doing so

#### Thanks!

#### Do you have any questions?

ignace1@unlv.nevada.edu







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#### Appendix M

#### **Google Slides Presentation for Week 4**

Understanding and Navigating the Menstrual Experience

#### **Nutrition** and Physical Health

Workshop #4 of U N ME Program Presented by Edellene Ignacio, OTD/s (She/her/hers)



#### **Content Warning and Disclaimer**

The following content included in this lecture may bring participants feelings of discomfort or stress.

Content related to the following will be included:



- Menstruation, periods, bodily functions, and blood
- Gender, sex, and sexuality

If at any point you feel discomfort with the topics, you are very welcome to leave the room and return based on your comfort.

If at any point you have concerns with my professionalism or comments on my delivery of the topics, please feel free to speak with me directly or submit an anonymous note.



#### **Table of contents**

01 02 03

Review/Myths Nutrition Exercise

What foods should you Exercise benefits

04 05

aim for?

**Discussion**Activity
Guided Meditation

(-(\_)

What is menstruation? (Review)

- Hormonal process to prepare the body for reproduction/pregnancy
  - There's many things that can affect a person's menstrual cycle (hormones, nutrition, stress, sleep, medications)
  - It's commonly known for the "menstruation period" or the "period"
    - the time of the month that menstruators bleed
  - Someone who menstruates/has periods = "menstruator"
  - Someone who does not menstruate/does not have periods=
     "nonmensturator"

#### **Common Myths**

- Cranberry juice is the cure!
- I don't know how to work out at the gym— I'm allergic to exercise
- I can't workout on my period.
- I can't do certain yoga poses because it will mess with my period

#### What food CAN'T do for you

- Change the "taste" or smell of your vagina
- Change the physical appearance of your vagina
- Cause a yeast infection \*\*\*
- Instantly fix all your problems
  - 7 days to reach vagina



#### What CAN food do for you



- Make you feel better over time
- Address some issues over time



#### "Anytime" foods









- Prebiotics
  - Leeks, onions, garlic, whole wheat products, oats, soybeans, and bananas
- UTIs: plenty of water!
- Increased fish may help menstrual pain
- Lenti savigh may help with excessive menstrual bleeding











### "Cycle Syncing"

- A new workout trend going on around the idea of syncing your life to your menstrual cycles and the four phases
- No scientific evidence to support it
- I do not see harm in taking charge of your life in ways that make sense to your energy and motivation levels

#### **Exercising while on period**

- 45-60 minutes

(\_\_\_\_)

- 3 or more times during the week
- Low high intensity
- Something that you actually want to do



### **Yoga and Stretching**

- Elongating your muscles is good for cramps and muscle soreness
- Blood flow is good
- Can help mentally as well
  - Can boost your mood as well



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# Discussion

I will be asking the group questions and writing down notes of how the conversation will go. I will NOT be writing down your names or any information that can reveal who said what. Participation is optional, but highly encouraged.

# Activity

We will spend time trying a <u>body scan meditation</u>.

Participation is voluntary.

If you choose to leave, please fill out the Post-Survey

Questionnaire before doing so



Do you have any questions? ignace1@unlv.nevada.edu







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#### **Curriculum Vitae**

#### **Edellene Ignacio**

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Education	
University of Nevada, Las Vegas	May 2024
Occupational Therapy Doctorate	
San Jose State University	December 2019
Bachelor of Science in Psychology	
Research interests	
Dalvia Haalth and thorony	

- Pelvic Health and therapy
- Menstrual education

#### **Research Experience**

- Selected topic of menstrual education to address menstrual management
- Performed literature review
- Defended project proposal

#### **Internship/Fieldwork Experience**

Student Intern | Valley Health Specialty Hospital

May 2022 – August 2022

- Evaluated and developed evidence-based treatment plans for patients
- Documented patient goals, progress, and treatment session performance
- Provided patient and family education

Student Intern | Spring Valley Hospital

May 2023 – August 2023

- Evaluated and developed evidence-based treatment plans for patients
- Provided treatment for patients in the acute care and neonatal intensive care unit
- Documented patient goals, progress, and treatment session performance
- Provided patient and family education
- Collaborated with other disciplines to provided client-centered interdisciplinary care

#### **Leadership Experience**

Fundraising Chair | Student Occupational Therapy Association

May 2022 – Present

• Developing creative solutions to raise funds for the SOTA members

Assembly of Student Delegate Representative Alternative | SOTA | March 2022 - Present

 Assists the ASD Rep in connecting SOTA members to American Occupational Therapy Association

**Professional Development Chair | SOTA** 

May 2021 – May 2022

• Provide learning opportunities for the SOTA members

## Vice President of Service | Alpha Phi Omega 2019

May 2018 – April

• Coordinated community service projects for the members

#### **Professional Associations**

National Association of Neonatal Therapists, **Member since 2022** Student Occupational Therapy Association, **Member since 2020** American Occupational Therapy Association, **Member since 2020**