



# Surf therapy: the long-term impact

An independent longitudinal evaluation of the impact of  
The Wave Project on vulnerable young people 2013-2017

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## FOREWORD

This report is the second detailed study produced into the effects of The Wave Project surf therapy programme on young people with social and emotional challenges. The last report, published in 2014, was well received in respect of the short-term impact of the course. But a peer-review by the journal *Community Practitioner*, published in January 2015, recommended a more longitudinal follow-up study to assess the longer-term impact.



Community Practitioner wrote:

“The [Wave Project] intervention resulted in a significant and sustained increase in wellbeing. One year later, 70% of clients regularly attend a surf club and many have become trained as session volunteers. Parents and referrers noticed an increase in positive attitude and better communication, as well as improved self-management and analyzing at both home and school. It is concluded that the Wave Project provides a demonstrable young people.”

But it went on to say that:

“Further service evaluation of accessibility and long-term outcomes is also recommended.”

This report –Surf therapy: the long-term impact– has delivered on that recommendation. Independent researchers Dr Hannah Devine-Wright, of Placewise Ltd, and Catherine Godfrey MsC, of Cath Godfrey Evaluations, have been analyzing data from over 400 case studies, collected by the charity between 2013-17. The evaluators also ran a series of focus group interviews Wave Project participants and their parents from across the charity’s projects in England, Wales and Scotland, to get a broad view of the impact surf therapy has had on young people over time.

Their conclusions from this analysis are clear: surfing, when delivered in a supportive environment, with opportunities for continuation and volunteering, provides profound and long-term benefits on the wellbeing of children facing social and emotional isolation. For the first time, independent research has confirmed what many of us engaged in surf therapy have witnesses week in and week out: surf therapy works. I hope that this will be the first of many studies from all over the world that strengthen this evidence.

Joe Taylor  
CEO  
The Wave Project

## EXECUTIVE SUMMARY

This report represents a longitudinal analysis of the effectiveness of The Wave Project over five years. It examines The Wave Project's contribution to individual client wellbeing over time, as The Wave Project evolved into a national surfing intervention for vulnerable young people. The report includes an analysis of participants who subsequently joined a follow-on Surf Club and/or became volunteers with The Wave Project.



This independent evaluation of The Wave Project and Surf Clubs has two aims:

- To measure the effect of participation on wellbeing in a robust manner;
- To examine the effect of participation across time.

Both quantitative and qualitative data is used to illustrate the effect of The Wave Project on participants over time. The quantitative data is derived from a baseline and post-intervention survey administered to all Wave Project clients since 2013. Each questionnaire is a composite of bespoke items designed to capture personal information, project-related data and measure wellbeing using validated questionnaire items. Feedback from clients led to the survey being modified in 2017 to make it easier to complete whilst retaining essential measures of wellbeing. This report focuses on an analysis of survey data from 412 clients who completed both surveys in 2017, with

previous years reported in more detail elsewhere (Devine-Wright & Godfrey, 2015; Godfrey, Devine-Wright & Taylor, 2015).

Analyses of the questionnaire data reveals that The Wave Project consistently improves the wellbeing of young people. In 2017, all health and behaviour-related measures reported mean (average) improvements post-intervention. This means that The Wave Project has had a significant positive impact on the wellbeing of vulnerable young people year-on-year for five years.

To examine the effect of participation over time, a series of follow-up focus groups and interviews were conducted with parents and participants in England, Scotland and Wales in February 2018. Qualitative data from open-ended survey items and clients and their parents who participated in focus groups or interviews shows a lasting, positive impact of The Wave Project and follow-on Surf Club on both clients and their families. Confidence, physical and mental health and wellbeing not only improved but this improvement was sustained over time. Parents attributed positive and lasting improvements directly to participation in The Wave Project and Surf Clubs rather than to child development per se. 'He was a different child by the end of it' (Parent, Cornwall), 'I think it saved him to be quite honest, I really do' (Parent, Devon). For many participants and parents/carers, The Wave Project is transformational; enhancing wellbeing, improving social interaction and opening up opportunities for personal growth and development (including volunteering), that were previously unimaginable. The Wave Project is a cost-effective, tailored, one-to-one surfing intervention that brings about lasting positive change in vulnerable young people. For many the impact is dramatic, as a parent in South Wales said, '[He] has recently stated that he wants to volunteer with The Wave Project and become a mentor himself - this is amazing and such a turnaround from the young lad who didn't want to come out of his room, didn't want to live.'

## BACKGROUND

The Wave Project is a six-week intervention that seeks to improve the lives of vulnerable young people. Between 2013-17, The Wave Project directly reached around 2000 (1,945) vulnerable young people aged 8-21 who experience physical and mental health issues, social deprivation or social isolation. Amongst those facing social isolation are young carers, who often report low self-esteem and high levels of stress, anxiety and depression (Harden et al., 2006), and young people who have been bullied.

According to government statistics, around six per cent of children are disabled (Office for Disability Issues, 2014). Amongst 11-15 year olds, almost one quarter (23%) report that they have a long-term illness (e.g. asthma, diabetes, cancer, arthritis, epilepsy) or disability (including learning disabilities, autism) (Institute of Health Equality, 2017). It is estimated that mental health problems affect one in ten children and one in five young adults. In 2012, the annual short-term costs of emotional, conduct and hyperkinetic disorders among children aged 5–15 was estimated to be £1.58 billion whilst the annual long-term costs were in the region of £2.35 billion (Annual Report of the Chief Medical Officer, 2012). However, only a quarter of school-age children with a diagnosable mental health problem receive any intervention at all, despite most parents of these children seeking professional advice and those that do seek help often face lengthy delays (Khan, 2016).

On referral, around a third of Wave Project participants have diagnosed mental health issues, a third suffer social deprivation or family breakdown and a third are socially isolated because of a disability, being a young carer or being bullied. Most are not taking part in other sporting or leisure activities, and all are vulnerable to further isolation.

Surfing is the aquatic sport at the heart of The Wave Project. Surfing is a highly aerobic aquatic sport that can significantly improve the cardiorespiratory endurance and upper body and core strength of children with disabilities (Armintano et al., 2015). Although children with physical disabilities have the same activity requirements as all children (WHO, 2012), they have less opportunities to participate in sport (Arminatano et al., 2015). This can result in lower fitness levels and higher obesity levels (Murphy & Carbone & the Council on Children with Disabilities, 2008) which puts them at increased risk of secondary health problems in later life such as coronary heart disease and diabetes (Fragala-Pinkham et al, 2008).

To enable people of all abilities to surf, The Wave Project uses specialist equipment, such as sand buggies and adapted surfboards as required.

The benefits of aquatic sports can be more pronounced for disabled than able-bodied children (Koury, 1996). The buoyancy provided by water can enable children with impaired mobility on land to function independently without the assistance of mobility devices. Beyond the physical, being able to move through water unassisted can enhance self-esteem and self-awareness (Clapham et al., 2014). Swimming can strengthen muscles that enhance postural stability during locomotor and object-control activities and decrease stereotypical movements, such as spinning and swinging, associated with autism (Yilmaz et al. 2004). Success at surfing requires repetition, determination and

stamina (Clapham et al., 2014), attributes that many children with autism possess (Delaney & Madigan, 2009).

Surfing is an outdoor activity that can be undertaken independently, without complicated rules or close contact with others (Delaney & Madigan, 2009). Surfing is relatively unstructured, exploratory and playful rather than achievement oriented. Having fun is fundamental to the well-being of children as is having engaging things to do (UNICEF report, 2011). As surfing is immersive, it can erode sense of time and lead the world to be experienced as a place of 'mystery, risk and adventure' (Tonucci, 2005); it is characterized by 'stoke', an intense awareness of the moment and being 'at one' with the environment (Wheaton, 2016).

Although the aquatic, 'blue' environment can be hazardous, with drowning the third most common cause of unintentional death globally (Grellier et al., 2017), surfing, like other 'lifestyle' sports, positively embrace and even fetishise notions of risk and danger (Gilchrist & Wheaton, date unknown). Generally, children have an appetite for risk – they search for places and experiences that give them a sense of freedom and autonomy, away from adults, that provide challenge, excitement, discovery sometimes destruction and fulfil a wish to have a place of their own (Child Accident Prevention Trust 2002). For disabled children experiencing degrees of protection well beyond the norm (Gill, 2007), aquatic sports like surfing can provide a rare opportunity to experience risk. Some commentators have argued that if children are not allowed to take risks they may grow up over cautious and/or become unable to judge potentially dangerous situations for themselves (Gleave, 2008).

Risk-taking is a critical component of resilience, the capacity to recover from or adapt to, challenging and adverse situations. Resilience is linked to 'capabilities', the capacity to do and be that which people value, and 'competence', the ability to generate and capitalize on opportunities in the environment (Allen, 2014). Sandseter et al (2011) provide compelling evidence that taking risks in play is a natural coping mechanism, which helps reduce fears, tackle phobias and reduce anxiety. As resilience is not fixed, it can build and erode over time depending on the presence of 'protective factors' like self-efficacy, self-esteem, social problem-solving skills and a positive outlook (Hartley-Brewer, 2001). However, although being resilient is helpful, it is unlikely to be sufficient to counter effects associated with adverse factors such as living in poverty or having little social support (Allen, 2014).

Like resilience, being connected to others in social networks is a protective factor that improves the chance of leading a healthy and successful life (McPherson et al., 2013). Social exclusion and loneliness is known to effect people of all ages but according to the 2006/07 European Social Survey, 28.8% of people aged 15-25, more than any other age category, reported that they felt lonely some of the time and 2.3% felt lonely all or almost all the time. An inability to participate in normal relationships and activities available to the majority of people in a society can affect both the quality of life of individuals and the equity and cohesion of a society as a whole (Levitas et al., 2007).

Being discriminated against or bullied can reduce participation in social networks and lead to greater social isolation. Being bullied is associated with higher levels of psychological and physical ill-health and poorer life outcomes (Durcan and Bell, 2015).

Children and young people who do not conform to local norms of appearance, language or behaviour, are at higher risk of being bullied by peers (Levinson et al, 2013), as are children living with a disability or a long-term health condition (Sentenac et al., 2013). Although the literature on the link between friendships and resilience is limited (Allen, 2014) there is some evidence that peer contact can help to build young people's resilience (e.g. Hill et al., 2007; NCH/Action for Children, 2007) and wellbeing (Gutman et al., 2010).

One of the ways in which social networks (Durcan & Bell, 2015), and time spent playing in natural environments (Gleave & Cole-Hamilton, 2012) can enhance wellbeing, is through fostering a sense of belonging and identity. Surfing, like play more generally, is characterized by having its own language, rules and values, all of which contribute to the development of identities (Casey 2010; Wheaton, 2007). Sociologists believe that it is the embodied performance or 'doing' surfing that contributes to young peoples' 'authentic' selves (Wheaton & Beal, 2003).

At The Wave Project, clients 'do' surfing with the one-to-one assistance of a volunteer overseen by a surf co-ordinator. The aim is to teach surfing in a way that young people value, 'genuine, warm, confidential, non-patronising, that co-produces solutions and builds on strong relationships.' (Khan, 2016). A follow-on Surf Club is available for clients who wish to continue their surfing on a regular basis. There are also opportunities for former clients (and other family members) to become surf volunteers. This is particularly advantageous for disabled people as they are significantly less likely to take part in formal volunteering (Office for Disability Issues, 2014). Although volunteering in surf projects has not been extensively evaluated, akin to volunteering in nature conservation projects, it is likely to significantly improve mental wellbeing and levels of physical activity (Rogerson et al., 2017) as well as enhance the development of soft skills such as, integrity, responsibility and leadership (Sport England, 2017).



## INTRODUCTION

Wave Project clients participate in an initial 6 week surf course in a small group, led by volunteers and a surf coordinator. After completing The Wave Project clients are invited to become members of a follow-on Surf Club which is also staffed by volunteers. Participants in both The Wave Project and the Surf Club are provided with one-to-one support appropriate for their particular needs. The core ethos of both The Wave Project and the Surf Club is acceptance and fun.

The Surf Club provides a flexible, accessible forum for young people to continue surfing and socializing. Social events that take place throughout the year cater for both participants and their families. Members of the Surf Club are asked to contribute £5 per session, payable in arrears, for sessions they attend. The level of voluntary contribution has remained the same since 2013 and equate to approximately a quarter of the cost. A fee waiver policy applies for families facing financial hardship. While many families arrange their own transport to the Surf Club, this can also be provided for those who need it. Transport costs £5 per participant. Although the costs of participating in The Wave Project and Surf Club are minimal there can be hidden costs for accompanying adults, for example, car parking charges or the cost of refreshments.

From inception in 2010 as a volunteer-led pilot scheme for just 20 young people in Cornwall, The Wave Project has become a charity with over 1,200 volunteers overseen by 15 project coordinators. The Wave Project works with up to 200 children per week in 13 locations across 8 regions: Cornwall, Devon, Dorset, Sussex, North Yorkshire, East Lothian, South Wales and the Isle of Wight. There are currently 400 people on the waiting list, with 10-15 new referrals coming in weekly from professional services. In 2017, 461 young people were referred to the surf therapy programme and 300 people regularly took part in the Surf Club. An additional, 90 young people participated in Beach School, a Wave Project education programme that was not evaluated in the current study.

## Method

A bespoke questionnaire designed by independent evaluators has been administered over the last five years (2013-2017). The questionnaire examines wellbeing outcomes of the initial 6 week surf course, from client, parent and referrer perspectives. In 2017, questionnaire data was collected from 412 clients across ten sites (Mid, West and North Cornwall, North and South Devon, Dorset, Isle of Wight, Scotland, South Wales and Scarborough). This data was triangulated with qualitative feedback provided by 9 participants and 13 parents/carers in focus groups and interviews held in Cornwall, Devon, Scotland and South Wales.

## Procedure

For the questionnaire data, wellbeing scales were constructed using the whole data set with cases excluded if data was missing. Therefore, the number of cases can differ by type

of analysis undertaken. Well-being was measured using a modified version of the Stirling Children's Well-being Scale (SCWBS), a holistic, positively worded measure of emotional and psychological wellbeing developed for use with children aged 8-15 years (Liddle & Carter, 2015). The six items in the positive functioning scale used in 2017 were: 'I feel good about my future', 'I can make choices easily', 'I can find fun activities to do', 'I feel that I am good at some things', 'There are people in my life who really care about me', 'There are things I can be proud of'. In 2017, the alpha of the positive functioning scale pre-intervention was 0.759 and post-intervention it was 0.814.

Comparisons between pre- and post-intervention for scaled items were calculated using a paired sample t-test. The t-test calculated whether the difference in mean score across the whole sample pre-intervention was significantly different from the mean score post-intervention. A 'very strong' significant difference indicated that in 99 out of 100 cases the difference in mean scores was caused by what was being measured i.e. the intervention, rather than by chance. A 'strong' significant difference equated to 95 in 100 cases.

Focus group and interview data was fully transcribed and thematically analysed. Throughout this report, quotations are used to support and illustrate results from the questionnaire.

## Participants

The number of people participating in The Wave Project has increased dramatically. In 2014, 109 young people were referred to the project of whom one-third (n=36) were female and two-thirds (N=73) were male. In 2017, 461 young people were referred to the surf therapy programme projects across ten locations. Of the 412 clients who filled in the survey, 347 completed the Stirling measure in the pre- and post-Wave Project. The ratio of female to male participants has remained stable at 1:2 for five years.

In 2017, 218 (53%) of Wave Project participants' parent/carer completed the post-intervention survey which allowed data to be triangulated between clients and their parent/carer. When the analysis concerned 'hard outcomes' e.g. joining a surf club, the analysis was conducted with this sub-set.

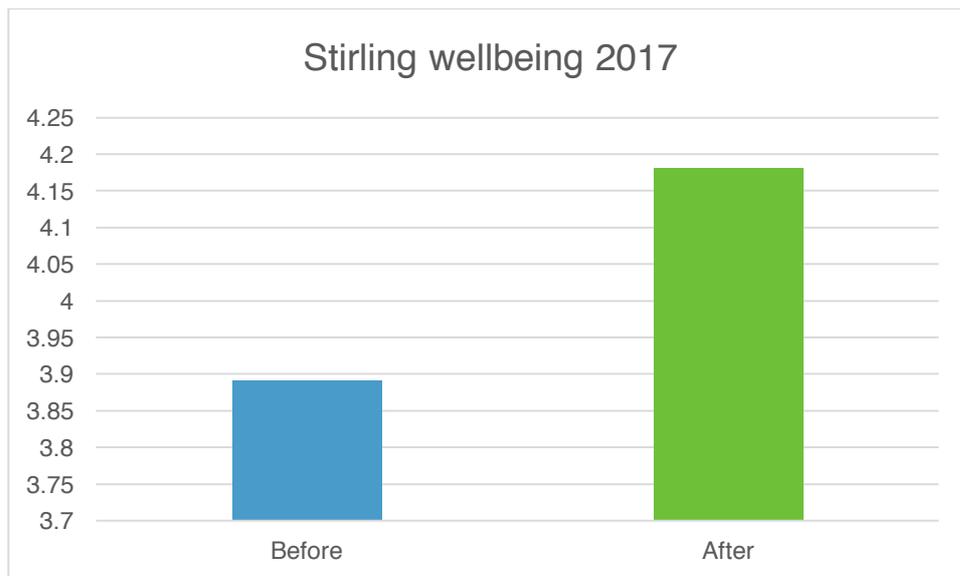
Twenty-two people, 9 children and 13 adults, were interviewed either individually or in small groups in February 2018. Of the children represented either in person or by their parent/carer, one had been involved with The Wave Project since 2013, three since 2015, two since 2016 and seven had been referred to the project in 2017. All the children had subsequently joined the Surf Club.

## Results

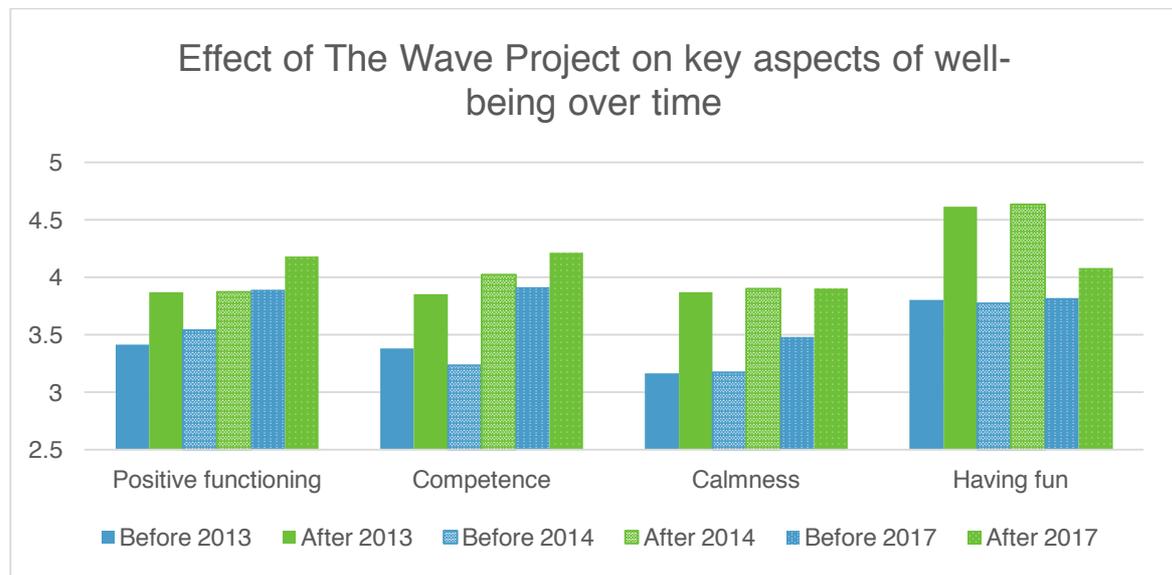
Data across all five years has shown a consistently strong and robust improvement for boys and girls, across all locations and up to three months after intervention. Paired

sample t-tests comparing pre- and post-intervention measures showed that The Wave Project had a very strong effect on all aspects of wellbeing in 2017 ( $p < .000$ ). As figure 1 shows, in 2017, there was a very strong increase in positive functioning (T1 ( $M = 3.89$ ,  $SD = .63$ ), T2 ( $M = 4.18$ ,  $SD = .63$ );  $t(347) = -10.21$ ,  $p < .000$ ) as measured using the Stirling measure of well-being. However, in 2017, there were some gender differences consistent with girls reporting lower subjective well-being/ satisfaction with themselves pre-intervention than boys (Children's Society, 2015; Hamblin, 2016).

Figure 1: Effect of The Wave Project on well-being (Stirling measure) in 2017



As figure 2. shows, The Wave Project has had a sustained impact on positive functioning and other key aspects of well-being year on year.



## Competence

Competence increased very strongly every year as measured by, 'I feel that I am good at some things' ( $p < .000$ ). In 2017, parents reported sustained behaviour change that had a positive impact on the wider family, for example, '[My child became] less negative about life in general. It had a huge impact at home, towards me, towards her brother. She'd get more excited, 'I'm going to Wave Project tomorrow'...rather than 'uh' [depressed] 'everyone hates me' 'I'm rubbish at everything', she got excited and 'I can do this'.' (Parent, Cornwall)

However, feedback from some parents in the focus groups indicated a potential conflict between the non-competitive ethos of The Wave Project and parent's desire for their children to achieve and succeed. Whilst some parents concurred with The Wave Project ethos, for example, 'It's not the surfing that counts, it's the enjoying, the going, the participating, the getting out there and being you' (Sasha, Parent, Cornwall) others expressed not only pride in their child's achievements, for example, being able to stand up on the board, surfing in big waves or succeeding in competitions outside The Wave Project but satisfaction that their child was 'better' than others. Being 'better' took various forms including: being chosen to represent The Wave Project at events or in the media, being a 'natural' surfer or owning (expensive) surfing kit. '[My child] comes into class and says, 'I've been surfing at the weekend' and who else surfs? Nobody puts their hands up. It raises self-esteem and self-value and kids love that, the certificates, the medals, she loves that you know. I'd love to see her being taught to surf to grow the skill because she has the ability to be an ambassador for this type of project.' (Parent, Devon)

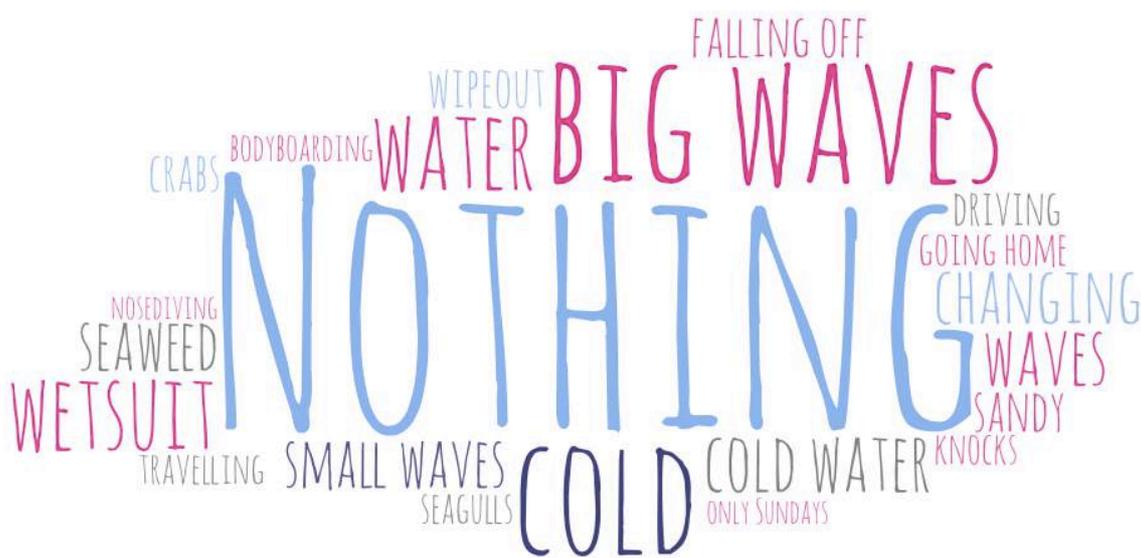
This desire for competitive advantage and distinctiveness was surprising given that the same parents a) acknowledged the importance of accepting and not judging for wellbeing, 'It's hard to find something that makes your child more confident, more outgoing...they



99% of clients said they felt better (N=330) and parents were equally positive: 'I can't praise it enough' (Parent, Devon), 'It's been brilliant' (Parent, Scotland). 'Even after the first session it was like a switch flicked in her head, she got out and she was beaming, she was a different child and it was because nobody was belittling her and she could do it and she was being praised and she was being encouraged and she'd found something that she was good at and she just wanted to keep doing it.' (Parent, Cornwall)

As figure 4. shows, even when participants were asked to describe three things they didn't like about The Wave Project the results were overwhelmingly positive.

Figure 4: Word cloud for 'What I like least about The Wave Project'

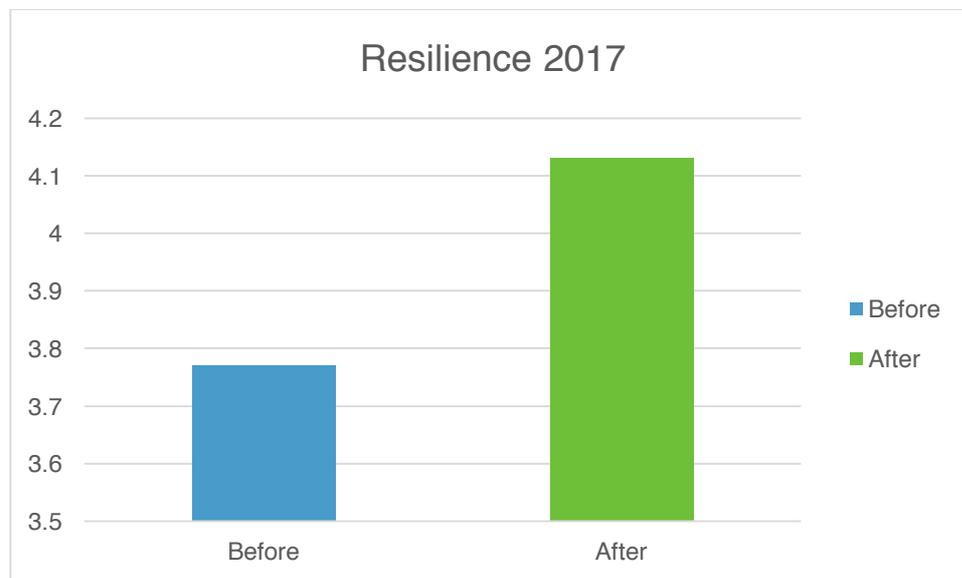


## Risk and resilience

Children have an appetite for risk and The Wave Project enables young people of all abilities to experience what a participant on the IOW called an 'adrenilating' sport. 'I quite like the feeling of going around in the water like a washing machine,' (Participant, Scotland)

Resilience was measured by a reliable three-item 'resilience' scale consisting of 'I like trying new things', 'I love learning new things' and 'I keep trying even when something is difficult to do'. The alpha of the Resilience scale was .752 pre-Wave Project and .762 post-Wave Project. As figure 5. shows, there was a very strong increase in reported resilience in 2017 ( $p < .000$ ).

Figure 5. Increase in reported resilience in 2017



'[The Wave Project] taught him resilience. As part of his autism he doesn't necessarily cope with failure very well, but the encouragement and support he was provided with enabled him to learn from the falling off etc.' (Parent, South Wales) A parent of a child who was pulled from the water by a life guard and taken to hospital with an injured foot said, 'It didn't stop her whereas before if anything like that had happened at any of her other clubs there's no way on this earth she'd ever have gone back. She couldn't wait to get back in the water. She was so cross that she couldn't go back in because she was on crutches. It didn't dent her enthusiasm at all!' (Parent, Cornwall)

## Access issues

Accessing physical activities suitable for children with a range of abilities can be challenging and parents welcomed the presence of a regular, affordable sporting activity. 'It has built [my child's] confidence. Having something to do on a Saturday accessing things that she wouldn't otherwise be able to access. When she was younger she did riding for the disabled and then that came to an end and I couldn't afford riding lessons and I thought 'I wonder what?' and then amazingly this came along and it is on our doorstep and I think you like it even more so it has been great.' (Parent, Scotland)

Even children with a diagnosable mental health issue can find it difficult to access interventions and there are often lengthy delays (Khan, 2016). The speed with which children were referred to The Wave Project differed by location. For example, parents in Scotland reporting that they had been referred very quickly whilst some parents in Cornwall waited over a year to join The Wave Project.

Although parents welcomed their child being referred to The Wave Project, there were differences across locations in terms of how the project was perceived by non-

participants. For example, the long-standing Wave Project in North Devon has become an integral part of the local place identity. By contrast, in Scotland, there was some concern about how the referral process was perceived. 'People know [my child] had done Wave Project and they wondered how he got to do it. Sometimes you don't want to have to say, 'Well my kid did it because of a, b or c.' You don't want to have to disclose that.' (Parent, Scotland)

## Fitness

Self-reported frequency of exercise increased very strongly ( $p < .000$ ) for the 98 participants who completed the pre- and post- exercise question in 2017. Of these, 89% ( $N=88$ ) felt fitter post-intervention. All the clients ( $N=5$ ) who rarely exercised felt fitter. 'I've got more muscle tone in my legs and it has helped [with] everything.' (Participant, Scotland) This is important since children with disabilities have less opportunities to participate in sport (Arminatano et al., 2015) and this can lead to lower fitness levels (Murphy & Carbone & the Council on Children with Disabilities, 2008) which puts them at increased risk of secondary health problems in later life such as coronary heart disease and diabetes (Fragala-Pinkham et al, 2008).

Parents reported that The Wave Project had an indirect impact on their health and wellbeing and, where applicable, the health of their other children, for example, because they walked whilst their child was surfing. 'It's good for [my daughter who does not attend The Wave Project] to play in the fresh air and get out there doing physical exercise rather than sitting there in front of the TV or the x-box all day.' (Parent, Scotland)

## Feeling safe

Feeling safe and supported as a context for decision making is an essential component of wellbeing for young people (The Good Childhood 2015, p.14). Almost all participants (99.5%) reported that they felt very or fairly safe, with only 2 people (0.5%) reporting that they did not feel safe. The qualitative data suggested that it was physical characteristics of the natural environment (sea, water, waves, cold) rather than the activity of surfing that made them feel unsafe. As parents observed, 'They give the level of supervision that is appropriate for the kid and let them have the freedom as well.' (Parent, Scotland) and 'The volunteers are just the right amount of encouraging but patient, bit of a joke but not too much of a joke, they've got the balance right, I can't praise it enough.' (Parent, Devon)

## Surfing as a form of therapy

It is difficult, and arguably unnecessary, to partial out the therapeutic contribution of different components of The Wave Project and Surf Clubs, for example, the activity of surfing, the aquatic environment or the presence of volunteers. As parents noted, 'The whole feel of it is that it is all very calm and chilled and at their pace... The whole sea thing,



mental health issues themselves that they have made public within the arena of the club. I look at people like that who turn up and I feel quite emotional because [my child] sees them and runs straight to them and throws her arms round them.’ (Parent, Devon) The sense of belonging extended to parents/carers and other family members: ‘The volunteers do go out of their way to make us feel welcome and wanted.’ (Parent, Cornwall) Although most participants are not accompanied by a parent/carer on the beach or in the sea, events organized by The Wave Project (such as the Christmas surf) bring together parents/carers and staff and enable experiences to be shared. ‘What is really special is that you end up in an environment where you talk to people who ‘get it’’ (Parent, Devon). ‘However, it is important to remember that social connectedness is not important for everyone: ‘I just go there to surf.’ (Participant, Scotland)

## Giving Back and Volunteering

All interviewees described feeling more connected to others, by making friends and/or having regular access to the project. This illustrates a sustained impact of The Wave Project: young people remain in the club and attend social gatherings and events and many go on to become volunteers or surf instructors themselves and give their support to other, newer Surf Club members. Some gain training and accreditation as part of this, with positive implications for their future.

The positive impact of volunteering is well documented (Okenden and Stuart 2014) and it is evident that The Wave Project, enables both young people and their parents/carers, who might not otherwise have the opportunity to volunteer, to get involved. ‘I started volunteering in the water towards the end of the summer [when my son] started. Next [Wave Project intake] [my son] came along too and helped with some of the new students and that was really good as well for him to chat to the new people.’ (Parent, Scotland). Opportunities to meet and talk with other parents/carers helps to build wider community relations and relationships with others (Gleave and Cole-Hamilton, 2012). This is important since research has found that a sense of community can boost immune systems, lower blood pressure and guard against cognitive decline, while joining a community group can reduce risk of dying (Institute of Health Equality, 2017).

Survey data showed that soon after course completion, even if the majority do not intend to go on to volunteer, this profile changes with time and many do ultimately volunteer. In Cornwall, where the Surf Club has been running for over five years, the results are impressive: around 60% of people attending the initial 6 week course have gone on to join Surf Club expressed an interest in doing so, and 10 % of those who are over 14 and able to do so, have become volunteer helpers with The Wave Project. In other locations where the Surf Club is less well-established it is equally popular. In 2017, 74% of former Wave Project participants who recorded a ‘hard outcome’ had either made friends, joined a sports club or became a volunteer. This progression seems to be part of a developmental journey rather than an expectation or achievement and as such it fits the ethos of the project, of encouraging, accepting and allowing young people to ‘flourish’ (Good Childhood Report, 2015) and thereby improving life chances in all sorts of ways.

However, the qualitative data revealed several barriers to (female) parents/carers becoming surf volunteers including concern about their body image, a lack of time and fear of water. Nevertheless, even parents/carers who could not volunteer in the water found other ways to help out, for example, fundraising. 'I'm doing a skydive to fundraise for WP because I can't volunteer in the water...this is just a way of giving something back because they have given us so much, they have given me [my daughter] back.' (Parent, Cornwall)



## CONCLUSIONS

The Wave Project is a bespoke surf therapy intervention that provides, a fun, physical, outdoor, supported group activity for vulnerable young people. The particular characteristics of the project are important: an ethos of acceptance, support and non-competitive challenge and with this, the embodied experience of being in the sea and surfing. This may be particularly valuable for those with sensory and neurological issues. The Wave Project and follow-on Surf Club effectively widen participation in sporting activities (Office for Disability Issues, 2014) and contribute to a greater sense of wellbeing, confidence and resilience (Sacker et al, 2007 in Allen, 2014).

The Wave Project significantly improves life chances by enhancing physical and mental wellbeing and increasing social connectedness. Benefits accrue not only to participants but also to volunteers, some of whom also experience significant health issues, parents/carers and other family members. Beyond this, The Wave Project acts as a hub for volunteering and through its ambassadorial and social activities builds community, not only at the local level but nationally and internationally. As societal awareness of The Wave Project gathers momentum, there are wider benefit to beach and surfing communities: The Wave Project is a beacon for inclusiveness and it promotes the shoreline as a pleasurable, accessible place for recreation, learning and wellbeing.

Although difficult to quantify, The Wave Project appears cost effective. While there are too many situational factors to report an accurate figure on costs saved, some costs have been averted by the mode of delivery as well as the profile of Wave Project participants. As the service is largely volunteer based, it provides a cost effective mode of delivery and volunteers also develop wellbeing through their involvement and via training they receive. Other preventative interventions such as school based emotional learning, have been calculated to save £3,206 per child to the public sector over a ten year period (Knapp et al 2011). By helping children to stay in school, costs of truancy, estimated to be £1318 per year per child and costs of exclusion, in the region of £9748 in public value benefits are averted with 89% of these savings benefiting the local community (HM Treasury, 2014 in Allen, 2014).

With ADHD increasing by 842% between 1996-2007 (Hansard 2007 cited in Conservative Party Childhood Review 2008) it is cost-effective to invest in activities in the natural environment that reduce prescription medication. According to the Kings Fund (2008) it costs £2,148 per person per annum to treat mental ill health in children. It has been estimated that reducing the number of GP consultations provides a social return on investment of £5.96 for every £1 invested (Family Action, 2014 in Durcan and Bell, 2015).

The initial six-week course costs approximately £300 per child and each follow-on Surf Club session costs £20 per child. Assuming that a child attends 10 Surf Club sessions per annum, the overall cost for a child to benefit from surf therapy provided by the Wave Project is £500 per child, per year. Across time, as clients become surf volunteers they may become 'cost neutral', experiencing additional benefit at no cost to the project at all.

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