

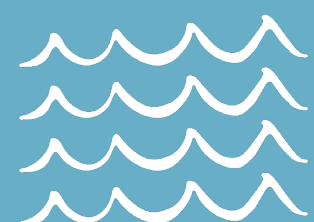
A DROP IN THE OCEAN

A SURF THERAPY
EVALUATION

2023



SPÓRT ÉIREANN
SPORT IRELAND



PROJECT
PARTNERS/FUNDERS

LEAD PARTNER:  **Donegal Sports Partnership**
SPORT IRELAND

DELIVERY PARTNER:  **Liquid Therapy**

PROJECT PARTNERS:

 **SLIGO SPORT & RECREATION PARTNERSHIP**
SPORT IRELAND

 **LEITRIM SPORTS PARTNERSHIP**
SPORT IRELAND

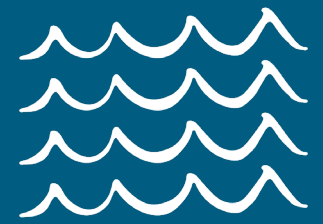
THIS PROJECT WAS FUNDED UNDER THE
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the dormant
accounts fund

 **SPÓRT ÉIREANN**
SPORT IRELAND

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MEET THE AUTHORS

DR. EASKEY BRITTON

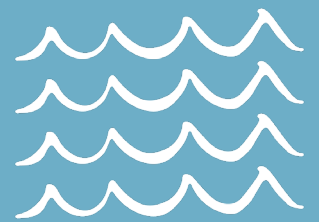


Dr. Easkey Britton is a renowned Irish surfer and marine social scientist with a deep love and passion for the sea. She specialises in ocean and human health and the interdependencies between oceans and humans, contributing her expertise in 'blue health' on national and international research projects, including the Erasmus+ funded INCLUSEA project fostering greater inclusion for people with disabilities in surfing in Europe. Easkey has published numerous peer reviewed journal articles and is the author of several books on our human relationship with the ocean, including 'Saltwater in the Blood' (2021), '50 Things to Do By the Sea' (2021), and 'Ebb and Flow: Connect with the Patterns and Power of Water' (2023). Her combined expertise as both a professional surfing ambassador and researcher extends beyond academia to applied and action research partnerships and co-creative community-led projects including the facilitation of gender-based experiences of blue space in the Middle East and the Seasuit Project, the design of sportswear aimed at creating greater diversity and inclusion for women in watersports.

DR. JAMIE MARSHALL



Dr Jamie Marshall is a research fellow at Edinburgh Napier University who specialises in community based approaches to supporting positive mental health. He started his professional career by founding the Wave Project in Scotland, supporting hundreds of local young people facing mental health challenges through surfing. Building on this 'in the field experience' Jamie undertook the world's first PhD explicitly exploring the mechanisms underlying surf therapy. His post-doctoral roles include as evaluation lead at the Wave Alliance supporting sports based mental health start-ups in the developing world, social impact lead at the upcoming Lost Shore Surf Resort in Scotland, and longstanding board member for the International Surf Therapy Organization. In his spare time Jamie enjoys (unsurprisingly) surfing, freediving/spearfishing, and exploring the coastline of Scottish island home of Barra.



ABOUT
LIQUID
THERAPY

INTRODUCTION

Liquid Therapy is an award winning charity located in Rossnowlagh, Co. Donegal. It offers a supportive environment where young individuals can access the physical and therapeutic benefits of surfing and the ocean through child-centered programmes. The mission of Liquid Therapy is to ensure that the mental health and well-being benefits of the outdoors, particularly the ocean, are accessible to all individuals, irrespective of any existing barriers they may face, such as intellectual, physical, behavioural, or emotional challenges.

The organization provides inclusive and adaptive surf therapy programmes that specifically cater to the needs of young people who struggle to participate in mainstream programmes. These programmes have been developed over a period of 12 years and are evidence-based, addressing barriers to inclusion in both sport and society, while also promoting positive mental health and overall well-being.

The project was delivered in collaboration with Donegal, Sligo and Leitrim Sports Partnership with support from the 'Dormant Accounts Fund'.



INNOVATION FOR SPORTS INCLUSION
FUNDING 2023

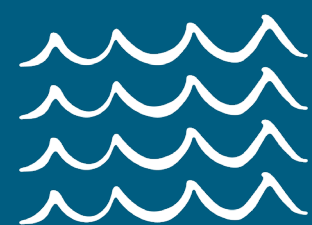


Liquid Therapy was a recipient of Innovation for Sports Inclusion Funding 2023. The vision of the Innovation for Sports Inclusion fund is to solve critical problems and challenges to increase the number of people from economic, social or educational disadvantage, or who have a disability, participating in sport and physical activity in Ireland.

This funding played a crucial role in further developing Liquid Therapy's mental health and wellbeing programme A Drop in the Ocean (ADITO) and implementing innovative methodologies to monitor health outcomes in sports. As part of the project Liquid Therapy worked with 59 young people and developed supporting project materials, training resources and developed a comprehensive evaluation framework for the ADITO programme. Programmes were delivered at the Liquid Therapy Surf Centre in South Donegal and a satellite project at Streedagh Beach in Sligo. A further 8 young people were included from an ADITO programme delivered on Streedagh Beach in Sligo funded by the Irish Youth Foundation and Sligo Sports Partnership.

As part of the wider remit of the project a supporting mobile application was developed. This has the potential for the newly developed evaluation framework to be deployed through the application and more effectively gather data on the impacts and outcomes of the programme using digital technology.





METHODS

The Liquid Therapy evaluation protocol was developed to explore key questions related to the impact associated with their unique intervention. A mixed methods approach was utilised to track changes through validated quantitative measures, but to also offer depth and nuance through a range of qualitative approaches. The quantitative tools utilised were:

The World Health Organization 5 Well-being Index (WHO-5); a 5 item validated scale that explores well-being through positively worded items. The scale has been demonstrated to be robust within a range of contexts and populations. Well-being is a key target of the Liquid Therapy intervention hence the inclusion of this scale.

The Inclusion of Other in Self (IOS): a visual scale developed to explore feelings of closeness between participants and an identified group or concept. In this evaluation closeness to family, friends, the Liquid Therapy Pod (surfing group), and the sea were explored. This item was utilised due to the importance of positive socialisation within the Liquid Therapy model, and to offer an initial exploration of changing relationships with the sea for participants.

A range of qualitative measures were also utilised to offer depth and nuance to participants' experiences of the Liquid Therapy. The qualitative tools utilised were:



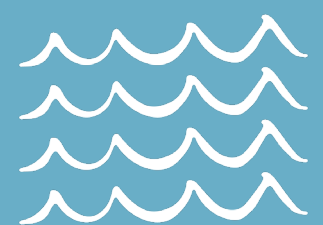
A word association exercise around the participants' experience at Liquid Therapy and spending time in the ocean. The aim of this was to offer insight into what stood out for participants within their experiences.



At the end of the programme, in a feedback form, participants were anonymously asked about anything they felt that changed about how they felt about themselves and their life from their attendance at Liquid Therapy, anything they learnt at Liquid Therapy, anything else they wanted share about their experience or any recommendations for improvement they may have. Participants were given the opportunity to respond through written, drawing, or recorded responses to allow them to express themselves in their preferred manner. These were also sent home with participants to give adequate time to reflect on their experiences. The aim of this was to allow for more in-depth exploration of participant experiences.



Parents and carers were anonymously asked for written feedback on any impact they had witnessed for their children, alongside any suggestions for improving the program. The aim of this was to explore parents' unique perspectives of Liquid Therapy.

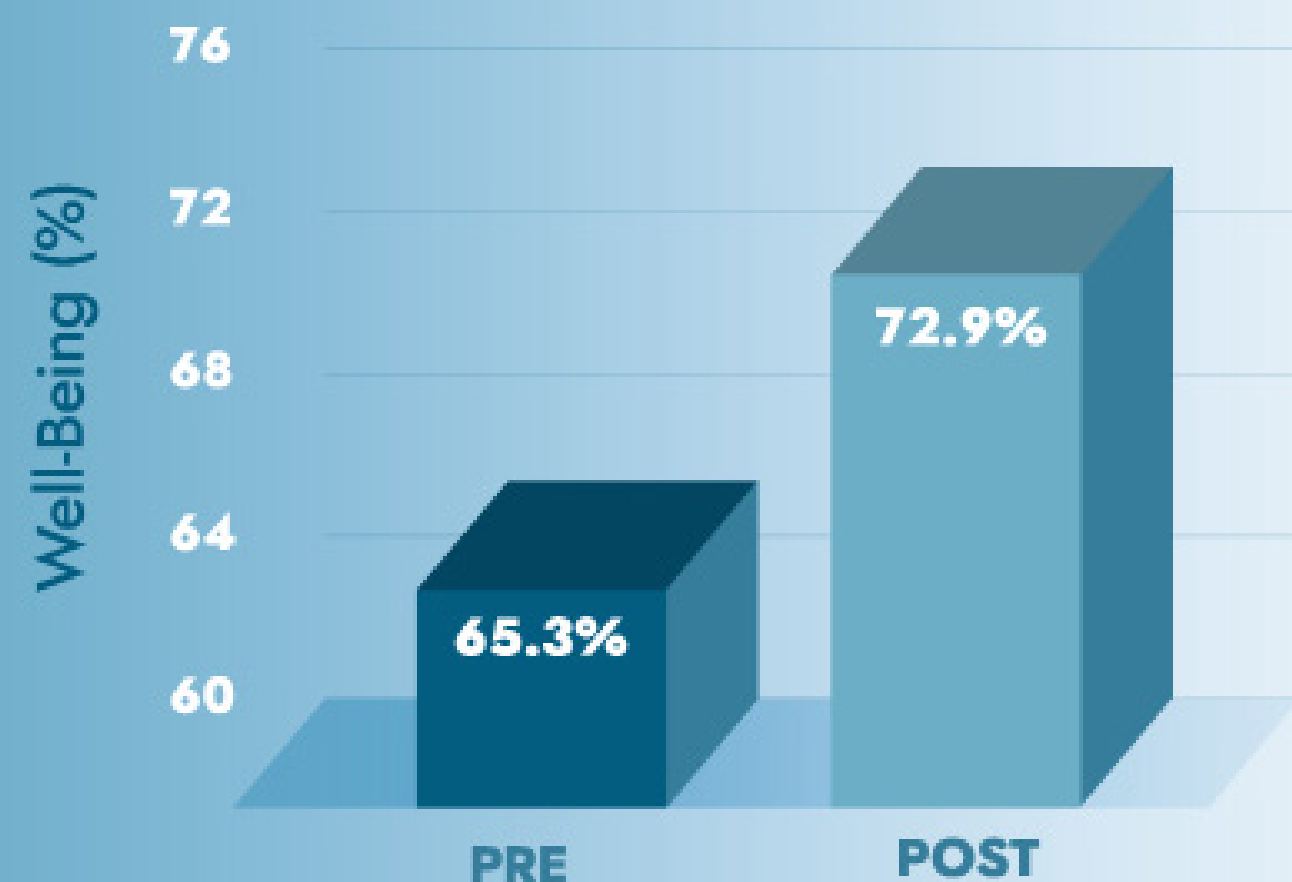


RESULTS AND DISCUSSION

QUANTITATIVE FINDINGS

For all the presented results, pooled data from across the multiple ADITO sites has been utilised to offer better statistical functioning and more robust conclusions. Nuance between different sites is highlighted where appropriate. Attendance across all sites was very high at 84%. The first statistical measure was the WHO-5 which explored the associated impact of attending an ADITO program on well-being.

ADITO Impact on Well-Being (WHO-5)



7.64%
INCREASE
IN
WELLBEING

When all the data is combined ($n = 45$) there was a 7.64% increase in well-being which is statistically significant ($p < 0.008$) and represents a moderate positive effect on participant well-being ($r = 0.40$). This associated impact on well-being is very encouraging and suggests the ADITO program fulfils its primary aim of supporting youth well-being. It is worth noting that the baseline for most

attendees was relatively high at 65.3% (the WHO-5 associates a score of ≤ 50 with poor well-being, and a score of ≤ 28 as indicative of depression). Despite higher baselines a significant increase was still observed, and it would be interesting to see ADITO piloted with more vulnerable groups where the associated impact would plausibly be magnified.

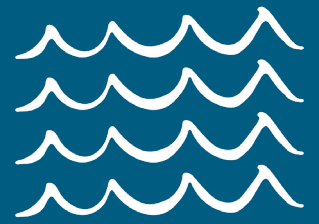
Social components are a key element within the ADITO program, and were explored using the Inclusion of Others in Self scale. Small improvements were seen across all measures in the pooled sample.

Inclusion of Others in Self Scale



The most notable associated positive impact was in how participants felt closer to the rest of their Liquid Therapy Pod (other participants on the same course). This change was both statistically significant ($p < 0.001$) and represented a large effect size ($r = 0.63$). This finding seems to demonstrate that LT aims around positive socialisation were being achieved within courses and suggests some translation to wider life with a significant ($p < 0.037$) small positive associated impact ($r = 0.32$) on closeness to friends more broadly. Another aim of LTs is developing positive relationships with blue spaces and this

was also represented in a significant ($p < 0.026$) small change in relation to participants closeness with the sea ($r = 0.32$). It should be noted that this change was somewhat suppressed by multiple participants who had previous experience with ADITO and had much higher baselines on this item, suggesting their increased positive relationship with the sea was maintained between consecutive courses. Given the notion of 'blue health literacy' is such an important part of ADITO, exploring how to track it in more detail may be useful.



QUALITATIVE FINDINGS

A total 22 responses to the feedback form were received from participants and 17 from parents/carers.

22

RESPONSES FROM PARTICIPANTS

17

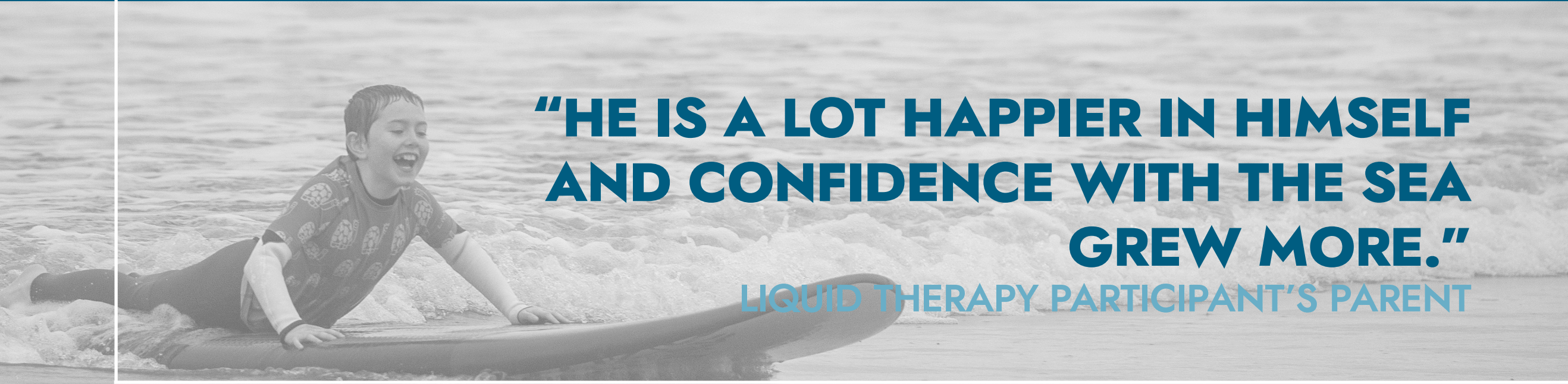
RESPONSES FROM PARENTS/CARERS

As outlined previously, the form included open-ended reflective questions with the opportunity to respond in multiple formats including written and drawing responses. This provided the researchers an opportunity to better understand how participants themselves define and express their experiences. Incorporating drawing as a complementary methodology enables participants to have a more active and meaningful role in the co-

production of knowledge — how they ‘see’, ‘feel’ and ‘know’, providing a participatory and inclusive experience. Without the need for proficient written / language skills and by offering an imaginative and creative space this method is also considered to be ethically sound and particularly productive for work with young people. In total, 14 participants provided drawings along with written responses in their feedback forms. The qualitative analyses of the responses to the open-ended reflective questions, supplemented by drawings, strengthens the reliability of the overall findings by situating the results of the survey within a richer and more nuanced context. Analysis of the qualitative data provided insights into the complex (and sometimes hidden) subtleties of thoughts, experiences and feelings of participants in ways that are illustrative, self-empowering and individualised. In particular, the drawings shared by young participants helped to give expression to the more ineffable parts of the surfing experience, elements that may otherwise have been hard to put into words.

“HE IS A LOT HAPPIER IN HIMSELF AND CONFIDENCE WITH THE SEA GREW MORE.”

LIQUID THERAPY PARTICIPANT’S PARENT



The drawings and written responses show how a sense of mastery was developed within surfing and other ADITO activities and that participants and their carers reported that this led to improved confidence in their wider lives.

“HE IS A LOT HAPPIER IN HIMSELF AND CONFIDENCE WITH THE SEA GREW MORE.”

LIQUID THERAPY PARTICIPANT’S PARENT

It was evident from the responses that the programme helped participants to feel more open to failure as a natural part of the learning process, helping to build confidence and leading to a greater sense of self-efficacy.

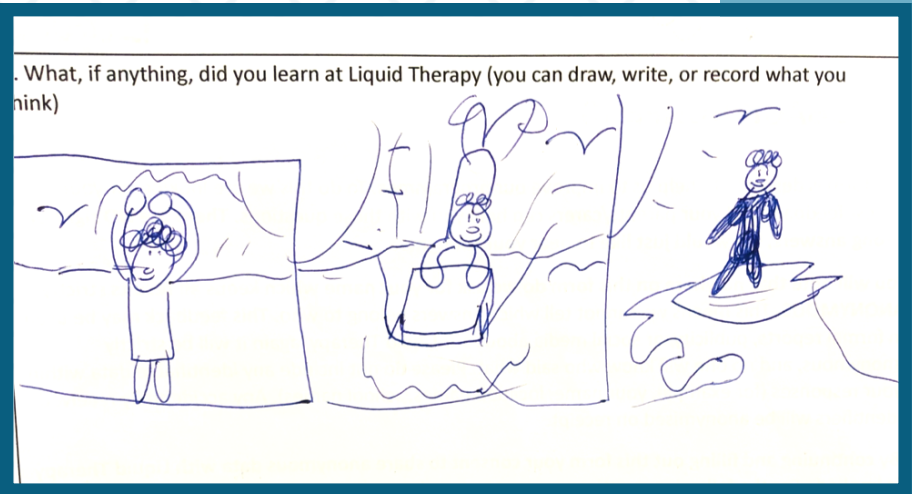
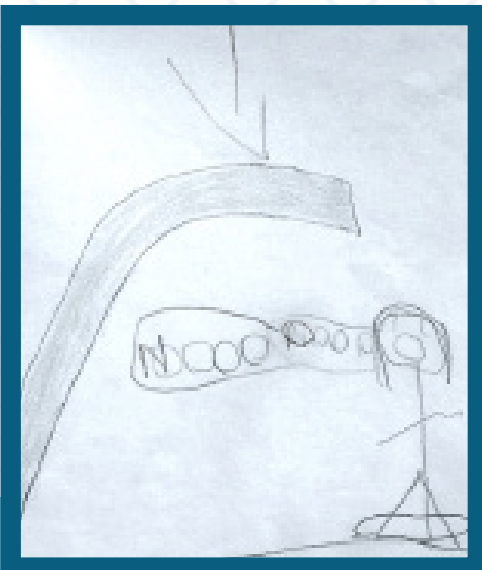
“I LEARNED HOW TO SURF - EVEN IF YOU FALL IT’S OKAY TO GET BACK UP.”

LIQUID THERAPY PARTICIPANT

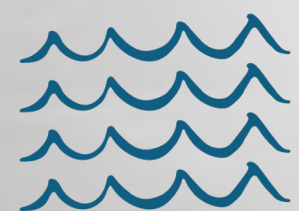
“(I LEARNED HOW) TO TAKE MY TIME AND DON’T RUSH THINGS - IT WILL HAPPEN, GET THERE IN THE END.”

LIQUID THERAPY PARTICIPANT

Most drawings illustrated a progressive learning journey for participants that included scenes of the power of the ocean. The power of the ocean (e.g. drawings of big waves) may at first have given rise to more fearful emotions with several participants depicting in their first drawing various examples of a big wave with a very small figure on a board with a turned down or open mouth or saying, “noooo.”

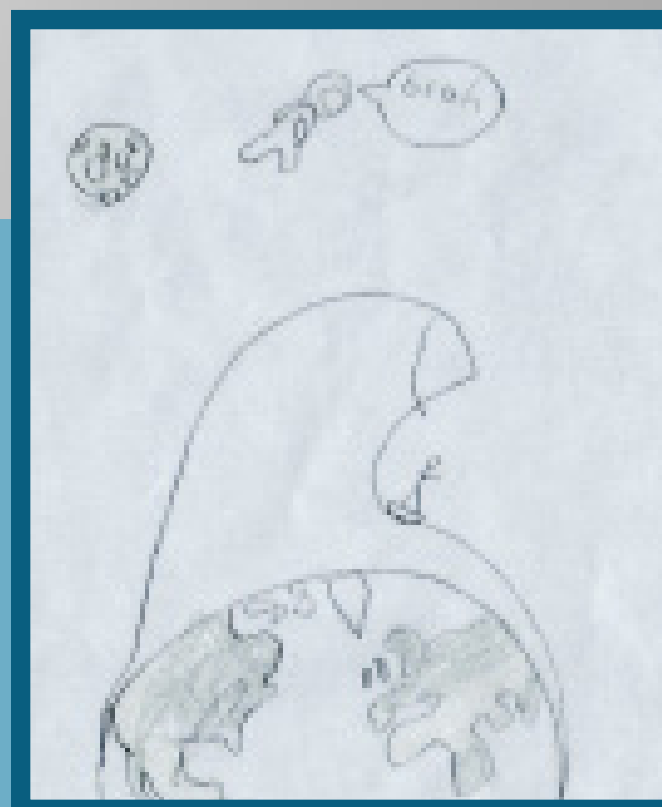


However, participants proceeded to illustrate in subsequent drawings how that fear was transformed into a feeling of confidence that came with mastering the skill of surfing, often leading to a sense of connection and wonder and awe for the ocean as seen by comic panel style drawing of a participants surfing journey, from wading in the water, to bodyboarding, to standing.



QUALITATIVE FINDINGS CONTINUED

Another participant drawing depicts surfing as something of a cosmic experience with a drawing of an astronaut floating above planet Earth encircled by a big breaking wave with a surfer riding the wave, literally on top of the world, suggesting a powerful sense of self-discovery. These responses also emphasise the importance of embodied and sensory learning experiences as illustrated by a comment from one participant shared during a session.



"MY FIRST WAVE WAS LIKE I WAS THE BUBBLE ON TOP OF A GLASS OF 7UP."

LIQUID THERAPY PARTICIPANT

Although the drawings typically depict an individual surfing, many of the drawings and written responses highlight participants' experiences of social connectedness and the types of support that are valued, especially the welcoming and encouraging environment facilitated by the team.

"LIQUID THERAPY HAS HELPED, SUPPORTED AND GUIDED ME, THEY GAVE ME BIG CONFIDENCE IN THE WATER."

LIQUID THERAPY PARTICIPANT

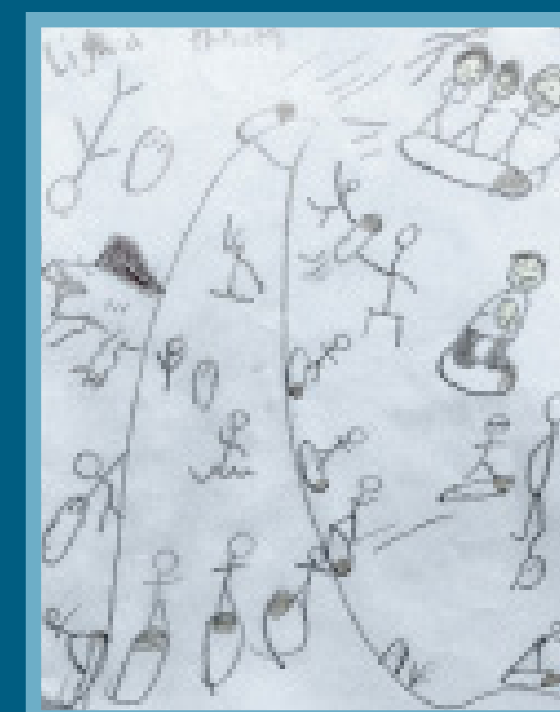
"THE INSTRUCTORS ARE AMAZING AND SO CARING AND FRIENDLY TO THE CHILDREN."

LIQUID THERAPY PARTICIPANT'S CARER

"THEY WERE GREAT AT MAKING THE STUDENTS FEEL COMFORTABLE AND MEETING AT THEIR LEVEL, GENTLY ENCOURAGING THE CHILDREN. THE PROGRAMME WAS GREAT FOR BUILDING CONFIDENCE, HELPED WITH REGULATION AND PROVIDED NEW EXPERIENCES."

LIQUID THERAPY PARTICIPANT'S CARER

Several drawings illustrate groups of stick figures together, for example, under the crest of a wave smiling, with a speech bubble and the words, 'it was great fun' and another standing on the beach holding hands surrounded by surfboards.



One participant drew an ocean full of surfers everywhere and a big wave. Four surfers are standing together on surfboard, smiling. An individual surfer, smiling, is brightly coloured in. The participant has drawn other surfers wiping out and a sea creature with red hat jumping out of the wave and catching a surfer in its mouth.

This corresponds with surf therapy literature that evidences how the provision of safe spaces within the programme directly supports the development of positive social connections. Safe spaces are spaces that lack of judgement, where participants feel celebrated and supported in a non-patronising way, with the ability to engage at their own pace. This was clearly evident in the feedback participants shared:

"I ACTUALLY JUST WANNA SIT HERE AND CHAT (IN THE SHALLOW WATER)."

LIQUID THERAPY PARTICIPANT

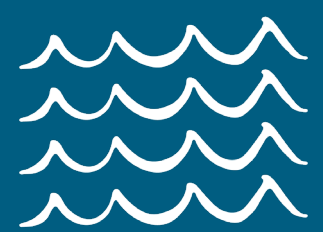
In addition to expressions of strong social connections, drawings and written responses also revealed the important support role of blue space nature connections including more-than-human elements such as a fish below the waves, a turtle, or a seabird in the sky and elements associated with the coastal environment and ocean.

"I FEEL CLOSER TO THE SEA."

LIQUID THERAPY PARTICIPANT

"LEARNED HOW TO SURF, ABOUT THE SEA LIFE AND TIDES AND HOW COOL OUR TEACHERS WERE."

LIQUID THERAPY PARTICIPANT



QUALITATIVE FINDINGS CONTINUED

The experience left some participants with a deep attachment or bond with the sea itself with one participant commenting during a session:

"I JUST WANT TO SIT IN THE WATER FOREVER."

LIQUID THERAPY PARTICIPANT

The findings emphasise the value participants place on playful learning experiences with a sense of enjoyment coming from overcoming the initial challenge of learning new skills and the novelty of being immersed in a new environment. This also speaks to the importance of opportunities Liquid Therapy provide for creative play that engages with the entire blue space, not only surfing.

"MORE CONFIDENT IN THE WATER. FEELS GOOD. BUILT A HUGE SANDCASTLE. CLIMBED TO THE TOP OF A ROCK CLIMBING WALL."

LIQUID THERAPY PARTICIPANT

As well as the other activities included in the ADITO programme that support positive mental health outcomes that can be appl when participant leave the beach.

"SURFERS TOLD ME THAT THEY HAD FOUND HAND BREATHING (FROM A BEACH WORKSHOP) REALLY HELPFUL WHEN THEY FELT STRESSED AT SCHOOL AND THAT IT HELPED TO CALM THEMSELVES DOWN."

LIQUID THERAPY FACILITATOR

The wider literature strongly supports the importance of developing a relationship with the natural world for the healthy development of young people. This cultivates a sense of wonder, an important motivator for lifelong learning. Early experiences of nature connection provided by LT are crucial at a time of ecological crisis and where children and young people are less connected to the natural world than ever before, with the potential to cultivate a sense of stewardship and care for the natural world as well as more positive feeling about each other.



All of these mechanisms of support that Liquid Therapy have created contribute to an overwhelmingly positive learning experience and positive impact on participants sense of well-being, triangulating with the findings in quantitive measures.

"IN FAR BETTER FORM, MOOD IS VERY GOOD. I'M HAPPIER AND MORE POSITIVE. I REALLY LOVED THE GUYS WHO DONE LIQUID THERAPY AND THEY WERE SUCH A GOOD CREW TO BE AROUND. THEY TAUGHT ME SO MUCH ABOUT THE SEA, I LEARNED SO MUCH WITH THEM."

LIQUID THERAPY PARTICIPANT

Responses from caregivers (parents and/or teachers) also highlight not only the positive wellbeing outcomes experienced in situ during each session but also the spillover effects experienced at home and at school in the days that followed.

"MY SON HAS BECOME A LOT CALMER AND RELAXED AFTER LIQUID THERAPY. SURFING WAS HIS DREAM BUT HE NEVER GOT THE CHANCE BEFORE LIQUID THERAPY."

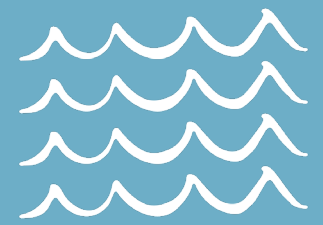
LIQUID THERAPY PARTICIPANT'S PARENT

"HE WAS HAPPIER AND CHATTY ON THE EVENINGS AFTER EACH SESSION. ALSO, MORE TIRED OF COURSE. HE STRUGGLES SOCIALLY TO MIX WITH OTHERS BUT OBSERVING HIM THERE HE SEEMED AT EASE AND RELAXED."

LIQUID THERAPY PARTICIPANT'S CARER

"PUPILS WHO ARE QUITE SHY WERE SMILING COMING INTO SCHOOL ESPECIALLY ON TUESDAY AND THURSDAY MORNINGS."

LIQUID THERAPY PARTICIPANT'S TEACHER



NEXT STEPS

The 2023 evaluation offers an in-depth exploration of Liquid Therapy's unique delivery of surf therapy for its participants. Alongside these conclusions a number of next steps are suggested to maximize the benefits from this evaluation.

1

The evaluation protocol developed within this project can and should be continued to further develop the evidence base for Liquid Therapy, surf therapy, and blue health more widely. A secondary aim of this project was building internal evaluation capacity for Liquid Therapy. The project was led by two external researchers, but the wider Liquid Therapy team were engaged at every step. Continuation of the protocol will allow for further development of this internal evaluation capacity.

2

The evaluation noted that some groups had quite high baselines or were repeating the ADITO programme. Work to identify, target, and pilot ADITO with new populations could provide further insight into the impact of ADITO. This could be especially true for groups with propensity for lower well-being baselines, and who could potentially experience even higher benefit.

3

Given the aims of the Sport Ireland Innovation Fund, further work could be undertaken to expand upon key findings about Liquid Therapy and explore their implications for wider and different Irish sporting contexts.

4

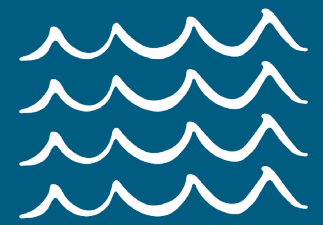
A key element of the ADITO programme was developing Blue Health literacy for participants, the success and impact of which was seen within data collected. The data collected was helpful in exploring this topic, but to better evaluate and track this component, both for Liquid Therapy and the wider paradigm, the development of a bespoke Blue Health literacy tool would be useful.

5

Several pieces of qualitative data pointed towards longer term impact for Liquid Therapy participants, especially around positive health behavior changes. This evaluation was not designed to explore this in significant depth. Further longitudinal work to explore the longer term impact of Liquid Therapy would be beneficial.

6

The mobile application developed to facilitate the implementation of the evaluation protocol has the potential to greatly simplify the tracking of impacts and outcomes in sports (in accordance with or subject to GDPR legislation). Moreover, this technology holds promise for seamless transferability to diverse organizations, locations, and sporting contexts.



CONCLUSION

The Liquid Therapy surf therapy intervention is associated with significant moderate improvements on youth well-being and a significant large effect on within group positive socialisation. Furthermore, reported participant experiences within qualitative data triangulate with both the quantitative data and with wider surf therapy and blue health literature (especially around positive socialisation, developing self-efficacy, and restorative blue space engagement). The intentional blue health literacy components of the programme are a novel and exciting program element for further exploration and development. While further evaluation is required to both bolster sample sizes and better understand certain programme elements, the findings highlight Liquid Therapy as a highly promising approach to supporting youth mental health in Ireland.



LIQUID THERAPY



**IMPROVED
PARTICIPANT
WELL-BEING**



**SAFE
SPACES**



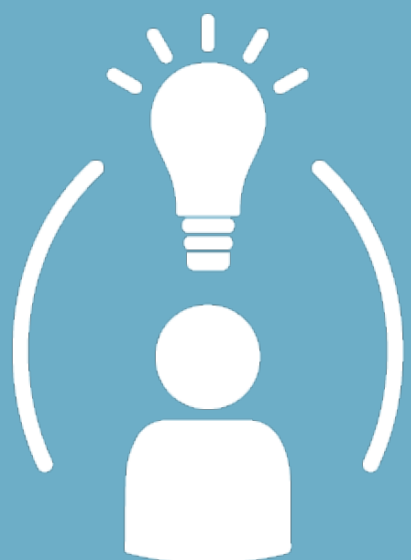
**POSITIVE SOCIAL
CONNECTIONS**



**BUILDING
CONFIDENCE AND
SELF-EFFICACY**



SENSE OF MASTERY



**POSITIVE LEARNING
EXPERIENCE**



**RELATIONSHIPS WITH
THE NATURAL WORLD**



