



Trauma-informed yoga training in Kenya: A qualitative pilot study on feasibility and acceptability

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ABSTRACT

The current study presents a pilot qualitative exploration of the collaboration of two yoga service agencies in implementing a trauma-informed mindfulness-based teaching curriculum in Kenya, Africa. Yoga and mindfulness practices have been demonstrated as successful complementary and alternative approaches to managing the impacts of stress trauma. This study explores the feasibility and acceptability of mindfulness programming for yoga teachers in the Nairobi region of Kenya. Grounded theory is used to explore survey results. Outcomes demonstrate promise for both acceptability and feasibility. Curriculum tools were viewed as effective, and participants indicated intention to both utilize and share tools. Reflections on program effectiveness and impacts are addressed, as are potential considerations for improved program translation. Findings suggest the potential benefit for future collaborations, and also suggest best practices considerations for global implementation of embodied mindfulness programming.

1. Introduction

Yoga and mindfulness practices have been demonstrated as successful complementary and alternative approaches to managing the impacts of stress and trauma. To illustrate, in a meta-analytic review of randomized controlled trials that explored mindfulness and yoga for posttraumatic stress disorder, Gallegos et al¹ found that meditation and yoga-based approaches yielded small to medium effects on Post Traumatic Stress Disorder (PTSD) symptom reduction offering increased choice and a second-line treatment option for patients. To date, nearly all of the research on trauma and yoga has been conducted within the United States among veterans, women with chronic PTSD, and adults being treated for cancer.¹ However, trauma is a global issue²⁷ and research on trauma-informed yoga programs is needed to explore feasibility and acceptability across cultures, contexts, and countries. This study explores the feasibility and acceptability of mindfulness programming for yoga teachers in the Nairobi region of Kenya.

Research suggests that there may be high rates of trauma exposure and trauma symptomatology among Kenyans. Rates of probable PTSD in Kenya are relatively high.² In a study aimed to assess the prevalence of probable PTSD and its associated risk factors in a general household population, researchers found that 48% had experienced a severe trauma, and an overall prevalence rate of 11% of probable PTSD. Risk factors include being female, single, self-employed, having experienced

recent (traumatic) life events, having a common mental disorder and living in an institution before age 16.² Rates seem to be high in urban settings as well. In a study of Kenyan University students (N = 23, 525 male and 365 female, mean age 23), Othieno et al³ found that serious injury in the previous 12 months was reported by 29% of the students. Further, PTSD was present in 16% (men 15% and women 16%). Out of the total, 41% of the students had depressive symptoms (36% mild–moderate symptoms and 6% severe) with significant, negative health and mental health outcomes associated with recent injury. These findings suggest a need for an acceptable prevention and intervention specific for managing stress and sequela related to exposure to traumatic stress.

Yoga programs offer promise in addressing these issues.⁴ Nguyen-Feng et al⁴ describe yoga as a methodology for addressing the impact of yoga on the body as well as being promising approach for general distress. However, there is an important distinction between trauma-informed interventions designed to support individual with distress in the general population and trauma-treatment.⁵ A review and meta-analyses of psychological treatments for adults with posttraumatic stress disorders Cusack et al⁶ indicate *treatment* for trauma typically involves exposure to trauma-reminiscent stimuli, or trauma memories and a reprocessing or reframing of the trauma memories. This is aligned with guidance from the American Psychological Association⁷ for treatment of PTSD which strongly recommends cognitive behavioral

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therapy, cognitive processing therapy and prolonged exposure therapy. This panel also suggests the use of brief eclectic therapy, eye movement desensitization processing, and narrative exposure therapy.⁷ They also provide a list of useful medications in their report.⁷

Recent reviews of the literature are also aligned suggesting that, given the current body of evidence, yoga cannot currently be offered as a stand-alone treatment for trauma symptoms.⁴ In their systematic synthesis of 12 studies of yoga interventions for the psychological symptoms associated with experiences potentially traumatic life events, they found an overall between groups (yoga vs. comparison) effect sizes ranging from $d_s = 0.40$ – 1.06 . Citing consistent problems with the quality of the research currently available, researchers concluded that the overall risk for bias precluded their ability to describe yoga as an empirically supported treatment for trauma and related symptoms.

Distinctly, support programs focusing on embodied practices, such as the TIMBo (Trauma Informed Mind Body) program⁸ discussed in this paper, offer tools for how to negotiate symptoms related to trauma, emotional reactions and triggers, and stress such as relaxation training, guided imagery, and breathing retraining. The distinction between these types of adjunct support programs and psychological treatment is that support programs help individuals negotiate current stressors as well as symptoms as they arise in order to enhance daily functioning and wellbeing; whereas a substantial portion of treatment programs intentionally work with trauma memories and reactions by eliciting and/or processing them in some way.⁶ Support programs may be able to play a vital role in supporting well-being. To do this, Libby et al⁹ warn that it is critical for yoga teachers to understand the limits of their scope of practice, and to collaborate with and refer to qualified mental health professionals to appropriately manage participants' needs through treatments known to be effective.

The current work presents a case study of an international collaboration of two yoga service agencies, yogaHOPE and the Africa Yoga Project (AYP). The two yoga organizations partnered to provide a trauma-informed yoga training in Kenya, Africa. The goal of programming was to offer training in utilization of trauma-informed approaches to yoga and provide yoga teachers strategies to create a space where participants can learn new responses to both internal and external triggers. Through theory and technique, teachers learned to ground programming in the embodied experience of stress and trauma (explaining sensations as a natural biological function), bring awareness to present moment sensations in the body, cultivate empathy, and share personal experiences and insights. The focus of facilitation was on simplicity (bringing focus back to basic biology), repetition (bringing group back to their body's biology) and fostering connection (acknowledgement that all living things share these biological mechanisms).

The current paper reviews the feasibility and acceptability of providing training in the TIMBo (Trauma Informed Mind Body)⁸ program for a group of Kenyan yoga teachers. It was hypothesized that training in trauma-informed yoga teaching practices would be well-received by Kenyan yoga instructors. Further, it was hypothesized that Kenyan yoga teachers would successfully learn, implement and share trauma-informed mindfulness tools and that these tools would have a positive impact for the teachers.

1.1. Organizational collaborators

The program collaboration was implemented over a five-day training intensive in Kenya, Africa. Trained facilitators delivered a trauma-informed mindfulness curriculum. Programming represented a partnership between two yoga service organizations: yogaHOPE and AYP.

1.2. yogaHOPE

YogaHOPE is a global non-profit yoga outreach organization

dedicated to bringing the practice of yoga to underserved women and specifically addressing the impacts of traumatic stress. The work of yogaHOPE is based on the idea that the practice of yoga produces positive motivational change by helping individuals regain their vital center of energy, satisfaction and stability. Designed specifically for women, yogaHOPE works to build compassion and resilience, combat the impacts of traumatic stress, improve self-compassion, and positively impact women's relationships with themselves and others.

Most recently, yogaHOPE's focus has been on the development and implementation of trauma-informed mindfulness programming. The TIMBo (Trauma Informed Mind Body) Program⁸ offers a deliverable, research-based curriculum addressing the ways in which mind-body practices allow for long-term traumatic stress recovery. The TIMBo program provides facilitators with a structured curriculum of 16 sessions that leaves students with tools to address their habituated patterns, and manage symptoms that lead to relapse and entrapment in the cycle of trauma (www.yhtimbo.org). Sessions are structured and repetitive in order to foster trust. Each session includes a group discussion, breath work, physical yoga asana practice, and meditation.

The TIMBo program addresses three primary objectives. The first and most concrete objective of this program is to give women simple, effective and accessible tools to utilize as active coping strategies for self-regulation. Examples include breath and physical movement practices. The second objective is to help women gain awareness of their bodies and their body sensations. Emotional traumatic memory becomes lodged in the body, and is triggered in an endless feedback loop that can become chronic and debilitating.⁸ The third and long-term objective is to help women renegotiate their self-belief through awareness of their inner experience, and begin the process of transformation.

The TIMBo training protocol prepares potential facilitators to offer the trauma-informed mindfulness and yoga curriculum. Facilitators are taught to lead gentle, trauma-informed yoga sequences as well as to facilitate group discussion and lead breath work and meditation. Based on the TIMBo theory, facilitators are taught to ground programming in biology, focus present moment awareness of body sensations, cultivate empathy, and share personal insights.¹⁵ The TIMBo program was developed with an empirical understanding of the embodied experience of trauma (see^{10,11,12,13}). The training model integrates didactic knowledge-based sessions in which the teachers in training learn about the model and the techniques. More, the training emphasizes and the experiential component, the teachers in training are taken through the TIMBo processes as if they were participants.

To date the TIMBo curriculum and theory has been successfully adapted for global work in Haiti, Kenya, and Tehran. In all global contexts, yogaHOPE works with a team of local constituents to implement a train-the-trainer model. This model fosters conscious relationship and cultural competency. Cultural competency is important in trauma work as there may be culture-specific, individual, and collective meaning linked to trauma and associated symptoms. More, cultural and individual beliefs can influence how each of us comes to terms with trauma, trauma memories, as well as how we perceive help and support. For example, in some cultures it is believed that rape brings shame to a family. In others, there is an assumption that the survivor is safe and can process the trauma symptoms within the context of this safety, when in fact, the survivor's daily experience is one of danger and risk of re-traumatization is real and ever-present. As culture is an evolving and shifting phenomenon, those who do trauma-work must reference the expertise of those with whom they work rather than structure support around pre-conceived notions of how trauma and help are experienced (Schnyder et al., 2016).

TIMBo was first introduced in the global context in Haiti. In 2012, yogaHOPE partnered with local Haitian organization AMURT-Haiti collaborating to address program translation, training, research and monitoring. While the TIMBo curriculum was developed for and has been primarily implemented in work with women, there is evidence

that programming can also be impactful for men.^{14,15} Haitian men and women were trained as facilitators and to date, TIMBo programming is being offered across five regions in Haiti. Outcomes from global programming are positive. Evidence suggests that participants not only learn, but also utilize and share self-regulation tools learned through the TIMBo program.^{14,16}

1.3. Africa Yoga Project (AYP)

The Africa Yoga Project (AYP) is a yoga-based, health promotion program implemented to promote wellness in Kenya, Africa, an area with considerable poverty and health concerns.^{17,18} The AYP's mission is to enhance physical, emotional, and mental well-being among both its employees and participants. To do this, the AYP trains and funds Kenyans to teach free community yoga classes throughout Kenya. The yoga methodology typically utilized by AYP is power vinyasa yoga, a Western-conceptualized form of yoga that integrates personal inquiry, physicality through yoga forms, and meditation. The AYP teachers are primarily trained in Baptiste methodology, a form of vinyasa yoga, and often receive training in other styles as they continue their yoga teaching education.

Currently, the AYP offers yoga classes throughout the Nairobi region in community centers, neighborhoods, and schools. The AYP teachers are trained, paid, and mentored. Program reports indicate that as many as 7000 individuals per week have access to wellness activity via free AYP yoga classes (¹⁷ www.africayogaproject.org). According to Klein et al,¹⁷ the AYP may also be beneficial for Kenyan citizens as a health promotion and job-training program. This mission is aligned with need as several research studies found that Africans have benefited from yoga interventions in health care and health promotion contexts.^{17,19,20,21}

Apart from the positive narratives reported through anecdotes and attendance numbers by AYP, there has been two studies completed exploring AYP yoga and associated outcomes (i.e.^{17,21}). First, West et al,²¹ conducted an exploratory, qualitative study of AYP. This qualitative study was conducted with a sub-sample of AYP teachers ($N = 7$). Data were collected using unstructured interviews, and interview content was analyzed using a thematic approach.²¹ Overall, West et al²¹ reported that teachers had positive impressions of their AYP experience. Content analysis yielded five themes, which researchers organized into the acronym S.P.A.C.E. That is, participants reported that teaching for AYP provided a sense of *safety* and *stability* (i.e., S), *personal growth* (i.e., P), an increased capacity for taking *action* (i.e., A), and enhanced ability to meaningfully *connect* with (i.e., C) and *empower* others (i.e., E). Overall, the researchers concluded the AYP has utility for enhancing peace and health at the individual and community levels, while increasing participants' employability.

The Klein et al¹⁷ study of the AYP used a mixed method concept mapping process and analysis. This was done in a two-phase procedure. During phase one, participants brainstormed statements about how practicing and/or teaching yoga with AYP affected them. In phase two, participants sorted the self-generated statements into piles according to how each participant thought the statements related to one another. Also, in phase two, the participants rated the statements in terms of perceived importance. These data were analyzed using multi-dimensional scaling (MDS) of sort data calculated statement coordinates, and mapped them in a 2-dimensional space.¹⁷ Hierarchical cluster analysis (HCA) of these data identified clusters (i.e., concepts) among statements. Cluster average importance ratings gave the concept map depth and indicated concept importance.¹⁷ Bridging analysis and researchers' conceptual understanding of yoga literature facilitated HCA interpretive decisions. Of 72 AYP teachers that participated in the study, 52 and 48 teachers participated in brainstorming and sorting/rating activities, respectively. Teachers brainstormed 93 statements about how they were affected by teaching for and practicing with AYP.¹⁷ The resultant MDS statement map had adequate validity (stress

value = .29). HCA created a 12-cluster solution with the following concepts of perceived change: Identity as a Yoga Teacher; Prosocial Development; Existential Possibility; Genuine Positive Regard; Value and Respect for Others (highest importance); Presence, Acceptance and Competence; Service and Trust; Non-judgment and Emotion Regulation (lowest importance); Engagement and Connection; Interpersonal Effectiveness; Psychosocial Functioning; and Physical Competence and Security.¹⁷ Overall, the findings indicated that the AYP teachers perceived the AYP as facilitating change across physical, mental and spiritual domains.

These findings indicate the AYP yoga appears to be both acceptable and feasible for Kenyans. Despite these positive qualitative findings associated with the general practice of AYP yoga described here, no research has been published to date exploring the acceptability and feasibility of the implementation of a teacher training program addressing trauma-informed approach to yoga among the AYP teachers delivered to the AYP community in the Nairobi region of Kenya. Given the relatively high rates of trauma in Kenya, yoga interventions delivering content specific to trauma-exposure have substantial potential for positive impact.

2. Methodology

This study represents a qualitative assessment of the impact of trauma-informed mindfulness training in an international context. The study utilized a post programming survey to assess the experience of male and female yoga teachers in Africa participating in a trauma-informed integrative mindfulness curriculum training. The survey was voluntary and anonymous for teachers participating in programming and all teachers who participated in programming ($n = 17$) completed the survey.

2.1. Participants

Study participants included men ($n = 7$) and women ($n = 10$) who were AYP trained yoga teachers, teaching in Kenya, Africa. The AYP yoga teachers predominately come from poverty throughout the Nairobi region in Kenya without opportunity for continued occupational trainings (<https://www.africayogaproject.org/pages/our-impact>). The yoga teachers enrolled in the collaborative training were all active yoga teachers. Participants did not have specific trauma-informed yoga training or curricula experience prior to the current study.

2.2. Programming

The collaborative program was offered as a five-day, day-long intensive program in which yogaHOPE's TIMBo curriculum was implemented in its entirety with supplementary theoretical and practical training. Participants were given an overview of key theoretical components of the TIMBo curriculum including training on understanding emotional anatomy, understanding the embodied impact of trauma and developing and implementing appropriate trauma-informed yoga sequencing.

Two program facilitators and two sign language interpreters were present throughout the five-day training. Programming was offered in English, and all participants were fluent English speakers. Daily sessions were conducted following the TIMBo curriculum model. The TIMBo curriculum follows a manual guided approach. Sessions began with a general group discussion. Facilitators led discussions based on program themes, and encouraged participants to share how they related to the various topics addressed. Discussion was followed by a breathing exercise, and concluded with a trauma-informed asana (physical yoga) practice and guided meditation.

The TIMBo physical yoga practice can be characterized as trauma-informed, and represents a gentle physical practice. The class follows a distinct arc that remains consistent across sessions. While different

forms or shapes may be incorporated, the class arc includes integration, endurance, and ends with restorative forms and meditation. The yoga practice is gentle. Cuing is invitational and options are given for each form. This standard sequence is repeated throughout the curriculum to foster the trauma-informed principles of safety, predictability, structure and repetition. After initial sessions, trauma-informed hands on healing (physical assists) were incorporated in programming.

The TIMBo model is rooted in a gender-responsive approach including a specific focus on the components of relationship, mutuality, and empathy. The original TIMBo curriculum was developed for and implemented with women yoga participants. In the current project, both men and women instructors participated in training, and it was believed that TIMBo's trauma-informed, gender-responsive approach would translate effectively. Evidence of the potential impact for both men and women had previously been demonstrated in a similar implementation in Haiti.^{14, 15} The teachers in training were provided with both didactic knowledge-based sessions and sessions within which they experienced the TIMBo practices as if they were participants. In this way, the individuals who were trained to teach the TIMBo program have the opportunity to internalize the methods through experience and are able to both deliver the program to others while managing their own stress and/or trauma as well as the vicarious trauma they may experience through working with those who have been traumatized.

2.3. Data gathering

Participants completed a survey following participation in programming. The survey was administered in person and completed on paper. Surveys were developed by a collaborative team of researchers and practitioners from the yogaHOPE and AYP programs. The goal of the survey was to assess how taking the TIMBo teacher training affected the AYP teachers as trainees learning about and experiencing the TIMBo methodologies. Surveys gathered both demographic and experiential data. The assessment tool included multiple choice, Likert scale and open-ended qualitative questions.

Qualitative data were gathered and analyzed following a grounded theory approach.²² This approach has its foundations in hermeneutics, or the theory of interpretation, arguing that humans are sense-making beings, and therefore will attempt to make meaning out of their experiences (i.e., phenomenology²³). Data were analyzed in an iterative (or cyclical) process. For this paper, the interpretative process occurred on two levels. First, the participants made meaning of their experience. They shared their perceptions through a set of open ended questions related to the content of the program. Second, the researchers, authors of this article, themselves engaged in a meaning making process of the reported experience as qualitative data were coded, and analyzed into themes and subthemes through an iterative process of coding and researcher convergence.^{22, 23}

The open-ended question asked participants: (a) how the program affected how they managed emotions, obstacles experienced in managing emotions, and interact with others; (b) program tools that were most helpful and why, (c) reflections of each component of the program (i.e., yoga, breathing, meditation, gentle touch, connecting emotions and body sensations, groups processing and sharing, and journaling), (d) what components were most helpful, and (e) suggestions for improvements. The data were de-identified and entered into data fields specific to each question. The first coding of data occurred by creating themes of responses question-by-question. Next, an overall analysis of participants' responses was conducted comparing responses to participants' descriptions of their experiences (across questions sets and answers). The researchers reviewed data, considered themes by questions, and converged on overall thematic representation of the participants' experiences (see Tables 1–3).

Table 1
Reflections on Effective Program Components.

Theme
Subtheme (Sample Participant Response)
TIMBo Group Processing
<i>Validation</i> (I feel understood, one, that I'm not the only one who is going through it alone.)
<i>Connection</i> (I got to know that we connected emotionally, which was great. That I am not alone.)
<i>Expressive Relief</i> (through sharing I felt like the burden was off my chest)
<i>Empowerment</i> (Yes through sharing it has brought a lot of inspiration and empowerment thus making me a strong person.)
<i>Group Trust</i> (I get a sense of self-realization connecting with my inner being by expressing my emotion in group due to respect of confidentiality.)
<i>Positive Learning Environment</i> (peaceful with great loving and nurturing lesson to us.)
<i>Awareness of a Common Humanity</i> (It gave me courage to share. I realized that we are basically human. I related to so much from what people shared. Sharing healed me, I felt connected.)
TIMBo Journaling
<i>Clears and Settles the Mind</i> (through journaling and writing, I get clear follow up of every situation that I have been and I creates away for me to clear with myself.)
TIMBo Connecting the Body with Emotions
<i>Emotional Awareness</i> (I am more aware of my emotion and body sensation and they speak different.)
<i>Help Confronting/Processing Feelings</i> (This is extremely helpful for managing my own distressing or intense emotions.)
<i>Voice to Feelings</i> (I am more aware of my emotion and body sensation and they speak different languages. So by connecting them, you let them speak your language.)
<i>Relief</i> (I noticing my emotions with body sensations vanished as I breathe deeply as I recognize and they are almost the same painful feel them.)
<i>Reflective Pause</i> (Make me want to make good decision without rushing into action.)
<i>Empathy</i> (Coming to know others and feeling their emotion.)
TIMBo Breath Work
<i>Present Moment Focus</i> (Breath even on the posture it clears everything and makes you feel on present moment.)
<i>Calmng</i> (Breath truly helps calm down my emotions it's a good tool and can be used anywhere.)
<i>Clearing</i> (I have learned to use my breath as a tool of letting my emotions free. and bringing me back to my real self.)
<i>Healing</i> (There's this feeling in the head that was really healing)
<i>Connected to Body Sensations, Emotions, and Self</i> (It is a kind of cleanse and connection to my whole being.)
<i>Grounding</i> (Helps with grounding and bringing be to the present moment. I feel calm after a breath.)
<i>Reflective Pause</i> (Gave me space and time to take control and put things into perspective.)
<i>Self-Control</i> (Coz breath controls everything through mind/thoughts/bodies.)
TIMBo Yoga
<i>Gentle, Calming, and Peaceful</i> (Yoga is gentle.)
<i>Accessible/Simple</i> (Very gentle, accessible and amazing simple but strong tool.)
<i>Choice</i> (It was very gentle and full of freedom of choice.)
<i>Predictability</i> (I knew what was coming week to week.)
<i>Fun</i> (Joyful, full of freedom.)
<i>Short Sessions</i> (I felt like it was short.)
<i>Connection to Body Sensations, Emotions, and Self</i> (Makes me calm and relaxed, it connects me with my inner self.)
TIMBo Gentle Touch
<i>Soft</i> (You don't have to move your hands while assisting or press hard. Only the touch means a lot and creates a big connection.)
<i>Comforting</i> (Gentle touch that makes one to feel comfortable especially someone who had ever gone through trauma of sexual assault.)
<i>Caring/Loving</i> (Like being held by somebody who really cared- in a non-threatening and safe way- soothing.)
<i>Safe</i> (It creates a sense of security and safe space.)
<i>Self-worth</i> (The touch said You are worthy.)
<i>Healing/Supportive</i> (It was supportive and re-assuring that I am here and we are together in this, and won't leave you.)
<i>Teacher/Student Connection</i> (I felt like I was supported, loved, connected with someone and I really felt that together we are one.)
TIMBo Meditation
<i>Calmng</i> (Meditation made me relax.)
<i>Emotional Insight</i> (Meditation brings more insight of my emotions.)
<i>Clearing</i> (Yes it brought the time to let go and create a new space for a positive attitude.)
<i>Empowerng</i> (I really liked the visualization where I viewed myself as a great being.)
<i>Connection to Body Sensations, Emotions, and Self</i> (This was the point of settling for me. It was the center of everything, where I collected myself.)

Table 2
Perspectives on Program Impact.

Theme
Subtheme (Sample Participant Response)
Positive Connection to Self
<i>Increased Self-awareness</i> (I am aware of myself, emotions, fears, shame and know how to balance them so I know that the way I will interact with people out there will be more compassionate, focused and very understanding.)
<i>Connecting to Self</i> (I get a sense of self-realization connecting with my inner being by expressing my emotion in group due to respect of confidentiality and it let go of everything where I feel stuck.)
<i>Self-Compassion</i> (I feel compassion and loving to myself.)
<i>Confidence</i> (This build confidence.)
Increased Body Awareness
<i>Awareness of Body Sensations</i> (I am aware of my sensation and will be able to acknowledge them without resisting them.)
<i>Body Awareness Reported in Yoga, Breath Work, Emotions and Body, and Meditation</i> (see Table 1)
Increased Emotion Regulation
<i>Expressed/Released Emotions</i> (My thoughts are not clogged up with fear.)
<i>Emotional Literacy</i> (I understand my emotional anatomy and am able to relate and respond to my emotions and people mindfully.)
<i>Emotional Control</i> (I feel that I can be in full control of my emotions and reactions to challenging situations.)
<i>General Help with Emotions</i> (It has taught me to face and acknowledge fear and shame also through having self-acceptance this may manage my emotions.)
<i>Emotion Regulation Reported in Yoga, Breath Work, Emotions and Body, and Meditation</i> (see Table 1)
Increased Self-Regulation
<i>Reflective Inner Dialogue</i> (To converse with myself about the action or steps to take when something happens to me.)
<i>Cultivation of a Reflective Pause</i> (Help me in having a conversation with myself to fit the action am going to take will serve me better or not.)
New Personal Insights
<i>New Perspective</i> (To see or view things in a different angle.)
<i>Resolving Own Issues Empowers Helping Others</i> (Have minding the people around me and the ones I know more than myself. It's high time I start from myself the pass it on.)
<i>Understanding Others</i> (now I understand myself and it helps me in understanding others.)
<i>Feel Empowered with Tools</i> (am now well equipped with skills on how to deal with my and other people's sensations.)
New Relational Insights
<i>Increased Empathy</i> (because not I'll be feeling them from their perspective.)
<i>Increased Compassion</i> (I have a better view of things and I will show compassion.)
<i>Giving People Space, Accepting, Allowing</i> (Like understanding other their way of being by giving them their space not judging and disrespecting their emotions.)
<i>Increased Loving Kindness</i> (I feel love and trust that I will be in a position to connect.)

Table 3
Perspectives on Program Intensity and Trauma Sensitivity.

Theme (Sample Participant Response)
Program too Intense (Increased connection, decreasing shame. But also it felt like a lot-too much each day. I would have liked more breaks and time to pull back from the group throughout the day.)
Meditation not Effective (Not so much- it was too long for me as a guided meditation and GM doesn't work the best for me.)
Private/Confidential Space (Doing the program at least much confidential place.)
Not Feeling Comfortable (Not comfortable.)
Honoring the Complexity of Trust (I feel connected and open and can easily share with the people I don't know or have met for a short period of time. There's not much trust with relatives and close friends.)
Misperception TIMBo is Trauma Treatment (More practice doing trauma in the field.)

3. Results

3.1. Demographic data

Seventeen AYP teachers participated in the training and completed the post-program survey, 7 men and 10 women. Survey participation

was voluntary and all participants completed the post-test survey. All participants were yoga teachers trained through AYP. Six of the participants reported having children. The majority of participants (71%) reported completing a college or post-college level of education. Participants reported a variety of areas of professional training including acrobat (n = 5), information and communication technology (n = 3), martial arts (n = 2), dancer (n = 2), mental health/psychology (n = 2), beadwork (n = 1), musician (n = 1), visual arts (n = 1), creative entrepreneurship (n = 1), performing arts teacher (n = 1), beauty therapist (n = 1), interpreter (n = 1) and tour guide (n = 1). These categories were not mutually exclusive.

As a group, the participants had been practicing yoga between one and seven years with an average length of practice of four years ($M = 3.93$, $SD = 1.5$). Participants taught between 3 and 10 classes per week, with one participant not currently teaching and one reporting teaching more than 10 yoga classes per week.

3.2. Program acceptability and feasibility

It was hypothesized that training in trauma-informed yoga teaching practices would be well-received by Kenyan yoga instructors, and this hypothesis was supported by the data. The data suggest that the program is both acceptable and feasible. Acceptability, defined as how the intended individual recipients react to the intervention, is reflected in Table 1. Specifically, the program components appear to translate to the current context, and the outcomes are aligned with the mission for the program. Participants' responses were predominately positive and suggest that they found the program useful.

Feasibility, defined by successful recruitment for and implementation of the program, was reflected in the facilitators ability to recruit a full cohort of participants (17 participants), deliver the program with no dropouts and by the data demonstrating that program components were viewed by participants as effective. TIMBo tools were not only implemented and shared, but were indicated to have positive impacts on participants and their self-regulation. Specifically, the major themes in Reflections on Effective Program Components are: Connecting the Body with Emotions, Breath Work, Yoga, Gentle Touch, Meditation, Journaling, and Group Processing (see Table 1 for a listing of subthemes and sample participant statements).

3.3. Utilization and effectiveness of program components

It was hypothesized that Kenyan yoga teachers would successfully learn and implement trauma-informed mindfulness tools. Qualitative outcomes reveal that this hypothesis was supported. Participants of the AYP program indicated clear benefit to the embodied approach to emotion. Respondents cited increased emotional awareness, help in confronting and processing feelings, provision of a voice to their feelings, establishment of a sense of relief, increased capacity for reflective pause, and increased empathy (see Table 1 for examples).

Training participants were asked whether or not they utilized specific tools to manage emotions. The survey asked participants to indicate utilization of tools both prior to and after completing the program training. This list included a variety of tools including some that are not part of the training program. Prior to the training, participants indicated using the following tools daily: breathing (69%), meditation (38%), yoga self-practice (50%), yoga group-practice (47%), and self-talk (63%). After participation in the training, all respondents indicated planning to use breathing, meditation, yoga (self-practice), yoga (group) and self-talk.

TIMBo curriculum sessions begin with group processing, journaling and breath. AYP participants indicated that they found the processing component to provided validation, connection, expressive relief, empowerment and group trust. They felt that the journaling aspect allowed them to clear and settle their minds (See Table 1).

Participants discussed breath work as a tool for grounding to the

present and connecting to self, feelings and bodily sensations. According to results, breathing tools fostered present moment focus, were calming, clearing and healing, connected participants to body sensations, emotions and self, were grounding, allowed for reflective pause, and fostered self-control (see Table 1). As one participant stated, breath *“helps with grounding and bringing me to the present moment. I feel calm after a breath.”*

Asana or physical yoga forms is another major component of the TIMBo program. The yoga forms taught as part of the TIMBo curriculum are gentle, primarily restorative and tailored to each individual's body. The arc of the class follows the pattern of integration, endurance, and restorative forms followed with meditation. The goal is not to obtain an ideal posture and alignment or to create flexible bodies, but instead to get students to breath, to move, and to connect to their bodies. This may be quite different from the power vinyasa yoga AYP participants had previously been trained in. Participants did note the difference. Participants described the asana component of the TIMBo program as gentle, calming and peaceful, accessible/simple, offering choice, predictable, fun, short, and as fostering connection to body sensations, emotions and self.

AYP participants were asked about their experience of touch and assist as a component of the TIMBo program. Participants' qualitative responses to their experience of the use of touch were positive. They suggested that the touch was soft, comforting caring/loving, and safe. Further they described the tool of touch as being healing and supportive, increasing self-worth, and improving the student/teacher connection (See Table 1).

Meditation is additionally offered as a tool in the TIMBo curriculum, following the physical asana practice. Participants, in general, responded positively to the meditation practice describing it as calming, fostering emotional insight, clearing, empowering and nurturing connection to body sensations, emotions and self (see Table 1). As one participant stated, *“Meditation calms me down, gives me spaces and helps me feel peace.”*

3.4. Perspectives on program impact and intention to share programming

Results supported the hypothesis that learning about and experiencing TIMBo trauma-informed tools would have a positive impact on the teachers in training and they would share trauma-informed mindfulness tools. Overall, the qualitative data were positive, indicating ways in which the participants believe the program had been beneficial. To illustrate, one participant attributed the following to the program, *“I can only say that the program has really changed my life from nowhere to somewhere and [I] hope to continue doing other levels and finally become a facilitator who can be able to change other people's life.”*

The major themes in Perspectives on Program Impact are: Positive Connection to Self, Increased Body Awareness, Increased Emotion Regulation, Increased Self-Regulation, New Personal Insights, and New Relationship Insights (see Table 2 for a listing of subthemes and sample participant statements).

After programming, the participants indicated the intention to share tools learned as part of the TIMBo curriculum. The AYP yoga teachers were taught trauma-informed yoga in both theory and practice, and participants indicated feeling that they could bring tools back to their yoga students. All participants indicated that they planned to share the tools learned with others, and those with children indicated planning to incorporate tools in parenting. The majority of participants indicated that programming impacted how they think (71%), feel (77%), act (71%), engage in self-care (71%), and view the world (82%).

They discussed their plans to incorporate TIMBo tools in both general and private yoga classes. As one participant stated, *“I like introducing TIMBo session in my private classes, especially now that I have a client who told me she wants to learn how to deal with her emotions.”* Another stated, *“In my yoga classes, I will teach with an awareness of trauma survivors, and give general tools e.g. breathing exercises and*

visualization. I will listen and give room for my students and friends to feel their sensations.”

The participants also indicated intention to share the program with family and friends. Participants who were parents specifically discussed using tools with their children. They discussed the intention to teach their children tools in order to create space, but further they articulated their intention to use the tools themselves to improve parenting skills. One described sharing tools, *“By making them aware of their sensations, giving space and trying some of the tools together, placing arms where it feels the sensation, and breathing with them.”* Another, *“Listening to them, giving them my time and ears to listen will make them feel loved and connected, and also if they make me so angry, I will use this knowledge to calm myself and not do anything I would regret.”* A third participant said, *“Before this training I could not control my emotions to my kids. When they misbehave, I could hit them like I wanted to kill. Now, I will be looking at the mistake in a different perspective, and be a stand to them.”* Outcomes echo responses to TIMBo programming more generally, and align with other global implementations where participants not only used tools with their children, but utilized tools for managing anger and fostering more effective parenting skills.¹⁴

3.5. Areas for clarification and improvement

Participants discussed themes that would suggest areas for potential improvement. There was some indication that programming might be too intense (See Table 3). As one participant stated, *“it felt like a lot- too much each day. I would have liked more breaks and time to pull back from the group throughout the day.”*

Some participants discussed concerns regarding private/confidential space and not feeling comfortable. The theme of needing to honor the complexity of trust also came up. Additionally, there were concerns related to misperceptions of TIMBo as trauma treatment. (see Table 3 for a listing of themes and sample participant statements).

Participants asked for additional trainings and more hands-on experience with TIMBo tools. It appears that participants would have benefited from a more extensive training beyond the 5-day intensive. Participants recommended the addition of more lightness and fun, as well as more breaks. Participants would have liked to have been able to do more physical yoga. Participants also indicated the potential benefit of a discussion session(s) to process their experience of the training.

Within the context of understanding trauma and its effects, some participants noted challenges with implementing tools including prayer and talking with a friend. Specific to this training, no concerns or obstacles were noted in implementation of yoga based tools (e.g., physical yoga practice, meditation, breath work).

Some of the components of training may have been novel and not universally accepted, at least not after the 5-day training intensive. Examples can be seen in the utilization of meditation. In describing the impacts of meditation, one participant stated *“it was too long for me as a guided meditation and GM doesn't work the best for me.”* Understanding how program components should be translated and knowing how such components will be received necessitates inclusion of key stakeholders in the process of development and implementation.

4. Discussion

As hypothesized, results suggest that the TIMBo program may be both feasible and acceptable as a trauma-informed training for yoga teachers in the Nairobi region of Kenya. Feasibility was indicated by reports of participants implementing tools taught as part of the training curriculum, and additionally describing these tools as effective. Participants discussed their intention to share curriculum tools with others, both with family and in the work of teaching yoga. Showing acceptability, it seems that participants were receptive to the training, and that they were able to garner new tools and approaches that they could then implement in their teaching, work, and in interpersonal and

familial relationships. These findings indicate an openness to acceptance of new approaches.

Another positive outcome is the successful partnering of two yoga programs- AYP and TIMBo. For this study, two distinct yoga organizations worked in collaboration to advance training offering new approaches and tool sets. Despite differences in program approaches, participants appeared open to the training and accepting of new perspectives. For example, the yoga teachers that participated in the current study were originally trained in a power vinyasa style of yoga. This can be quite distinct in comparison to the more gentle, slow, restorative nature of TIMBo's trauma-informed approach. Despite the differences, participants were willing to try and additionally found benefit from the new approach. It seems that this partnership of organizations resulted in the capacity to offer a wider scope of potential outcomes than either organization acting in isolation.

It is important to note that this a group that reported utilization of tools prior to program participation. What is unique about the utilization of embodied mindfulness practices after completion of programming was the addition of a trauma-informed perspective. Notably, the program offered the use of yoga tools such a presence, breath work, and movement within the context of trauma-informed practices.

In integrating a trauma-informed perspective to teaching yoga, attention should be given to the decision to implement touch or hands-on approaches to yoga facilitation. There is currently a lack of consensus as to the benefit and appropriateness of the use of touch in yoga with survivors of trauma. David Emerson's Trauma Sensitive Yoga prescribes no physical assists. As delineated in his book, "The facilitator will never place his or her hands on a client in the context of TSY"^{5(p.74)}. Other programs advocate for a belief that it is possible to incorporate trauma-informed approaches to touch, for example the Art of Yoga Project,^{24,25} and yogaHOPE.^{26, 15}

Overall, the participants in the current training did respond positively to the non-directive assist component of the TIMBo program. AYP is a program that trains in physical yoga assists, and because of this, participants may have been more comfortable with physical assists and thus responsive to the non-directive assists provided in the trauma-informed model of the TIMBo programming. As noted above, they felt safe and positively connected to facilitators when touch was administered. This was evidenced as they described the touch as soft, comforting and caring, and they described a sense of healing and increased self-worth. The AYP teachers' experience with physical assists may explain some of their receptivity. While there appears to be positive evidence for the benefit of healing non-directive touch in trauma-informed yoga program, it is important to consider individual culture and context when making the decision to utilize touch. It is also important that facilitators be informed in best practices for administering trauma-informed touch when deciding to integrate touch into the classes they teach (see²⁶).

There were also some areas of potential for improved translation of trauma-informed programming. This is not surprising given the short duration (five days) and intensity of the training. While it might bring additional logistical issues, participants could potentially benefit from a spaced out approach to scheduling, as compared to a 5-day intensive. Offering a follow-up training could also prove beneficial.

In bringing a trauma-informed curriculum training to a new population, it is important to focus on the context in which programming is administered. Attention should be paid to the training location site. The intervention was offered in a room that could not be completely private for sound and sight. Accordingly, some participants noted concerns regarding privacy, confidentiality, and feelings of safety. While these concerns were noted, they did not appear to impact the capacity for participants to learn and integrate new trauma-informed approaches. While it may be challenging to negotiate location options, particularly if programming trainers are coming to an area for an intensive, it is an important consideration. This becomes particularly fundamental in doing trauma work. While ideal conditions may not be feasible, it is

important to arrange the best-case scenario, and to acknowledge and attempt to address any concerns as they arise. It is also important to acknowledge and address the complexities of trust, as trust is essential in creating a comfortable and potentially salubrious space. While the TIMBo program actively engages trust in its approach and curriculum, it may be important to explore how to specifically address trust building in situations of short duration, such as the current 5-day training intensive. Planning would benefit from input of local constituents in discussing interpretations and experiences of trust. Additionally, it would be beneficial to have a referral list of local services available, one that is vetted by someone within the culture.

It is possible that the cultural translation of meditation tools utilized needs to be examined further, beyond basic language translation. It is important to explicate tools for cultural competency and appropriateness. This includes examining details of meditation tools including length and content. A best practice could be to develop the meditation tools with local constituents and to include stakeholders throughout the process.

Finally, it is important to clearly delineate program objectives and scope. While current program objectives appear to have been well-articulated, and program participants overall viewed participation in the training and exposure to new trauma-informed tools as beneficial, there was some confusion as to distinctions between trauma-informed mindfulness programming and trauma treatment. The TIMBo program does not constitute clinical trauma treatment, nor does it claim to. The TIMBo program articulates itself as a complementary tool that can be beneficial in conjunction with other forms of trauma treatment. Based on findings, it appears that this distinction should be more clearly delineated. While ongoing evaluation may continue to demonstrate the benefit of yoga programming for survivors of trauma, it is helpful for practitioners to understand the difference between embodied mindfulness practices and clinical intervention. The TIMBo program would benefit from clarifying its role within trauma-informed intervention strategies and addressing scope of practices within training settings. More generally, understanding the importance of this distinction may be important to the field of complementary and alternative approaches to addressing the impacts of trauma.

5. Conclusion

The current study suggests the acceptability and feasibility of a trauma-informed yoga and mindfulness program in Nairobi, Kenya, as well as the potential utility of successful collaboration of yoga service organizations in the provision of trauma-informed practices. Participants learned about trauma and trauma-informed delivery of yoga-based tools including breath work, movement, meditation, and touch and indicated intention to both utilize as well as share the tools. Participant reports suggested that they were positively impacted by their experience of the TIMBo curriculum training.

Recommendations for best practices in cultural translation of mindfulness curricula include consideration of program intensity, and ensuring confidential and private space for implementation. Individual program components should be specifically explored for cultural competency. Program providers should consider specifics in the cultural translation of tools; for example, meditation length and content and the decision to include a hands-on component to the yoga practice. Program objectives should be clearly articulated, including delineating scope of practice and differentiating trauma-informed mindfulness interventions and trauma treatment. In addressing trauma, programs should always provide a site-specific resource and referral list that is vetted by a local collaborator.

This study was not without limitations. Participants were individuals who already had established practices of yoga and other positive coping tools. It is unclear precisely how this program would be received by individuals who had not had exposure to yoga and related self-regulation tools. The current study would have benefited from a

pre-test assessment and program follow-up. The short, intensive nature of the program, in some ways limited the capacity for in-depth assessment. Qualitative interviews would certainly have added depth and potential value. Overall, methodology leads to limited generalizability; however, outcomes support the success of this pilot program and suggest the potential benefit of future studies in this area.

One of the primary findings beyond program benefit was the feasibility of yoga service program collaborations, specifically in an international context. Future research should continue to explore these collaborations, and further develop best practices, for there appears to be added benefit in collaboration. Additionally, researchers should explore the intricacies of specific program components, and develop an understanding of how cultural context impacts these components. One example could be the exploration of gentle, non-directive touch as a healing component in trauma-informed yoga and mindfulness programming.

It is our hope that the current study will inspire additional yoga service organization collaborations. Further, this study indicates the value of sharing trauma-informed mindfulness-based tools for self-regulation in a global context, as long as this is done in a mindful and culturally appropriate way.

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