Pre-Engagement as Method: An EmbodiMap™ VR Experience to Explore Lived Experience of People from South Sudanese Refugee Background

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Abstract
This paper discusses the use of pre-engagement as a method to introduce EmbodiMap, a Virtual Reality (VR) tool to a group of South Sudanese refugees in Sydney, Australia. The aim of the pre-engagement is to understand how currently available support for the mental and emotional wellbeing of the refugee population can be further supported through psychosocial engagements using purposefully developed tools. The EmbodiMap tool and experience, developed by the felt Experience and Empathy Lab (fEEL) at UNSW Sydney, is a creative approach that potentially offers a transformative experience as participants virtually reach into their bodies and draw or register their immediate or persisting feelings, sensations and emotions. As an arts-based approach, EmbodiMap provides an innovative alternative to approaches that rely heavily on words, thus helping amplify the participants’ self-expression. Pre-engagement is used as a psychosocial engagement method, allowing for a small group of participants to experience EmbodiMap first-hand and engage ‘hands on’ with the technology before providing insights into how the tool may be adapted, developed, or codesigned further to facilitate a meaningful experience for use with the broader community. The pre-engagement with a small group of South Sudanese community members revealed scope for further engagement with the broader community, while adapting to the needs and issues identified.

Keywords
arts based methods, virtual environments, community based research, case study, methods in qualitative inquiry

Introduction
Researchers in the field of refugee studies have highlighted issues to be addressed in responding to the challenges of unmet mental and emotional needs of refugee populations. (Long, 2014, p. 1) discusses the need to rethink ‘durable’ solutions for refugees’ needs, and to premise refugees as the experts of their own lived experience. This requires researchers to take ‘one down’ positions of support in working to best facilitate individuals and groups to come up with creative solutions that work for them. It also means building capacity among health-care providers and scientists to understand and respond to the health needs of refugees (Marano et al., 2016), the need for an ‘all hands-on deck’ approach that is locally coordinated (Hayes et al., 2016, p. 1) and the need for ‘sustained and creative engagement’ (Milner, 2014, p. 11). Given the unaddressed needs, we as researchers and practitioners in the field are called to face the immensity of such challenges in innovative and co-constructive ways. Arts-based approaches to the refugee mental health crisis have been acknowledged as having transformative potential. They

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involve going beyond what is experienced or expressed, while speaking to it and simultaneously opening up space for more adaptive ideas (Jones, 2018, p. 290; Lederach, 2005, p. 38). Ayindo (2008, p. 185) similarly argues that arts approaches have contributed to the depth of learning that is essential in response to the painful experiences of conflict and mass violence where intervention requires more holistic approaches. Because arts are part of everyday life, they ‘bear potential to fully challenge our imagination in search for creative, viable and sustainable alternatives’ (Ayindo, 2008, p. 186).

To address such challenges, we used EmbodiMap a Virtual Reality (VR) tool and immersive sensate experience which enables users to explore their subjective experiences by focusing on sensations felt in the body to gain insights into their emotional and mental wellbeing. While VR technologies are often perceived as the antithesis of mindful and wellbeing practices, they are increasingly being used to successfully support reflective experiences and cultivate empathy (Papadopoulos et al., 2021). The EmbodiMap experience is designed to support participants in engaging with their thoughts and emotions, how they are experienced in their body, and how they make meaning from these experiences. We co-developed EmbodiMap with a range of people identifying as experiencing trauma, anxiety, and stress, and adapted the EmbodiMap experience to suit the needs of the many different participants. Using a ‘pre-engagement approach’ a small number of people from potential participant groups use the prototype tool and experience protocols. This pre-engagement approach allows them to engage with the EmbodiMap experience and be ‘hands on’ with the technology, before providing insights into how psychosocial engagements mediated through creative practices might be further adapted, developed, and codesigned to address specific community needs and to facilitate meaningful experiences. The pre-engagement approach, pre-empted a more sustained or broader community engagement, allowing for primary engagement to be co-designed from the outset and the VR tool to be modified and customised for optimal experience and impact.

This pre-engagement approach was used with a small group of South Sudanese refugee community leaders in Sydney, who underwent personal experiences of EmbodiMap before exploring how they could envisage it being used to support issues in their broader community, such as in relation to youth suicide and resettlement challenges. The aim was to understand how currently available support for the mental and emotional wellbeing of the refugee population can be further supported through psychosocial engagements using purposefully developed tools.

**Creative Engagement and the Refugee Voice**

Arts-based approaches are particularly crucial in the refugee mental health field as they have potential to address the complexity of the “refugee voice” (Jones, 2018; Sigona, 2014, p. 10). This is important if we are to arrive at and practice innovative measures to face the challenge of unmet mental and emotional health needs. The issue with the refugee voice is fourfold. Firstly, there is the silencing of the refugees’ narratives. This involves refugees being spoken for instead of speaking for themselves and allowing only certain versions of their narratives to emerge while others disappear (Sigona, 2014). Secondly, there is the constructing of the refugee voice to one singular voice. This involves the humanitarian, academic and media discourses adopting one representation of the refugee which heavily relies on the image of victimhood and vulnerability, and which ‘makes Western “experts” and support organisations the only trustworthy voice to speak for refugees and about the experience of forced displacement…’ (Sigona, 2014, p. 4). Thirdly, there is the scrutinising of the refugee voice, for example by immigration officials, which involves concerns about believability. This is especially important if the refugees have experienced trauma, given the ways in which trauma manifests non-verbally and non-sequentially and in ways that are reduced by Western science-practitioner models (Bracken, 2003; Van der Kolk, 2014). The scrutiny is evident in the rigorous process enacted by immigration representatives, of dissecting and analysing the refugees’ narrative for ‘internal coherence and external consistency’ to ‘prove’ it trustworthy enough to warrant granting asylum (Sigona, 2014, pp. 6–7). Lastly, there is the destruction of the refugee voice. The refugees may have experienced trauma to a degree that may render their ability to recount their ‘experiences’ mute (Herman, 1997; Levine, 2010; Porges, 2007). As Scarry (1985, p. 4) points out, the physical pain of torture ‘does not simply resist language but actively destroys it’.

Thus, approaches that do not rely heavily on spoken words but enable articulation of felt experience by creative means can open up alternative avenues for expression, potentially allowing for deeper reflection and providing insights not available through other means. Creative means of expression can provide refugee survivors with alternative personal ways of understanding and articulating their experiences, in contrast to the clinical and medical terminology that may be inadvertently assumed as be the only means of describing mental and physical distress or wellbeing (Bennett et al., Froggett, Kenning, Manley, & Muller, 2019; Boydell, Gladstone, Volpe, Allemang, & Stasiulis, 2012; Chamberlain et al., 2018; Fraser & Sayah, 2011). The EmbodiMap experience and tool is an example of these creative means of expression.

**Cultural Understandings of Mental Health**

Researchers have found it important to note that refugees’ understandings of mental health differ within and across cultures, and to keep in mind that refugees are not a homogeneous group (Byrow et al., 2019; May et al., 2014; Sullivan et al., 2020). In their study investigating differences in mental health knowledge and beliefs between participants from the
Iraqi and Sudanese refugee communities, and Australian-born individuals, in Sydney, May et al. (2014) found that a more complex definition of what constituted mental health among these communities was called for, involving ‘differences in the labelling and conceptualisation of specific disorders’ (p. 765). Indeed, it has been demonstrated that culture can extensively affect the perception, experience and presentation of depressive symptoms for instance, the labels these symptoms receive, and the individuals’ treatment choices and pathways to help (Fozdar, 2009; Kleinman, 1977; Tilbury, 2007; Wierzbicka, 1986).

The medicalization of mental health, and the search for cultural equivalence of emotion terms to describe a person’s mental state has been problematic in some refugee contexts. Studies examining the understanding and expression of depression among East African communities in Australia (Fozdar, 2009; Fozdar & Banki, 2017; Fozdar & Rapley, 2004; Tilbury, 2007) found that there were no words directly translatable to ‘depression’ in any of the local languages (Amharic, Tigrigna, Somali, Sudanese Arabic and other dialects), and that the closest terms described anger, anxiety, self-pity, constant worry, grief, discomfort, fright, unhappiness, and sadness. These words did not denote an abnormal mental state as in the Western medical model. Terms for abnormal mental states could only be translated simply as ‘madness’ or ‘craziness’.

The medical framing of the mental health state of refugees can be problematic as it is presented to them as ‘the truth’ of their condition thus silencing other possibilities (Bracken, 2003, p. 4). And as Tilbury (2007, p. 454) argues,

It universalises an emotion state, rather than recognising its cultural situatedness; it individualises an emotion state, rather than recognising its social embeddedness; it rationalises an individualistic solution to the problem through medication or individual counselling, rather than recognising structural and social causes of despair…

Indeed, other studies have also found that refugees may not see value of the medical framing of their mental health state, and may prefer help that addresses their social and practical needs (Fozdar, 2009; Savic et al., 2016; Sullivan et al., 2020). For instance, while violence and trauma may have an ongoing impact on many individuals and communities from refugee backgrounds, individuals and communities may not self-identify as trauma ‘victims’ or survivors, may prioritise other areas of their lives that need focus, or may have strategies in place for self-management. This calls for taking what Sullivan et al. (2020, p. 22) call a “culturally responsive” or “critically conscious” approach to intervention, and the identification and mobilisation of resources that are based on different cultural approaches to mental health.

The pre-engagement method and co-design approach are akin to the ‘Two-Eyed Seeing’ research framework which Bartlett et al. (2012) propose for use in research with Indigenous communities, using her collaborative research experience with the First Nations community of Ewipkek in Canada. ‘Two-eyed seeing’ is a guiding principle that was introduced to the academic community by M’ikmaq Elders Albert and Murdena Marshall in Nova Scotia, Canada, meaning ‘learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing’ (Bartlett et al., 2012, p. 335). The ‘Two-Eyed Seeing’ framework is thus a collaboration between the researcher and the community, embracing research in a way that privileges the community’s ways of knowing over the researcher’s. Adopting this framework hence assists us to create a project that is specific and appropriate in design to the community of South Sudanese refugees that we are working with.

EmbodiMap: Virtual Reality Tool and Experience

The EmbodiMap experience and VR tool, developed by fEEL (felt Experience and Empathy Lab) at University of New South Wales (UNSW) is designed as a qualitative research method and a creative experience. It has a set of protocols designed to enable the creative experience to potentially lead to therapeutic outcomes. The EmbodiMap experience is not just the use of the VR technology. It includes protocols for psychosocial engagement, through discussion and semi structured interviews, between participants and researchers or facilitators to establish a space that is meaningful, and safe for participants. It also establishes whether participants are available to share their experiences, context and understandings of felt sensations and emotions, including how they label and interpret these feelings and sensations. The protocols allow time for deep reflection on emotions and sensations after engaging with the technology, and time for feedback on the experience and technology itself.

An important aspect of EmbodiMap is to foster stress-free engagement with the technology and promote a comfortable space that potentially allows for self-revelatory experiences. Therefore, protocols including ‘onboarding’ and ‘off-boarding’ engagements are used for acquainting participants with the technology, and safety and hygiene requirements, how to use the technology, and what to expect on entering the virtual space. To use the technology, the participant is invited to wear a portable untethered Oculus Quest VR headset to enter the virtual space—this choice being because they are lighter than earlier versions and cable-free. This makes the VR less off-putting for those not experienced with VR, and more appropriate for experiences that engage with emotion. Similarly, using hand-tracking technologies allows participants to draw using their hands (rather than using VR controllers) and may feel more intuitive.

Participants can make virtual marks in the space, using a range of colours which appear on each fingertip and can be selected by simply touching the required colour with the
Participants can create life-size avatar bodies, pose them, walk around and step inside them. Participants are encouraged to draw onto the figures, noticing any sensations in their body and mapping them onto the avatar figure. Participants are invited to observe and reflect on the drawings they have created. (Figures 1 and 2).

EmbodiMap can be experienced as a guided meditation where a voice-over encourages participants to slow down and focus on feelings and sensations, and as they become aware of sensations in their body, they can draw them on to the avatars. The experience can be self-directed as participants engage with avatar bodies without direction exploring the affordances of the tool. Furthermore, EmbodiMap can become a shared experience with peers, researchers or therapists donning a VR headset and entering the same virtual space.

The EmbodiMap tool was developed using iterative ‘bottom up’, participatory design approaches working with immersive media designers, artists, and psychologists and people who identify as experiencing mental health concerns. They provided feedback about the ease of use of the tool, the appropriateness of the environment, and the overall creative and/or therapeutic experience. Through this process it became evident that the VR tool needed to be adaptable for the needs of different communities and individuals. To support subjective experience a range of variables were developed in the
VR tool, to be selected by the participant or researcher or therapist working with them. When entering the virtual space participants select virtual landscapes or semi-enclosed rooms. The environment can be light, bright and open or dark and enclosed.

**EmbodiMap Rationale**

EmbodiMap was developed to explore sensate and somatic responses to stress and/or anxiety or trauma and to help participants visualise the felt experience of autonomic nervous system (ANS) activation. It draws principally on two areas of practice: somatic psychotherapy (including Sensorimotor Psychotherapy) (Ogden et al., 2006, 2015), and body mapping (De Jager, Tewson, & Boydell, 2016). Traditional body mapping involves ‘… the process of creating body-maps using drawing, painting or other art-based techniques to visually represent aspects of people’s lives, their bodies and the world they live in’ (Gastaldo et al., 2012, p. 5). It originated in South Africa as a therapeutic tool for women living with HIV (MacGregor, 2009). As a method, body mapping has been used for sharing stories; research; co-production; political advocacy; as communication; for teaching; examining embodied experience in physical space; in child/adolescent centred methods; and for therapy. Body mapping has been used in the health sciences and as an arts-based approach to health research, bringing awareness to the ways we hold emotion in the body (De Jager et al., 2016; Gastaldo et al., 2012). It is recognised as a powerful means of expressing, through drawing and text, felt experience of the mutually constitutive relationships between sensations in the body, and emotional states (Cregan, 2006; DeMello, 2014; Werbalowsky, 2019). Body mapping involves creating a life-size drawing of the body, onto which participants draw, or map, feelings and sensations experienced in their own body. Early explorations of virtual body mapping using proprietary software such as Tilt brush by Google to simply translate the experience through the use of drawing tools and soundscapes that ‘augment and manipulate illustrations’ (Ticho, 2020).

Embodimap refocuses such approaches by privileging engagement with the internal body space, and dynamic engagement. EmbodiMap as a tool effectively transforms the body mapping experience from a two-dimensional drawing process, which often entails symbolic representation (for example, the drawing of specific shapes or images on a 2D body outline on paper) into a physical and virtual experiencing of the body and emotions. Participants enter the virtual space using an untethered VR headset and find themselves in a dynamic relationship with an avatar. Whilst the avatar body appears as a translucent 3D shape with the same proportions as the user, it may also be selectively ‘filled’ with organs or left empty.

EmbodiMap is less focused on illustration than on visualising and registering embodied experience in an immediate and direct way, using the capacity for mark-making through touch, combined with the facility for moving inside the avatar body. The development of EmbodiMap engages with sensorimotor psychotherapy theories in understanding the capacity offered through movement and change of posture, as exemplified in the work of Pat Ogden (Ogden, 2018) who explores ‘movement vocabulary’ to understand how the body is experienced and how posture facilitates shifts in psychosomatic awareness. Using EmbodiMap users can walk around, step inside, pose and re-pose their avatars and potentially inhabit them. By allowing users to experience their physical body in this way, EmbodiMap potentially offers a transformative experience bringing to the fore how emotions are felt and experienced in the body, and so can be used to develop personalised understandings of the body-emotions relationship.

**The Pre-Engagement**

**Recruitment**

We worked with a group of South Sudanese refugees in Sydney to find out their response to the tool and experience and understand how this might support their community. We started the engagement by consulting the designated leader of the community, the chairperson of The Community of South Sudan and Other Marginalised Areas (CSSOMA) NSW Inc, who chose a group of six South Sudanese men of ages ranging from 23 years to 35 years to trial the tool. The six men were not a representative sample of the South Sudanese community in Sydney, but were identified by the chairperson as an initial contact before the tool could be introduced to a larger representative group. The six had been residents in Australia for between 3 and 15 years after arriving as humanitarian entrants. One of them was a student working part-time, while five of them were employed full-time, married and had children. They had all experienced conflict and mass violence back in South Sudan and had been displaced to a refugee camp in Kenya before coming to Australia. The six attended a two-hour EmbodiMap engagement in November 2020 following relaxation of COVID-19 pandemic lockdown regulations. The role of the pre-engagement was to understand their responses to creative approaches and methods, to learn more about their communities needs for future engagements and to understand how to build trust to be able to engage more deeply with other members of the community in future co-design projects.

**Data collection and Analysis**

Using EmbodiMap as a method we aimed through the creative engagement and accompanying psychosocial engagement to create a space where participants felt safe and able to share their experiences in a meaningful way (Kahn, 1990). The virtual drawings produced in the creative engagement were not analysed directly but participants were free to use them in
the interviews as a focus to help participants reflect on emotions and sensations in relation to the body.

We used semi-structured interviews to provide insights into how the experience made meaning for the participants, and context and factors that influenced their responses. We engaged in phenomenological analysis allowing us to gain insights into the perceptions and experiences of the engagements and how meaning was made from the experience (Bennett, Froggett, & Muller, 2019). We observed and made notes, and individually and as a group listened to all recordings, choosing to work with the expressive and nuanced expression available in the audio recording (rather than reverting to transcripts) (Kenning et al., 2021; Froggett & Wengraf, 2004).

The pre-engagement, data collection and analysis was approved under UNSW Human Ethics Research Committee (HC200508).

**Interviews**

Participants underwent an onboarding experience which included an overview of COVID-safe engagement regulations; VR headset hygiene; an introduction of what to expect when entering the virtual space; and the form the EmbodiMap experience would take. The following flow-chart shows the process the participants went through:

Onboarding: Short meet and greet and COVID-safe protocols 10mins

- interview 15 min

Instruction guide to technology functionality and introduction to what to expect of immersive experience 10 mins

- EmbodiMap VR session 15mins

Offboarding individual debrief 10 mins

- Group debrief 15 mins

After the onboarding experience, participants were invited to engage in a fifteen-minute semi-structured interview exploring their prior experience of VR; how they felt about engaging in the EmbodiMap VR experience; any prior experience of exploring emotions and bodily responses; whether they were aware of experiencing emotions, how they would label those emotions, and whether they found it easy to express their feelings and emotions, and what they expected to feel on that day. The emphasis on the participants’ particular experiences was important since as noted above, our experiences, perceptions and expressions are mediated by our culture and life circumstances (Bracken, 2003; Berry, 1997; Edkins, 2003). At all times participants were invited to expand on their answers and to comment in whatever way they wanted.

After this first interview, each participant was fitted with the VR headset and introduced to the virtual space. A voice-over in the app guided them through the EmbodiMap VR experience. At the end of the session researchers assisted with the removal of the headset. Participants were invited to provide feedback. They were asked to describe how the experience was, what they felt, and whether they were able to draw or represent their feelings and emotions on the avatar. As in the first interview, participants were invited to expand on their answers and comment on anything they wanted.

Finally, participants were invited to engage in a group debriefing session with the other participants and researchers to discuss their experiences. They were given opportunity to comment on any aspect of their experience and what it meant for them. They were also invited to share their thoughts on how the experience would be received within the South Sudanese community they were part of.

**Results**

**Status in the community.** The participants were all part of the South Sudanese community in Western Sydney and were familiar with each other. All participants had travelled together to the venue and appeared as a cohesive group. It was also evident that there was a hierarchy in the group, as they introduced themselves and mentioned their position with respect to the leader of their community. The hierarchy was further noticeable in dealings with each other and with the researchers facilitating the experience. The group were invited to introduce themselves to researchers and researchers were invited to reciprocate. The participants reiterated their status in their community, and it seemed apparent from the outset that they had agreed to engage in the research because they wanted to know how it might support their community (as opposed to how they might benefit personally). Jacob said:

...that's why when Marial [the leader of the community] said we come we said let's do it, it might create awareness in the community.

When it came to time to leave, all participants left together and explained that they were all going to comfort a family in their community who had lost their 18-year-old son to suicide.

**Choosing the feeling.** Participants seemed to find their feelings and emotions rather inaccessible and not readily identifiable in the English language. One of the participants, Ebro, reported this struggle to identify emotions saying:

… it’s that choosing that feeling, what feeling we are talking about, that was a little bit hard for me to determine what it is…

This effort to identify emotions was further revealed by Jacob as relating to the stigma surrounding issues pertaining to mental health in the South Sudanese community when he said:
… but majority of my community we don’t understand what stress and emotions is. Say you are stressed and emotional, they will define that are you “crazy” … yeah. We don’t understand that stress is natural as a community.

Deng appeared to experience a resistance to engaging with the EmbodiMap tool in the first instance, especially as the meditative voice entreated him to slow down and focus on how he was feeling. Alier wanted to know whether we were proposing a new way of experiencing emotion, and Mabior wanted to know what emotion we ‘were trying to evoke’ with the instructions given to draw his emotions on the avatar. Was there a specific emotion we were looking for, and was he ‘failing’ in not identifying it?

**Following instructions.** All the participants seemed very careful to follow instructions and get ‘things right’. They all appeared to have taken preparations for our meeting, coming into the room very well-dressed, looking official, they were polite and careful to follow protocol. They looked keen to ‘do’ all the requested tasks as instructed, not wanting to make any mistakes. In their interaction, it appeared evident that they were being very careful to defer to the leader of the group.

The idea of following instructions seemed to persist in the participants comments: Alier, answering a question about how he felt when he was drawing, representing his feelings on the avatar, said:

> … I was just aah actually answering the questions as they came [from the voice over guided meditation]… I just answer them… yeah, yeah. Just answering… do like that… do like that [making drawing movements to demonstrate] so I just describe myself the way I was asked

Ebro, answering a question about whether he made the leap to transfer his sensations on to the avatar, said:

> Yes… based on the instructions (pause) … I don’t know, I, I’m following the instructions, I hope you make sense of this… but I don’t know what is happening…

In answer to the same question, Gatkuoth reported:

> Yeah, like when they [The guided meditation voice] asked me like ah where does your feelings, where’s your feeling very strong, then I tried to draw it, but then again it’s like I didn’t draw it properly… [laughter from the group].

There seemed to be a sense of apprehension and hesitancy to what the exercise involved, as revealed by the repetitions of ‘I was just … answering the questions… Just answering… just describe myself’, as though saying he was not giving much thought to what was happening. Similarly, Ebro’s repetition of ‘I don’t know… what is happening’ gave the connotation of ‘just’ going along with what was asked.

**Moments of discovery.** Despite the struggle in accessing and identifying emotions at the start, participants expressed a sense of discovery on going through the EmbodiMap experience. Jacob, describing the immersive experience afterwards remarked:

> Wah! Fascinating! [with laughter]… Yeah. More about your feelings, and emotions, and how you react to them... and if you have stress, or emotion, how does it affect you and where?… And if you move your hand a little bit high, it will change the ... the emotions will change or shift... but you still have that feeling…

It appeared that Jacob had now grasped how EmbodiMap worked and could use it to explore his emotions.

In answer to a question about whether he changed colours he was using to drawing during the experience, Jacob reported another discovery:

> Yes! (looking at his fingers) was it orange, or pink colour... and then it got down to a little bit darker... when you become more emotional which I think it's when it gets darker...

When you go to the level of emotions, that’s exactly how you do it, it’s like your image in front of you, saying this is how you look when you are emotional or stressed… When it comes to emotions or stress issues, you can start, you can come you know like that, and then when you start you don’t know, and then after that you are like you are stressed now so what do you do, you are emotional, … and that is what represents your feelings, discussed like lightly, you go down to dark, and you see you need to do something.

The discovery that this was possible further illuminated the fact that the community could benefit, and this could indeed be a tool to help members express their emotions and create awareness, as Jacob further remarked:

> So, this is not hard, given that I don’t have much experience, but … would help a little bit in the community to express emotions… We need to create that awareness, so people can know this is what’s happening, and this is how you should react to it.

**Representation – another chance.** There initially seemed to be a distancing of feelings and self, a reluctance to identify felt emotions as one’s own. Here the participant used the word ‘you’ when referring to his own experiences. For example, Jacob, describing the EmbodiMap experience, says:

> … More about your feelings, and emotions, and how you react to them... and if you have stress, or emotion, how does it affect you and where? … if you are not happy, you feel like… you’re your heartbeat can even go up if you are feeling emotional or stress or that sort of thing.

However, it was noticeable that at a point in the experience, the participants began to identify with the avatar, and to
consider it as a representation of self. For instance, Gatkuoth, asked what he thought of the experience, immediately replied:

Pretty much comfortable, to be honest, I saw myself differently. The only thing I could really notice, if the avatar was in my chain [referring to a gold chain he wore around his neck], that’s me, that’s me, that would be me

On being further questioned about how he identified with the avatar, Gatkuoth replied enthusiastically,

I feel eehm, yes it was me, yeah. Yeah, very excited I got excited.

The excitement of identifying with the avatar as ‘self’ seemed affirming. Much of Gatkuoth’s experience had been in thinking about what happens next and questions about what control and agency he had. This concern was potentially al-

For Ebro, the moment of recognition was when a ‘ping’ sound occurred during the meditation, and he felt he could identify with the avatar. For Alier, it was the height of the avatar - Alier expressed surprise at noticing that his height corresponded with the avatar’s height. For both, this moment marked the symbolic shift from the avatar being ‘other’ to the avatar being ‘me.’ Self and object merge to become one, or at least self becomes the object of the avatar and thus one where subjective feelings can be represented.

The issue of representation was particularly important to the participants, and they expressed appreciation at having a second figure to draw into, seeing this as a chance to undo what they had done and try and represent their emotions or feelings ‘more accurately’ according to them. This was for example expressed by Gatkuoth when he remarked:

How can I really, really get this.. can it be perfected?… Yeah, I was just in that space, but then again I was just so curious… to make it better. ‘cause in my real world I’ll be like na, this is not right..and then make sure.. I’ll say I went wrong here…’cause once you’ve decided what to do, I decided I then perfect it, making it better.

The researchers did not require the participants to represent their emotions in any particular way, but some participants seemed to feel they needed to ‘perfect’ their representation.

Both Jacob and Ebro also expressed appreciation of having a second figure to draw onto to represent their emotions better.

**Place and safety.** Participants expressed the importance of feeling safe in the space, be it virtual or real. This was apparent right from the outset in their coming together as a group, sitting together, everyone concurring with what each person said as was evident in the overlapping voices and agreement during the debriefing session. At the end of the session, they all left together, and explained that they had to go and comfort a family who had lost their 18-years-old son to suicide.

The importance of safety was additionally communicated by Gatkuoth as he described his experience in the virtual space:

… I was just concentrating exactly on my feelings and what this environment is, what am I seeing here? Is there any, is there going to be change? What will be next?… what the environment is going to be like really… is there anything that’s going to be very surprising in this space? See I’m not very familiar where I am so, so I’m not really aware of this, I’m just going there, but in in this space, is it, is there any surprise here… am I going to fall (hesitating) what is it going to be?

It was important to Gatkuoth that he was not alone, as he reflected:

…before I was like ok, I couldn’t see anyone. I could see I’m in the room, but I’m not seeing anyone, actually… But when I took that all in, I started seeing these guys are here (laughs)[in the physical space] I’m alright. It’s alright

On entering the virtual space Gatkuoth began to focus on what was going to happen, seemingly expecting the space to change. As he spent more time in the virtual space he began to look around and explore it. He then focused on the lack of a door in the virtual room. He wanted to know, ‘How do I get out of here?’ He wondered whether he was alone and how risky the place was, and felt safe when he was reassured that others were in the same physical space as him. Deng also expressed sensing danger in the virtual space when he first got there, and said:

It helps someone to like wonder and think. Yeah, wonder and think a lot of things, you know, like is it dangerous to go up that mountain there? Ok. What is down there and, uh, you know, where, where the sky meets the ocean?

**Curiosity - what next?** As the participants came to the end of the exercise, they expressed curiosity, wondering what would come next. After Gatkuoth went through a process of acclimatising to the virtual space, he then asked ‘What will be next. what is going to happen?’ There was apparent discomfort with passivity, and Deng encapsulated this feeling when he said about the EmbodiMap experiece:

Yeah, yeah. It’s too slow. Because of the things you are dealing with and big things… It’s like, there is a resistance. I don’t have time to calm down like that. It’s too slow…

Deng said, referring to his initial resistance and eventual reaction:
… when I was starting it, my head was resisting. Yeah. But then when I start to calm down, my heart was feeling something about how uh and imagining things … so I feel good. I wanted, I wanted to be there longer wanting to explore some other things.

**Discussion and Considerations for Further Engagement**

The participants engaged with the EmbodiMap experience while not sure what they would get from it, but keen to explore. It was clear that how this would support their community was front-of-mind throughout. We identified six key aspects of their engagement all of which are to be explored further in the next engagement with this group and in planning for work with their community.

**Collective Style of Engagement**

The focus on community rather than individual wellness is essential for further engagement. Individual experiences seem to take on a secondary place in deference to what the whole community is experiencing and what their needs are. As noted above, these men were not a representative sample of the community, but they tended to act as gatekeepers, looking out to see that what did get into the community was of benefit to them. This community outlook aligns with what researchers in the refugee and mental health field have found: the importance of community-based or community-engaged initiatives that seek to address mental health (Fozdar, 2009; Sullivan et al., 2020). In a study specifically examining the impact of acculturation stress among South Sudanese refugees in Australia, Milner and Khawaja (2010, p. 22) found that the social support received from extended family and other social groupings within the Sudanese community is a significant determinant of mental health functioning.

**Culturally Embedded Emotions**

Our experiences and perceptions as human beings are mediated by our culture and life circumstances, and consequently, the understanding, experiencing and expression of emotions can be said to be culture-specific (Bracken, 2003; Berry, 1997; Edkins, 2003). In the Dinka language spoken by the South Sudanese men interviewed for instance, there is no word that directly translates to ‘trauma’, neither are there words that clearly differentiate among ‘stress’, ‘emotion’ and ‘feeling’. The issue of language is particularly worthy of note, and here, we need to pay attention to the hegemonic way the English language can tend to override other languages in describing emotional and mental states. Wierzbicka (1986, p. 584) puts this plainly when she says:

> English terms of emotion constitute a folk taxonomy, not an objective, culture-free analytical framework, so obviously we cannot assume that English words such as disgust, fear, or shame are clues to universal human concepts, or to basic psychological realities.

However, as Wierzbicka (1986, 1999) further argues, the fact that a particular language may not have a word for a particular emotion does not mean that people speaking that language do not perceive that emotion as a distinct feeling or that they cannot express it. Hence, ‘… we should carefully listen to how people in different cultures talk about what they see and how they feel… and avoid analytical categories based on culture specific aspects of our own languages’ (Wierzbicka, 1999, p. 275).

Thus, when Ebro seeks to put a finger on ‘what feeling’ we are talking about, when Alier wonders whether we are proposing a new way of experiencing emotion, and when Mabior asks what emotion we are ‘trying to evoke’, they underline the fact that they could be perceiving the experience differently and are seeking to make their language congruent to ours. The question for us as researchers is, how willing and ready are we to disrupt our understanding of how emotions are experienced, expand our vocabulary, and receive and uphold what the participants bring?

**The Refugee Voice**

Is the refugee participant’s ‘voice’ heard through the drawings, or did they just give us what they thought we wanted? This gives us opportunity to reflect on the extent to which we might limit the participants’ voice (curtail their imagination and creativity) when we ask them to follow the instructions of the guided meditation experience in this version of EmbodiMap as they draw, and when we use specific language for these representations, thus posing as ‘experts’ of their experience (Sigona, 2014, p. 4). We need to maintain the tricky balance of easing the sense of overwhelm the participants may feel, while at the same time allowing them space to express themselves as they will.

The potential impact of the EmbodiMap tool for:

(a) Representations of feelings, sensations and emotions: As participants virtually reach into their bodies, they may begin to express experiences which they do not have language for, rendering a deeper articulation of their realities, as Jones (2018) argues in her discussion of how creativity and the expressive arts transform individual trauma:

> Art becomes the transition site between the “felt” and the “told”, the body and the world, where the subconscious becomes conscious, and the subjective becomes objective – both visible and audible. Art becomes the culturally mediated “voice” of change, both literally and figuratively (Jones, 2018, p. 46).
(b) Opportunity to process and change emotion: The second figure/avatar that appears may give participants a chance to change their emotion. The participant can take charge of the emotion as a result. This happens as the movement from one figure to another offers space for exposing the undesirable mapping or drawings, and replacing them with the desired ones, in the same way that theatre for instance serves to expose ‘the offending scripts’ and allow for the rewriting of desired scripts (Amollo, 2008, p. 11). The revision and reconstruction of these mappings allow for the possibility of transformation, for instance from a debilitating state to one in which one has more control and agency. This revision and reconstruction, however, needs to be totally owned and carried out by the participants as they see best, as we see in the case of Gatkuoth, who wanted to ‘correct’ the representation he had made on the avatar.

Safety

Safety is important to this group of refugee participants, because of their lived experience of displacement and living with uncertainty. Further engagement thus should be cognisant of the need for the participants to feel safe, both in the real and virtual space. For those displaced from their country of origin, the feeling of being lost is real in varying degrees, even as they try to settle in a new country where they have been given refuge. We say in varying degrees, because as argued earlier, refugees do not all necessarily experience trauma as a result of going through traumatic events, and individuals and groups may experience the impact of these events in differentiated ways (Fozdar, 2009).

Curiosity

A sense of openness and expectation of what we may encounter in the engagement is crucial to the process. This calls for a shift towards what Savic et al. (2016, p. 81) refer to as ‘a critically informed cultural approach to healing’. It involves acknowledging and setting aside our biases and assumptions and being ready to receive, accept and if need be, negotiate the discoveries we make.

Conclusion

This paper has discussed a pre-engagement method introducing EmbodiMap to a small group of South Sudanese refugees in Sydney with a view to extend the experience further to the broader community. The EmbodiMap tool and experience is a creative approach that potentially offers a transformative experience as participants virtually reach into their bodies and draw or register their immediate or persisting feelings, sensations and emotions. The potential of the tool is being explored to augment other methods that support the mental and emotional wellbeing of people from refugee backgrounds. As an arts-based approach, EmbodiMap provides an innovative alternative to approaches that rely heavily on words, thus helping amplify the participants’ self-expression. This is crucial because oft-times the refugees’ voices are either silenced, constricted, questioned or destroyed altogether through their experiences of war, displacement and resettlement.

The paper also considered cultural understandings of mental health, paying attention to differences in the experiencing, perception, understanding and expression of emotions among the South Sudanese and other groups, the delicate issue of the language of emotions, and the need to identify resources that are based on different cultural approaches to mental health.

The pre-engagement method used with the South Sudanese community members paid attention to the complexity of experiences and to what members would like to prioritise in the engagement. The pre-engagement sought to bring together the community’s knowledge and the researchers’ knowledge to create a collaborative project that is specific and appropriate for the community. The pre-engagement revealed scope for further engagement with the broader community, while adapting to the needs and issues identified. For this community, the development and application of EmbodiMap is likely to be more effective, as it emerged, if these issues are taken into consideration in the adaptation: importance of community and collective engagement, the notion of the cultural embeddedness of trauma, the significance of listening to and appreciating the refugee voice, the importance of safety, and maintaining a critically reflective and culturally responsive attitude through the process. Importantly, the data collected is not only the interviews and the VR experience, but also the entire context of engaging with the community.

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1. All participants’ names have been changed to pseudonyms.

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