

Research

Yoga and the Healing of Interpersonal Trauma: A Qualitative Meta-Analysis

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Abstract

Although emerging research indicates that yoga facilitates healing from interpersonal trauma, consensus is lacking as to yoga's main facilitative factors. To address this limitation, we employed qualitative meta-analysis to analyze data from six qualitative studies ($n = 105$) that examined the healing agents of yoga that facilitated recovery from interpersonal trauma. The analysis process included coding data from each study and analyzing codes across all of the studies to derive meta-categories. Three researchers engaged in dual-level analyses (i.e., both inductive and deductive) to support consistency, address any inconsistencies, and develop a consensus. We identified and categorized six meta-categories based on the original 45 themes from the six studies and found differing levels of convergence across the studies. Meta-categories with high levels of convergence included (1) stabilization: coping strategies to reduce trauma-related symptoms; (2) authenticity, inner attunement, and self-acceptance; (3) equanimity: calming the mind and mindfulness; and (4) community: reduced isolation through safe connection with others. Our findings offer a more integrated, comprehensive, and consolidated understanding of the specific ways yoga can facilitate recovery from interpersonal trauma and demonstrate how qualitative meta-analysis methodology can tie together the richness of similar, stand-alone qualitative studies. *Gaffney et al. Int J Yoga Therapy 2023(33). doi: 10.17761/2023-D-22-00048.*

Keywords: yoga, interpersonal trauma, healing agents of yoga, trauma recovery, qualitative meta-analysis

Abbreviations Used

PTSD = posttraumatic stress disorder

QMA = qualitative meta-analysis

TSY = Trauma-Sensitive Yoga

Introduction

There is a growing trend and encouraging research for the use of yoga interventions to alleviate trauma symptoms.¹⁻⁴ As a way to address physiological dysregulation, psychological distress, and somatic symptoms, researchers have begun to use mind-body practices^{5,6} to assist with the treatment of trauma and posttraumatic stress disorder (PTSD). The connections among yoga, trauma, and interpersonal trauma have been investigated in quantitative studies.⁷⁻¹⁰ Qualitative researchers^{3,11-15} have also studied the effects of yoga as an adjunct treatment for survivors of intimate partner violence. As research on yoga interventions continues to grow, researchers have called for further studies to examine the effectiveness of yoga as an intervention following trauma and as a complementary approach to healing interpersonal trauma.^{3,16} The present study aimed to address gaps in the literature by examining the healing factors that contribute to the recovery from interpersonal trauma.

Interpersonal Trauma

The U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) defines trauma as a phenomenon that “results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being.”^{17(p.7)} Interpersonal trauma stems from interpersonal violence, where physical, sexual, or psychological force or power, deprivation, and neglect are intentionally applied by an individual or small group of individuals against other persons, typically in a family, intimate partner, or community context.¹⁸ Interpersonal trauma is often more detrimental than non-interpersonal trauma due to the element of betrayal involved in the rupture of fundamental assumptions undergirding one's interpersonal relationships¹⁹ and to repeated exposure to the same type of trauma over time.²⁰

Interpersonal trauma, experiences that are often prolonged in nature, can have a devastating effect on one's mental, physical, and psychological well-being.²¹ Interpersonal trauma is associated with increases in emotional and psychological difficulties (e.g., anger, shame, anxiety, amnesia, depression, insomnia, and trauma-related disorders), behavioral challenges (e.g., self-injurious behaviors and substance-use concerns), and physical health problems (e.g., chronic illnesses and neuroendocrinological issues).^{17,22–25} Additionally, individuals may make failed attempts at self-protection and have an impaired ability to make meaning of events.^{17,22} The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* notes that PTSD “may be especially severe or long-lasting when the stressor is interpersonal and intentional.”^{26(p.275)} Studies have shown that interpersonal trauma is more likely to contribute to the development of PTSD than non-interpersonal trauma.^{27,28} In the United States, the 12-month prevalence of PTSD among adults is 3.5%.²⁶ Lifetime rates of interpersonal violence may contribute to the risk of developing PTSD, as illustrated by the following prevalence statistics: rape (3.2%), sexual assault (5.8%), and lifetime physical abuse by an intimate partner (4.5%).²⁹

Yoga's Benefits for Interpersonal Trauma Survivors

Polyvagal theory^{30,31} describes trauma as a condition where the emotional, physiological, psychological, and social dimensions of an individual are intricately interconnected.²² Porges³⁰ suggested that researchers may want to design therapeutic interventions that create calm states and activate the neural regulation of the brainstem, which could help to prompt the regulation of the social engagement system. Yoga, a traditional practice of connecting the mind, body, and spirit through physical postures (*asana*), breathwork (*pranayama*), and meditation, appears to be an intervention that can decrease psychological, physiological, and emotional distress and physical symptoms and increase the quality of life.^{2,3} Researchers have suggested that mindfulness-based interventions and yoga used concurrently are effective in reducing trauma-related symptoms and demonstrate comparable effectiveness when used as interventions separately.³²

Previous research demonstrated how yoga that emphasizes mindful movement and interoceptive awareness helps to regulate affective arousal, increases the ability to experience emotions safely in the present moment, and promotes a sense of safety within one's body.⁴ Researchers have suggested that yoga provides benefits to participants during practice and in their lives, including empowerment to make choices, development of strong connections to others, acceptance toward themselves and their life experiences, and cultivation of an internal balance.⁴ Srivastava and colleagues³³ found an incremental change on measures of anxiety, depression, and overall functioning as a result of yoga meditation practice.

Furthermore, Nolan²¹ examined the effectiveness of Trauma-Sensitive Yoga (TSY) among interpersonal trauma survivors. That study found support for the efficacy of TSY in reducing PTSD, depression, and anxiety symptoms for women with PTSD and described yoga benefits that included peaceful embodiment.

Peaceful embodiment was described as a “felt sense of control over and connection with one's body, thoughts, and emotions.”^{21(p.38)} For interpersonal trauma survivors, peacefully reconnecting to one's body was found to be a healing experience.²¹

The literature on trauma and yoga has grown since 2018, and TSY, an approach specifically developed for trauma survivors, has been studied by both quantitative researchers^{7,9,10} and qualitative researchers.^{3,4,14,34} Although studies demonstrate the effectiveness of yoga as an intervention, these studies do not fully account for relational traumas, despite growing evidence for the impact of trauma on the body.^(e.g.,¹⁰) Although research on utilizing yoga to facilitate the recovery of interpersonal trauma continues to grow, consensus on what factors yoga contributes to this recovery is lacking. Qualitative meta-analysis (QMA) would help researchers systematically search for commonalities across the studies on yoga and interpersonal trauma.

Purpose of the Present Study

In 2021, Mazzio and colleagues¹⁶ suggested that yoga was efficacious in the treatment of interpersonal violence. Although we found several studies exploring the efficacy of yoga on interpersonal trauma, we did not find any meta-analyses on the topic. As most studies selected used a qualitative research approach, a QMA was the most suitable form of analysis. The focus of our study was to: (1) select comparable qualitative studies on the use of yoga for treating interpersonal trauma, (2) compare the themes across the selected studies, (3) identify potential connections across these themes, (4) examine the strength of these thematic connections, and (5) highlight the healing factors of yoga for the treatment of interpersonal trauma.

Methods

Using the keywords *yoga* and *trauma*, we searched the Google Scholar, ProQuest, and PsycINFO databases from 2005 to 2020, which yielded 578 articles and dissertations to consider for review. According to Timulak,³⁵ researchers who conduct QMAs are selective and establish decision rules to identify the studies that can most likely be analyzed via QMA. Based on our inclusion and exclusion criteria, we were able to reduce the number of studies from 578 to 6 studies examined in our QMA.

Inclusion Criteria

Based on Timulak's³⁵ guidelines, QMAs can be conducted with a minimum of 2 studies and not more than 100 studies. The final number of studies identified depended on the available number of qualitative studies on yoga and interpersonal trauma. The key inclusion criteria for our QMA included

- qualitative research approach;
- sample comprised of adult interpersonal trauma survivors;
- substantial qualitative data, including rich quotations and detailed participants' yoga experiences; and
- clearly and adequately described qualitative analyses.

Exclusion Criteria

Exclusion criteria included a lack of detail in describing aspects of the research analyses utilized or excessive focus on quantitative research approaches if mixed methods were used. Additionally, some studies had a less relevant or broader focus on integrative therapies not restricted to yoga or included a combination of interventions, such as group psychotherapy and meditation, whereas others broadly focused on trauma rather than interpersonal trauma specifically. Other reasons some studies were deselected were participants consisting of care providers instead of trauma survivors and participants who were not adults.

Final Selection of Studies

After reviewing the initial database search, we determined that 19 studies appeared to meet our inclusion and exclusion criteria. The authors carefully reevaluated these studies independently based on the inclusion criteria, methodological features of the studies, and data-analysis methods. Each of the researchers annotated their responses and documented reasons for whether the study should be included in the selection. A consensual decision was made after authors shared their responses and deliberated on each of the studies reviewed. The authors then reduced the final selection to 6 articles (Brand-Cousy,³⁶ Gulden and Jennings,³⁷ Ong et al.,³⁴ Rhodes,¹⁵ Stevens and McLeod,³⁸ and West et al.⁴), as the other 13 articles did not meet the criteria for our QMA.

Participants (Aggregate from All Six Studies)

The six studies had a combined sample of 105 participants. There were 104 females and 1 male, with ages ranging from 18–62 years. Other demographic information included racial/ethnic identity of participants, such as White, Black, Hispanic/Latina, and American Indian. All participants met criteria for interpersonal trauma as defined by the researchers of each study. Participants had previously practiced yoga or were invited to complete a yoga intervention in the study in which they participated. Types of yoga practice to which participants were exposed included Ashtanga, Bikram, Forrest, Hatha, Iyengar, Kundalini, Power, Trauma-Informed, TSY, Restorative, Vinyasa, and Yin.

Positionality

As is typical of qualitative research, the first, second, and third authors completed a bracketing exercise prior to the study by detailing their experiences, positionality, assumptions, and biases related to their yoga practice, and they described how their personal and professional experiences and biases could affect the analysis process.

The first author was a member of the coding team. She is a counselor educator and a licensed counselor who has practiced yoga for the past 7 years and has taught yoga for the past 4 years, since completing her yoga teacher training. In addition to utilizing trauma-informed yoga with clients in therapy, the first author has taught various types of yoga to individuals and groups, including more active yoga forms, such as ashtanga, and restorative, chair

yoga, and yin yoga forms. The first author has worked with trauma survivors and perpetrators in various settings, including a domestic violence agency and shelter. She has published research findings on how TSY can facilitate trauma recovery among domestic violence survivors. She utilizes a trauma-informed lens and polyvagal theory in her clinical work. During the bracketing exercise, she identified a positive bias toward yoga, particularly TSY, and proposed that TSY may offer curative benefits to individuals recovering from complex trauma.

The second author was also a member of the coding team. She is a licensed psychologist at a hospital that uses adaptive yoga and movement therapies to treat mental health conditions. Additionally, she holds a certification from The Center for Mind-Body Medicine and uses a polyvagal approach in clinical practice. The second author has published research findings that suggest that yoga can have a positive impact on well-being after interpersonal trauma. During the bracketing exercise, she identified a positive bias toward yoga, specifically the connection between yoga and positive health benefits.

The third author was a member of the coding team as well. He is a professor in counseling psychology and a licensed psychologist. He has conducted qualitative research over the past 25 years, including several QMAs on the topics of therapist expertise, international therapist expertise, and yoga. He began practicing yoga after co-authoring a study with the second author and holds a strong belief in the efficacy of yoga for physical, spiritual, and emotional well-being.

The fourth author assisted in writing and editing the final manuscript. She is a doctoral student in counseling psychology and has participated in vinyasa and restorative yoga classes, among others, and has worked with trauma survivors in various settings, including a university sexual assault and domestic violence center and a children's mental health center. The fourth author did not participate in the initial bracketing exercise but identified a positive bias toward yoga and its positive effects on trauma survivors when beginning to work on the manuscript.

Consensual Qualitative Research Data-Analysis Procedures

Utilizing aspects of consensual qualitative research,³⁹ all decisions, from selecting the studies sampled to the final analysis, were made consensually among the first three authors. A major benefit of using consensual qualitative research is leveraging the perspectives of multiple data analysts. In our data-analysis process, the authors first independently read each qualitative study and then individually analyzed the data. Next, the researchers came together, compared their analyses, and reached a consensus as to the best interpretation of the data. The authors analyzed the results and discussion sections of the 6 studies, focusing on interpersonal trauma survivors' experiences with yoga that surfaced in the form of quotes, paraphrased quotes, and themes presented. The authors worked toward consensus through each stage of the data-analysis process, from initial coding to theme development, and finally to developing meta-categories and theoretical models to represent our findings.

Qualitative Meta-Analysis Data-Analysis Procedures

One desirable aspect of QMA is the triangulation of results due to comparing multiple studies on the same topic. In addition, when findings are compared across studies, definitions are deepened and themes/categories are better formulated and understood.⁴⁰ The authors utilized Elliot and Timulak's⁴¹ descriptive-interpretive approach to analyze the data. This approach entails starting with organizing collected data into preliminary themes.

The authors examined the data by deconstructing the text into manageable units of meaning, typically a complete thought or quote. All quotes were selected, organized, and analyzed using Excel software. Quotes were coded and organized into preliminary themes based on shared meanings. During this clustering process, each code was reexamined and a definition of the meaning was developed; codes were adjusted, named, and renamed as they were compared against one another in a process called *in vivo* coding.³⁵

Early in the analysis process, the authors noted that two of the studies, Gulden and Jennings³⁷ and West et al.,⁴ provided a comprehensive presentation of the analyzed domains, so those studies served as our reference point. The seven domains in Gulden and Jennings³⁷ study are: (1) heightened spiritual awareness and growth; (2) enhanced mental and physical health benefits; (3) amelioration of trauma-related symptoms; (4) love, empowerment, and acceptance of oneself; (5) internal sense of safety; (6) nurture the self; and (7) getting "blissed out." The five domains in West et al.'s⁴ study include: (1) grace and compassion, (2) relation, (3) acceptance, (4) centeredness, and (5) empowerment.

Utilizing inductively developed preliminary themes and the themes from Gulden and Jennings³⁷ and West et al.,⁴ we continued to refine the thematic groupings. Next, the authors created meta-categories of closely related themes. A definition of each meta-category was created by identifying and articulating the commonalities found among the themes assigned to each meta-category. We then identified the level of convergence or overlap among themes that made up each meta-category. A high level of convergence was noted when the meta-category was represented by at least five out of six studies, a moderate level of convergence was noted when the meta-category was represented by at least three out of six studies, and a low level of convergence was represented by two or less studies. In addition to representation of studies, convergence included how similar the themes from different studies were to one another. In the final step of the data analysis, the authors presented the main findings in the form of narratives supporting each meta-category developed and a figure to further clarify the connections among the six meta-categories.

Credibility Checks

Credibility checks in the form of triangulation and use of independent analysts were employed in this meta-analysis. Each of the first three authors worked independently to analyze the data. After each article was analyzed, the authors met and worked toward a consensus. In this way, the data analyzed were not only assessed for credibility, but also served to corroborate the analysis through triangulation.

Results

The following results are based on the six studies analyzed by QMA. Six meta-categories were constructed from a total of 45 themes identified in the original studies (Table 1). A figure was also developed to further clarify the connections among these six meta-categories (Fig. 1). The relative strength of the meta-categories is based on the number of studies represented in each meta-category, as well as on the substance and richness of quotes that made up each meta-category. Selected quotes from across the various studies were used to best illustrate each meta-category presented below.

Stabilization: Coping Strategies to Reduce Trauma-Related Symptoms

All six studies contained themes regarding the reduction of trauma symptoms. Rhodes¹⁵ noted that yogic practices (e.g., breathing exercises, postures) could be utilized as tools to cope with stress and trauma triggers that continued to arise in participants' daily lives. A participant in Stevens and McLeod's^{38(p.19)} study stated that,

Circular breathing is a good thing if you're really anxious or having a panic attack or something. Being able to think your way towards that and make yourself do that, especially if you're losing control. It's good to step away and be able to do that.

Stabilization and learning coping skills to manage trauma-related symptoms also appeared to contribute to restoring a sense of self-as-agent. For example, Brand-Cousy^{36(p.147)} found that participants "emphasized the significance of mindful, yogic breathing in soothing trauma-based hyperarousal symptoms" and described how "the breath also became a tool for accessing deeper layers of awareness and self-healing." Further development of positive coping strategies was identified by Ong and colleagues,^{34(p.29)} who stated that participants "acquired tools that helped them calm down and relax. This enabled them to better handle challenging interpersonal situations in which they typically felt distressed or triggered." One participant in that study stated that learning these skills helped them to manage their emotions more effectively: "Just being more relaxed and now I know how to be more relaxed and calm in a situation."^{32(p.28)} The view that yoga provides tools to reduce trauma symptoms was shared by Gulden and Jennings,³⁷ who described yoga techniques such as breathwork, mindfulness, physical movement, postures, and psychotherapy as contributing to a decrease in mental health distress.

Authenticity, Inner Attunement, and Self-Acceptance

This meta-category reflects how individuals honor the concept of "I am who I am"^{15(p.250)} and demonstrates that acceptance to honor ourselves, our bodies' abilities and limitations, and our emotional limits contributes to a greater capacity for increased self-confidence and positive emotions. This meta-category had high convergence across all six studies and parallels previous research demonstrating that authenticity and self-acceptance help individuals find a balanced life that may lead to self-love, hope, and acceptance.^{42,43} Rhodes¹⁵ stated that yoga encouraged participants to be more

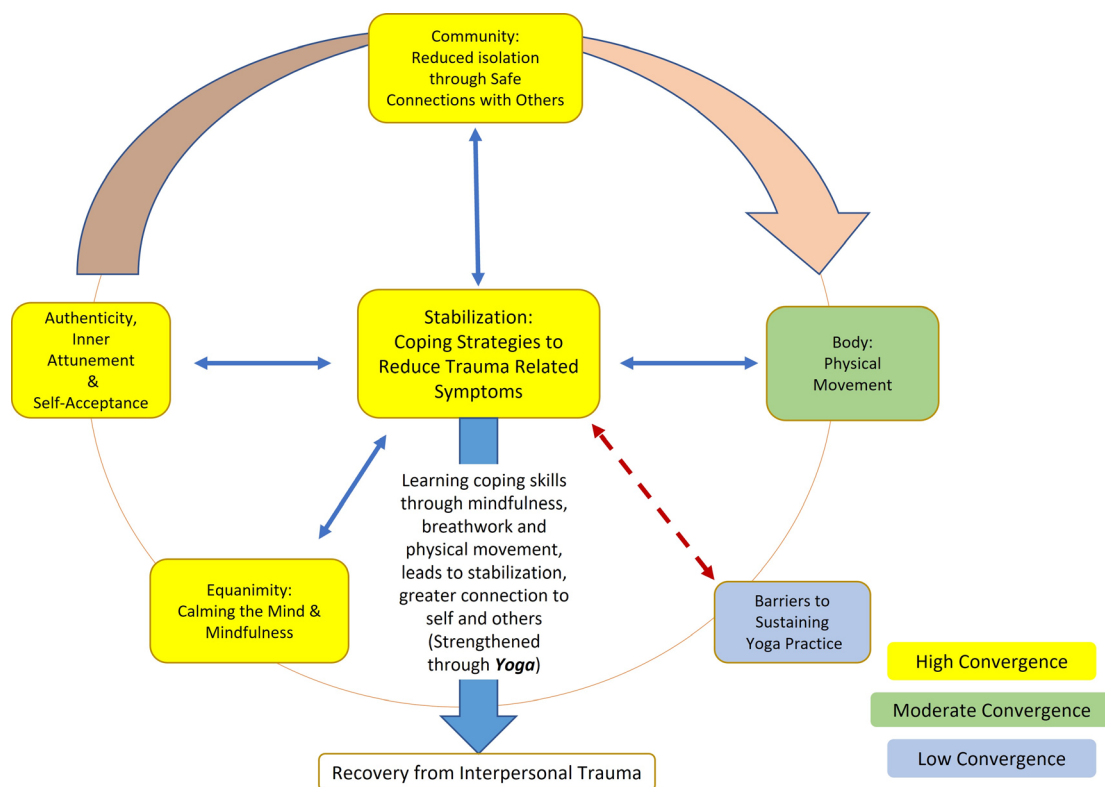
present and aware of the discomfort, and even pain, of mind-body sensations that they had previously managed through avoidance or dissociation. Through yoga, participants felt more empowered as they developed a sense of ownership, strengthened mind-body connection, and gained greater control over their experiences and

thoughts.¹⁵ One participant reported, “I feel more authentic than I think I ever have.”^{15(p.250)} Additionally, acceptance of oneself and life circumstances was highlighted: “I understand that there’s nothing I can do, my brain will take time to heal that. I’m more patient . . . with myself.”^{38(p.16)}

Table 1. Meta-Categories Constructed from the 45 Themes Identified in the Original Studies

Meta-Category	Convergence Level	Study					
		Brand-Cousy (2007) ³⁶	Gulden and Jennings (2016) ³⁷	Ong et al. (2019) ³⁴	Rhodes (2015) ¹⁵	Stevens and McLeod (2019) ³⁸	West et al. (2017) ⁴
Stabilization: Coping strategies to reduce trauma-related symptoms	High	X	X	X	X	X	X
Authenticity, inner attunement, and self-acceptance	High	X	X	X	X	X	X
Equanimity: Calming the mind and mindfulness	High		X	X	X	X	X
Community: Reduced isolation through safe connections with others	High	X		X	X	X	X
Body: Physical movement	Moderate	X	X		X	X	
Barriers to sustaining yoga practice	Low		X		X		

Figure 1. Meta-Categories Related to Impact of Yoga on Interpersonal Trauma Recovery



The red dashed arrow indicates the weak relationship (low convergence) between the meta-category “barriers to sustaining yoga practice” and the stabilization meta-category.

Self-acceptance and getting in touch with authenticity may be facilitated through reconnecting with positive emotions. Ong et al.³⁴ reported that TSY helped to increase positive feelings, including confidence, hopefulness, peace, pride, and a sense of permissiveness toward the self. One participant shared how their experience with TSY allowed them to be present-centered and kept negative emotions at bay^{34(p.28)}:

I'm more able to maintain my thoughts about being in the present and not entertain feelings of anxiety about the future. Because before the yoga I was like really anxious. . . . So I'm [now] able to keep my perspective about the present . . . and let it flow rather than falling into the anxiety about what is going to happen in the future.

Additionally, a participant in Rhodes^{15(p.250)} study reflected on how yoga contributed to positive emotions: “[E]very time I go to yoga class, I feel better—more presence, more confidence, more secure in my body.” Gulden and Jennings³⁷ described an internal feeling of safety, where interpersonal trauma survivors felt “a sense of peace” (p. 27), “more in [their] body” (p. 26), and increased positive affect. In addition to reconnecting with positive emotions, West et al.⁴ found that yoga appeared to assist trauma survivors with identifying and being curious about current negative emotions, such as “why is this hurting” (p. 19), acknowledging anger, and later feeling “renewed and replenished” (p. 11), as a result of a new way of regulating emotions. Finally, West et al.^{4(pp.11–12)} noted participants’ ability to integrate part of their trauma-survivor persona into a recreated holistic identity: “[S]ome participants’ descriptions were characterized by feelings of wholeness and integration between different dimensions of their identity: [My] identity is [no longer] as a trauma survivor’ . . . , [my] identity is much more whole.”

Equanimity: Calming the Mind and Mindfulness

Many individuals recovering from interpersonal trauma experience challenges in coping with their trauma because they have difficulty staying in the present.⁴⁴ Trauma survivors may struggle with mindfulness because of thoughts, feelings, and somatic reactions that prevent them from staying present to themselves.⁴⁵ This meta-category of equanimity, or having a calm, mindful stance and being fully engaged in the present moment, was present in five out of the six studies.

Gulden and Jennings^{37(p.24)} described equanimity as “learning to turn off my mind to just listen and feel myself in the present moment.” A participant from Brand-Cousy’s^{36(pp.88–89)} study described the benefits of being present by stating, “I need to breathe these things out . . . So I feel like I’m creating a space for me in my tummy, cause that’s where I concentrate the breathing on, but I feel like the trauma is everywhere. So just sweeping through and really . . . removing, all the junk.” Additionally, West and colleagues⁴ found that mindfulness and a calm mind translated to fewer experiences of rumination, less reactivity, and feeling more positive. One participant in the Ong et al.^{34(p.28)} study noted

a newfound ability to detach from thoughts, noting that by “practicing yoga, breathing, and release, paying attention to thoughts, I can maybe get a thought and know that that thought doesn’t really define anything about me, it’s just a thought and I can let it go.”

Stevens and McLeod^{38(p.19)} described how yoga provides a way to reconnect to the body and “counterbalance” experiences of dissociation through a growing mind-body connection and reduced experiences of feeling like one’s “brain is not connected to the body.” A participant in that study shared their experience of creating this connection^{38(p.17)}:

*[W]hen I feel anxious . . . I feel like I've got metal rods up my arms and my legs that keep me tense. But when you get to the end of your yoga, it's like someone's taken them all away, and your arms and your legs are free, and your mind's all clear and *sighs* it's just a great feeling.*

Community: Reduced Isolation Through Safe Connections with Others

A sense of community was described by five of the six studies as a significant benefit of participating in yoga in a group format. This meta-category was made up of two elements: (1) feeling understood and accepted by others, and (2) the process of moving from isolation to inclusion and greater safety in the group.

Across the studies represented in this meta-category, participants described feeling understood and accepted by others, and they experienced a closeness in relationships, especially physical comfort.⁴ One of the participants in Ong et al.’s study^{34(p.28)} described positive advancements in relationships and reduced isolation: “I will not isolate myself as much, yeah.” Another participant expressed hope to maintain healthier relationships with friends and family, characterized by more stable relationships without drama, stress, or violence. Those researchers also observed that participants were better able to navigate challenging interactions with family members because they were calmer and more connected to them. For example, one participant stated, “Yes, I feel like I am generally overall more calm, and . . . assuming my child is being a little irritable teenager, I am more present, being able to connect to his energy and know that his reactions to me probably [mean] that something happened at school.”^{34(p.28)} Rhodes^{15(p.252)} indicated that yoga is a form of “self-care [and] relates to the participants’ improved sense of their own needs in relation to their interactions with others.” Yoga with others also contributed to a “greater sense of peace and control over their own bodies and lives,” which “translated into an ability to establish clearer boundaries with others.”^{15(p.252)}

Stevens and McLeod^{38(p.13)} described a process of moving from isolation to inclusion in the group, with one participant stating that “having sort of nice, relaxed, social engagements helped bring up my confidence and how I felt about interacting with people and trusting them again.” Another participant in Rhodes^{15(p.250)} study stated, “I am reaching out more in ways that I couldn’t have done [previously].”

Body: Physical Movement

This meta-category refers to ways in which participants described positive shifts in their physical health and bodies. Four of the six studies identified the benefits of creating time to move one's body. One participant reported that yoga is a gentle approach to movement that allows you to "go at your own pace and listen to your body and what it needs."^{15(p.253)} Stevens and McLeod^{38(p.19)} echoed this view and stated that "participants . . . experienced significant physical tension and aches and pains, due to living in a state of fearful vigilance. Yoga exercises allowed welcome relief from physical pain." In a similar vein, Gulden and Jennings^{37(p.24)} noted that one participant said, "[P]hysically, I have noticed benefits with balance, strength, and flexibility . . ."

Breathing and movement in a safe place assisted with a reduction of "pain in the body"^{36(p.147)} in addition to reducing triggers associated with trauma, which promoted a sense of control and an ability to work with the pain. Brand-Cousy^{36(p.147)} captured the acceptance of changes in the body, and how "nurturance and acceptance of [the] body's limitations helped [participants] work through painful internal experiences in gentle ways." The researcher went on to reflect that, "[T]he need for a gentle and slow approach to practicing yoga for trauma implies a support for this accepting and nurturing frame toward the body" (pp. 147–148).

Barriers to Sustaining Yoga Practice

It is important to acknowledge that although yoga has many benefits, the practice can bring about challenges, and two out of the six studies identified barriers to yoga. Although the studies did not share consistent barriers, some personal challenges were highlighted. Gulden and Jennings^{37(p.27)} highlighted personal challenges of "over practicing and not observing physical limits that led to an injury." Gulden and Jennings^{37(p.27)} also described that "some yoga poses, like heart-openers (e.g., back bending), were seen as challenging for individuals with a history of trauma due to the vulnerability these postures may impose." Both Rhodes¹⁵ and Gulden and Jennings³⁷ noted time and the financial commitment of yoga as barriers. For example, Rhodes^{15(p.254)} noted that:

External barriers included factors such as the cost of attending classes . . . and difficulties motivating oneself to practice without a teacher's guidance. Some participants also noted that it was difficult accessing classes that felt safe. For instance, they would have liked to take yoga classes that were Trauma-Sensitive, but these classes were far from where they lived, or not at a time that was convenient.

After surviving an interpersonal trauma, "feeling safe in a room among strangers and establishing trust with a yoga instructor" was initially challenging for some.^{37(p.27)} In addition, the motivation to practice and fears related to posttrauma movement and connection were described as challenging.^{15,37} Some "participants explained that because yoga improved their interoceptive awareness . . . it was hard to practice because it brought attention to suffering."^{15(p.254)} Lastly, Rhodes^{15(p.254)} described how some participants articulated

"fears of feeling better because the improvement could go away. Sometimes it was hard to change their way of being; they were used to their trauma symptoms."

Discussion

In this QMA, we identified key healing agents of yoga across six qualitative studies. Our QMA results revealed that the practice of yoga serves as a method for interpersonal trauma survivors to develop coping skills and resources that increase connection with others and safety in themselves. Out of the six meta-categories, four had the highest levels of convergence: (1) stabilization: coping strategies to reduce trauma-related symptoms; (2) authenticity, inner attunement, and self-acceptance; (3) equanimity: calming the mind and mindfulness; and (4) community: reduced isolation through safe connections with others. One meta-category—body: physical movement—had a moderate level of convergence, and another meta-category—barriers to sustaining yoga practice—had a low level of convergence. It is noteworthy that most of these meta-categories are not only trauma-informed but are also essential principles in yoga.

Stabilization: Coping Strategies to Reduce Trauma-Related Symptoms

A central meta-category from our research was the reduction of trauma symptoms. As we know from the literature, practicing yoga ameliorates anxiety; regulates the autonomic nervous system, blood pressure, emotions, and breathing; reduces muscle tension; decreases physical symptoms of PTSD and emotional distress; and increases quality of life.^{2,44,45} Mind-body interventions, including yoga, regulate the autonomic nervous system and emotional and behavioral activation, and they support an individual's responses to challenges (e.g., psychological stress).⁴⁶ We conceptualize this finding by applying polyvagal theory, which connects neurophysiological patterns of autonomic regulation and expression of emotions and behavior. This physiological framework has become increasingly utilized for understanding responses to trauma and stress.⁴⁷

Research shows that interventions like yoga are an effective approach for the regulation of vagal function and shift the underlying neural platform that may indirectly affect physiology, emotion, and behaviors.^{47,48} The practice of yoga affects vagal pathways, which are suggested to form means of strengthening and exercising neural platforms to foster self- and emotional regulation and prosocial behaviors.^{49–51} Our findings suggest that through yoga, individuals are better equipped to learn coping strategies for regulation and resilience to benefit physical, mental, and social well-being. Yoga movement and breathwork offer an approach to learning the coping skill of self-regulation, which is the conscious ability to regulate the autonomic nervous system by managing responses to threat or adversity; learning self-regulation skills may reduce symptoms of depression and PTSD because of shifts in the autonomic state (e.g., from sympathetic nervous system dominance to improved ventral vagal regulation).^{46,47} Breathing

skills within yoga facilitate a shift in autonomic states that promote positive psychological and health consequences.^{52,53} Our findings indicate that learning new coping skills contributes to an increased sense of safety in the body, mind, and spirit and leads to the restoration of posttrauma health.

Authenticity, Inner Attunement, and Self-Acceptance

Self-acceptance and a nonjudgmental stance were highly convergent constructs in our study, a finding that supports research showing how yoga has become recognized as an important agent in developing self-acceptance.⁵⁴ Consistent with our findings and with previous research, yoga and other mind-body practices emphasize somatic awareness and mindfulness, which encourage individuals to practice a nonjudgmental stance, nonreactivity, curiosity, and acceptance of oneself, relationships, and environment.⁵⁵ Additionally, Cox and Tylka's⁵⁶ research focused on how yoga promotes body acceptance and appreciation that includes characteristics illustrative of acceptance, gratitude, love, protection, respect, and self-care—all offered unconditionally to the body through ongoing practice. Furthermore, intentional movement that promotes psychological safety in the body has been found to cultivate joy, mindful attention, self-compassion, self-acceptance, and body connection and responsiveness.⁵⁷ Our findings suggest that yoga's intentional mindful movement may be a healing factor in experiencing joy, self-acceptance, and regaining a sense of authenticity through safe physical movement.

Another high-convergence finding we identified was inner attunement, where one connects to their internal self, allowing for emotional regulation. Traumatized individuals often feel disconnected from themselves and unsafe inside their bodies because of the internal warning signs (e.g., anxiety, increased heart rate, dissociation, and insomnia) that flood them.⁵⁸ As a result of these constant warning signs, people who have experienced trauma often ignore how they feel and attempt to cope by either shutting down or developing panic symptoms.⁵⁸ In this process of ignoring their body's internal messages, they block out both what is safe and healthful and what is harmful and threatening. Subsequently, their relationship with their body may feel unfriendly and unsafe, resulting in the need to self-regulate through external means such as self-medicating and the tendency to require excessive amounts of reassurance from others.⁵⁸ Consistent with previous literature, participants in our QMA also reported difficulties regaining a sense of safety within their own bodies. Researchers suggest that yoga could help to restore an individual's sense of safety after trauma.^{44,45} Being attuned to the self requires the body to feel safe, and numbing causes traumatized individuals to lose both the sense of their bodies and the sense of feeling alive.⁵⁸ Yoga practitioners understand that trauma is stored in the body; healing trauma necessitates somatic awareness and processing that allow one to rebuild a relationship with their inner world through the growth of sensory awareness and re-establishment of a compassionate relationship with the self.⁵⁸ Through yoga, our participants acquired new ways to increase their window of tolerance, be curiously attuned to their inner experiences, and incorporate new behaviors.

Equanimity: Calming the Mind and Mindfulness

Embodiment and present-centeredness were key components of this highly convergent meta-category. *Embodiment* is described as the way we live in our bodies, being present with our physical selves, and being responsive to internal cues, and it is an intentional way to care for ourselves.¹ Consistent with previous research,⁵⁹ we found that yoga helps to create a calm and mindful state and serves as a resource to generate self-compassion and a sense of connectedness. Several studies have considered TSY. (See, e.g., Kelly et al.⁷ and Price et al.⁹) In Gladden and colleagues' study,⁶⁰ participants who completed pre- and postsurveys after attending 3 weeks of TSY shared improvements in self-care, embodiment, and mood. Additionally, those authors found that yoga offers an opportunity to embody being in the present moment with a greater connection to oneself.⁶⁰ In another study, Cook-Cottone and Douglass⁶¹ suggested that yoga contexts offer a climate of body positivity, intentional inclusion and acceptance, strength, and community, and that the practice may help to promote positive embodiment. Our research indicates that yoga practice strengthens the relationship with the mind, physical self, and connection to the present moment.

Consistent with previous research, yoga-based exercises can assist interpersonal trauma survivors through practicing grounding exercises, regulating emotions, tolerating emotional experiences, and connecting with their bodies to regain a sense of safety and establish a new relationship among body, spirit, and mind.^{44,45,62} Rhodes¹⁵ captured this experience and highlighted that centeredness, desensitization, and interoceptive exposure help trauma survivors take effective action by staying present in the moment and altering their practice instead of engaging in a fight/flight or freeze response. Our findings also support the idea that calming the mind and being present in the body contribute to a state of equanimity despite participants having experienced significant stressors as a result of interpersonal trauma.

Community: Reduced Isolation Through Safe Connections with Others

Communities and support networks play a vital role in healing from traumatic events.²² Crews and colleagues⁶³ described how trauma-informed yoga groups assisted with increasing self-compassion and building community after sexual violence and asserted that healing cannot take place in isolation. Their research found that trauma-informed yoga groups appeared to help build connections with others in the shared experience of doing yoga as a group. This connection bonds the members on a mind-body as well as spiritual level.⁶³ Researchers realized that during the process of movement and choosing body poses, participants grew in connection to their own bodies as well as with others in the group.⁶³⁻⁶⁵ Beyond the interconnectedness brought about by a strengthened sense of community, yoga participants may also benefit from other aspects of community, such as the bolstered resilience to manage relational challenges and losses, a greater sense of purpose, and spiritual transcendence of the self.⁶⁶ Our findings support previous research suggesting that, when practiced in a

group format, yoga provides a foundation for building community, gaining safety, experiencing the support and acceptance of a healthy community after trauma, and other previously described aspects of enhanced community.^{63,66} Taken together, a yoga context that promotes intentional inclusion and acceptance likely contributes to a greater sense of community.⁶¹

Body: Physical Movement

Yoga offers a mind-body intervention shown in the extant literature to positively affect physical well-being for those with a trauma history,⁶⁷ a finding our research supports. Ross and Thomas⁶⁸ found that yoga contributes to the following health benefits: improved balance, energy, quality of life, sleep, social and occupational functioning, and flexibility; and decreased pain, stress, and cholesterol.

Yoga poses provide a present-moment somatic focal point that may feel safe to trauma survivors, who are often overwhelmed by body sensations.^{6,43} Salmon et al.⁶ explained that the repetitive motions involved with yoga appear to restore biological and stress-coping functions that are often disrupted during periods of stress. In a study with traumatized youth, one participant noted that the physical activity of yoga assisted in meeting “underlying goals of increasing her comfort with her body, recognizing somatic signals of anxiety, and learning ways to use breathing and mindfulness to restore calm and self-control and prevent escalation of distress into maladaptive outbursts with destructive consequences for self and others.”^{67(p.435)} The physical postures and practice of yoga offer an opportunity to be curious and reclaim one’s body by experiencing choice that maximizes self-care that has often been derailed or underdeveloped due to exposure to trauma and other forms of adversity.⁶⁷ Our research also illustrated the many physical and psychological benefits of yoga for survivors of trauma.

Barriers to Sustaining Yoga Practice

Only two studies reviewed in our QMA reported barriers to yoga. Although the other studies did not note any barriers to yoga, we offer two considerations for this absence. One explanation could be researchers’ implicit positive bias focused on the benefits of yoga, to the exclusion of barriers. Additionally, it could be challenging to trace attrition and follow up with research participants who did not have a positive yoga practice experience.

Based on our findings, multiple factors seem to account for the balance between the barriers and benefits in yoga practice. As both an intrapersonal and interpersonal practice, when yoga is combined with the sometimes-volatile nature of interpersonal trauma, outcomes may vary. For example, if there is a perceived lack of safety in the yoga class, trauma survivors may not feel safe to return.

Although the barriers to sustaining yoga practice merit further study, an important way to increase the safety of yoga practice for interpersonal trauma survivors would be for instructors to adopt TSY or trauma-informed approaches to practicing yoga. To address the cost of attending yoga classes for those who cannot afford it, we encourage yoga studios to increase accessibility by considering the use of a sliding-fee structure.

Implications for Practice

The healing agents offered by yoga may not be emphasized or considered in the teaching of general yoga. Based on our findings, our hope is that these healing agents, reflective of participants’ perceptions of healing through yoga, serve as a guide for both yoga instructors and psychotherapists as they consider the multiple factors involved in the healing of interpersonal trauma. In Figure 1, we propose that although salient healing agents may exist, an intricate balance of factors improves neurobiological, physiological, and mental health outcomes for individuals with an interpersonal trauma history. Given the salience of these healing agents, psychotherapists may want to adopt some of these yoga principles or practices to help clients who experience interpersonal trauma. Some authors have proposed ways psychotherapists can bridge psychotherapy with yoga.^{47,69} Integrating yoga into psychotherapy practice may also support trauma-informed therapies that take a bottom-up approach (e.g., brain spotting, somatic psychotherapies, mind-body approaches). Utilizing approaches such as yoga in therapeutic practice may also inspire interventions with a focus on the body’s wisdom to provide guidance and encourage individuals to reconnect with the body and listen to its cues that inform healing, change, and safety after trauma.

Using yoga practice allows for an integrative approach that employs neurobiology and physiology to process the effect of the trauma by releasing stuck patterns and the emotional dysregulation that occurs when an individual’s sense of safety has been impacted. This helps to rebuild authenticity through physical movement and trust within the body through a safe embodiment practice. In this way, the needs of individuals with trauma can be served in a more intentional way.

As proposed in Figure 1, we found that yoga facilitates the learning of coping skills through mindfulness, breathwork, and physical movement, leading to stabilization and greater connection to self and others. For yoga therapists, it would be important to emphasize safety in the body and provide options such as sensitivity, attunement, grounding, and mindfulness of one’s body. Based on the yoga practice, the instructor could emphasize pacing and modifications, offer body and posture choices, and check in frequently with participants. For example, instructors could offer participants the option of taking care of their needs by opting out if they are triggered or uncomfortable because of sensitivity to aromas (use of incense, aromatherapy), sounds, or physical assists. In addition, it is important that the instructor attends to group dynamics to promote safety and build a sense of community.

Limitations

One limitation of our study is that we did not explore the stylistic distinctions in certain types of yoga. Some yoga practices (e.g., TSY) are specifically trauma-informed and encourage adaptive yoga, a focus on widening the window of tolerance, coping skills to regulate the nervous system, and a greater sense of embodiment following psychological trauma; therefore, future qualitative research may want to explore the stylistic distinctions

that are contributing factors to the success of using yoga to recover from trauma.

Another limitation is that our QMA consisted of nearly all women and only those living in the United States. Although some of the samples included participants from various socioeconomic statuses and ethnicities, it is important to conduct studies with more culturally diverse and gender-inclusive populations. Additionally, conducting future research with international participants would help to provide a better understanding of whether these key healing agents would be salient across more diverse international samples. Research exploring the effects of yoga on various types of trauma would also help to provide an understanding of the extent to which yoga can facilitate recovery across a spectrum of trauma experiences ranging from acute to complex trauma.

Implications for Future Research

The six qualitative meta-categories from our findings add to the literature and inform future directions for practice and research on ways yoga can facilitate recovery from interpersonal trauma. Also, we were impressed with how QMA methodology was instrumental in helping us to harvest the rich findings of similar, stand-alone qualitative studies. As more qualitative studies on yoga become available, we recommend QMA to help consolidate our understanding of the healing agents of yoga.

The six meta-categories and their corresponding levels of convergence shown in Figure 1 indicate how frequently the meta-categories were represented across the six studies. All the high- and moderate-convergence meta-categories in the circle are interconnected with one another and intersect with the meta-category of stabilization: coping strategies to reduce trauma-related symptoms. In other words, coping skills were acquired through the practice of yoga; in turn, the application of these coping strategies reinforced these meta-categories. The only meta-category with low convergence was barriers to sustaining yoga practice. Overall, the intersection between the high and moderate meta-categories with stabilization led to trauma recovery, indicated by a decrease in trauma severity and the number of trauma symptoms. Although this suggests that the meta-categories with high convergence are central to trauma recovery, future studies are needed to examine the impact of yoga on interpersonal trauma to determine whether the meta-categories with moderate and low convergence are also identified.

Currently, a myriad of yoga styles are practiced. Each yoga style exemplifies a unique set of values and objectives, as well as ranges in the pace, intensity of movement, and level of challenge. In more recent years, TSY has been developed to specifically cater to the needs of complex trauma survivors. Only two studies^{4,32} in our QMA explored the effects of this style of practice, suggesting that despite the differences in yoga styles and approaches, the healing agents are more similar than different. More empirical research on all the different yoga styles will be needed for definitive conclusions to be drawn.

Conclusions

The current QMA brought together findings from six kindred studies, identified themes, created meta-categories with various levels of convergence, and introduced theoretical modeling that noted the interactions among the meta-categories. The results of our QMA suggest that, consistent with the trauma literature (e.g., Herman's²³ pioneering work), trauma recovery comprises primary elements such as the establishment of safety by helping survivors restore a sense of control over their bodies before they can find stability in their thoughts and emotions. Through physical movement and mindfulness in the practice of yoga, survivors learn to pay attention to bodily integrity and functions.²³ Contrary to top-down therapy approaches (e.g., cognitive) to healing trauma, where thought and perception are accessed, yoga offers a bottom-up approach (e.g., somatic) to healing, where trauma stored in the body is accessed and processed through movements and the sensory system. This approach brings about healing without the need for survivors to retell their trauma narratives; it also helps them to create a new identity, regain connection and trust in others, and restore hope for the future. In this way, survivors find healing not only within themselves, but also with others and their environments.

Conflict-of-Interest Statement

The authors have no conflicts of interest to declare.

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