

THESIS

WOMEN'S EXPERIENCE RECEIVING OCCUPATIONAL THERAPY FOR PELVIC
FLOOR DYSFUNCTION: A CASE SERIES

Submitted by

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ABSTRACT

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Introduction: Pelvic floor dysfunction (PFD) is a condition that affects one third of women, greatly impacting their quality of life (QoL). There is limited research on occupational therapy (OT) and pelvic floor health as pelvic floor therapy is a relatively new topic in the field of OT.

Objectives: Explore the experiences of women who have received OT for PFD.

Method: Eligibility criteria included: ≥ 18 years old; biologically female participants; self-reported pelvic floor health issue; English speaking; completed OT intervention for PFD within the past two years. Four participants completed a semi-structured interview about their treatment and qualitative analyses were completed using inductive coding techniques. Participants' electronic medical records were reviewed. The Pelvic Floor Distress Inventory Questionnaire-20 (PFDI-20) was completed to assess changes in PFD symptoms and impact on QoL.

Results: Qualitatively, three main themes emerged from the data across participants: 1) OT changed the course of women's ongoing journey with pelvic health, 2) women experienced relief through discovering OT, and 3) OT empowered women to be the experts of their own bodies.

There were clinically significant changes in participants PFDI-20 scores indicating a decrease in PFD symptoms and impact of PFD symptoms on QOL following OT intervention.

Conclusion: In conclusion, it appears that OT interventions may play an important role in positively impacting women's life with PFD. More research is needed to investigate the mechanisms of what makes OT interventions effective in treating PFD.

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TABLE OF CONTENTS

ABSTRACT.....	II
ACKNOWLEDGEMENTS.....	III
INTRODUCTION	1
OVERVIEW OF THE PELVIC FLOOR	1
OVERVIEW OF PELVIC FLOOR DYSFUNCTION.....	2
Urinary Incontinence	2
Fecal Incontinence	3
Pelvic Organ Prolapse.....	3
Chronic Pelvic Pain.....	4
IMPACT OF PELVIC FLOOR DYSFUNCTION ON QUALITY OF LIFE	4
CURRENT MEDICAL TREATMENTS	5
OCCUPATIONAL THERAPY	6
Definition of Occupational Therapy	6
OCCUPATIONAL THERAPY INTERVENTIONS FOR PFD	7
Voiding/Bladder Diary.....	7
Diaphragmatic/Deep breathing	8
Pelvic floor muscle awareness and core engagement.....	9
Yoga.....	9
OCCUPATIONAL THERAPY AND PELVIC FLOOR DYSFUNCTION: LITERATURE GAP	10
PROGRAM FOCUS AND RESEARCH PURPOSE AND QUESTIONS.....	11
FOCUS	11
RESEARCH QUESTION	12
METHODS	12
Study Design.....	12
Trustworthiness.....	13
Recruitment.....	14
Pelvic Floor Dysfunction Occupational Therapy Information	14
Data Collection Procedures.....	15
Data Analysis	17
CHAPTER 2: MANUSCRIPT	19
INTRODUCTION	19
LITERATURE REVIEW	19
IMPACT OF PELVIC FLOOR DYSFUNCTION ON QUALITY OF LIFE	21
CURRENT MEDICAL TREATMENTS	21
METHODS	23
Study Design.....	23
Trustworthiness.....	23
Recruitment.....	24
Pelvic Floor Dysfunction Occupational Therapy Information	25
Data Collection and Analyses Procedures	25

RESULTS	29
Individual Case Descriptions	29
Quantitative Findings.....	30
Qualitative Findings.....	31
DISCUSSION AND IMPLICATIONS	39
Quantitative.....	40
Qualitative.....	40
STUDY LIMITATIONS AND FUTURE DIRECTIONS	44
CONCLUSION.....	44
CHAPTER 3: CONCLUSION	45
IMPLICATIONS FOR OCCUPATIONAL THERAPY	45
REFERENCES	48
APPENDIX A:.....	55
QUALITATIVE INTERVIEW QUESTIONS:	55
APPENDIX B:	58
PELVIC FLOOR DISTRESS INVENTORY QUESTIONNAIRE-SHORT FORM 20 (PFDI-20)	58
LIST OF ABBREVIATIONS.....	60

CHAPTER 1: INTRODUCTION, LITERATURE REVIEW, METHODS

Introduction

Pelvic floor dysfunction (PFD) is a condition that predominantly affects females (Davis & Kumar, 2003). Approximately one third of women are affected by PFD and these disorders are often underreported due to shame and societal stigma (Frota et al., 2018; Pierce et al., 2015). In 2008, 11% of women had PFD so severely that they needed surgical intervention, which approximates to 300,000 operations a year, with 29% of those operations being re-operations (DeLancey et al., 2008). Often, women delay seeking medical attention due to embarrassment, misconceptions that the symptoms they are experiencing are a common result of childbirth and aging, or lack of knowledge of services available (Davis & Kumar, 2003). Although PFD is rarely life threatening, it can greatly affect the quality of life (QoL) of women, including social isolation, restricted employment, loss of independence, and sexual inhibition (Davis & Kumar, 2003).

Overview of the Pelvic Floor

The pelvic floor is comprised of muscles, tissues, nerves, and ligaments that attach to the pelvic bones and create a “hammock” that supports the pelvic organs (Lawson & Sacks, 2018). The pelvic floor serves three purposes. The first purpose is to support the pelvic organs against changes in intrabdominal pressure that occur during daily activities such as lifting objects, exercise, or coughing (Hodges et al., 2007; Pierce et al., 2015). The pelvic floor muscles (PFMs) provide a constant state of tone to support and maintain the position of pelvic organs during this increase in pressure (Pierce et al., 2015). Secondly, the PFMs regulate the storage and emptying of the bladder and bowel, signaling when elimination is necessary by opening and closing sphincters of the urethra and anus to help maintain continence (Pierce et al., 2015). The third

purpose of the pelvic floor is to facilitate sexual function, which in females includes vaginal penetration and vaginal birth (Pierce et al., 2015).

Overview of Pelvic Floor Dysfunction

PFD is a general term that encompasses many clinical problems involving the pelvic floor (Davis & Kumar, 2003). Lawson and Sacks (2018) define PFD as an abnormal functioning of the pelvic floor which can be caused by structural abnormalities, underlying disease, or physical trauma. When the pelvic floor is functioning in an unhealthy manner it can compromise bowel function, bladder function, and support of internal organs (Lawson & Sacks, 2018). There are many conditions which fall under the umbrella of the term PFD. These conditions do not occur in isolation, but rather women often experience a combination of pelvic floor issues which have multiple causes and occur gradually (Davis & Kumar, 2003; Frota et al., 2018). The most common PFD conditions that affect women include: urinary incontinence (UI), fecal incontinence (FI), pelvic organ prolapse (POP), and chronic pelvic pain (CPP) (Lawson & Sacks, 2018; Pierce et al., 2015).

Urinary Incontinence

Urinary Incontinence (UI), the involuntary loss of urine, affects 8.2% (348 million) of the population worldwide (Frota et al., 2018; Pierce et al., 2015). There are three types of UI: stress, urge, and mixed incontinence. Stress incontinence is a leakage of urine occurring from an increase in abdominal pressure due to physical exertion or stress on the bladder (Radzimińska et al., 2018). Stress incontinence usually occurs during coughing, laughing, or sneezing (Radzimińska et al., 2018). Predisposing factors include: multiple births, weakened connective tissue, previous surgeries, hormone deficiency, history of hysterectomy, and genital mutilation (Heydari et al., 2017; Radzimińska et al., 2018). Urge incontinence, more commonly known as

“overactive bladder”, is leakage that occurs after a strong urge to urinate. It can be triggered by everyday occurrences such as drinking cold water or the sound of running water (Radzimińska et al., 2018). Mixed UI is a combination of stress and urge incontinence.

Fecal Incontinence

Fecal Incontinence (FI), the involuntary loss of feces, was reported to affect 11-15% of community dwelling adults, translating to one in five women in 2011 (Bochenska & Boller, 2016; Pierce et al., 2015). FI and UI are strongly associated due to the innervation of the external anal and urethral sphincters by sacral nerves. The rectum and bladder are also exposed to the same trauma due to their proximity to each other (Whitehead et al., 2009). Risk factors for developing FI include: increasing age, obesity, diabetes mellitus, sphincter injury, and multiple vaginal deliveries (Bochenska & Boller, 2016). The occurrence of FI in women increases with multiple childbirths, from 5.9% with no vaginal delivery to 15.1% in women with four or more vaginal deliveries (Whitehead et al., 2009). Davis and Kumar (2003) found that following a woman’s first vaginal birth one third of women will suffer damage to their anal sphincter complex resulting in long term FI. A small percentage will even have a third-degree tear, which is a tear from the vaginal wall to the anal sphincter (Davis & Kumar, 2003).

Pelvic Organ Prolapse

Pelvic Organ Prolapse (POP) is the descent of the anterior or posterior vaginal wall, uterus, or apex of the vagina (Frota et al., 2018). POP is a condition that affects 5-10% of women (Davis & Kumar, 2003). Women with POP can experience a range of symptoms from mild descent of organs to complete eversion of the vagina with prolapse of the bladder, urethra, cervix or rectum (Davis & Kumar, 2003). Women can also experience UI, incomplete voiding, incomplete emptying of bowels, and feelings of bulging or pressure (Lawson & Sacks, 2018).

There are many factors that can contribute to developing POP, including multiple vaginal births, obesity, hysterectomy, genetics, and age (Davis & Kumar, 2003; DeLancey, 2016). It is estimated that 50% of women who have given birth will develop a degree of prolapse due to loss of pelvic floor support (Davis & Kumar, 2003). Age has been shown to contribute to the development of POP, as 40% of women over the age of fifty develop uterine prolapse (Lawson & Sacks, 2018).

Chronic Pelvic Pain

Although there are no universal definitions of chronic pelvic pain (CPP), institutions such as the Royal College of Obstetricians and Gynecologists define CPP as “intermittent or constant pain in the lower abdomen or pelvis of at least 6 months duration, not occurring exclusively with menstruation or intercourse and not associated with pregnancy” (Ahangari, 2014, p 1). CPP can be considered a syndrome in and of itself or it can be a symptom of another disease, such as endometriosis. CPP does not have one single cause which makes it difficult to treat (Huang et al., 2017). The pain can be caused by musculoskeletal conditions, adaptive posture, POP, irritable bowel syndrome, chronic pelvic inflammatory infection, dyspareunia, dysuria, or dysmenorrhea (Daniels & Khan, 2010). One of many risk factors for women developing CPP is trauma, with a large portion of these women having experienced sexual abuse (Panisch & Tam, 2020).

Impact of Pelvic Floor Dysfunction on Quality of Life

In addition to affecting women physically, these conditions also negatively impact women socially and psychologically, collectively reducing the QoL of one third of adult women (Davis & Kumar, 2003; Frota et al., 2018; Radzimińska et al., 2018). All of these conditions are associated with anxiety, depression, and social isolation (Ahangari, 2014; Bochenska & Boller, 2016; Daniels & Khan, 2010). In addition to these shared symptoms, each condition has unique

impacts on QoL. FI and UI may cause women to change their lifestyles due to shame and embarrassment, which often leads to decreased activity and participation through social isolation and loss of employment (Bochenska & Boller, 2016; Radzimińska et al., 2018; Whitehead et al., 2009). FI can also impact a woman's sexual function as women with FI often report low sexual desire and satisfaction (Bochenska & Boller, 2016). POP symptoms can interfere with daily activities such as affecting exercise and sexual functioning (Lawson & Sacks, 2018).

CPP is associated with disturbed physical health, sleep quality, decreased work productivity, and mental health (Ahangari, 2014). Romão et al. (2009) performed a study to determine the prevalence and impact of anxiety and depression in women with CPP at a chronic pain clinic in Brazil. The study compared women with CPP to a control group of the same age, measuring the intensity of CPP, QoL, anxiety, and depression with multiple instruments. The study found a significant association between anxiety and CPP, as 73% of women with CPP in the study had anxiety compared to 37% in the control group. The study also found an association between depression, social isolation, and CPP leading to decreased QoL in women with CPP (Romão et al., 2009). Management of the pain can become expensive and coupled with repeated absence from work places an increasing economic burden on these women (Ahangari, 2014). Collectively these issues negatively impact women's participation in daily activities and QoL.

Current Medical Treatments

There are a wide variety of medical treatments performed for PFD management with the goal of restoring functional anatomy, maintenance of continence, and sexual function (Davis & Kumar, 2003). Physical therapy (PT) is considered a first-line, conservative treatment approach. Pelvic floor PT focuses on interventions that target function and mobility of the pelvic floor (Lawson & Sacks, 2018). Interventions used by PTs include manual therapy, neuromuscular

electrical stimulation, biofeedback, intravaginal and intrarectal assessments, and PFM exercises (Lawson & Sacks, 2018). Other PT treatments include keeping a urinary or bladder diary and bladder training (Hong et al., 2019).

Surgical interventions performed by urogynecologists, are reserved for those individuals with severe symptoms or anatomical abnormalities such as misalignment of pelvic organs and protrusion of the uterus through the hymen (Davis & Kumar, 2003; DeLancey, 2016). Surgery is an acceptable intervention for multiple types of PFD, but reoperation is often needed (Lawson & Sacks, 2018). For example, Lawson and Sacks (2018) report that reoperation rates for POP are 30% and that symptoms often return over time after surgery.

Both PT treatment and surgical interventions can be effective, but they are not enough. It appears that both PT and surgical treatments do not consider the negative impact that PFD symptoms have on the everyday life of women, in their relationships, mental health, participation in everyday activities, and their self-efficacy; therefore, occupational therapists (OTs) have begun to work in the field of PFD (K. Mathias, personal communication, September 14th, 2020). OTs may use similar techniques as previously described; however, they bring a unique, holistic view of the individual, considering how these symptoms affect women's everyday lives and empowering women with tools to understand and manage their pelvic floor health (K. Mathias, personal communication, September 14th, 2020).

Occupational Therapy

Definition of Occupational Therapy

Occupational therapy (OT) therapeutically uses engagement in everyday activities to achieve health, participation, and well-being (AOTA, 2020). OTs consider individuals in a holistic and client-centered manner, including considering their environment and how that

environment impacts their participation in occupations and their overall health (Yerxa, 1990). Researchers theorize that participation in meaningful occupations positively impacts an individual's well-being and QoL (Law, 2002).

Occupational Therapy Interventions for PFD

Burkart et al. (2020) found that women's occupational performance, participation in everyday activities, and QoL can be greatly affected by PFD conditions such as UI, FI, POP and CPP. OTs are beginning to address PFD in women, using techniques developed by other health professionals. It appears from personal communications that there are many techniques that OTs use to treat PFDs, the main four being: use of a voiding/bladder diary, diaphragmatic/deep breathing, pelvic floor awareness, and yoga (K. Mathias, September 14th, 2020). While little research has been performed concerning OT's use of these techniques, the techniques are shown to improve the lives of women with PFDs (Berzuk & Shay, 2015; Hung et al., 2010; Tenefelde et al., 2014; Wyman et al., 2009).

Voiding/Bladder Diary

A voiding diary, also known as a bladder diary, is a tool used to assess voiding frequency, incontinent episodes, and fluid intake for individuals who suffer from UI (Wyman et al., 2009). Voiding diaries can vary from simple to complex. Wyman et al. (2009) discussed the use of three to seven-day voiding diaries to record bladder habits for women with UI to educate them on normal and abnormal bladder function. Locher et al. (2001) demonstrated that a seven-day voiding diary provides reliable estimates of the frequency of incontinent episodes in women. The diary also allows the client to track and observe their habits and routines around urination, facilitating insight into what lifestyle changes need to occur (Wyman et al., 2009).

Diaphragmatic/Deep breathing

PFMs are involved in breathing, relaxing during inspiration and contracting during expiration, working to control intra-abdominal pressure and facilitate trunk stability. PFMs, the diaphragm, and deep abdominal muscles are all connected, working together to protect internal organs from intra-abdominal pressure. PFMs can affect diaphragmatic movement and pulmonary function (Park & Han, 2015). Normally the abdominal muscles and PFMs work together during breathing. In women with stress UI, the abdominal muscles are more active than the PFMs. This demonstrates that the abdominal muscles are compensating for weak PFMs (Hung et al., 2010). In women with CPP, their breathing patterns may change to compensate for the pain, causing shallower breathes. Proper diaphragmatic breathing and posture allows the PFMs to stretch to their proper length, helping with pain and improving continence (Bobb et al., 2019; Hung et al., 2010).

Hung et al. (2010) found that retraining of the diaphragmatic, deep abdominal, and PFMs can improve symptoms in women with UI. The intervention consisted of a five-stage exercise regimen over a four-month period. The exercise regimen included: diaphragmatic breathing, tonic activation and muscle strengthening of deep abdominal muscles, activation of PFMs, functional expiratory patterns, and impact activities such as running. At the end of four months the treatment group showed significant improvement in UI symptoms and a greater increase in QoL than the control group who only received oral information on UI, bladder hygiene, and PFM muscle exercise (96.7% vs 66.6%, $p=0.002$). The treatment group reported a significant decrease in leakage via a 3-day voiding diary and a pad test that determines amount of leakage during everyday activities, as well as an increase in urinary holding time. The results of this study demonstrate that a correct diaphragmatic breathing pattern is necessary for expiration

without leakage (Hung et al., 2010). Correct diaphragmatic breathing involves the coordination of the diaphragm, deep abdominal muscles, and PFMs through long deep breathes in through the nose and long breathes out through pursed lips.

Pelvic floor muscle awareness and core engagement

PFMs play an important role in offering stability to the abdominal or core muscles. It is important for women to be aware of their PFMs in order to consciously engage them simultaneously with their abdominal muscles to provide postural support to the rest of the body (Berzuk & Shay, 2015). Berzuk and Shay (2015) demonstrated that improving pelvic floor knowledge and PFM functioning led to an improvement in PFD symptoms and QoL in women with PFD. A combination of PFM and transverse abdominal exercises were shown to be more effective than PFM exercises alone in improving the QoL in women with stress UI (Ptak et al., 2019). Additionally, Stüpp et al. (2011) found that increasing women's awareness of their PFMs and teaching women how to coordinate those muscles with their breathe improved their QoL and decreased their POP symptoms.

Yoga

Yoga is an ancient Indian discipline that uses body postures, breathing exercises, and meditation to connect the mind, body, and spirit (Sha et al., 2009). The World Health Organization classifies yoga as an integrative and complementary health practice that combines the mind and body (Gonçalves et al., 2017). In the medical field yoga is used as a modality to treat many issues including: chronic back pain, respiratory performance in individuals with chronic obstructive pulmonary disease, fatigue, and depression (Sha et al., 2019). Although yoga and PFD has not been studied, yoga has the potential to improve outcomes among women with PFD.

There are many elements of yoga that OTs can use to treat PFD. One element is “downtraining” or relaxation techniques. These techniques are used to relax hypertonic PFMs which can cause pelvic pain and limit mobility (Tenfelde et al., 2014). “Downtraining” techniques include: diaphragmatic breathing and the use of different yoga postures to stretch the tight muscles. In yoga, diaphragmatic breathing is used to bring awareness to the pelvic floor and relax the nervous system (Arnouk et al., 2017; Ripoll & Mahowald, 2002). Different yoga postures can also be used to strengthen hypotonic muscles that contribute to UI, FI, and POP (Tenfelde et al., 2014). Some of these yoga postures include standing open hip postures such as the Warrior 2 or Side Angle poses which bring awareness to the body, allowing insight into how the body moves and how to lift the pelvic floor. These yoga positions also improve posture, strength, and flexibility, allowing for better support of respiration (Tenfelde et al., 2014).

Yoga improves women’s mental health as well as their physical health. Gonçalves et al. (2017) found that consistent practice of yoga decreased depression and anxiety, which are symptoms often associated with CPP. Not only does practicing yoga improve women’s mental health, but it also increases endorphin release which allows for better pain control in women with CPP (Ripoll & Mahowald, 2002). Yoga has a holistic impact on the individual considering body, mind, and spirit which complements OT’s holistic view of the individual (Mailoo, 2005; Ripoll & Mahowald, 2002; Gonçalves et al., 2017; Tenfelde et al., 2014; Arnouk et al., 2017).

Occupational Therapy and Pelvic Floor Dysfunction: Literature Gap

Occupational therapy (OT) provides a unique perspective and individualized interventions for women with PFDs. Occupational therapy is defined as “the therapeutic use of everyday life occupations with persons, groups, or populations (i.e., the client) for the purpose of enhancing or enabling participation” (AOTA, 2020, p 1). This perspective considers the whole

person, which includes body functions, roles, routines, habits, relationships, and their environment. OTs consider how all of these factors enable or inhibit an individual's participation and performance in daily activities. OTs focus on a client's physical health needs as well as their emotional, social, and mental health needs (AOTA, 2020). This perspective is different from other health professions such as PT, urogynecologists, and obstetrician-gynecologists (OBGYNs), who tend to focus on mainly the physical components of the dysfunction (K. Mathias, personal communication, September 14th, 2020). In addition to considering all aspects of the client OTs also teach clients how to advocate for themselves. OTs are skilled at empowering clients to fight for the things they need and teaching them the skills needed to accomplish their goals (AOTA, 2020).

OTs are beginning to address PFD in women, using techniques developed by other health professionals. Researchers show that these techniques are useful in women with PFD, but there is limited research on OTs' use of these techniques and women's experience of receiving OT for PFD (Berzuk & Shay, 2015; Hung et al., 2010; Tenefelde et al., 2014; Wyman et al., 2009). The current study aimed to capture the experience of women receiving OT for PFD to better understand the impact of PFD on women's lives and OT's role in treating this condition.

Program Focus and Research Purpose and Questions

Focus

Pelvic floor therapy is a relatively new topic in the field of OT. Currently there is limited research on OT and pelvic floor health. This research is limited to: OT interventions for managing urinary dysfunction in a primary care setting, treatment of older women with UI, OT's role in the treatment of POP, the occupational impact of PFD after childbirth, and women's awareness of available treatment to support managing PFD (Burkhart et al., 2020; Blacker et al.,

2020; Cunningham & Valasek, 2019; Molitor & Nadeau, 2020). The purpose of this study was to explore the experiences of women who received OT for PFD in order to broaden our understanding of OT's role in pelvic floor health.

Research Question

1. What is the experience of women receiving occupational therapy for pelvic floor dysfunction?

Methods

Study Design

A qualitative, retrospective case-series design was used to provide a detailed description of the experience and perspective of women who received OT for pelvic floor health issues (Savin-Baden & Major, 2013). A case-series is comprised of multiple case studies which are accounts of individual cases or experiences (Savin-Baden & Major, 2013). A case-series approach was chosen to uncover the real-world implications of each participant's experiences working with an OTs for PFD. This study included semi-structured interviews with four participants who have completed OT interventions for PFD within the past two years and a review of participants' electronic medical records (EMRs) to understand the intervention process and outcomes of the OT sessions. Including both qualitative and quantitative data provided a comprehensive understanding of the four cases, informing this case series research study. A pragmatic paradigm, defined as "an approach that draws upon the most sensible and practical methods available in order to answer a given research question", was chosen for this study (Savin-Baden & Major, 2013, p.171). This approach places importance on using any method possible to best answer the research question. The pragmatic paradigm focuses on the

experiences of individuals that emphasize change and therefore was chosen to explore how OT impacted the lives of these women (Savin-Baden & Major, 2013).

Trustworthiness

The research team for this study consisted of two professors of OT, one professor of Human Development and Family Studies, one pelvic floor OTs, and three graduate OT students completing masters work in OT. Through personal reflection and frequent meetings, the research team acknowledged their backgrounds and how that impacted their perspectives during data analyses. Triangulation, peer review, member checking, and frequent self-reflection was used to mitigate biases during the data collection and analyses.

Researchers' Lens. This study's research question sought to explore the experience of women who received OT for PFD. The broader intentions for this study were to: 1) advocate for OT's role in women's health by encouraging research and knowledge about how OT improves women's well-being, 2) impact the view of women's health, and 3) shed light on women's experiences with PFD, empowering women to talk about these issues.

The first intention stems from my position as an OT student. Pelvic floor therapy is an emerging practice in the field of OT, and as a result there is a lack of research concerning the use of OT interventions on PFD (Jones et al., 2020). This is why I chose a qualitative approach to explore the experiences women have had in this area as a broader starting point for OT and pelvic floor therapy research. The second intention stems from my personal interest in women's health. I am a woman who has experienced PFD and I recognize its impact on women's daily lives. The third intention stems from my training as an OT student, specifically in occupational justice. I have learned the importance of occupational inclusion in decreasing health and social inequalities that women experience. This includes teaching and empowering women to advocate

for themselves. In short, I believe that decreasing the literature gap in the area of PFD in women and the impact of OT on women's health, will bring awareness to the need for more research in this area and encourage improvement in women's health care.

Recruitment

The lead author worked with a local OT (KM) trained in pelvic floor health who works at her own private practice in the southwest United States. The OT identified clients who had been discharged from pelvic floor OT. To be included in the study, participants met the following inclusion criteria: 18 years or older; biologically female individual; a self-reported pelvic floor health issue; English speaking; completed OT intervention for pelvic floor health issues within the past two years. The authors chose to work exclusively with female participants because PFD affects women at higher rates than men (Luber et al., 2000). KM encouraged current and past clients through social media and word of mouth to participate in the study. Once clients showed interest, KM introduced potential participants to the lead author via email. Following the introduction, the lead author screened potential participants for inclusion criteria over the phone or via email and the participants consented to participating in this IRB approved study.

Pelvic Floor Dysfunction Occupational Therapy Information

KM has five years of training as an OTs and has completed over a dozen continuing education courses related to pelvic floor health and treatment. Her approach centers on the core values of OT; she considers how clients' symptoms impact their participation and performance in the activities that they take part in every day. KM reported taking a holistic outlook on treatment, considering the whole person and adapting her interventions to each client's specific needs. All participants received OT with KM for their specific PFD; however, dose and specific activities were individualized to best meet the needs of each participant. Common OT

interventions KM uses with all clients include: completion of a voiding diary, diaphragmatic breathing, pelvic floor and core awareness, and yoga (K. Mathias, personal communication, September 14th, 2020).

Data Collection Procedures

Quantitative Data Collection. Retrospective chart review was conducted to collect intervention information, including outcome information on each participant following the interviews. Participants signed a release form allowing for review of their charts by the lead interviewer. A data collection spreadsheet was created for consistent data collection from the chart review. If information was not found in the chart, that data point was left blank. Chart review data collected included: initial evaluation information, diagnosis, length of time the participant received OT, number of treatment sessions, treatment location (via Telehealth or at the participant's house), and specific OT interventions. Additional information included: goals, goal modifications, and the comparison of the assessment results from pretreatment to post treatment. KM used the Pelvic Floor Distress Inventory Questionnaire-Short Form 20 (PFDI-20) (Appendix B) to determine change in PFD symptoms of QoL following treatment.

Pelvic Floor Distress Inventory Questionnaire-Short Form 20 (PFDI-20). The PFDI-20 is a twenty-question form regarding symptoms experienced in three PFD areas over the last three months. These three areas are split into three domains: The Urinary Distress Inventory, Pelvic Organ Prolapse Distress Inventory, and the Colorectal-Anal Distress Inventory (Barber et al, 2005).

The PFDI-20 has excellent test-retest reliability (ICC = 0.93) and good internal consistency (Chronbach's alpha 0.88) (Barber et al., 2005). All questions are answered on a Likert scale (Not at all=1; Somewhat=2; Moderately=3; Very much=4) and the test is able to be

completed in five to ten minutes. The test is scored by determining the mean score on a scale of 0-4 for each of the three sections. Each section's score is then multiplied by 25 and all three scores are added together. The total scores range from 0-300. The higher the score the greater the impact of the PFD on the client's life (Barber et al., 2005). Wieggersma et al. (2017) established that the minimal important change for the PDFI-20 with conservative or nonsurgical treatment is 13.5 points or 23% change.

Qualitative Data Collection. Semi-structured interviews were conducted with participants using an interview protocol (Appendix A). The interviews included questions to collect demographic information (age, education level, etc.). **The first and sixth authors** conducted the interviews via a secure communication platform (Zoom) with the interviews lasting approximately one hour. During the first half of the interview, participants were asked about their experience with PFD, including what other health professionals they may have seen before working with an OTs and the PFD symptoms they were experiencing that led them to seek treatment. Open-ended questions, **as opposed to close-ended or yes/no questions**, were used to facilitate conversation. Sample questions included: "What issue/symptoms were you experiencing that led you to seek Kelsey for help?" and "How long were you having these issues before seeing Kelsey?" Probes guided participants to think back on the symptoms they were experiencing and how those symptoms were affecting their daily lives at the time they sought treatment.

The second half of the interview inquired about the participants' experiences with their therapist, what interventions were used, the feasibility of homework given, and improvements that they saw in their PFD symptoms, occupational engagement, and social participation following intervention. The researchers asked probing questions including: "What were your

initial impressions of your sessions with Kelsey?”, “How did your sessions with Kelsey change your outlook on the symptoms that you were having?”, and “Tell me about any differences you have experienced socially, in your relationships with your partner or spouse, family, and friends.” The interviews were audio and video recorded for transcription purposes. Recordings were transcribed verbatim into a word-processing document and double checked for accuracy. The recordings and transcriptions were stored on a secure server.

Data Analysis

Quantitative Data Analyses. Descriptive statistics such as mean, standard deviation, proportions, and frequencies were used as appropriate to describe the sample. Outcome measure scores before and after the interventions were reported and a percent change calculation was performed for the total score using the following equation: $\text{Time 1} - \text{Time 2} / \text{Time 1} \times 100$.

Qualitative Data Analyses. The transcribed interviews were entered into Nvivo qualitative software to assist in data analysis. Two authors (JS and HS) read each transcript multiple times to become familiar with the data. The transcripts were then coded using an inductive coding method (Savin-Baden & Major, 2013). Each research performed line-by-line analysis independently, labeling sections of the data with descriptive codes. The two researchers then came together for discussion comparing codes line-by-line. If a disagreement occurred, the researchers returned to the transcripts and discussed them until a consensus was reached. Next the researchers examined relationships between the codes to develop themes and subthemes. Analysis was performed across all the interviews, creating themes within each interview and then larger themes across all interviews. Once the codes were created, they were peer-reviewed by a co-author (KA). Multiple authors met to compare codes and discuss emerging themes to ensure that the themes were grounded in data. Data collection and analysis occurred concurrently, which

allowed for refinement of the data collection process and interview questions throughout the study. Each interview was analyzed separately, focusing on the individual participant and then analyzed between interviews.

To ensure rigor the primary author kept an audit trail and triangulated with other authors to develop a comprehensive understanding of the data. Self-reflection was used throughout the data analysis to ensure that the researchers remained neutral throughout the research process (Savin-Baden & Major, 2013). Peer-review was performed by my committee members and was used to ensure neutrality of the researcher by allowing an outside source to check for accuracy and determine that the findings were supported by data (Savin-Baden & Major, 2013).

CHAPTER 2: MANUSCRIPT

Introduction

Pelvic floor dysfunction (PFD) is a prevalent health condition affecting approximately one third of women (Frota et al., 2018). This number may be larger, as PFD often goes underreported due to shame and societal stigma (Davis & Kumar, 2003; Pierce et al., 2015). The number of women seeking treatment for PFD is expected to increase exponentially from 28.1 million to 43.8 million by 2050 with the aging population (Parden et al., 2016).

PFD is defined as an abnormal functioning of the pelvic floor, which can be caused by structural abnormalities, underlying disease, or physical trauma (Lawson & Sacks, 2018). These conditions do not occur in isolation, but often are experienced as a combination of pelvic floor issues which have multiple causes and occur gradually (Davis & Kumar, 2003; Frota et al., 2018). The majority of research related to PFD is from professionals such as, physical therapists (PTs), urogynecologists, and obstetrician-gynecologists. Currently, occupational therapy (OT) research is limited to: OT interventions for managing urinary dysfunction in a primary care setting, treatment of older women with UI, OT's role in the treatment of pelvic organ prolapse (POP), the occupational impact of PFD after childbirth, and awareness of treatment available (Burkhart et al., 2020; Blacker et al., 2020; Cunningham & Valasek, 2019; Molitor & Nadeau, 2020). The purpose of this study was to explore the experiences of women who received OT for PFD in order to broaden our understanding of OT's role in pelvic floor health.

Literature Review

The pelvic floor is comprised of muscles, tissues, nerves, and ligaments that attach to the pelvic bones and create a “hammock” that supports the pelvic organs (Lawson & Sacks, 2018). The pelvic floor serves three purposes: 1) support the pelvic organs against changes in

intrabdominal pressure changes during daily activities, 2) regulate the storage and emptying of the bladder and bowel, and 3) facilitate sexual function, which in females includes vaginal penetration and vaginal birth (Pierce et al., 2015). When the pelvic floor is not functioning correctly, bowel function, bladder function, and support of internal organs may be compromised (Lawson & Sacks, 2018).

The most common PFD conditions that affect women include: urinary incontinence (UI), fecal incontinence (FI), pelvic organ prolapse (POP), and chronic pelvic pain (CPP) (Lawson & Sacks, 2018; Pierce et al., 2015). UI is defined as the involuntary loss of urine, affecting 8.2% (348 million) of the population worldwide (Frota et al., 2018; Pierce et al., 2015). FI is defined as the involuntary loss of feces, affecting as many as 1 in 5 women (Bochenska & Boller, 2016; Pierce et al., 2015). Davis and Kumar (2003) found that following a woman's first vaginal birth, one third of women will suffer damage to their anal sphincter complex, resulting in long term FI. POP is the descent of the anterior or posterior vaginal wall, uterus, or apex of the vagina (Frota et al., 2018). Women with POP can experience a range of symptoms from mild descent of organs to complete eversion of the vagina with prolapse of the bladder, urethra, cervix or rectum (Davis & Kumar, 2003). Age may contribute to the development of POP, as 40% of women over the age of 50 develop uterine prolapse (Lawson & Sacks, 2018). Although there are no universal definitions of CPP, institutions such as the Royal College of Obstetricians and Gynecologists define CPP as "intermittent or constant pain in the lower abdomen or pelvis of at least 6 months duration, not occurring exclusively with menstruation or intercourse and not associated with pregnancy" (Ahangari, 2014, p. 1)

Impact of Pelvic Floor Dysfunction on Quality of Life

In addition to affecting women physically, these conditions also negatively impact women socially and psychologically, collectively reducing the QoL of one third of adult women (Davis & Kumar, 2003; Frota et al., 2018; Radzimińska et al., 2018). All of these conditions are associated with anxiety, depression, and social isolation (Ahangari, 2014; Bochenska & Boller, 2016; Daniels & Khan, 2010). In addition to these shared symptoms, each condition has unique impacts on QoL. FI and UI may cause women to change their lifestyles due to shame and embarrassment, which often leads to decreased activity and participation through social isolation and loss of employment (Bochenska & Boller, 2016; Radzimińska et al., 2018; Whitehead et al., 2009). Furthermore, FI can also impact a woman's sexual function as women with FI often report low sexual desire and satisfaction (Bochenska & Boller, 2016). CPP is associated with disturbed physical health, sleep quality, decreased work productivity, and mental health (Ahangari, 2014). Romão et al. (2009), found an association between depression, social isolation, and CPP leading to decreased QoL in women with CPP. Management of the pain can become expensive and that coupled with repeated absence from work places an increasing economic burden on these women (Ahangari, 2014). POP symptoms can interfere with daily activities such as affecting exercise and sexual functioning (Lawson & Sacks, 2018). Collectively these issues negatively impact women's participation in daily activities and QoL.

Current Medical Treatments

Currently there are a variety of medical treatments for PFD management with the goal of restoring functional anatomy, continence maintenance, and sexual function (Davis & Kumar, 2003). PT is considered a first-line, conservative treatment approach. Pelvic floor PT focuses on interventions that target function and mobility of the pelvic floor (Lawson & Sacks, 2018).

Interventions used by PTs include manual therapy, neuromuscular electrical stimulation, biofeedback, intravaginal and intrarectal assessments, and PFM exercises (Lawson & Sacks, 2018). Additionally, urogynecologists perform surgical interventions which are reserved for severe PFD symptoms or anatomical abnormalities often associated with POP (Davis & Kumar, 2003; DeLancey, 2016). Surgery is an acceptable intervention for multiple types of PFD, but reoperation is often needed (Lawson & Sacks, 2018). Lawson and Sacks (2018), report that reoperation rates for POP are 30% and that incontinence often returns over time after surgery.

It appears that both PT and surgical treatments do not consider the negative impact that PFD symptoms have on the everyday life of women, in their relationships, mental health, participation in everyday activities, and their self-efficacy; therefore, OTs have begun to work in the field of PFD (K. Mathias, personal communication, September 14th, 2020). OTs may use similar techniques to PTs; however, OTs bring a unique, holistic view of the individual, considering how these symptoms affect women's everyday lives and empowering women with tools to understand and manage their pelvic floor health (K. Mathias, personal communication, September 14th, 2020).

OTs are beginning to address PFD in women, using techniques developed by other health professionals. Researchers show that these techniques are useful in women with PFD, but there is limited research on OTs' use of these techniques and women's experience of receiving OT for PFD (Berzuk & Shay, 2015; Hung et al., 2010; Tenefelde et al., 2014; Wyman et al., 2009). The current study aimed to capture the experience of women receiving OT for PFD to better understand the impact of PFD on women's lives and OT's role in treating this condition.

Methods

Study Design

A qualitative, retrospective case-series design was used to provide a detailed description of the experience and perspective of women who received OT for pelvic floor health issues (Savin-Baden & Major, 2013). A case-series is comprised of multiple case studies which are accounts of individual cases or experiences (Savin-Baden & Major, 2013). A case-series approach was chosen to uncover the real-world implications of each participant's experiences working with an OTs for PFD. This study includes semi-structured interviews and a review of participants' electronic medical records (EMRs) to understand the intervention process and outcome of the OT sessions. A pragmatic paradigm, defined as "an approach that draws upon the most sensible and practical methods available in order to answer a given research question", was chosen for this study (Savin-Baden & Major, 2013, p.171). This approach places importance on using any method possible to best answer the research question. The pragmatic paradigm focuses on the experiences of individuals that emphasize change and therefore was chosen to explore how OT impacted the lives of these women (Savin-Baden & Major, 2013).

Trustworthiness

The research team for this study consisted of two professors of OT, one professor of Human Development and Family Studies, one pelvic floor OTs, and three graduate OT students completing masters work in OT. Through personal reflection and frequent meetings, the research team acknowledged their backgrounds and how that impacted their perspectives during data analyses. Triangulation, peer review, member checking, and frequent self-reflection was used to mitigate biases during the data collection and analyses.

Researchers' Lens. This study's research question sought to explore the experience of women who received OT for PFD. The broader intentions for this study were to: 1) advocate for OT's role in women's health by encouraging research and knowledge about how OT improves women's well-being, 2) impact the view of women's health, and 3) shed light on women's experiences with PFD, empowering women to talk about these issues.

The first intention stems from my position as an OT student. Pelvic floor therapy is an emerging practice in the field of OT, and as a result there is a lack of research concerning the use of OT interventions on PFD (Jones et al., 2020). Therefore, I chose a qualitative approach to explore the experiences women have had in this area as a broader starting point for OT and pelvic floor therapy research. The second intention stems from my personal interest in women's health. I am a woman who has experienced PFD and I recognize its impact on women's daily lives. The third intention stems from my training as an OT student, specifically in occupational justice. I have learned the importance of occupational inclusion in decreasing health and social inequalities that women experience. This includes teaching and empowering women to advocate for themselves. In short, I believe that decreasing the literature gap in the area of PFD in women and the impact of OT on women's health, will bring awareness to the need for more research in this area and encourage improvement in women's health care.

Recruitment

The first author (JS) worked with co-author (KM); a local OTs trained in pelvic floor health who works at her own private practice in the southwest United States. The OT identified clients who had been discharged from pelvic floor OT. To be included in the study, participants met the following inclusion criteria: 18 years or older; biologically female individual; a self-reported pelvic floor health issue; English speaking; completed OT intervention for pelvic floor

health issues within the past two years. The authors chose to work exclusively with female participants because PFD affects women at higher rates than men (Luber et al., 2000). KM encouraged current and past clients through social media and word of mouth to participate in the study. Once clients showed interest, KM introduced potential participants to the lead author via email. Following the introduction, the lead author screened potential participants for inclusion criteria over the phone or via email and the participants consented to participating in this IRB approved study.

Pelvic Floor Dysfunction Occupational Therapy Information

KM has five years of training as an OT and has completed over a dozen continuing education courses related to pelvic floor health and treatment. Her approach centers on the core values of OT; she considers how clients' symptoms impact their participation and performance in the activities that they take part in every day. KM reported taking a holistic outlook on treatment, considering the whole person, and adapting her interventions to each client's specific needs. The end goal of KM's treatment sessions is enabling clients to return to the occupations that they need and love to do. She reported focusing on client's mental health as well as their physical health. All participants received OT with KM for their specific PFD; however, dose and specific activities were individualized to best meet the needs of each participant. Common OT interventions KM used included: completion of a voiding diary, diaphragmatic breathing, pelvic floor and core awareness, and yoga (K. Mathias, personal communication, September 14th, 2020).

Data Collection and Analyses Procedures

Quantitative Data Collection. Retrospective chart reviews were conducted to collect intervention information, including outcome information on each participant following the

interviews. Participants signed a release form allowing for review of their charts by the lead interviewer. A data collection spreadsheet was created for consistent data collection from the chart review. If information was not found in the chart, that data point was left blank. Chart review data collected included: initial evaluation information, diagnosis, length of time the participant received OT, number of treatment sessions, treatment location (via Telehealth or at the participant's house), and specific OT interventions.

Additional information included: goals, goal modifications, and the comparison of the assessment results from pretreatment to post treatment. The OT used the Pelvic Floor Distress Inventory Questionnaire-Short Form 20 (PFDI-20) (Appendix B) to determine change in PFD symptoms of QoL following intervention. The PFDI-20 is a twenty-question form regarding symptoms experienced in three PFD areas over the last three months. These three areas are split into three domains: The Urinary Distress Inventory, Pelvic Organ Prolapse Distress Inventory, and the Colorectal-Anal Distress Inventory (Barber et al, 2005).

The PFDI-20 has excellent test-retest reliability (ICC=0.93) and good internal consistency (Chronbach's alpha 0.88) (Barber et al., 2005). All questions are answered on a Likert scale (Not at all=1; Somewhat=2; Moderately=3; Very much=4) and can be completed in five to ten minutes. The test is scored by determining the mean score on a scale of 0-4 for each of the three sections. Each section's score is then multiplied by 25 and all three scores are added together. The total scores range from 0-300. The higher the score the greater the impact of the PFD on the client's life (Barber et al., 2005). Wiegersma et al. (2017) established that the minimal important change (MIC) for the PDFI-20 with conservative or nonsurgical treatment is 13.5 points or 23% change.

Quantitative Data Analyses. Descriptive statistics such as mean, standard deviation, proportions, and frequencies were used as appropriate to describe the sample. Outcome measure scores before and after the interventions were reported and a percent change calculation was performed for the total score using the following equation: $\text{Time 1} - \text{Time 2} / \text{Time 1} \times 100$.

Qualitative Data Collection. Semi-structured interviews were conducted with participants using an interview protocol (Appendix A). The interviews included questions to collect demographic information (age, education level, etc.). The first and sixth authors conducted the interviews via a secure communication platform (Zoom) with the interviews lasting approximately one hour. During the first half of the interview, participants were asked about their experience with PFD, including what other health professionals they may have seen before working with an OT and the PFD symptoms they were experiencing that led them to seek treatment. Open-ended questions, as opposed to close-ended or yes/no questions, were used to facilitate conversation. Sample questions included: “What issue/symptoms were you experiencing that led you to seek Kelsey for help?” and “How long were you having these issues before seeing Kelsey?” Probes guided participants to think back on the symptoms they were experiencing and how symptoms were affecting their daily lives at the time they sought treatment.

The second half of the interview inquired about the participants’ experiences with their therapist, what interventions were used, the feasibility of homework given, improvements that they saw in their PFD symptoms, occupational engagement, and social participation following treatment. The researchers asked probing questions including: “What were your initial impressions of your sessions with Kelsey?”, “How did your sessions with Kelsey change your outlook on the symptoms that you were having?”, and “Tell me about any differences you have

experienced socially, in your relationships with your partner or spouse, family, and friends.” The interviews were audio and video recorded for transcription purposes. Recordings were transcribed verbatim into a word-processing document and double checked for accuracy. The recordings and transcriptions were stored on a secure server.

Qualitative Data Analyses. The transcribed interviews were entered into Nvivo qualitative software to assist in data analysis. The first and third authors read each transcript multiple times to become familiar with the data. The transcripts were then coded using an inductive coding method (Savin-Baden & Major, 2013). Each researcher performed line-by-line analysis independently, labeling sections of the data with descriptive codes. The two researchers then came together for discussion, comparing codes line by line. If a disagreement occurred, the researchers returned to the transcripts and discussed until a consensus was reached. All interviews were double coded. Next, the researchers examined relationships between the codes to develop themes and subthemes. Analysis was performed across all of the interviews, creating themes within each interview and then larger themes across all interviews. Once the codes were created, they were peer-reviewed by the fourth author who was not involved with study participants. Multiple authors met to compare codes and discuss emerging themes to ensure that the themes were grounded in the data. Data collection and analysis occurred concurrently, which allowed for refinement of the data collection process and interview questions throughout the study. Each interview was analyzed separately, focusing on the individual participant and then analyzed between interviews.

To ensure rigor the primary author kept an audit trail and triangulated with other authors to develop a comprehensive understanding of the data. Self-reflection was used throughout the data analysis to ensure that the researchers remained neutral throughout the research process

(Savin-Baden & Major, 2013). Member checking was used with participants to ensure accuracy of the interview transcripts (Savin-Baden & Major, 2013) Peer-review was performed by two co-authors with backgrounds in occupational therapy and was used to ensure neutrality of the researcher by allowing an outside source to check for accuracy and determine that the findings were supported by data (Savin-Baden & Major, 2013).

Results

Individual Case Descriptions

Four participants participated in the study with the average age of the four women being 33 years. All participants completed a bachelor's degree, were in a partnered relationship, and completed treatment in Colorado. Case descriptions were compiled from a combination of the participants' EMRs and semi-structured interviews to present background information on each participant. Participants' anonymity was protected with pseudonyms.

Katelyn. Katelyn is a 31-year-old postpartum athleticism coach. Through her career as a postpartum athleticism coach, she had a significant amount of background knowledge of the pelvic floor before seeking care. She was an athlete in college with a history of lifting weights and a contracted pelvic floor. Katelyn had a difficult 60-hour labor with her daughter, incurring a third-degree tear. It was after her daughter's birth that she started experiencing stress UI with exercise and bulging because of POP. The KM taught Katelyn different techniques of coordinating her breathing with her occupation of lifting weights, as well as scar work techniques for a third-degree tear from childbirth. Katelyn saw KM for 5 sessions.

Kelly. Kelly is a 29-year-old, personal trainer and doula. She saw many experts with different approaches, including three PTs, before seeking out OT. Kelly initially saw KM for hip tightness during her training for a martial art competition. Following competition, she discovered

that she was pregnant and worked with the KM throughout her pregnancy. KM also addressed UI and urgency. Kelly acknowledged KM's comprehensive care approach focusing on preventative work during her pregnancy. Kelly saw KM for 9 sessions.

Natalie. Natalie is 36 years old, with a history of four vaginal deliveries and three miscarriages. She has a complex pelvic floor history seeing many medical professionals, including OBGYNs and a PT before seeing KM. Natalie had a traumatic experience with her OBGYN encouraging her to have a hysterectomy following presentation POP symptoms. She mentioned experiencing shame and fear with her pregnancies due to her past miscarriages. Natalie also mentioned fear with certain exercises, insecurity with her body, and anxiety due to her pelvic floor symptoms before seeing KM. She saw KM for POP symptoms, UI, pain, cramping, and painful sex. Natalie saw KM for 12 sessions.

Vivian. Vivian is 37 years old with history as an athlete and training with the Restore Your Core[®] program. Her journey of seeking care for PFD occurred off and on for 10-11 years, seeking treatment from multiple professionals following one vaginal and one c-section delivery before seeing KM. Vivian saw KM for mixed UI and POP. Running is an important part of her identity and a way of connecting with family and friends. Vivian saw KM for 5 sessions.

Quantitative Findings

The PFDI-20 scores improved across all participants from pre-assessment to post-assessment (see Table 1). All of the participants had improvement of over 23%, with the change in scores ranging from 80.59%-100% (Wiegersma et al., 2017). These results indicate that participants had clinically meaningful improvements in PFD symptoms and decreased impact of PFD symptoms on QoL following OT.

Table 1. Change in The Pelvic Floor Distress Inventory Questionnaire-20 scores pre-treatment and post-treatment

Participant	Katelyn	Kelly	Natalie	Vivian	Mean (SD)
PFDI-20* Assessment results pretreatment (evaluation)	122	57	170	128	119.25 (±46.67)
PFDI-20 Assessment results post treatment (discharge)	13	0	33	16	15.5 (±13.58)
% of Change	89.34%	100%	80.59%	87.5%	86.82%

*PFDI-20=The Pelvic Floor Distress Inventory Questionnaire-20; total score is 300

Qualitative Findings

Three main themes emerged from the data across participants: 1) OT changed the course of women’s ongoing journey with pelvic health, 2) women experienced relief after discovering OT, and 3) OT empowered women to be the experts of their own bodies. The three themes have subsequent subthemes, all illustrated by quotes (Figure 1).

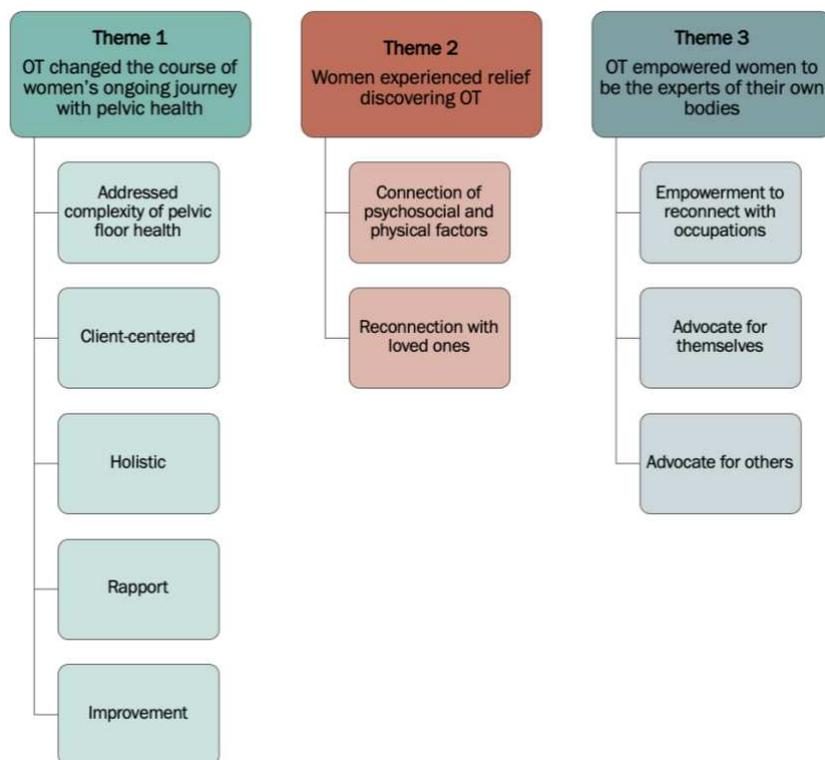


Figure 1. Themes and subthemes of qualitative findings

Theme 1: OT changed the course of women’s ongoing journey with pelvic health.

Participants described their experience of searching for treatment for their PFD as a “journey”. Three of the participants had seen multiple experts, including PTs and OBGYNs with varying approaches before being treated by an OTs. The participants’ PFD symptoms fluctuated throughout this journey. Natalie stated: “it’s been such a journey for...years.” Through the participants’ description of finding and working with an OTs (KM), they observed many factors that set the OTs apart from other professionals. Five subthemes emerged from the data that describe how KM’s OT approach changed these women’s pelvic floor journeys: (a) addressed complexity of pelvic floor health; (b) client-centered; (c) holistic; (d) rapport; and (e) improvement.

Addressed complexity of PF health. Participants described the difficulty of treating their PFD as their symptoms were constantly changing. Katelyn stated:

Well, it depends on the time of the month...mine is...a uterine prolapse...when I'm ovulating or when I am actually on my periods...it drops, and I do have a little more symptoms if I don't adjust my workouts or just daily activity.

Participants explained that the OT used a variety of intervention methods chosen for their specific PFD symptoms and goals. Kelly referenced the types of interventions that the OT implemented with her:

We worked a lot with the bones and...scar work...on the whole-body mechanics and working with the fascia and muscles...a lot of posture ...balancing the hips...during like the pre-pregnancy stage and postpartum it was more internal work...she did work on...core canister breathing...she also focuses a lot on digestion... (“Core canister” is a term used to refer to the abdominal core muscles.)

Kelly described observing KM's motivation to find the underlying cause of Kelly's symptoms:

So with the occupational therapy I definitely noticed...curiosity. It was more...let's find out...the underlying cause of things...physical therapy was more like...let's treat this body part as it's broken...occupational therapy with Kelsey showed me that...it's all connected, so...it's probably not the part that you think it is...I feel like she was much more diverse, so she could approach things at different angles.

Client-centered. Participants explained that the OT listened to their needs and fears, modifying their interventions to address those concerns. Kelly stated that the OT always adapted the session to her specific needs: “She really...knew...what level you're at, at the moment...It was really tailoring everything to what body she had in front of her that day.” Katelyn echoed those sentiments saying:

It (intervention) was always open and free to adjust, like if she would come in, I'd be like I'm feeling this, this week and I really want to figure out how to do this. She may have had another plan for our session, but she would be willing to adjust to...work on something that I was really freaking out about or just didn't understand...

Katelyn is a pregnant postpartum athleticism coach and she stated that the OT focused on her goal of returning to the weight room:

...she knew what I was wanting to do, which was get back into the weight room, because that's my job. Like I have to be able to do those things. And so, helping me move forward to that and not just laying on the ground and breathing correctly.

Holistic. Participants identified that a holistic approach was a component that set OT apart from other experts they had seen. Vivian elaborated on her experience:

...I was very aware of it in the first session because it was out of my normal experience of seeing a pelvic floor therapist...she was interested in and talked about my whole experience like as a human...the emotions included and...every part of my experience was valued.

Natalie explained that the OT would demonstrate a technique and then explain the implementation into daily activities:

the breathing is...the start of it...then she'd always go back to 'when you're moving this way, make sure you're breathing...and lifting at the same time...with every breath, engage, connect your pelvic floor and then do your movement.

Kelly emphasized that the OT educated her on the interconnection of the all the muscles: "...occupational therapy with Kelsey showed me that...it's all connected...it's probably not the

part that you think it is...let's find out like where it's actually originating...treating the whole being.”

Rapport. The participants expressed feeling a genuine connection with the OT and how important it was for them to feel heard and supported. Vivian stated: “I really liked...having...my whole experience matter and...feeling like I had...this supportive person to be on this journey with me...I didn't feel like I was fighting to be heard...It just felt very supportive...” Kelly described relating to the OT through similar stages of life:

...I feel like she and I were always on like the same level of course being pregnant together and postpartum...she was just super relatable so...it makes the world of difference when you can actually really relate to the person...

Katelyn also said that having the OT explain the process and give her choices was important: “...just being honest about what was gonna happen, and giving me...options on the front end of what she would do...so I felt I knew everything...I was never caught off guard with anything...”

Improvement. The participants saw improvement throughout their sessions with the oT that they did not see with other professionals. Natalie described:

...I only saw her a handful of times and...I immediately felt stronger and didn't have issues. I didn't have to wear a pad all the time because I was afraid, I was gonna pee myself...I mean, that...completely went away and that never went away with the PT.

Natalie described having a better experience during her pregnancy:

And I felt better with this pregnancy than I have with any of my pregnancies. I felt strong, I felt energized. Like she had me moving my body and helping me through that and...I wish I felt that way with all my pregnancies. It was amazing...It was clear that

what we did during my pregnancy really paid off...I mean I had a baby and haven't had any leakage! I haven't had the pain, the cramping...

Theme 2: Women experienced relief after discovering OT. Participants indicated feeling a sense of relief once they began working with an OT. Vivian stated: "I was uncertain and questioning my own experience...and to have...what I was experiencing validated...with new knowledge...was helpful to move forward in confidence." Two subthemes emerged from the experience of relief: (a) connection of psychosocial and physical factors and (b) reconnection with loved ones.

Connection of psychosocial and physical. The participants acknowledged that psychosocial factors, such as embarrassment, fear, and anxiety occurred with the physical factors that they were experiencing. Vivian explained: "...it's very demoralizing to...be an athlete...for like a lot of my life and then have this thing impact my...life so much." Katelyn described the fear she felt with prolapse symptoms:

...if your symptoms are bad like even just walking is scary at times for me because...it feels like my uterus is just about to come out and so I think before I had...the mental stability...that it definitely did affect...my confidence and being around other people...

The participants stated how having a mental breakthrough with KM's assistance helped them manage their own physical symptoms. Katelyn states:

Just having this kind of mental breakthrough, I think is almost as important as physical if not more, because...you can...still have symptoms occasionally...I just, when I started feeling these really intense symptoms again...I was just like, 'Oh my goodness! What is happening? This is gonna be forever!' And so, having Kelsey feel like, 'Nope, it feels totally different or in a month you may feel totally different.' And it's so true. There are

so many factors that go into it, that it's not just this is your life now...so that...was really helpful just having that mental support as well, that I'm not going to have to stop or give up all these things I love doing because of my prolapse symptoms. That I can work around it and it's okay if you have a little bit of symptoms as long as you're recognizing what's happening and can then maybe take some strategies to move forward.

Reconnection with loved ones. The participants described a decrease in isolation and the ability to reconnect with friends and families as a result of therapy with the OT. Vivian enjoyed running and described reconnection with her family once her symptoms improved and she was able to return to running: "...I mean...it's improved a lot as far as like what I've gotten out and being able to do...like I've went on some runs with my family and I've...been sprinting outside regularly." Katelyn described an increase of confidence with having sex again after the onset of her PFD symptoms following OT intervention:

...it (PFD symptoms) definitely affected...my want to have sex...it made me nervous that I was going to like mess up...that was something Kelsey kind of helped me walk through and explain to me...how that's not the case for what I was experiencing and...gave me...confidence in that...moving forward.

Theme 3: OT empowered women to be the experts of their own bodies. Participants stated that the OT's focus was on empowering them to manage their own symptoms and be in control of their bodies. Vivian explained: "...it was helpful to specifically know what was going on in my body...I feel like I was given...a good toolkit for myself that helps me feel more...in control and empowered for...my own specific needs." Three sub-themes emerged: (a) empowerment to reconnect with occupations, (b) advocacy for themselves, and (c) advocacy for others.

Empowerment to reconnect with occupations. Participants explained that the OT equipped them with the tools to manage their symptoms in order to participate in occupations that they valued. The OT appears to have used occupation-based interventions tailored to each individual to allow for best outcomes. Vivian stated that she was more confident in her sexual intimacy with her partner:

...I was given more tools to help, like release tension...be knowledgeable about...my specific body...and more empowered to...be confident in...having better intimacy because...where I was coming from felt more...confident and able to...speak for...what I need.

Participants explained that the OT's goal was not to limit their activities but encourage them to do the activities that they love. Katelyn states:

...Kelsey is really great at...encouraging you to do the activities you love. She does not try to inhibit you in any way...with my knowledge...I knew I could get myself past a certain point if I had someone to help me get there and Kelsey was the perfect fit.

Vivian stated: "I've been dancing and...jumping and...doing explosive movements that before would have caused me to leak...I'm able to function the majority of the time doing more things that I love to do."

Advocate for themselves. The participants explained how following treatment with the OT they felt empowered to manage their symptoms, but also when they needed to ask for help.

Katelyn stated:

She is empowering me to take care of me instead of, 'I need her to help me', because she doesn't ever say that at all. She never feels like she needs to be there to support me...she showed me, and I can do it...I would definitely say I think I have a lot

more...confidence in managing my own symptoms. I do not feel like I need to just call Kelsey every time I have anything more.

Kelly similarly shared: "...Kelsey was the one who really educated me and showed me different things that I could do on my own...so it was really empowering to know that...I don't need help all the time..."

Advocate for others. Participants explained that feeling more empowered to advocate for themselves encouraged them to advocate for other's needs. Katelyn explained how her friends reached out to her asking about pelvic floor therapy: "They will...text me or call me... 'Hey...I'm actually having some of these (symptoms), like do you think I should go see someone?' And I'm like, 'Yes...there is help!'" Through the validation of their own experiences, the four women in this study saw the value of working with a pelvic floor OT. Vivian stated: "...I think there's probably a bit of increased confidence because...my own personal experience was validated, and I think I could...speak to that to others too and say...the value of having a good pelvic floor therapist..." Further, Natalie recognized the importance of empowering her daughter to be comfortable talking about pelvic floor and women's health issues. Natalie stated: They're not talking about it. So, who's going to talk about it...I have a 10-year-old daughter. So, I try to be more aware of my own body and...what I'm saying, so that I can help her someday, so she feels comfortable talking...

Discussion and Implications

The purpose of this study was to examine the experience of women receiving OT for pelvic floor health issues. The qualitative results provide insight into women's perceptions of their experience receiving OT and their ability to return to occupations. The quantitative results suggest OT may increase QoL and decrease symptoms for women with PFD.

Quantitative

Despite a small sample size, all the women had clinically meaningful improvements in PFD symptoms and QoL from pre-treatment to post-treatment. This suggests that OT interventions improve women's lives through physical improvement in symptoms and over all QoL. Interestingly, all women benefited, with over an 80% improvement in PFDI-20 scores. This is much greater than the 23% minimal change needed to indicate clinically meaningful improvement (Wiegersma et al., 2017). Qualitative findings supported the PFDI-20 findings as participants reported improvements in their PFD symptoms that went unseen with other health professionals. Participants also reported being able to return to occupations and social engagement with decreased fear and anxiety associated with their PFD symptoms. These improvements in PFD and QoL are important as researchers show that PFD can impact women's occupations and social participation, leading to isolation, loss of independence and decreased sexual intimacy (Davis & Kumar, 2003).

Qualitative

Theme 1: OT changed the course of women's ongoing journey with pelvic health. In the present study, it appears the OT made a unique contribution to pelvic floor treatment and health promotion. Due to OT's holistic nature using biopsychosocial, cognitive behavioral, and biomechanical approaches, the OT was equipped to address the complexity of pelvic floor health issues that participants experienced. Three participants saw other health professionals before seeking OT intervention. The participants reported seeing differences with their OT's approach versus other professionals' approaches including, the importance of feeling a connection with the OT, feeling heard, and the importance of having their experiences validated. The participants explained that their OT did not treat them as a problem to fix, but as human beings with

emotions and experiences. Further, it was evident from the qualitative findings that participants indicated their OT valued their experiences with PFD and listened to what they needed from her. These findings suggest the importance of client-centered care and considering the whole person, including client's goals for therapy, when treating women with PFD.

Participants explained that OT would adapt intervention sessions depending on their needs that day. The OT was transparent with the women about what she was going to do during the session and giving choices to the participants. Participants recalled that the OT made sessions feasible by often coming to their house and making sure that the exercises she gave were able to easily fit into the participants daily routines. The participants explained that the OT focused her interventions on their goals and occupations, never discouraging them from engaging in an occupation, but giving them the tools to better engage in them while managing their symptoms. The OT often used their desired occupations as interventions to reach their goals. These results suggest that connection with the OT, focus on the participants goals, and feasibility of home exercises may have increased participants motivation to engage in interventions possibly contributing to the improvements that they saw in PFD symptoms.

Theme 2: Women experienced relief after discovering OT. In agreement with current research, this study demonstrated the importance of connecting with the participants and considering factors other than physical components of PFD. For example, PFD not only affects women's physical bodies but also their social participation and mental health (Ahangari, 2014; Bochenska & Boller, 2016; Daniels & Khan, 2010). OTs are uniquely equipped to address both the physical and psychosocial factors associated with PFD, using a perspective that considers the participant's whole experience. The OT in this study addressed the participants' mental health concerns such as fear, anxiety, feelings of isolation that are often associated with PFD.

Participants reported improvement in their mental health and increased self-efficacy following validation of their experiences by the OT, education about their bodies, and learning strategies to manage their symptoms. Improvements included less fear and anxiety while engaging in occupations, and an increased ability to reengage in social activities with renewed confidence following OT intervention. The results of this study suggests that validation of women's experiences with PFD, coupled with education and client-centered care, could increase self-efficacy in managing their PFD symptoms.

Renewed self-efficacy and improvement in PFD symptoms allowed participants to reengage in occupations they enjoyed. Through engagement in occupations, participants reconnected with friends, family, and partners, leading to decreased isolation and improvement in their mental health. One participant expressed an increased confidence with sexual intimacy with her partner. All participants expressed increased confidence with advocating for their needs and advocating for their needs. These improvements of increased social participation and sexual intimacy with decreased fear and anxiety following OT interventions are important, as researchers show that PFD is often associated with isolation and decreased sexual intimacy (Davis & Kumar, 2003).

Theme 3: OT empowered women to be the experts of their own bodies. Participants described feeling empowered to manage their symptoms and understand their individual bodies after receiving OT intervention. Advocacy is an important part of OT's role to promote engagement in occupation by empowering clients to advocate for their needs (AOTA, 2020). The participants stated their symptoms fluctuated depending on their menstrual cycle or with activity (i.e., following a strenuous workout). This study showed that it was important to teach women how to understand their own bodies and empower them with strategies to manage the symptoms

they were experiencing. The participants also discussed that through the education from the OT, they felt more capable of advocating for their needs and the needs of others. Validating women's experiences with PFD and teaching women how to advocate for themselves is important in decreasing the shame and stigma around PFD by validating women's experiences with PFD (Davis & Kumar, 2003; Pierce et al., 2015). This validation is also important in increasing the awareness around the benefits and improvements seen with OT pelvic floor therapy.

Participants described how empowering and motivating it was to focus on their desired occupations during intervention sessions. Implementing occupation-based interventions tailored to the individual is unique to OT. OT uses engagement in occupations to promote health and participation in daily activities (AOTA, 2020). The OTs centered participants' sessions around the occupations they wanted to engage in, teaching participants how to manage their symptoms while engaging in those occupations. Further, the OTs empowered participants to manage their own symptoms with strategies they had learned, decreasing reliance on OT. These results demonstrate that, following OT intervention, participants were able to return to occupations that were previously limited by their PFD symptoms, suggesting an improvement in the women's QoL.

Interestingly, three of the participants were military wives. It appeared that these women took ownership of their health, seeking out pelvic floor therapy as they felt a need to be very independent, maybe due to their partner's work or travel. These three women all had previous knowledge of pelvic floor mechanisms through their history as an athlete, training in athletic programs, or careers working as a postpartum athleticism coach, doula, or personal trainer. This may have motivated them to seek out treatment for their symptoms more than women without a background in pelvic floor mechanisms.

Study limitations and future directions

There are several limitations to this case series. First, the sample size was small, with only four participants. Therefore, the results cannot be generalized. Second, the participants are a homogenous group. All of the participants were Caucasian women, living in Colorado during treatment, with at least a bachelor's degree. Third, all of the participants saw the same OT for pelvic floor treatment. Only working with one OT limits the study to one approach to pelvic floor treatment. To obtain a better picture of OT's impact on women's lives with PFD, more women should be interviewed who have seen multiple OTs in different areas of the United States. Despite these limitations, this study gives insight into the unique role that OT plays in treating women with PFD and the physical and psychosocial improvement that can be seen through OT intervention.

As far as we know, this is the only study that captures the experience of women receiving OT intervention for PFD. Further research is needed to better understand the impact that PFD has on occupational performance and participation. Further research should explore the interventions that OTs use to treat women with PFD and the impact that OTs have seen these interventions make on women's lives. Further research is needed to better understand older women's experiences with PFD, whether that is in the community or in long term care facilities and how management of their PFD symptoms differs from that of younger women. Further research should continue to study the unique role that OT has in this area of practice and advocate for OT's place in this emerging practice setting.

Conclusion

In this study, participants reported improvements in their PFD symptoms and ability to return to the occupations they enjoyed. Participants reported that OT changed the course of their

journey with PFD through seeing them as whole beings, addressing their mental health as well as physical health, developing rapport, validating their experiences, enabling them to reengage in occupations they enjoyed, and focusing on the participant's goals. Participants expressed feeling relief when discovering OT because their psychosocial needs were addressed, as well as their physical needs. Lastly, participants felt empowered to manage their pelvic floor health and to advocate for themselves and others.

CHAPTER 3: CONCLUSION

Due to the increasing prevalence of PFD in women, additional research is needed to support this emerging practice in the field of OT and meet the needs of women with PFD. Therefore, the purpose of this study was to understand women's experience receiving OT for PFD. Upon interviewing four women with PFD and conducting thematic data analysis, the following themes emerged: 1) OT changed the course of women's ongoing journey with pelvic health, 2) women experienced relief after discovering OT, and 3) OT empowered women to be the experts of their own bodies. Quantitatively, all four women also demonstrated clinically meaningful improvement in their PFD symptoms and QoL following OT intervention for PFD.

Implications for Occupational Therapy

Women with PFD often experience a negative impact on their ability to perform daily occupations (Burkart et al., 2020). PFD is a health issue that affects approximately one third of women, and the number of women projected to seek care will increase with the aging population (Frota et al., 2018; Parden et al., 2016). This study offers preliminary support that OT pelvic floor rehabilitation improves women's PFD symptoms and QoL. Increased advocacy is needed for OT's role in pelvic floor rehabilitation and an increased awareness of the treatment options that are available for women with PFD (Burkart et al., 2020). The American Occupational

Therapy Association (AOTA) acknowledges pelvic floor rehabilitation as an emerging practice in the field of OT that enables performance and participation in desired occupations (Jones et al., 2020). This is one step in the direction of advocacy for OT's role in pelvic floor rehabilitation. Further research may help support the impact that OT is making in the field of pelvic floor therapy and the need for more OTs in this area.

This study touched briefly on the interventions that one OT used in pelvic floor therapy, but there is a need for further OT research on women with PFD and the interventions OTs use in treating PFD. There are many available continuing education courses, and some are specifically being developed for OTs interested in pelvic floor health, but there is a lack of OT specific research. Continued research is needed to support this emerging practice area including qualitative research about the interventions OTs use for treatment of PFD.

There is also a need for further research in understanding how PFD impacts women's occupations. This study addressed how four women's occupations were impacted by their PFD. More research is needed with larger sample sizes and women of varying ages and backgrounds to better understand the scope of how occupations are affected by PFD.

PFD treatment is costly and is a neglected pelvic health issue (Burkart et al., 2020). Currently, OT pelvic floor rehabilitation is rarely funded by insurance. This is partially due to decreased public awareness of the impact that OT can have on PFD. Cultural beliefs that PFD is a normal part of women's lives after pregnancy also contributes to decreased insurance coverage of pelvic floor therapy. Increased advocacy is needed to create greater awareness of how PFD is a common dysfunction that can easily be treated and possibly prevented if intervention occurs early enough. With increased advocacy, education, and further research, the hope is that

insurance would see the necessity of OT pelvic floor rehab and increase coverage of therapy sessions

In conclusion, pelvic floor therapy is an emerging practice in the field of OT where OT can offer a unique perspective and skills. This study suggested that OTs approached participants' treatment and experiences with occupation-based interventions tailored to each participant. Women experienced an improvement in PFD symptoms and reengaging in occupations suggesting that OT increased women's QoL. Therefore, OT must continue to advocate for their role in women's health and the impact that OT can make on the lives of women experiencing PFD.

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APPENDIX A:

Qualitative Interview Questions:

This interview has questions about your treatment with Kelsey for pelvic floor issues. I recognize the treatment you received involve personal topics. Feel free to share as much or little as you want to. If there is anything that you want to share off tape please let me know and I can turn the recording off.

I want to start by asking you a couple questions about yourself to get to know you better:

- What is your first name?
- How old are you?
- What is your highest level of education?
- Did you see other people for this issue before seeing Kelsey? OBGYN, urogynecologist, physical therapist

We will come back to talking more about your pelvic health issues, how these issues have affected your daily activities, what your treatment sessions looked like, and the improvement that you saw through your treatment with Kelsey.

1. Tell me about what led you to see Kelsey:
 - a. What issue/symptoms were you experiencing that led you to seek Kelsey for help?
 - b. How long were you having these issues before seeing Kelsey?
 - c. On a scale of 1-10 how severe would you say that your symptoms were before seeing Kelsey?
 - i.If pain: Can you describe the pain to me? When did it occur? Was it constant? Did it happen with certain activities?
2. How did you find out about pelvic floor therapy?
 - a. Was it through a doctor, OBGYN, midwife, urogynecologist, word of mouth?
 - b. When did you start seeing Kelsey for your pelvic health issue?
 - c. How long did you see Kelsey for therapy?
 - d. How often did you see the Kelsey?
 - i.Once or twice a week? Every other week?
 - ii.How long were your sessions?
 - e. How long has it been since you stopped seeing Kelsey?
3. Describe your experience receiving treatment from Kelsey:
 - a. What did you do?
 - i.What things did she focus on specifically in your sessions and what were they targeting?
 1. Breathing techniques
 2. Focus on posture
 3. Awareness of your pelvic floor
 4. Core awareness
 5. Relaxation techniques

- 6. Stretching techniques
- 7. Lifestyle changes
- ii. Did Kelsey give you any of these things to do at home between sessions?
- b. What were your initial impressions of your sessions with Kelsey?
- c. What did you like about the sessions? What did you dislike about the sessions?
- d. What was your understanding of your pelvic floor issue and what you were doing during your sessions with Kelsey?
- e. How did your sessions with Kelsey change your outlook on the symptoms that you were having?
 - i. Do you feel that you had more control over your health after treatment with Kelsey?
 - ii. Did you feel that the things that she gave you to do at home were easy to incorporate into your daily routine?
- f. Did you ever participate in a Telehealth session and if so, how do you feel about the Telehealth interaction versus in person interactions?
- 4. Let's talk about things in your life that changed. Before Kelsey tell me about things that were a problem or that you had to change because of the symptoms that you were experiencing.
 - a. Let's start with **leisure activities** that you enjoy doing. Were there things that you enjoyed doing that you had to stop doing because of these symptoms. For example, were you unable to go see a movie in the movie theatre because you were worried about incontinent episodes? (Leisure)
 - i. How has time with Kelsey changed that? What does that look like now?
 - ii. Have you been able to do any of those activities again?
 - iii. Are there new activities that you have been participating in?
 - b. How did it impact **taking care of children or work** outside of the home?
 - i. Prolapse/Pain example: For example did you notice your symptoms getting worse with increased stress on your body physically and mentally? Did holding or picking up your children make your symptoms worse?
 - ii. How has time with Kelsey changed that? What does that look like now?
 - c. How did it affect your **sleep** and ability to rest? (Rest and Sleep)
 - i. Prolapse/Incontinence: For example was your sleep impacted by frequent trips to the bathroom at night?
 - ii. Pain: For example did the pain keep you up at night or did certain positions exacerbate the pain?
 - iii. How has time with Kelsey changed that? What does that look like now?
 - d. How did it affect your **energy level**?
 - i. How has time with Kelsey changed that? What does that look like now?

- e. How did it affect things like **shopping, driving, housework, exercise?** (IADLS)
 - i. Pain/Prolapse: For example did driving put more pressure on your pelvic floor or exacerbate your pain?
 - ii. How has time with Kelsey changed that? What does that look like now?
- 5. Tell me about any differences you've experienced **socially**, in your relationships with your partner or spouse, friends, and family.
 - a. For example did you spend less time socializing with others? Did you stay at home more often? Did you feel more isolated?
 - b. Have your relationships improved, stayed the same, or gotten worse?
 - c. How did it affect your sex life with your partner or spouse?
- 6. How did it affect your mental health?
 - a. Have you seen a difference after treatment?
- 7. How do you feel about your ability to manage these issues following your treatment with Kelsey compared to before treatment?
- 8. A large part of occupational therapy is education. What did you learn that helped you feel more in control of your health?
 - a. Do you feel more comfortable speaking about pelvic floor health after working with Kelsey?
- 9. Before seeing an occupational therapist, did you see other professionals for the same issues, if so what was your experience with them?
 - a. Did you see a difference in your treatments with Kelsey than with other professionals?

APPENDIX B:

Pelvic Floor Distress Inventory Questionnaire-Short Form 20 (PFDI-20)

Patient Name: _____

Date: _____

Pelvic Floor Distress Inventory Questionnaire - Short Form 20

Please answer all of the questions in the following survey. These questions will ask you if you have certain bowel, bladder or pelvic symptoms and if you do how much they bother you. Answer each question by putting an **X** in the appropriate box or boxes. If you are unsure about how to answer, please give the best answer you can. While answering these questions, please consider your symptoms over the **last 3 months**.

		If yes, how much does it bother you?			
		Not at all	Somewhat	Moderately	Quite a bit
1	Do you usually experience pressure in the lower abdomen?	YES <input type="checkbox"/> NO <input type="checkbox"/>			
2	Do you usually experience heaviness or dullness in the lower abdomen?	YES <input type="checkbox"/> NO <input type="checkbox"/>			
3	Do you usually have a bulge or something falling out that you can see or feel in the vaginal area?	YES <input type="checkbox"/> NO <input type="checkbox"/>			
4	Do you usually have to push on the vagina or around the rectum to have a complete bowel movement?	YES <input type="checkbox"/> NO <input type="checkbox"/>			
5	Do you usually experience a feeling of incomplete bladder emptying?	YES <input type="checkbox"/> NO <input type="checkbox"/>			
6	Do you ever have to push up in the vaginal area with your fingers to start or complete urination?	YES <input type="checkbox"/> NO <input type="checkbox"/>			
7	Do you feel you need to strain too hard to have a bowel movement?	YES <input type="checkbox"/> NO <input type="checkbox"/>			
8	Do you feel you have not completely emptied your bowels at the end of a bowel movement?	YES <input type="checkbox"/> NO <input type="checkbox"/>			
9	Do you usually lose stool beyond your control if your stool is well formed?	YES <input type="checkbox"/> NO <input type="checkbox"/>			

Patient Name: _____

Date: _____

		If yes, how much does it bother you?				
		Not at all	Somewhat	Moderately	Quite a bit	
10	Do you usually lose stool beyond your control if you stool is loose or liquid?	YES <input type="radio"/> NO <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	Do you usually lose gas from the rectum beyond your control?	YES <input type="radio"/> NO <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	Do you usually have pain when you pass your stool?	YES <input type="radio"/> NO <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	Do you experience a strong sense of urgency and have to rush to the bathroom to have a bowel movement?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Does part of your stool ever pass through the rectum and bulge outside during or after a bowel movement?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Do you usually experience frequent urination	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Do you usually experience urine leakage associated with a feeling of urgency; that is, a strong sensation of needing to go to the bathroom?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Do you usually experience urine leakage related to laughing, coughing, or sneezing?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Do you usually experience small amounts of urine leakage (that is, drops)?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Do you usually experience difficulty emptying your bladder?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Do you usually experience pain or discomfort in the lower abdomen or genital region?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

LIST OF ABBREVIATIONS

CPP	Chronic Pelvic Pain
EMR	Electronic Medical Record
FI	Fecal Incontinence
OT	Occupational Therapy
OTs	Occupational Therapist/s
PFD	Pelvic Floor Dysfunction
PFM	Pelvic Floor Muscle
POP	Pelvic Organ Prolapse
PT	Physical Therapy
PTs	Physical Therapists
QoL	Quality of Life
UI	Urinary Incontinence