



# The experience of yoga for persons with complex interpersonal trauma: A phenomenological approach

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## ABSTRACT

**Background:** and Purpose: Complex Interpersonal Trauma is a phenomenon with great impact on the American population. Persons who have survived complex interpersonal traumas can experience symptoms beyond what is captured in the Diagnostic and Statistical Manual's (DSM-5) diagnosis of Post-Traumatic Stress Disorder. Yoga is an ancient practice that has been found to have healing benefit for persons impacted by complex interpersonal trauma. The purpose of this study is to further the body of clinical research in support of yoga as a therapeutic intervention.

**Materials and methods:** This study uses transcendental phenomenology methodology to gain a deeper understanding of the experience of yoga for those who have survived complex interpersonal trauma. Narrative interviews were used to gather data, yielding insight that aligns with current findings in literature supporting yoga as a healing intervention. The sample size for this study was five participants.

**Results:** This study's findings shed light on the benefits of yoga for persons with complex interpersonal trauma. Themes discovered include transformation through yoga, comparing holistic benefits through opposing yoga styles, community and relationships, and trauma healing.

**Conclusion:** This study and its findings offer implications for clinical social work practice to incorporate yoga as a therapeutic intervention for trauma.

## 1. Introduction

Trauma has great impact in the United States with about 50% of adults experiencing one or more traumatic events in their lives [1]. Complex interpersonal trauma refers to specific trauma types that are relational and that happen in a continuous manner [2]. Examples include childhood abuse, intimate partner violence, human trafficking, etc. [2]. This specific trauma type will be the focus in this paper and has been found to potentially lead to a diagnosis of Complex Post Traumatic Stress Disorder (CPTSD) [3,4]. Development of CPTSD emerged with research from Judith Herman who focused mainly on childhood abuse, intimate partner violence, and repeated sexual violence [4,5]. It has been found that stress experienced from complex interpersonal trauma has a unique symptom cluster that is not currently captured by the Post-Traumatic Stress Disorder (PTSD) diagnosis within the DSM-5. Currently, symptoms of PTSD include intrusion, avoidance, alterations in mood and/or cognition and changes in reactivity or arousal [6].

Additional symptoms specific to complex interpersonal trauma include affect dysregulation, relationship challenges through life, a

disorganization in sense of self, and lack of self-awareness [4,7–9]. A diagnosis of CPTSD carries these symptoms in addition to symptoms that are currently listed under the diagnosis of PTSD. While CPTSD is not currently recognized on its own by the DSM-5, it is recognized in the most recent International Classification of Diseases (ICD-11) as a disorder [10]. This 11th, and most recent, version of the ICD lists symptoms of PTSD as well as disruptions to affect, relationship barriers, and self-concept within the CPTSD diagnosis [5].

An intervention with growing support in treating complex interpersonal trauma is yoga. Yoga is an ancient practice that dates to 1,500 years before the common era, located within the Indus Valley Civilization [11,12]. Early explanation of yoga is found within the Rig Veda Sanskrit text, with further explanation in additional Vedas [12]. The philosophy of yoga and further elaboration on physical postures or *asana* continued to emerge in the pre-classical and classical yogic time periods [13]. Key goals of yoga emerging from these times include eliminating suffering, harmony, and Pantanjali's 8-limb yogic path [13]. This 8-limb path provides philosophy on how to treat self and others with peace and respect [14]. The goal within this philosophy is to achieve less suffering

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and increased centeredness [14].

The rich history of yoga was brought into America in late 19th century, though remaining a niche practice in the Western world [15]. Swami Vivekananda is credited with bringing what is referred to as Modern Postural Yoga to Western Europe and America [11]. Modern Postural Yoga was intended to be adaptable to individual's lives despite spiritual or religious practices [11]. This adaptation could be attributed to increased focus on the physical practice of yoga over time. Focus on the physical components of yoga has translated into the philosophy of yoga not always being practiced from a Western perspective. This focus can lead to exclusion of some of the benefits yoga can have on mental health and general well-being [15]. Yoga when used for therapeutic or healing purposes can look much different than yoga used for just muscle strengthening and lengthening exercise. When yoga is practiced within the context of its original intent, the focus remains on the connection of body and mind, rather than body separate from mind [15].

In yoga, there are many styles of the physical practice that can be engaged in. These styles include but are not limited to vinyasa, hatha, yin, ashtanga, Bikram, and Iyengar [16]. Each of these physical practices has a slightly different focus. A common style of yoga practiced in Western context is Hatha yoga which is known to be more of a slow-paced sequence where postures practices are accessible for any body type [16]. Yin yoga is also common in Western contexts and is known for being a more relaxing experience with fewer postures being practiced, as each posture is held for three to 5 min [16]. While there are many styles of yoga, a common goal of most practices is connecting the body and mind.

A connection of body and mind is useful in healing trauma symptoms as trauma creates neurophysiological distress. The brain is heavily impacted by trauma, which can lead to hyperarousal in the amygdala, creating a person to feel stuck in a space of survival instincts. Initial research regarding this phenomenon was developed by Walter Cannon who coined this experience the fight or flight response [17]. Since this discovery in the early 1900's, instinctual responses have been expanded upon such as the freeze response with works of Peter Levine (1997) [18], and the faint response [19]. Such survival responses decrease activity in the pre-frontal cortex and increase activity in the amygdala. This can cause challenge in a person's ability to think logically [20]. The neurological phenomenon resulting from trauma presents as physical experiences such as increased heart and respiratory rate, sweating, and/or gastrointestinal dysfunction [18,20–22].

This body-mind connection is also articulated in the Polyvagal theory, which could be described as the Western, medical explanation of the yoga experience [22]. Polyvagal theory looks at phenomenon in the nervous system, specifically the Vagus nerve and associated complexes, and how these networks are altered when a person experiences trauma [21]. Polyvagal theory goes beyond just what is happening in the brain to look at what other neural platforms are being engaged or adversely impacted because of trauma. The prominent neural platforms impacted by trauma include the Ventral Vagal Complex (VVC), Sympathetic Nervous System (SNS), and Dorsal Vagal Complex (DVC) [21].

Polyvagal Theory has been used to further support the use of yoga as an intervention for trauma as it uses both a "top-down" and "bottom-up" approach of engagement [9,22]. These approaches refer to the engagement of areas of the brain with "top-down" referring to engagement that moves from pre-frontal cortex down to the amygdala and "bottom-up" referring to engagement that moves from the amygdala to pre-frontal cortex [9,22]. Connecting breathwork and physical postures, as done in yoga practice, increases communication through regions of the brain which can then promote physical feelings of safety, body awareness, rational thinking, and calming hyperactivity in the amygdala [9,22].

Studies have been developed in recent years that further support the use of yoga as a therapeutic intervention in mental health care. A large focus of yoga as an intervention has been with trauma broadly. A 2018 study focusing on a Veteran population found that yoga has significant success in decreasing trauma symptoms compared to a control group

[23]. This study's results were based on 51 participants who all held a PTSD diagnosis and were not currently involved in a mind-body practice outside of the intervention [23].

A qualitative example of a study was conducted with a sample of Veterans diagnosed with PTSD aimed at capturing their experiences of yoga [15]. This study used a Kundalini yoga intervention, which is a style more heavily focused on spiritual experience and breathwork [15, 16]. Themes reported from participants include "energy and renewal, self-esteem, spiritual strength, centeredness, peace, and connection with spirit, self/wonder." [15]. This study further elaborates the traditions of yoga practice, benefits of holistic health, and importance of integrating these principles into Western medicine [15].

A meta-analysis of mind-body interventions also found statistically significant benefit in yoga treatment [24]. Six yoga studies were included in this meta-analysis. Styles of yoga analyzed included low-intensity physical practice, Kundalini yoga, group interventions, and yoga mostly focused on breathwork [24]. Populations included Veterans, adult women, and mixed-gender groups [24]. Trauma was measured using self-reporting of trauma symptoms, clinician assessment, or the use of the CAPS trauma symptom rating scale [24]. Five out of six of the studies reviewed reported statistically significant decrease of trauma symptoms [24].

There are few studies that focus specifically on complex interpersonal trauma, though these also show efficacy of the intervention. In 2019, Mahoney and colleagues authored a study that closely looked at a variety of group treatment for adults with complex interpersonal trauma symptoms. This study included group psychoeducation treatment that included mindfulness and yoga, and found efficacy in this approach [7]. However, symptoms such as dissociation, which has high prevalence for persons with complex interpersonal trauma types, was not addressed with this group intervention [7].

Van der Kolk and colleagues studied the use of yoga as an adjunctive treatment for those with CPTSD related symptoms [9]. This study placed participants in two groups: one receiving yoga as adjunctive treatment, one receiving psychoeducation on women's health related issues [9]. The yoga intervention used is called Trauma Center Trauma-Sensitive Yoga (TCTSY). This study found that both groups experienced decrease in trauma symptoms [9]. However, it was discovered that those in the yoga group experienced maintenance of this decrease in trauma symptoms over time, whereas the women's health group experienced return of trauma symptoms over time [9]. This study remains the largest to be completed with focus on complex interpersonal trauma and the use of yoga.

The use of TCTSY was also analyzed through a qualitative study complete by West and colleagues in 2017 [25]. This study included the 31 women who received TCTSY as an intervention in the above discussed randomized control trial, and focused collecting information regarding PTSD symptoms as personal growth [25]. This study organized findings into themes of "grace and compassion", "relaxation", "acceptance" (of selves, lives, bodies), "centeredness" and "empowerment" [25]. Participants further discussed increased awareness of their trauma symptoms but feeling better equipped to manage them after completing this intervention [25].

Nguyen-Feng and authors further reviewed Van der Kolk and colleagues' study and their use of Trauma Center Trauma-Sensitive Yoga (TCTSY) [8]. This further analysis found efficacy for TCTSY was greater with those who had experienced fewer instances of adult-onset complex interpersonal trauma types than others [8]. The additional review examined in this study provided a glimpse into a factor (frequency of trauma events) that could contribute to efficacy of yoga as an intervention for interpersonal trauma [8].

Though yoga has growing empirical support in mental health care, expanding what a standardized yoga intervention could look like is still needed. It has not been clear in existing studies which aspects of yoga interventions studied have been helpful for the healing process. Given the quantitative majority of this research topic, participant feedback on

specific processes and healing properties is missing from the literature. Gaining participant perspective could be helpful in developing a future yoga intervention that could be efficacious for those who have experienced complex interpersonal trauma. Incorporating participant experiences into this body of research empowers those who would be impacted by clinical outcomes.

### 1.1. Purpose of study

The population of interest for this study is those who are survivors of complex interpersonal trauma and are currently engaged in a yoga practice. The study seeks to obtain deep understanding of processes and healing properties of yoga that are present within this population. However, little has been done to capture the lived experience of those with a complex interpersonal trauma history who practice yoga. This study will aim to serve as further support in the literature for yoga as a practice, continuing to fill the gap in knowledge of how yoga is effective, in hopes to continue the push for making yoga an accessible intervention for those who need it. The question driving this study is: "What is the experience of a yoga practice for persons with complex interpersonal trauma?". Experience is meant to capture what each participant feels, thinks of, or otherwise deems important about their yoga practices. The use of this methodology is to allow participant voice to come through with minimal influence or bias from the researcher. This study should be viewed as an introductory study that can help in guiding continued development of yoga in mental health care. Further, this study hopes to build on the supportive literature of yoga as a therapeutic intervention.

## 2. Materials and Methods

### 2.1. Data collection

In-depth narrative interviews were conducted with five participants. This data source aligns with the philosophical position for this study, transcendental phenomenology [26]. The sample size is also within suggestion of phenomenology. Though there is some conflict on appropriate sample sizes within this methodology, a range is three to eight participants [27]. This range is given so that the researcher can focus on fully capturing the lives experience of each participant in detail (27.). Interviews were conducted assuming a sense of wonder, and in an open-ended way that allowed participants to speak freely [26]. The narrative interview guide can be viewed in [Appendix A](#). This study was approved through an institutional review board through Indiana University before any recruitment or data collection began (protocol #: 2012982070).

Participants were recruited via recruitment flyers distributed by various yoga teachers local to an urban area in a Midwestern state. Five yoga teachers were willing to distribute the flyer to classes they were teaching. Out of the five teachers, three taught at yoga studios while the other two taught independently online. Purposive sampling was used to ensure those who were interviewed were a best fit for the study [28]. A brief phone interview was conducted before scheduling a narrative interview to ensure all participants met inclusion criteria of [1] being at least 21 years of age [2], having a history of complex interpersonal trauma (defined as any fitting examples of trauma types such as childhood physical and/or sexual abuse, intimate partner violence, human trafficking, or other relational and continuous traumas), and [3] engaging in a yoga practice (defined as practicing once per week in any setting) for the past three months.

Four participants were current residents of the Midwestern state in which recruitment took place, while one lived on the West coast. Demographic information was not collected in this study; however, all participants were female. Racial categories were mixed (though not specified) and ages ranged from mid-twenties to early sixties. All interviews were conducted via Zoom due to the COVID-19 pandemic, which allowed for a range in location of participants. Participants were

yielded via the recruitment efforts approved by the institutional review board for this study. All interviews were conducted between January and March of 2021. After completion of each interview, a recording and raw transcription was uploaded to a secure cloud for storage. All recordings and identifiable transcriptions were deleted after analysis was completed.

While additional interviews would have increased sample size, this would have required changing of several documents through the approval process. Therefore, this study should be viewed as an early study within this subject.

### 2.2. Data analysis

Analysis methods followed guidelines provided within transcendental phenomenology. The works of Van Manen, Moustakas, and Wertz plus colleagues contributed to analysis steps [26,29,30]. The source most heavily relied on was Clark Moustakas, *Transcendental phenomenology: A conceptual framework* [29]. Before phenomenological analysis steps began, all interview recordings were transcribed into Microsoft Word software. Once transcriptions were completed, all identifying information was removed for confidentiality protection. Participants were then referred to by the number reflecting the order in which they were interviewed. Through the research process a reflexivity journal was kept for researcher records. These journals were used after each interview to capture initial thoughts about participant experiences before analysis began.

The first analysis step was to move through the *horizontalization stage*, which consisted of identifying each sentence that applied meaning to the lived experience described [29]. This was completed by noting words from each participant that seemed to hold particular importance, came up more than once, or were enriching to the description of the phenomenon captured. After becoming deeply familiar with the data, the next step was to work through the *clustered themes* analysis process [29]. In this stage, themes were assigned to each interview based on what appeared to be most meaningful about the experience of yoga from each participant's lived experience. Clustered themes captured 1-to-2-word concepts that stood out from each interview. Examples of clustered themes that started to emerge in this process are *community bond* and *mind/body connection*.

The next step consisted of identifying meaning units. Meaning units are sentences or paragraphs of the transcripts that appear to capture essence of the lived experience [30]. This step of identifying meaning units helped inform the stages of textural and structural description typical in transcendental phenomenology [29]. Narratives were formed for each of the five interviews that included both a textural description (also referred to as a descriptive narrative), as well as structural description (a reflective and interpretative narrative) [29]. The textural descriptions were completed first and included direct quotes from participants, and descriptive information of lived experiences [29]. Structural descriptions were then developed and captured the deep meaning or "essence" associated with each participant's lived experience [29].

The final analysis step included writing a textural-structural synthesis which consisted of important insights spanning across all five interviews [29]. The textural-structural synthesis included direct quotes, rich descriptions, and common themes discovered from previous analysis steps. It is at this stage that deep understanding of the phenomenon of yoga and complex interpersonal trauma emerged [29]. This stage provided most of the reported findings for this paper. Results are reported in themes as is consistent with the chosen methodology. While only major themes are reported, each stage of analysis was integral in identifying these themes from cumulative findings throughout the analysis process.

Member checking was completed with three of five participants. This step was completed at the end of data collection. All participants were contact and given the opportunity to complete member checking, but the two not included did not reciprocate researcher contact at this stage.

This strategy was used to enhance trustworthiness and rigor of the study [29]. This process consisted of a conversation where the researcher reviewed themes, points of the narratives established thus far, and invited participants to change, delete, or add anything that had been reviewed. This step was completed to ensure participant voice was captured and to minimize researcher bias.

### 3. Results

Results of this study are organized into themes, in alignment with transcendental phenomenological qualitative research. While there are distinctions between participant experiences, there were several shared experiences and meanings that were made. Both similarities and differences will be reported. Four major themes emerged from this study including [1] transformation through yoga [2], comparing holistic benefits through opposing yoga styles [3], community and relationships, and [4] trauma healing. Listed themes and explanation of each theme can be viewed in Table 1.

For context, a brief description of what yoga practices looked like for each participant, as well as trauma types experienced will be provided. As previously discussed, there are many ways that yoga practice can look. The participants of this study engaged in a variety of yoga styles, with restorative practice and a more energetic practice being the two main types. Other aspects of yoga were also discussed such as meditation, spiritual ritual, and engaging in yoga philosophy daily. Participant 1 has been practicing yoga for over ten years and tries to maintain a daily yoga practice. This participant practices hot yoga in a studio at least once per week and additional practice occurs at home. Participant 2 has been practicing yoga consistently for 7 years, though was introduced to yoga before this time. This participant has decreased studio classes due to the COVID-19 pandemic and practices at home at least once per week for an hour. Participant 3 only practices at home and does so several times throughout the week. This participant has been practicing yoga for 3 years. Participant 4 has been practicing yoga for over 20 years and prefers to practice at home. This participant engages in yoga practice 2–3 times per week. Lastly, participant 5 is an instructor of yoga and practices in a studio at least 2 times per week. This participant also practices at home when their schedule permits.

Trauma types also varied from participant to participant. The goal of this study was not to capture rich description of the trauma history itself, but some of this information was given naturally. One participant did not share about their trauma history specifically, while the other four did provide detail about the types of traumas they have survived. Types

**Table 1**  
Explanation of themes.

Theme	Explanation of Theme
Transformation through yoga	Through interviews it emerged that all participants have a transformative experience of sorts when practicing yoga. This was discussed as feelings before beginning a yoga practice, how participants felt as a yoga practice ensued, and feelings after the yoga practice.
Comparing holistic benefits through opposing yoga styles	Participants practiced different styles of yoga. Participants discussed different benefits for different styles. This theme captures the differences experienced.
Community and relationships	Each participant has an important relationship that had formed through their yoga journeys. Additionally, some participants discussed a larger sense of belonging and community through their yoga journey.
Trauma healing	Participants were asked if there was any connection between their trauma healing and yoga practices. This theme captures how participants viewed yoga's role in their healing of life traumas.

of traumata captured in this study include emotional, sexual, physical, and psychological childhood abuse, repeated sexual abuse, and intimate partner violence. Participant 1 shared experiences of sexual abuse, participant 2 shared continuous emotional and psychological abuse in childhood, participant 4 shared emotional, psychological, and sexual abuse from parents and intimate partner violence in previous marriage of many years, and finally participant 5 discussed emotional and psychological traumas in childhood.

#### 3.1. Transformation through yoga

The experience of a physical practice was captured by asking participants what was felt (emotionally, mentally, spiritually, and other) during and after a yoga practice. Each participant was asked to frame what a yoga experience was for them based on what would be most typical of a 60-min, physical *asana* (posture) practice. Through each person's account, a transformation of sorts seemed to take place from the time one thought about starting a practice, to the time that practice ended and after.

The beginning of a yoga practice was an experience where anxiety or other distressing (to varying levels) emotions may be present. This time of anxiety could be what draws the participant to the yoga practice, a barrier to enjoying the practice, or simply anticipation of the practice itself and what may be to come. Participant 1 states, "I kind of use the drive to like get all my frantic thinking out of the way or I try to anyway ... to shift into a more practice-oriented space". This could capture that while pre-yoga practice anxiety is present, there is expectation that during and after yoga, anxiety will be lessened. Participant 5 captures this experience before a yoga practice as being in their "monkey brain" where questions pop up quickly and sporadically in preparation for class.

As the yoga practice begins, a shift is experienced that allows for both mental calm and physical empowerment to settle in. In some cases, there may be things that aid this transformation. For participant 1 these things include, "the same incense every class and you can kind of like smell, as you walk up the stairs ... nice like feminine local art that's really beautiful ... and then my teacher is always there." Participant 4 enjoys the use of yoga props and describes her yoga mat as "feeling like you're on an island and no one can get you" and also notes that she has a yoga bolster that she has named "Barry". Whether sensory in experience, props, home set-up, or studio, the sense of familiarity than can be experienced in a yoga practice appears to be a factor that begins the mental calming of the transformation.

The physical movement of yoga seems to connect to this mental feeling of calm, as participants start to connect with their body and breath. Participant 1 describes this experience, "I find myself feeling either angry, or like very empowered, sometimes both ... I feel like I start to really connect with my body more and even though I'm anxious, I can kind of imagine like my muscles stretching out, I can feel them like unraveling almost.". Participant 2 offers that when taking a power yoga class, "I feel strong, I feel empowered, I feel confident, I feel proud of my body and its abilities". For participant 3 the mental calm experience translates into a physical phenomenon, "I experience calm in my body. I really like to stretch and feel my body like that feeling in the muscles that experience.". Participant 4 offers, "everything feels it's working together and limber and powerful." Participant 5 has a physical experience different from the other participants based on a chronic illness they work to manage. This participant has used yoga as a way to manage their illness, so the movement of yoga becomes about mental clarity as well as physical healing. Though the mental clarity yoga brings was the focus of a yoga practice for this participant, the value of movement was still captured: "the thing is for me it's moving my body ... for me I always feel okay, because I'm moving my body, even if I'm very sore, my body hurts afterwards, I'm still feeling some type of good because I moved my body." Through the transformation of the yoga practice, physical movement holds power.



Challenges experienced by participants in a yoga practice include being able to maintain mental calm or clarity, consistency of practice, and in some cases managing emotions that may come up through a practice. Due to the nature of complex interpersonal trauma and its corresponding symptoms, anxieties experienced by survivors, intensity of emotion regulation, challenges with dissociation, and a disorganized sense of self could be higher than those with trauma experiences not interpersonal in nature [7,22].

### 3.2. Comparing holistic benefits through opposing yoga styles

This theme is meant to capture participant's variety of experiences based on what type of yoga they are practicing. The two yoga styles talked about through all five interviews were yin/restorative yoga and hot/power yoga. Yin and restorative are widely overlapping, so for the purpose of this paper yin yoga will be the label used to capture both. This style of yoga takes on a gentle approach; encouraging the use of props for physical support, settling into poses in a comfortable way that will allow you to be there for 2–5 min, continued focus on the breath, and is often noted as the style of yoga that allows for the deepest release in the physical body. Participants link this physical release to emotional release as well. These definitions of yoga styles are derived from participant experience rather than exclusive definitions of these terms in the realm of yoga practices.

Participant 2, for example, noted that transformation that occurs because of yin practice is far different than a hot or power class: "Yin classes ... definitely bring up a lot of emotion for me. I feel more I feel more in tune with my emotional and spiritual side ... it's kind of like a release of a little bit of everything." For this participant, such intense emotional release can lead to the end of a yoga class feeling emotionally exhausting, whereas a hot yoga class is more likely to feel more along the lines of the endorphin release someone would expect from any other workout. This experience takes yoga away from physical movement for exercise, and closer to physical movement for the purpose of emotional processing. Even after times of feeling physically exhausted, this participant described the experience as something that was productive for healing.

Participant 4 discusses yin as the style of yoga that was and is most responsible for trauma healing: "I do think that yin worked well for trauma, because it really just let it go and it's meditative ... It releases ... traumatic knots. And, I mean like now, I feel like jelly." This participant uses the language of feeling like jelly to capture the looseness and relaxation physically experienced after such a practice. Physical benefits of yin yoga were also referred for participant 5 due to their chronic illness and yin allowing for access to yoga in a way that made sense to their body. Yin yoga was also a style that allowed participant 5 to learn to listen to their body in a way that made other types of classes safe and continuing to feel good. Participant 5 states, "I didn't feel comfortable moving my body, so that built me up to move my body and I'm so glad [that's] the way that I learned."

Hot or power yoga types may vary in style, but the experiences felt from each were largely the same across participants. Hot yoga is typically a vinyasa style yoga class performed in a studio room set to a temperature of 95° or above, sometimes with humidity also added to the room. Vinyasa style for a yoga practice is quicker than what is experienced in yin, matching each movement to an exhale or inhale for a consistent flow or physical postures or *asana*. While hot yoga was not typically discussed as the yoga style responsible for trauma healing, components that were seen as most beneficial to this style directly relate to symptoms of complex interpersonal trauma. These benefits include increased empowerment and trust in the body, increased sense of self, and improved self-image.

P1: "sometimes I feel angry, which is interesting because I don't feel a lot of anger outside of my asana practice so maybe it's an outlet for me, um, but especially in the warrior poses I find myself feeling

either angry, or like very empowered, sometimes both ... [yoga] has really changed my relationship to my body and whether I'm able to trust it."

P2: "[yoga has the] physical benefits of strength and flexibility ... body image, confidence."

P3: "I like to push myself and feeling like I'm stronger than I was the like the time before, so I like the experience of feeling strong ..."

The feelings of empowerment in the body, strength, trusting the body, increased confidence and self-image were also components that appeared to undergo transformation. Yoga was used as a tool for participants to gain improvement in these areas of life. Consistent movement could be a factor allowing for such transformations, but the connection between body and mind that yoga brings is likely a central aspect.

Outside of physical practice, it is important to note that all participants, like many yoga practitioners, viewed yoga as something beyond movement. This concept of beyond captures life philosophy, spirituality, and general mental and emotional state. Three of five participants discussed their journey of yoga began by looking for ways to increase physical exercise. However, these participants discovered that values taught through yoga philosophy became just as important as movement.

### 3.3. Community and relationships

Each participant shared some connection to either a yoga teacher, fellow yoga community members, or added benefit to their yoga practice by sharing it with others in their lives. For those who shared about their yoga teachers, this person appeared to play a role of great trust for the participant and a foundational person in their yoga journey.

P1: "I kind of did my teacher training impulsively because I just felt so connected to [lead teacher] ... my teacher [lead teacher] is definitely a big influence on me ... I feel like there are several teachers that I've had that have really influenced my life, and that I can sometimes hear their voices in my head when I'm practicing or, especially when I'm teaching. But [lead teacher] is definitely the most influential teacher that I have had"

P4: "the right teacher appears at the right time ..."

P5: "And I met a yoga instructor And I personally thought she wasn't insane ... but she met me where I was at so I started going to her classes, because if I couldn't get on the floor, she'd give me a chair like so she just met me where I was at so that just made me so comfortable to do it ... So, I started coming back every Tuesday, then it went every Tuesday every Thursday and I just kept coming back."

Here the connections made to yoga teachers influenced the connection each participant felt to the yoga practice.

The yoga community was formed for participants either by going through yoga teacher training themselves or being a regular attendee of a particular studio's class. In either case, this aspect of yoga brought further benefit. Participant 1 talks about teaching training as an "intimate experience" where all peers created strong bonds based on the environment. Participant 1 continues to get this experience in studio classes: "and I also feel, when I'm at the studio, a renewed sense of community and we always all turn towards each other at the end of the class and bow to each other, and I feel like it's just a really powerful way to remind myself that we're all interconnected". The connection this participant has to a specific studio has allowed for these impactful relationships to build and become significant. Participant 2 shares a similar experience of community that developed while going through their own yoga teacher training program: "Community was a huge part of it, for me, and especially something I'm missing now." It was shared through participants that the COVID-19 pandemic and studio shutdowns has been a challenge and something that has negatively impacted this

sense of community.

Relationships outside of a specific yoga community were also talked about as bringing value to the yoga practice. Participant 3 shared that their yoga practice includes their partner, and that this aspect of their relationship helps to deepen their bond. P3: "... and I really enjoy that time together and being able to both connect in a way, where ... we're not you know touching and we're separate but we are bonding in a different way than just you know going out on a date or raising children together." Similarly, participant 5 shared that their mother joining in yoga practices, their brother and his partner attending classes the participant teaches, and friends who honored and respected the participant's practice greatly.

Trusting relationships have particular significance to complex interpersonal trauma. Interpersonal trauma can often severely damage a survivor's general trust in others, or perceptions of how they view themselves in a relationship. Polyvagal theory explains that the social engagement system of the vagal pathway is significantly impaired in complex interpersonal trauma, but yoga has been shown to improve functioning in this network [21,22]. Participant voice on relationships and communities captures successful and healing relationships. Through the themes captured and participant sharing, it emerged that yoga had healing benefit for symptoms experienced.

### 3.4. Trauma healing

The theme of trauma healing emerged throughout the duration of each narrative interview. Participants described benefits they have gained through a variety of yoga practices, and how yoga has provided some degree of healing in their lives. For context, a brief description of each participant's life experiences and trauma, as shared by them, will be included. This will serve to honor the life experiences these participants have survived, as well as honor that not all persons with complex interpersonal trauma histories originate from the same sources. Trauma narratives were not the focus of this study of narrative interview, so it is noted that these brief descriptions are not to be an attempt to capture all that each participant has endured. Elements of yoga that connect directly to each person's healing are discussed.

Participant 1 shared that they were a survivor of sexual abuse. This abuse history led to a sense of mistrust in their body: "As a survivor/victim of sexual abuse, I feel like I've been taught to really not trust my body in a variety of ways, but yoga has taught me that I can." Beyond the internal trust, this participant discussed feeling a sense of safety within their studio space and their relationship with their yoga teacher. Yoga has been able to create a place of safety, empowerment, and trust as well as a healing journey for this participant. "It's [yoga] a part of my existence and my being and it informs so much of what I say and do throughout the day."

Participant 2 briefly shared that their trauma history occurred through childhood by ways of being manipulated, isolated, and controlled by their mother. The yin practice of yoga, where the participant feels most emotionally and spiritually in tune, created a space where they could unlearn harmful self-beliefs, and begin to create a sense of security in self. Additionally, this participant found greater meaning in yoga practices beyond physical postures. "I think the physical practice, I mean it's good, you know we love it, it brings out a lot of things when you move because you know we hold trauma in our bodies. But the philosophy was a lot more impactful for me." This participant seemed to take on yoga as a way of life and this transformation being most helpful in healing trauma. Participant 2 discussed their interpretation of yoga philosophy enforcing a life of self-love through non-judgement.

Participant 3 did not share details of traumas faced but did include in her narrative interview that she had been working through past traumas and inner work for many years before yoga came into her life. Yoga became a practice that added to all the work she had done to heal herself and seemed to take this healing to a deeper level. Yoga has also provided

a tool that can continue this healing every day. Trauma can often lead to a person experiencing distressing thoughts, beliefs, or thought patterns for years beyond the trauma experienced. This participant discusses yoga as something that has helped in processing those thoughts: "Yoga does help me to stop streams of thought that I don't want to go down if they are unhealthy or unsafe. But then, also on the flip side, if it needs to be faced, facing it in a way that is positive and helpful and not in a way that could potentially make me spiral out of control."

Participant 4 openly shared through her interview about complex interpersonal trauma that started in childhood, and most recently were experienced in her marriage with her ex-husband. Her childhood holds trauma memories of sexual and physical abuse, and her abusive marriage included physical, sexual, psychological, and emotional traumas. This participant shared that safety is something they have come to find in friendships and surroundings since beginning her healing journey, but also does not feel sexual safety will be something she will experience again. She describes healing through yoga as something that "has felt like well, being able to stay present, being able to stay in your body, you know what I mean like mentally and physically, being more unified, feeling hopelessness kind of leak away, you know finding a sense of more personal power again." For this participant the meaning of the yoga experience seemed to come from various styles, connections with teachers she could trust, experiencing emotional regulation as result of her practice, connection to her body in a positive way, and having a productive release of the emotions she was holding.

Participant 5 did not directly discuss trauma experiences but did share her battles with chronic illness and healthcare challenges. Yoga was used as a tool to find her own physical healing after experiencing failed attempts through modern medicine. It was not until beginning a yoga practice that the mental benefits were also enjoyed, and the participant noticed the benefit of mental calm and clarity. However, this participant did share triggers of trauma coming up in yoga if practicing at a studio. It can be commonplace for certified yoga instructors to come around the room in a studio, possibly adjust a client's position by touching them for assistance or being near students. This experience in yoga felt like a safety threat to this participant, based on their trauma history. Because of this, a yoga practice feels most safe to this participant when at home, which seems to be where they can embrace feelings of safety that then allow for healing.

## 4. Discussion

There are consistencies between this study's findings and existing literature. Key points found through this study that are present in the literature include yoga encouraging a mind-body connection, neurological benefits, and providing a sense of safety. Participants discussed feeling benefit from yoga by being able to feel more in tune with their bodies and this presence in the body leading to a feeling of calm (not previously present) in the mind. This recount of the yoga experience aligns with research's suggestion that an integration of body and mind can reduce neurophysiological symptoms experienced as result of trauma [20]. Additionally, existing qualitative studies have found use of yoga to increase participant self-esteem (and increased self-acceptance), deepen connection with self, bring about a feeling of peace, strengthen feelings of empowerment and increased compassion [15,25].

Polyvagal theory's framework is also supported by this study's findings. Polyvagal theory suggests that trauma, specifically interpersonal trauma, can cause challenges with the ventral vagal complex, creating difficulty in reading and providing facial expressivity and connecting with others [21,22]. Participants of this study found interpersonal growth through yoga and improved relationships with others based on a strengthened sense of self. Polyvagal theory further supports yoga as an intervention that can strengthen the connection between mind and body.

This study also supports the idea that yoga philosophy could potentially be beneficial for those with complex interpersonal trauma.

Participants shared aspects of yoga philosophy, such as acceptance of self, nonviolence, and an overall sense of grounding, provided some relief from trauma symptoms. Participants who were connected more deeply to yoga philosophy shared consistently that they experienced increased self-value, relief of hyperarousal symptoms, and a deeper understanding of self.

Clinical social work practitioners could benefit from this study's findings by gaining insight into how clients with complex interpersonal trauma may benefit from yoga practice. This includes yoga being used as a tool to experience mental clarity, a safe space to process emotions, experiencing physical healing of trauma in the body, an arena where trusting relationships with others can be developed, a way to release intense and distressing emotions, and physical movement that allows a person to feel empowered in their body. Future research can assist in further identifying healing properties associated with yoga practice to aid in creating a standard of yoga in therapy settings. Currently, a lack of standard in providing yoga in therapy settings is a hindrance of being able to provide it [31].

Participants in this study experienced challenges associated with yoga practice. These included teachers being closer or more physical than a student was comfortable with, hot or power yoga not being the most conducive for emotional and physical processing, and a lack of consistency in engagement with a practice leading to less efficacy. When yoga is used as a therapeutic intervention, maintaining the practice in a consistent way is something that can be discussed between client and practitioner. It is impossible to know someone's trauma history unless shared directly with you, which supports the need to practice trauma-informed principles in any interpersonal profession. These principles include safety, trustworthiness and transparency, peer support, collaboration and mutuality, empowerment, voice and choice, and cultural, historical and gender issues, as established by the Substance Use and Mental Health Services Administration [32]. Trauma-informed care, which has a strong foundation in clinical social work practice, entails providing a safe space for yoga interventions to be delivered.

#### 4.1. Limitations

One limitation of this study is the sample size. Phenomenology does not warrant a particularly large sample size based on the goal of rich description [26], but a larger sample size could better support the found themes and considerations for intervention development. Future studies could look at duplicating the methodology and goals of this study with a larger sample size. Another limitation is that the yoga practices were not provided by anyone trained in clinical mental health care. If a goal of this research would be increasing accessibility of yoga in therapeutic settings, studies focused within the mental health care system would be helpful. Participants who practiced in a yoga studio were instructed by someone who has been certified in yoga teaching, not in mental health care. Those who practiced at home did so based on their own understanding of yoga practice. However, two of the study participants found healing in yoga after feeling the mental health care system as it did not meet their needs. This has implications for limitations in mental health care practice and could suggest expanding available interventions could increase ability to meet client needs based on individuality.

Further limitations include four of five participants being from the same state in the Midwestern region with only one participant from a West-coast state. All participants also identified as female, meaning the study lacks gender diversity. However, certain types of complex interpersonal trauma (i.e., sexual abuse) have been found to disproportionately impact women which would justify a female sample [33].

## 5. Conclusion

This paper captures participant voice and what a yoga practice means to them. Themes included in this paper all work together to capture the experience of yoga for persons with complex interpersonal

trauma. This study found benefit in yoga practice and trauma healing of participants. Themes of this study captured participants experiencing a transformation through yoga practice, varying benefits based on yoga styles, importance of community and relationships, and trauma healing experienced. In alignment with phenomenological underpinnings, the goal of this study is to provide a rich account of lived experiences, and not necessarily to provide generalizability or transferability to other studies or the larger population [26]. However, results of this study can still be considered when examining what factors of a yoga practice are beneficial to trauma healing. This knowledge base is one that should continue to be pursued for the benefit of clinical social work practice and its duty to best serve client needs.

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## Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

## Informed consent

Informed consent was obtained from all individual participants included in the study.

## Author statement

The authors would like to thank the editor and reviewers for their thoughtful feedback. All reviewer comments have been organized into a table to ensure response to each comment was given individual attention. Nearly every comment was incorporated into the revised version of this manuscript. The authors would like to thank Reviewer 2 for their specific feedback on additional studies to include in the introduction of this manuscript. Additional research has been integrated as well as citations revised to reflect primary sources. Further, the manuscript was edited to improve overall organization and conciseness. The authors hope these revisions provide adequate improvement to this manuscript for acceptance.

## Declaration of competing interest

The first author declares that she has no conflict of interest. The second author declares that he has no conflict of interest.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ctcp.2022.101674>.

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