

Original Research

“I feel happy when I surf because it takes stress from my mind”: An Initial Exploration of Program Theory within Waves for Change Surf Therapy in Post-Conflict Liberia

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ABSTRACT

Surf therapy is a novel form of sport for development (SFD) intervention being utilized to support well-being within post-conflict settings. There is currently little research exploring surf therapy program theory in SFD contexts. Theoretical exploration is important for optimization, monitoring, and further expansion of service delivery. This research utilized pragmatic qualitative methods to explore participant-perceived impacts and outcomes within the Waves for Change (W4C) surf therapy intervention, as implemented in Harper, Liberia, that aims to support youth well-being. Twenty-three past W4C participants (17 males and 6 females, mean age = 15.8 years, SD = 3.6 years, range 11-25 years) took part in semistructured interviews about their experiences of surf therapy. Data were analyzed through constant comparative analysis. Six impacts and outcomes were identified within three intervention domains: Social, Skills Curriculum/Bananas Culture, and Surfing. The findings highlight sport as an adaptable vehicle for improving well-being and skills within successful intervention delivery while providing a foundation for further in-depth exploration of program theory. Furthermore, the findings provide empirical evidence on how to optimize and proliferate surf therapy within other post-conflict settings. The findings also provide transferable conclusions for the improvement of SFD more generally.

INTRODUCTION

The direct and indirect consequences of armed conflict such as civil war have been linked to higher mental disorder prevalence among conflict-exposed youth (Attanayake et al., 2009). These mental challenges are intergenerational by nature, leading to long-term negative mental health propagated within family dynamics (Betancourt et al., 2015). Between 1989 and 2004, the West African country of Liberia experienced devastating civil war defined by widespread human rights abuses and collapsing infrastructure. The country continues to experience a range of post-conflict challenges and human rights abuse such as gender-based violence, ritualistic killing, economic inequality, and civil unrest (United Nations, 2016). Negative mental health and poor well-being is prevalent in children (under the age of 14) and youth (15-24) in Liberia within the context of complete collapse of protective communal, family, and social structures (Borba et al., 2016). To start addressing these challenges, priority areas for at-risk Liberian youth have been identified including counselling, skills training, community reintegration, and recreation (Levey et al., 2013). Aligned with these priority areas is the Waves for Change (W4C) surf therapy intervention. W4C aims to combine surfing, mentoring, and social support to improve the well-being of at-risk youth in Liberia.

The W4C intervention in Liberia is an example of sport for development (SFD) within a post-conflict setting. SFD is an

ever-increasing paradigm defined as “the intentional use of sport, physical activity and play to attain specific development objectives” (Sport for Development and Peace International Working Group, 2009, p.305). There remains a global paucity of rigorous evidence demonstrating the effectiveness of SFD (Langer, 2015; Whitley, Massey, Camiré, Blom, et al., 2019; Whitley, Massey, Camiré, Boutet, et al., 2019) though promising results can be seen within organizational evaluations, annual reports, and nonpeer reviewed grey material within the sector. This paucity of research is also reflected within SFD interventions targeting mental health outcomes among youth in post-conflict situations (Hamilton et al., 2016). While a recent study in Liberia demonstrated how a targeted and carefully designed SFD intervention can achieve developmental goals with marginalized youth (Blom et al., 2020), this study was limited by a lack of control group within the study design.

Within the SFD paradigm, action sports have been highlighted as having significant potential for impact (Thorpe, 2014) despite only making up 1.9% of SFD organizations (Svensson & Woods, 2017). Action sports are compatible with an “interventionist approach” to SFD and differ from traditional rule-bound competitive sports due to: (a) competitive structure not being a requirement, (b) goals being defined on a personal level, and (c) the use of public or natural spaces instead of defined play areas such as a pitch or court (Thorpe, 2014). Examples of action sports include skateboarding, climbing, mountain biking, and surfing. Despite positive case studies (Thorpe, 2014), evidence for the effectiveness of action sports for development remains limited. The action sport of surfing has provided the vehicle for a range of interventions collectively known as surf therapy. A recent review that explored the strength of evidence for the effectiveness of surf therapy found promising results relating to mental health for children and youth, though there remains a need for further rigorous study (Benninger et al., 2020).

Specific to W4C, this surf therapy intervention has been associated with positive well-being outcomes through regular internal evaluation using validated measurement tools (Waves for Change, 2019). In 2016, a randomized controlled trial (RCT) testing W4C intervention outcomes was carried out in South Africa as part of a master’s project (Snelling, 2016). The RCT found no statistically significant change to well-being or behavioral outcomes within the intervention. Limitations included low statistical power, challenges around intervention fidelity, and consistency of delivery. The study concluded that the W4C surf therapy intervention is highly feasible and warranted further study despite the observed lack of changes to outcomes. A

specific recommendation for further study within W4C was targeted exploration of program theory.

Program theory, or how SFD achieves its outcomes, has been highlighted as a research priority in both W4C and wider SFD literature (Hamilton et al., 2016). Meta-analyses, systematic reviews, and literature reviews have highlighted a range of factors that influence positive youth development through sport, all of which contribute to building an SFD program theory. For example, Holt et al. (2017) identified three key domains to Positive Youth Development (PYD) and SFD program theory: (a) PYD climate, (b) life-skills program focus, and (c) PYD outcomes. The study also distinguished between implicit and explicit processes. Massey and Williams (2020) stressed the importance of a contextually and theoretically targeted approach to SFD. Jones et al. (2017) consolidated similar findings (sporting and nonsporting based contexts, strategic use of targeted nonsport programming) into a systematic logic model to better understand program theory within PYD. Metastudies have also identified common individual mediators within SFD program theory, such as positive and strong adult and peer relationships (Holt et al., 2017). Skill-building activities and activities to support the transfer of skills outside of sport alongside personal/social development, such as improving confidence or self-worth were also highlighted (Holt et al., 2017; Jones et al., 2017). Within research focused on youth who have experienced trauma, theoretical mediators included psychological escape, the embodied nature of sport, and a sense of belonging (Massey & Williams, 2020). Another important consideration for SFD and PYD is the place of life-skill transfer within program theory. There exist multiple models for effective life-skill transfer in sport that discuss theoretical mediators such as the context of interventions, assets such as coaches, and structures around how transfer of skills to wider life occurs (Camiré, 2014; Gould & Carson, 2008; Petitpas et al., 2005; Pierce et al., 2017). Despite these findings, a large proportion of populations reviewed were not based in post-conflict settings and, as such, contextual differences must be considered.

In contrast to the broader SFD field, there has been minimal rigorous exploration of program theory and theoretical mediators within the emerging surf therapy paradigm (Britton et al., 2020; Benninger et al., 2020). To date, only one study has specifically explored program theory with surf therapy for children and youth (Marshall et al., 2019). This study sought to understand program theory through the experiences of children and youth participants in the Wave Project mental health intervention based in the United Kingdom. Marshall et al.’s (2019) work highlighted autonomous progression, mastery, and social connections as

key to youth mental health outcomes. This study also noted the following mediators as integral to intervention success: (a) sport-induced respite, (b) a safe space at the intervention, and (c) positive relationships. These findings mirror wider SFD and PYD literature (Holt et al., 2017; Massey & Williams, 2020). Further exploration of surf therapy program theory should be mindful of these mediators alongside the contextual differences between children and youth in the United Kingdom and those living in post-conflict settings (e.g., participant background, types of trauma, access to mental health services, and societal support).

In sum, there is a need for the development of program theory in both SFD (Hamilton et al., 2016) and surf therapy (Benninger et al., 2020; Britton et al., 2020). This study builds on previous research with an initial exploration of the W4C intervention in Liberia, with a particular focus on participant-perceived impacts and outcomes. A nascent program theory for W4C was presented as part of the RCT (Snelling, 2016), which was informed by research indicating the importance of safe spaces, social support, and mind/body therapy (Benninger & Savahl, 2016; Brendtro et al., 2002; Center on the Developing Child, 2015). However, this program theory must be viewed with caution due to the lack of input from participants. Without a rigorous participant-led exploration of W4C program theory, it is impossible to understand if the theoretical recommendations from previous stakeholder research (Benninger & Savahl, 2016; Rolfe, 2016) have been implemented. Exploration of participant experiences also allows for the development of different or new conceptualizations of W4C program theory. Furthermore, knowledge gaps were compounded by the fact that all research conducted by W4C has been focused on their South Africa programming rather than their site in Liberia. While targeted intervention outcomes may be similar, the two contexts are very different given Liberia's post-conflict setting. This study sought to explore and contribute to key knowledge gaps within the W4C evidence base by developing an initial exploratory program theory based on participant experiences of surf therapy in Liberia.

METHODS

Study Site: Waves for Change Liberia

W4C was founded in 2009 as a small surfing club run for youth in the Masiphumelele Township, Cape Town, South Africa. The founders recognized that surfing was a novel way to engage local children and youth. In an effort to provide more social support, the founders reached out to local social services but found such services were

underresourced. As the organization grew, it teamed up with mental health professionals from the University of Western Cape and University of Cape Town to develop a surf therapy curriculum that combined surfing with evidence-based mind/body therapy. The curriculum refers to evidence-based activities that are then integrated into W4C program theory and delivery. The curriculum was developed through engagement with local children and youth (Benninger & Savahl, 2016) and a review of different therapeutic techniques that had been found to be effective in children and youth. These therapeutic techniques specifically included elements of cognitive behavioral therapy, goal setting and emotional monitoring/regulation (Center on the Developing Child, 2015), and breathing and meditation techniques (Brendtro et al., 2002). [The W4C curriculum overview can be found here.](#) W4C currently works with 1800 children (aged 11-14 years) annually in at-risk communities in South Africa. These children face challenges associated with food insecurity, abuse, exposure to trauma, violence, and living in a turbulent social setting. The intervention is associated with improvements to participants' well-being, self-esteem, and effective use of learned skills in conflict resolution and maintaining a calm attitude (Waves for Change, 2019). The intervention also incorporates a "Surf Club" comprised of previous participants until the age of 17. Active members of this club also have a pathway to become future W4C mentors, offering unique insight to the role as previous participants.

W4C Liberia was piloted in 2016 as the first site in which the W4C curriculum was delivered outside South Africa. The intervention has expanded, reaching up to 150 children and youth (aged 9-20 years) per year in Harper, in southern Liberia. W4C Liberia is one of the only examples of surf therapy being delivered in a post-conflict zone. W4C Liberia has a growing Surf Club and has recently completed a pilot program based in the capital Monrovia. As the Monrovia site was only at initial pilot stage at the time of data collection, this study was exclusively focused on W4C in Harper.

Program Theory

Program theory interprets pathways that explain the theory of change linking intervention inputs to intervention outputs, with pathways comprising theoretical mediators (Bauman et al., 2002). Program theory exists as both a product and process illustrating pathways to impact and is by its very nature interpretive (Vogel, 2012). This study explored participant perceptions of impacts and outcomes of the W4C intervention to produce a linear logic model to visualize an initial program theory (Rogers, 2008). The mapping of these contextually perceived impacts and

outcomes is labelled an “initial program theory” within the definition of program theory as a process (Vogel, 2012). This exploratory step provides the foundation and direction for further study to build a comprehensive program theory. The individual evidence-based activities of the curriculum were treated as inputs in this study with their implementation an investigated activity. Interrogation of these individual items was deemed a secondary priority to exploring wider implementation for the intervention, given their basis in established theory. A logic model visualization allows for easier engagement by researchers and practitioners. The visualization breaks down participant-perceived impacts and outcomes while also demonstrating directionality. Specific training, investigation, and development of these mediators allow for continued investigation and development of program theory, further service optimization, geographic translation, and comparison with relevant frameworks such as the Sport-for-Health model (Schulenkorf & Siefken, 2019).

Ethics

Ethical approval was granted by the Edinburgh Napier School of Applied Sciences Ethics Committee on 25/01/2019 (Reference Code: SAS0052). This process involved in-depth discussion of research protocols with a committee independent of the study and was the most rigorous ethical review process available to the team. W4C staff were involved in this process to best inform ethical practices in line with the local context. All participants and parents of participants were given information about the study through a range of methods to ensure all consent was suitably informed.

Positionality and Reflexivity

The research team included individuals with a variety of prior experiences around surf therapy practice, mental health, clinical psychology, and surf science. The breadth of expertise allowed for honest discussion about prior assumptions and steps to ensure conclusions were truly substantiated within participant data. The lead researcher recognized his cultural outsider status as a white Scottish male within the Liberian context throughout the research process, including at the design phase. This was contrasted to a potential insider status based on extensive engagement with the surf therapy paradigm, including as a practitioner prior to becoming a full-time researcher. There are both strengths and weaknesses to an insider or outsider approach to conducting research (Manohar et al., 2019), but recognition and reflective engagement with outsider status is of paramount importance, especially given inherent and potentially uncomfortable power structures that may exist

(Hill & Dao, 2020). The lead researcher’s prolonged engagement with W4C in Liberia prior to any data collection was based on a recognition of this and aimed to build up trust, familiarity, and open communication both within the intervention and among the local community. This process was centered on sincerity, honesty, and transparency around the research project, its motives, and the lead researcher’s background (Hill & Dao, 2020). It was not an attempt to gain cultural insider status. Reflective practice was utilized throughout the study to highlight awareness of personal preconceptions, acknowledge outsider status, bolster credibility, supplement analysis, and add to the integrity of the research findings (Tracy, 2010). This process also enabled recognition of any potential confirmation bias based on existing SFD and surf therapy literature including prior research and/or experience among the research team. Reflective audio was recorded by the lead researcher on site, and regular discussions within the research team were built into the data collection and analytical process. Communication was not always feasible while in Harper due to technical difficulties, but it was maintained where possible. One output of reflective practice was an extensive use of prompts and repeating statements back to participants to thoroughly understand their experiences of surfing. This ensured data remained focused on participant experiences as opposed to inferences based on established surfing culture or the preconceptions of the research team. This was of special importance given the growth of surfing within Harper since the sport’s introduction in 2017 and the research team’s position as cultural outsiders. The research team also included individuals with a broad range of surfing experience, which supported reflective discussion on potential predispositions. The lead researcher had initially encountered W4C while in South Africa and subsequently collaborated with them in the foundation of the International Surf Therapy Organization (ISTO) in 2017. Another important outcome of communication within the research team was ensuring the lead researcher maintained a role as critical researcher rather than as an advocate for W4C (Sparkes & Smith, 2014).

Procedures

The study was designed in line with “basic qualitative study” (Merriam & Tisdell, 2016) due to the focus on understanding how participants made sense of their experiences at W4C. A purposive sample was utilized to ensure participants had in-depth experience of the W4C intervention. Sufficient variation of age, gender, and location was ensured in the sample to better understand core experiences within the intervention (Patton, 2015). Sampling occurred concurrent with data collection and

analysis. Children and youth who had taken part in W4C surf therapy for a minimum of six months were invited to take part in the study via the distribution of information sheets by W4C surf mentors. Consent forms were distributed to children and youth who expressed interest in participation. Parental consent was mandatory for all participants under the age of 18. Additional steps were taken to ensure participants were partaking voluntarily after some consent forms arrived back with only parent signatures. Participants were recruited from a range of local communities within Harper. Twenty-three participants were interviewed with an average age of 15.8 and an age range of 11-25 with a standard deviation of 3.6. The age range in the sample represents all W4C service users in Liberia. The gender makeup of the sample was representative of intervention participation with 74% male participants and 26% female participants. Given this gender breakdown, the research team was alert to potentially divergent experiences within data reported by female participants.

Twenty-three semistructured interviews were conducted during February 2019, with a mean interview time of 21 minutes (range 17-36 minutes). Younger participants typically had shorter interviews, which poses challenges, but it was deemed important to represent a full range of participant experiences. Interviews were conducted at locations and times that minimized disruption for participants. Locations consisted of private areas at the beach and a local health compound when the beach was judged too busy. Peer support, provided by W4C surf mentors, occurred in 70% of interviews. While W4C mentors' presence could have impacted interview content, it was considered an important step for participants under 18 to ensure access to appropriate, contextual, and trusted safeguarding support and to avoid researchers being alone with vulnerable child participants. Peer support was optional for participants over the age of 18, but all preferred to be interviewed individually. When present, the W4C mentors also helped with language challenges. While English is the first language in Liberia, the local dialect at times necessitated translator support. Before interviews, the lead researcher briefed W4C mentors involved on simple steps to minimize any feelings of coercion. This included how to deliver nonleading questions should translation be required and ensuring participants knew that everything shared was anonymous. W4C mentors agreed to confidentiality of all interview contents unless it impacted participant safety.

Interview procedures consisted of a brief introduction to ensure all participants understood the process: (a) that they were taking part voluntarily, (b) everything said would be treated confidentially unless it could impact participant

safety, (c) all data included in write-up would be anonymous, and (d) they could stop or pause the interview at any time. It was also highlighted that there were no right or wrong answers. At the start and at the end of interviews, participants were given the chance to ask any questions about the process.

Interview Guide

The interview guide (see below) was developed to ensure thorough exploration of participant experiences through open-ended questions with a particular focus on theoretical mediators of surf therapy (Caddick, Phoenix et al., 2015; Caddick, Smith et al., 2015; Marshall, et al., 2020; Marshall et al., 2019). Probes, prompts or "exploration" (Seidman, 2013) were used to further interrogate experiences and encourage resonance and depth for subsequent analysis. This process also ensured participant meaning was clearly understood given local dialect and slang. After piloting the interview guide, two questions caused confusion and so were removed from later interviews. The first question omitted was too conceptual and the self-descriptions it generated were very literal. The second question omitted used a colloquial expression ("day-to-day") that did not retain its meaning in the local dialect. In line with the pragmatic and explorative approach of the study, new questions were added as initial analysis occurred to further explore participant perceptions and specific elements of the intervention. The interview guide is as follows (questions that were removed are struck through, while questions that were added during the study are in italics):

- Can you tell me about your time with W4C?
- Can you talk me through how you got involved with W4C?
- When you look to back your first-time surfing, are there any events that stand out in your mind?
- Can you tell me how you felt when you caught your first wave?
- Can you tell me how you feel at the beach and in the water?
- Can you tell me what it was like meeting with new people at the beach?
- Can you tell me about the atmosphere at the beach?
- *Can you tell me about [insert item from W4C Curriculum]?*

- *Can you tell me about bananas' culture?*
- ~~How would you describe yourself as a person at the beach?~~
- ~~How, if at all, has surfing impacted on your day to day life?~~
- Can you tell me what surfing now means to you?
- Can you tell me about working alongside the W4C surf mentors?
- Can you describe to me what you thought about surfing before you started? (Follow up: How, if at all have these changed?)
- Is there anything else you think I should know to understand the W4C?
- Is there anything you would like to ask me in relation to anything we have discussed?
- *Can you tell me what you would tell your friends about W4C if they did not know about it?*
- *Can you tell me what it means for you to be a surfer?*

Analysis

The lead researcher transcribed key segments with filler left on the audio in a process that was repeated throughout data collection and concurrent analysis. Analysis was conducted in an iterative, emergent, and nonlinear manner with constant comparison between participant data (Charmaz, 2014). Three stages of coding were utilized (initial, intermediate, and advanced) concurrently with data collection. The different stages of coding allowed for in-depth exploration and comparison of perceived intervention processes, which in turn highlighted individual impacts and outcomes. The third stage of analysis identified the storyline of participant experiences in order to map an initial W4C program theory and understand directionality between impacts and outcomes. Audio recordings were used as an alternative to memo writing throughout to support analysis. The lead researcher managed the study design process, collected data, and conducted analysis with support at all stages from the other members of the research team.

Methodological Rigor

To enhance the rigor of data collection, several strategies

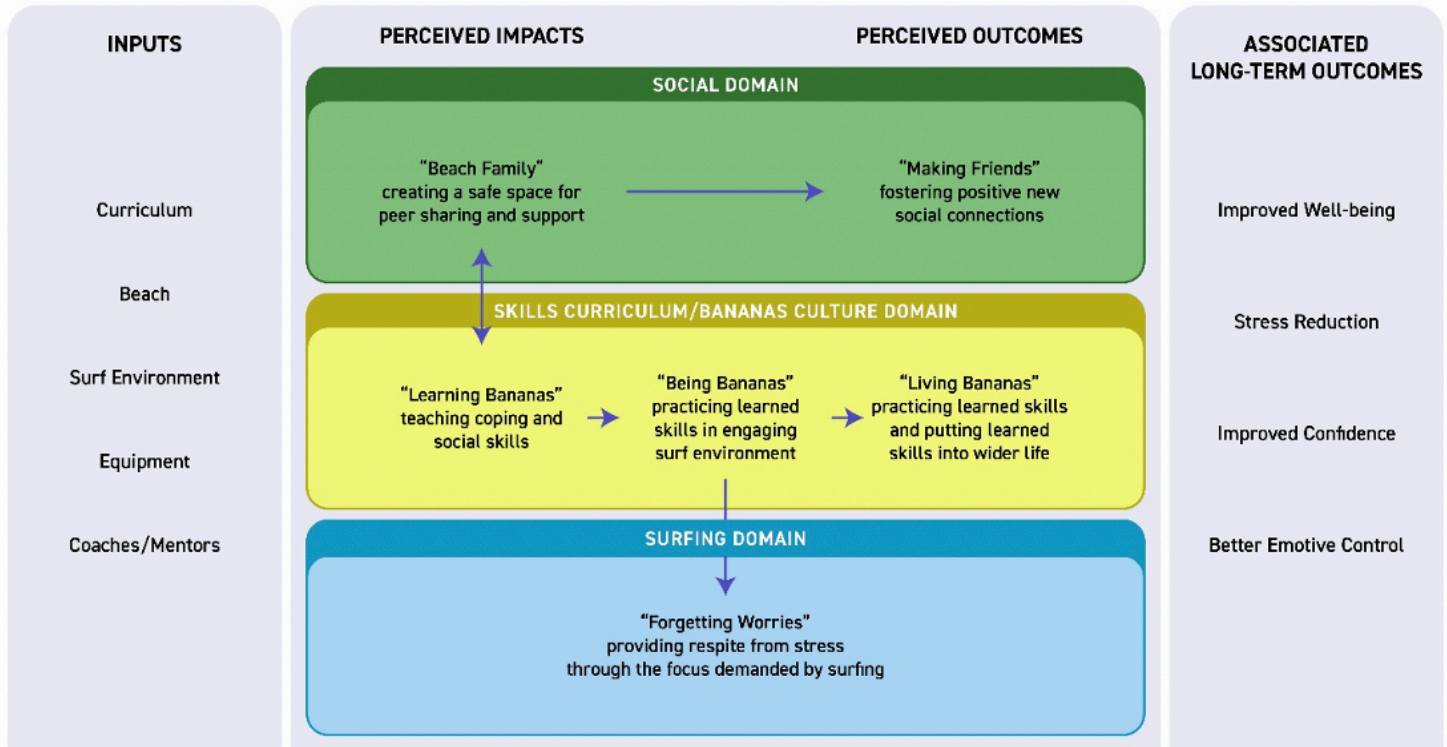
were employed, including prolonged participatory engagement with the intervention, triangulation, and member checking (Korstjens & Moser, 2018; Tracy, 2010). These strategies were identified as best suited to pragmatically promote rigor while avoiding a simplistic criteriological approach (Barbour, 2001; Smith & McGannon, 2018). For the month prior to and during data collection, the lead researcher established a role of observer-participant within W4C surf therapy. This involved taking part in surf therapy alongside a different cohort to participants involved in the study, joining W4C staff in preparation and debriefs from sessions, and joining weekly W4C team meetings. The lead researcher also held frequent informal discussions with W4C practitioners and local stakeholders, which built relationships within and around the intervention. This collaboration did not generate data in an ethnographic sense but supported multivocality and the interpretation of participants' experiences, especially with regards to the cultural differences between participants and the research team (Tracy, 2010). Member checking is a term that has been utilized with a variety of meanings within qualitative research (Sparkes & Smith, 2014) and has been criticized especially when utilized as a technical exercise (Smith & McGannon, 2018). In this study, member checking involved sharing interpretations with participants at initial analytical stages to enhance understanding and potentially generate new data. This method was especially important given cultural and linguistic differences between participants and researchers. The aim of this process was to enhance interpretation, rather than as a technical verification exercise and may be better described as "member reflection" (Tracy, 2010). These additional steps supported a rigorous, contextualized, and in-depth interpretation of participant experiences of the intervention.

RESULTS

An Initial Program Theory

A logic model visualizing perceived impacts and outcomes identified within W4C participant experiences in Liberia is shown in Figure 1. These impacts and outcomes have been labeled an initial program theory within the definition of program theory as a process (Vogel, 2012). It must be noted that this study was not designed to test long-term outcomes within the W4C intervention, and the four long-term outcomes listed are based on prior W4C evaluation conducted both in Liberia and South Africa. Six perceived impacts and outcomes were identified as integral to the W4C intervention and were grouped within three domains: Social, Skills Curriculum/Bananas Culture, and Surfing.

Figure 1. A logic model of initial program theory within Waves for Change in Liberia



Social Domain

"Beach Family": Creating a safe space for peer sharing and support

One of the key elements of the intervention identified by participants was the safe space that the coaches created and encouraged participants to support. This space was often likened to a family, with elements of both physical and emotional safety. Examples of participants speaking highly of their relationships with their coaches include:

"I feel good because my coaches can be around me, my surfing family make me feel good." (Participant 1)

"They (the coaches) are taking care of us like their own children, they never beat on us and they speak to us like sister and brother." (Participant 2)

The safe space is attributed to caring coaches who manage the "family" dynamic within the group. It is interesting to note that participants saw coaches as brothers and sisters as opposed to parental figures. This demonstrates the participatory style of teaching utilized to promote equity within the group and further reinforce the safe space.

Coaches also encouraged and continually reinforced a nonjudgmental attitude in the group that facilitated honesty

and openness among participants. This lack of judgment further reinforced the safe space while challenging local stigma around the discussion of feelings and negative mental health. For example, Participant 3 noted, "If you want to ask for help you must not be ashamed, because when somebody is in trouble, they may be ashamed to ask for help." The ability to share openly also led to a communal approach to solving personal problems through coach and peer support. Participant 4 noted,

The easy way of me being able to share my feelings at Waves for Change, I see that Waves for Change is almost, I would like to say a family. We are a group of people and then Waves for Change is all about caring for people and to not see people go on the wrong side. I feel happy when I get a problem and am able to share it with them and together find a solution.

This safe space within the intervention is fundamental to the service delivery and associated outcomes while also supporting an effective learning environment for curriculum items.

"Making friends": Fostering new positive social connections

New positive social connections were frequently referenced within the W4C intervention. Many participants reported

their struggles to make such connections prior to taking part in the surf therapy intervention due to a reported lack of interaction among different communities and backgrounds within Harper. Participant 5 commented,

Waves for Change is an organization that brings many people together such as you see people coming together from different communities, that you don't know their background you just see them coming in. When you are here at Waves for Change you are able to organize new friends, to make new friends who are able to help you tomorrow.

These new relationships were developed through learned social skills contingent on the safe space, openness, and nonjudgmental attitude modeled within the intervention. These social skills were further reinforced within curriculum activities. Participant 6 shared,

The reason why Waves for Change make me feel fine is because I was not having friends and I not know how to find friends, but Waves for Change taught me how to find friends, how to talk to other people and how to respect people.

Another element that seems to have facilitated new relationships was being able to share in the fun activity of surfing:

Sharing fun in the water, while surfing I made new friends. (W4C Participant 1)

Surfing means sharing fun. (Participant 7)

Social skills learned within the intervention and the shared fun of surfing seem to have facilitated new and positive relationships. This differed from the negative social connections that participants reported prior to the intervention. Such negative relationships led to antisocial behaviors, crime, and violence in contrast to the positive relationships described within W4C. Participant 5 shared,

Whenever I go out with my friends [since W4C] and we are interacting on anything, like discussing our school matters, when we communicate, I listen and when communicating, we respect each other's views.

New social connections were important for participants due to (a) their positive nature, (b) their basis in shared learning and surfing experience, and (c) their disregard for differences in community or background. These positive social connections, enabled by the effective safe space within the intervention, offer a clear pathway to associated

intervention outcomes.

Skills Curriculum/Bananas Culture Domain

“Learning Bananas”: Teaching coping and social skills

[The W4C curriculum](#), as discussed previously, is centered on evidence-based exercises designed to build skills that support and maintain positive well-being. Each curriculum item was not individually interrogated given their evidence-based development but looked at as a whole with respect to participant perceptions of impacts and outcomes. Young participants highlighted how skills within the curriculum are the priority for the intervention, over and above the sporting element:

The main thing (you learn) is how to manage your anger, because whenever somebody trigger you and you want to take action. If you go to Waves for Change and then you have that trigger, anger, Waves for Change will teach you the techniques to say, to be cool down. It will be better to know how to manage your anger and avoid trouble. (Participant 4)

For the above participant, the most important element of their surf therapy experience was learning to better regulate emotions like anger. The initial teaching of these skills was done through activities that explained and demonstrated skills before giving participants a chance to try. Participant 2 explained,

Immersion is the act of communication. Immersion means when we hold each other and go into the water. As we go into the water, we ask each other about their feelings. If someone is not happy, we all turn around to respect the person's feelings. It is part of the banana culture.

While the immersion activity is focused on introducing participants to a new aquatic environment, the key teaching points are related to respecting each other's feelings and communication. This participant demonstrates their understanding of the teaching points alongside how activities were not framed as curriculum, but as a culture inherent to intervention participation: “Bananas is our culture, it means respect, protect and communicate. It means love and care” (Participant 8).

The culture was identified as the “Bananas Culture” in reference to a popular surfing hand gesture (the shaka), which was deemed to resemble a banana by W4C participants. The definition of curriculum activities as part of an intervention culture seems to have given meaning and value to learned skills over and above benefits participants

may have felt. Participant 7 commented, “If you are stressed or worried in your mind you can easily tell somebody the way you are feeling and it is being bananas to tell somebody.” This participant describes a learned behavior from the curriculum activities as normalized and meaningful because it is part of the Bananas Culture they identify with. This example is of note due to the significant amount of local stigma that existed around being open and honest with feelings and mental health. The social and coping skills within curriculum activities were (a) prioritized over sporting activities; (b) taught in an explanative, demonstrative, and participatory manner; and (c) identified as integral to an intervention culture that resonated with participants.

“Being Bananas”: Practicing learned skills in an engaging surf environment

The teaching of key W4C social and coping skills was combined with their practice and reinforcement within aquatic and surfing activities. As one participant highlighted it was an important combination of learned theory and practice:

You have the theory and the practical, so the theory is protect, respect, and communicate and the practical like immersion (an aquatic activity) is where we demonstrate the theoretical aspect. Like communicating with your friends, you hold their hand in the water to protect them and in the water, you respect their view. (Participant 9)

The combination of learned skills and behaviors with surfing allowed for practice of learned skills within a real-world situation, such as when a participant fell off their board:

There was a time when I was in the waves and a wave break over me and I fell in the water. I take my take five [coping skill] and I get back on the board and release all the stress on my mind. (W4C Participant 6)

The naturally induced emotional and physiological responses experienced when falling under the water offer a real situation in which to practice learned skills with the safety net of coach and peer support. This safety net must be delivered effectively by attentive coaches. The reality of these situations could lead to negative emotions and/or experiences, which in turn could lead to disengagement from the intervention or reduced well-being. No participants reported such a situation, but it was not possible to interview any participants who had disengaged, so it cannot be ruled out. While skills are initially taught in a participatory manner, the natural challenges of the surf

environment in which participants get to practice them further entrenches skillsets.

The use of learned skills within the surf environment is also reinforced through praise from coaches and other participants as part of the Bananas Culture. Again, the positives of defining the curriculum as a culture are highlighted in maintaining the prioritization of coping and social skills within the sporting elements of the intervention. Participants described how their identities as surfers were not defined by their success standing on a surfboard but in how effectively they lived out the core elements of Bananas Culture. Participant 10 commented,

If I am a surfer, I would learn how to shelter each other, I would learn how to communicate with each other and how to protect each other. Once I am on top of the water, I will be able to surf better because everything is fine to me.

The continued prioritization of learned coping and social skills within the sporting elements of W4C further entrenched curriculum learnings. This was achieved through the practice of learned skills to manage real emotional and physiological responses in the surf and further reinforce the Bananas Culture within a fun and engaging sporting context.

“Living Bananas”: Putting learned skills into practice in wider life

The teaching and reinforcement of coping and social skills as part of W4C’s Bananas Culture and surfing activities seem to have led to behavior change that affected participants outside of the intervention, at home and in the community. Participant 8 noted,

When you go home, all the things you learn at Waves for Change you must apply them in the home. When you apply them at home your parents will start praising you saying you are doing good things.

Participants reported effective use of positive behaviors and coping skills within wider life that provide a pathway to associated W4C outcomes (e.g., improved well-being, stress reduction, and better emotive control). Participant 11 stated, “When my friends are fighting, I will show them the bananas sign and they will stop fighting.” The use of the Bananas gesture in a conflict resolution situation further highlights the success of reinforcing skills through a cultural definition. These skills seem to have been entrenched and valued enough that participants also discussed their willingness to share what they learned at the intervention with the wider community:

If you have that culture in you, you not only have it at the beach. But if you go out, if you want to do something bad, you will think about the bananas culture, the bananas rules and it will make you to stop. So, it is not only for the beach but for the home. It is there to educate you and so your neighbors and your household can learn. (Participant 4)

Within this specific example, the participant explains how they have become a conduit of W4C learnings within their family and local community.

Surfing Domain

***“Forgetting Worries”:* Providing respite from stress through the focus demanded by surfing**

One aspect of the W4C intervention that participants consistently highlighted was a sense of respite from stress, negative thoughts, and emotions that surfing and taking part in water activities enabled:

I feel happy when I surf because it takes stress from my mind. (Participant 3)

The surfing is great, the surfing helps to clean down the stress on the mind. (Participant 6)

The fact that participants focused on surfing as a chance to relieve stress highlights the lack of opportunities to experience such respite within a challenging post-conflict environment. Such respite provides a clear pathway to intervention outcomes such as stress reduction and improved well-being. Participants frequently emphasized a potential mechanism for this sense of respite in the form of the complete focus that surfing demands:

My focus is on the wave that I ride. (Participant 10)

Because when I am surfing, I am always focused on the board, I don't think about anything else. That's how I focus, I focus just on the board. Maybe after I am surfing, I have other things in my mind, but while I am surfing, I do not think about anything else just the board. (Participant 12)

The focus demanded by surfing, on what the wave is doing, or controlling the board, seems to have overridden prior negative emotions enabling a sense of respite. Participants reported how there was not space in their thoughts for anything else:

Surfing you are laughing and happy, you are enjoying the wave you gonna be laughing and smiling and it takes stress from your mind. You not be thinking about anything else. (Participant 13)

The focus reported as inherent to surfing provides a theoretical pathway to feelings of respite reported within the intervention and subsequent W4C outcomes such as stress reduction or improved well-being.

DISCUSSION AND IMPLICATIONS

The initial conceptualization of W4C program theory based on participant experiences in Liberia offers insight and implications for the intervention, for surf therapy, and for the wider SFD paradigm. Foundational to this initial W4C program theory was the effective creation of a safe space within the intervention, which aligns with stakeholder consultation conducted at the intervention design stage (Benninger & Savahl, 2016). The importance of safe spaces has been previously highlighted within surf therapy in different contexts (Marshall et al., 2020; Marshall et al., 2019), in wider SFD literature (Spaaij & Schlenker, 2014), and within post-conflict settings (Mahr & Campbell, 2016). The creation of safe spaces has also been emphasized in the development of best practices for a holistic approach to safeguarding children and youth in sport. (Rhind et al., 2017). The focus on a safe space and how it facilitated open sharing and the delivery of coping skills is comparable to other effective contextualized community-based mental health interventions for youth within the LMICs (Barry et al., 2013). Integral to this safe space were coach behaviors that mirror recommendations around the use of caring adults within PYD through sport (Camiré, 2014). While the use of safe spaces and caring adults have been previously identified as a priority for W4C delivery, these findings confirm them as important mediators within initial program theory. These elements are especially important in post-conflict settings where negative well-being has been linked to the collapse of protective communal, family, and societal structures (Borba et al., 2016). The safe space provided by the intervention offers an alternative or supplemental protective societal structure within a context where such structures are severely lacking. A recent review of mental health services in Liberia found only one clinical psychiatrist available to support a population of approximately 4.7 million people (World Health Organization, 2017). While further contributing to the evidence base around the importance of safe spaces within SFD and PYD through sport, this study also highlights key elements that enable safe space provision such as a nonjudgmental focus and equity between participants and coaches. Further exploration of this process

in isolation would be an important element in the development of a comprehensive program theory. The importance of a nonjudgmental and equitable approach to holding a safe space within an intervention is a valuable finding that can inform future intervention design in a contextually sensitive manner (Spaaij & Schulenkorf, 2014).

Alongside the establishment of a safe space, the importance of bolstering social connections, support, and cohesion is well established in PYD (Holt et al., 2017), post-conflict (Bosqui & Marshoud, 2018), and surf therapy (Benninger et al., 2020) paradigms. This study further supports existing evidence around the importance of social elements of intervention design. The study also explores how specific mediators such as safe spaces, taught communication skills and sharing in a fun activity facilitate bolstering of social connections. The establishment of positive relationships married to positive behaviors and values at W4C provides a pathway to longer term social and human capital (Bailey et al., 2013). These relationships may also contribute to protective and positive social support, the breakdown of which has been previously discussed in relation to post-conflict settings (Borba et al., 2016). While this paper is focused on participant perceptions of impacts and outcomes, the links to social capital present a new potential long-term outcome that W4C could explore within its ongoing measurement and evaluation. Furthermore, these steps enabled W4C in Harper to bring participants together from different communities who would not normally socialize together. In depth investigation of this within W4C in South Africa could be a potential research priority given integration of multiple diverse communities and ethnicities at South African intervention sites.

In addition to the discussion of social domains, the current study builds on evidence that the “plus sport” model (Coalter, 2009) provides the most effective framework for SFD intervention design and implementation. The plus sport model highlights the need for sport to be subservient to other processes and outcomes at intervention design. An often-romanticized notion of the power of sport (Coalter, 2013) has led to SFD often being viewed as intrinsically beneficial without any consideration of how sport is structured or delivered. When this view is taken and program theory is not given sufficient consideration, SFD can have negative impacts on the population it is supposed to serve (Richards et al., 2014). In contrast, this study found that W4C utilized the sport of surfing as a vehicle to support nonsporting theoretical mediators in achieving its associated long-term outcomes. Surfing’s suitability as a vehicle for SFD in Harper was highlighted, combining well with social and skill-based domains. Of note was the

intervention’s ability to create and hold a safe space for participants from a range of different communities, ages, and genders within a sporting context. This aligns with wider discussions of the suitability of action sports within SFD and PYD, especially given their less competitive focus on individual improvement and achievement, while allowing participants of different skill levels or capabilities to take part within the same space (Thorpe, 2014). Further research into the theoretical mediators and suitability of action sports as vehicles for SFD and PYD would be beneficial to inform future intervention design and optimization, especially given the dominance of traditional team-based sport within the paradigm (Schulenkorf et al., 2016; Svensson & Woods, 2017). The effective use of surfing as a vehicle for mental health outcomes seems to have avoided negative stigma that was evident locally and is well documented in West Africa (Esan et al., 2014; Gureje, et al., 2005). This evasion of negative stigma highlights another benefit to an effective plus sport approach. The impacts and outcomes explored in this study offers a replicable example of how to effectively deliver plus sport SFD while adding to the discussion around action sports as vehicles for SFD and PYD.

In line with the plus sport model, the W4C skill-based curriculum presented an overt focus on skills that provided pathways through to associated intervention outcomes. The intervention utilized mediators that could be identified from a range of existing life-skill transfer through sport models including the use of caring adults and a safe space (Camiré, 2014; Gould & Carson, 2008; Holt et al., 2017; Petitpas et al., 2005; Pierce et al., 2017). Where the W4C approach aligned with a more specific model is its clear focus on successful transfer of learned skills. The definition of the curriculum as a “culture” aligned with the Model of Sport-Based Life Skills Transfer created by Pierce et al. (2017) that includes elements highlighted in this study such as social support, meaningfulness for participants, and personal reconstruction. The same model highlights the importance of opportunities to use skills and similarity of context for transfer, matching with participant data around using learned skills in the face of real emotional and physiological responses in the surf environment. This approach seems to have led to entrenched transfer of W4C coping and social skills that participants reported using personally and in their community. It must be noted this “culture” approach to transfer may have been facilitated by the lack of extant surf culture in Harper. Attempting the same approach for another sport with an established culture such as soccer could be more challenging. The alignment of initial W4C program theory mediators with specific models and metafindings in life-skill transfer through sport adds credence to the intervention’s claims. The Model of

Sport-Based Life Skills Transfer (Pierce et al., 2017) should be integrated within future W4C training and development. It can also provide a framework for both a more comprehensive W4C program theory and wider future surf therapy intervention development.

In addition to the importance of skill transfer, this study explored how the inherent focus demanded by surfing enabled a sense of respite from negative emotions, feelings, and stress. This focus demanded by surfing has previously been highlighted in other studies with different geographical and cultural contexts (Caddick, Phoenix et al., 2015; Caddick, Smith et al., 2015; Marshall et al., 2019; Marshall et al., 2020). Given the novelty of the sport in Harper, this pathway also seems specifically tied to the action of surfing rather than any cultural associations that may exist due to external factors such as tourism, sports trends, or local sporting role models. A study by Whitley et al. (2018) exploring systems theory for sport-based PYD in traumatized and disadvantaged youth labeled this focus “forced mindfulness,” which correlates with participant experiences in this study. Whitley et al. (2018) also linked this focus to physicality and competition based on the type of sports involved, which contrasts with the individual action sport utilized by W4C. These findings suggest that focus demanded by sport can enable respite or escapism across different modalities of SFD and PYD. This respite or escapism has also been linked with improved mental well-being for individuals who have experienced multiple traumas or adverse conditions (Massey & Williams, 2020), supporting this pathway within an initial W4C program theory. It must be noted that this respite is a short-term relief and exposure stressors will return as children and youth leave the intervention environment, stressors that W4C and other SFD programs may not be able to ameliorate. When discussing focus within surfing, participants also reported key indicators of flow states including complete involvement, temporal distortion, sense of serenity, and a sense of ecstasy (Csikszentmihalyi, 2002) when discussing feelings of respite. Flow theory suggests a mental state involving complete immersion, focus, and intrinsic enjoyment within an activity, colloquially known as being “in the zone.” The possibility of flow states being present within surf therapy interventions has been previously suggested (Marshall et al., 2020) alongside other sport-based therapies (Ley et al., 2017). The presence of flow states offers a novel potential mechanism for, albeit temporary, respite from negative thoughts or emotions and toward improved mental health. Given the prerequisites for flow states are well established, this is a significant finding that can inform appropriate modalities or structures of sport delivery to encourage respite within SFD. This novel pathway should be a future research priority with the

presence of flow states being empirically tested within SFD and surf therapy contexts.

This novel finding around focus and respite also had practical implications for W4C service delivery. Participants reported that, from their own point of view, they did not always get enough time to surf in sessions. While joining W4C surf therapy sessions in Harper, the lead researcher did note that if sessions were shortened or delayed for any reason, the area that would be first cut back was the surfing time. The study findings suggest that the time allocated to surfing both supported curriculum skill transfer and provided opportunities for respite. After discussion of the research findings with practitioners in Liberia, surfing time within the intervention is now better protected to ensure these positive benefits. Highlighting surfing’s use as a vehicle for delivering therapeutic elements rather than as a fun add-on represented a significant change in Liberian practitioners’ approach. Furthermore, following discussion of this finding with W4C management, surfing time has been similarly protected across intervention sites in South Africa given the plausibility of similar theoretical mediators.

The exploratory program theory identified in W4C Liberia has supported expansion of surf therapy to another comparable post-conflict setting. Identified theoretical mediators have been included in training delivered to five youth organizations in Sierra Leone that wished to add surf therapy to their service delivery. The ongoing Wave Alliance initiative (www.waves-for-change.org/the-wave-alliance) utilizes the findings of this study alongside open sourcing of curriculum items and mentoring on elements of intervention delivery such as staff recruitment, evaluation, and fundraising to support other grassroots SFD projects. It is important to note this process is not prescriptive and successful integration of new contextual curriculum items has been observed. The project includes ongoing evaluation contributing to a reflective, critical, and honest theory of change process (Vogel, 2012) alongside continuing investigation into the transferability of surf therapy program theory (Smith, 2018).

Limitations

The lead researcher ensured that prior conceptualizations of mental health did not impact this pragmatic qualitative study. This was addressed by development of a working understanding of local concepts of mental health and personal well-being after arriving in Liberia, drawing on a priori reading and reflective practice. The research team held conversations with health organizations in Harper where possible, but given the dearth of local mental health

service provision these opportunities were limited. Despite these steps, acclimatization took time, as demonstrated by the exclusion of elements of the original interview guide. Mental health and well-being for Liberian youth focused on positive functioning as opposed to in-depth conceptual constructs around feelings matching with findings from comparable contexts (Glozah, 2015). This focus on mental health as it relates to positive functioning, while not a primary finding of this study, could prove a useful consideration for future research carried out within this context.

The presence of W4C mentors in 70% of interviews means data could have been influenced by third parties. Participants may not have wished to report honestly or openly with W4C mentors present due to the potential for repercussions or future exclusion from the surf club. Mentor presence was desirable for safeguarding reasons, and steps were taken to reduce potential coercion as listed above. While the most in-depth interviews were provided by older participants who did not have W4C mentors present, the correlation between findings with and without W4C mentors present suggests coercion mitigation strategies were successful. The in-depth involvement of W4C staff in the study allowed for observation and learning that could benefit future local evaluation.

One unavoidable element of this research was the lead researcher's position as a cultural, ethnic, and linguistic outsider to research participants in Liberia. Research has suggested that this can lead to issues around trust and rapport building with participants (Shariff, 2014). There was also a potential for response bias as participants may have worried about their data having negative consequences for intervention staff or structure. Clear steps were taken to mitigate for these issues, namely prolonged engagement with W4C in Harper and the prioritization of sincerity, honesty, and transparency about the study, its motives, and the lead researcher's background (Hill & Dao, 2020). Despite these steps the potential limitations due to the outsider status of the lead researcher and its potential impact on the study must be recognized.

CONCLUSION

This study was a pragmatic exploration of participant-perceived impacts and outcomes to develop an initial program theory within the W4C surf therapy intervention in a post-conflict setting. Interpreted findings were visualized in a logic model highlighting participant perceptions of psychological and social mediators within the intervention. While the scope of this study did not allow for the development of a comprehensive program theory, program

theory is both a process and a product (Vogel, 2012), and this initial and contextual exploration provides a valuable step in this process. The prioritization of a plus sport (Coalter, 2009) model combined with an effective safe space and supported socialization opportunities highlighted best practice for the wider sport for mental health and development paradigms. W4C participant experiences of life-skill transfer and development of a "culture" to do so aligned with, supported, and provided a worked example of a specific model of skill transfer in sport literature (Pierce, et al., 2017). The study made contributions to discussions around respite or escapism within SFD and PYD especially in the possible identification of flow theory as a novel theoretical mediator. The findings also contributed to service optimization within W4C and have provided an initial and contextual framework to support proliferation of surf therapy services within neighboring Sierra Leone. Finally, the study contributed to greater understanding of the surf therapy paradigm, exploring surf therapy in a post-conflict environment for the first time.

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