



Extending Waves for Change's Reach to Learners with Autism Spectrum Disorder: Giving differently-abled children access to surf therapy

INTRODUCTION

“We have a choice: invest in the most excluded children now or risk a more divided and unfair world.” - The United Nations Children's Fund¹

The Sustainable Development Goals (SDGs) have a much more explicit focus on inequality than the Millennium Development Goals (MDGs) and emphasise reaching the poorest, most excluded, and most vulnerable to ensure that no one is left behind. This is particularly important for children who are affected by multi-dimensional forms of poverty, including income poverty, food insecurity, poor living conditions and poor access to services. These challenges may be compounded by discrimination and/or harassment on the basis of disability or ethnicity that may further compromise children's access to services and opportunities across the life course, and drive an intergenerational cycle of poverty².

In South Africa, an excess of two million children (aged naught to 14) have some form of disability, including seeing (even when wearing glasses), hearing (even with a hearing aid), walking a kilometre or climbing stairs, remembering/concentrating, self-care such as washing or dressing, and communication in usual language including sign language³. Jordaan (2015)⁴ further notes that 70% of South African children with disabilities that are of school-going age are still not attending school; and those that are attending school are mostly still in separate, 'special' schools for learners with disabilities. In addition, children with disabilities were found to have less access to social services, such as an adequate standard of living, health services, and early learning and education⁵. Among those children with disabilities who do get access to schooling, dropout rates have been found to be higher than for those who are not disabled⁶.

This paper provides the findings of an internal research study of Waves for Change's (W4C) surf therapy programme piloted with a group of learners with Autism Spectrum Disorder (ASD). W4C offers its surf therapy programme through weekly morning and afternoon sessions. The purpose of the pilot was to increase access to the W4C surf therapy programme to learners who may not have access to alternative, structured developmental

¹ The United Nations Children's Fund. (2016). *State of the World's Children*. New York: UNICEF.

² Lucy Jamieson, Lizette Berry & Lori Lake. (2107). *South African Child Gauge 2017*. Available from: http://www.ci.uct.ac.za/sites/default/files/image_tool/images/367/Child_Gauge/South_African_Child_Gauge_2017/Child_Gauge_2017_lowres.pdf

³ Republic of South Africa Departments of Social Development, and Women, Children and People with Disabilities, and The United Nations Children's Fund (UNICEF). 2012. *Children with Disabilities in South Africa: A Situation Analysis 2001-2011*. Available from: https://www.unicef.org/southafrica/SAF_resources_sitandisability.pdf.

⁴Jordaan. (2015). *Inclusive education in South Africa: the good, bad and ugly*. Available from: <http://news.nwu.ac.za/inclusive-education-south-africa-good-bad-and-ugly>.

⁵ Republic of South Africa Departments of Social Development, and Women, Children and People with Disabilities, and The United Nations Children's Fund (UNICEF). 2012. *Children with Disabilities in South Africa: A Situation Analysis 2001-2011*. Available from: https://www.unicef.org/southafrica/SAF_resources_sitandisability.pdf.

⁶ Ibid.

programmes outside the school environment. Learners with ASD often present with ongoing social-communication problems that include difficulty communicating and interacting with others, repetitive behaviours as well as limited interests or activities and sensory integration issues. These symptoms subsequently impact school performance as well as home life.

The pilot programme was implemented by international non-profit organisation W4C and Noluthando School for the Deaf, situated in Khayelitsha. W4C provides a child friendly mental health service, through weekly surf therapy sessions, to vulnerable and differently-abled children living in unstable and volatile communities. Using evidence-based surf therapy courses, developed in partnership with the Universities of Cape Town (UCT) and the Western Cape (UWC), W4C gives children the skills to cope with stress, regulate behaviour, build healing relationships and ultimately make positive life choices. To prepare for this pilot, W4C coaches were equipped with training on how to handle and react to certain traits of autism; however, they were also encouraged not to modify the programme too much from standard delivery.

Research purpose

W4C's surf therapy programme has proven that children who complete the 12 months programme have increased school engagement, decreased anti-social behaviour, as well as increased school performance⁷. Given these and other positive changes the surf therapy programme has proved to have on the well-being of participants, W4C conducted research on the pilot Noluthando surf therapy programme, to establish whether the programme brings about similar, or different, changes to the children with ASD. In understanding the effect of the programme on the group of differently-abled children, W4C would be in a position to adapt the programme if and where necessary to suit the needs of the children better, and in preparation for scaling. In addition, such an understanding would allow W4C to advocate for making surf therapy programmes available and accessible to differently-abled children; aiming to provide inclusive, quality extra-curricular programmes to all children in the Province, increasing school engagement and performance, as well as overall positive behaviour.

Literature review

Autism is an invisible disability. People very often judge children with autism as being naughty or as being defiant; this is not the case. It is because of their inability to understand social rules that others very often just accept as the social norm. People with autism have difficulty interacting with others and communicating, their senses are sometimes impaired, and they have a rigid way of thinking. Children who don't have autism can develop simple basic skills that allow them to learn, like the ability to sit, listen or focus their attention. Children with autism don't have these skills as part of their development. These are skills that have to be taught directly to children with autism before they can start formal learning⁸.

Children with autism may have difficulties forming and maintaining meaningful relationships with their peers⁹. These difficulties can lead to social isolation and can impact their social, emotional and cognitive development, academic achievements, as well as their self-esteem

⁷ Waves for Change 2016 Impact Report. Available from:

http://www.waves-for-change.org/2016-impact-report_pdf/

⁸ Sasha, W. S. & Fathima, S.. *Autistic children struggle to get and education*. Available from:

<https://www.health-e.org.za/2010/08/23/autistic-children-struggle-to-get-and-education/>

⁹ Reichow, B., & Volkmar, F. (2009). Social skills interventions for individuals with Autism: Evaluation for evidence-based practices within a best evidence synthesis framework. *Journal of Autism and Developmental Disorders*, 40, 149–166.

Similarly, Pauw (2011) writes that labelling, discrimination and exclusion of the mentally ill happens all over the world and has occurred throughout history¹¹. Results from a South African Stress and Health (SASH) Survey¹² showed a 75% treatment gap of common mental disorders nationally. In addition to other factors that may be responsible for this treatment gap, stigmatisation of people with mental illness especially by health care professionals may also be responsible for this treatment gap¹³.

There is an increasing demand for mental health care in South Africa. There are only 1,12 psychiatrists, 1,28 psychologists and 1,6 social workers per 400,000 people in South Africa. And, of the 23 mental hospitals in the country, only 18 (mental health) beds are allocated per 100,000 people. In addition, South Africa is a country where poverty is a real problem, and many people in the country live below the poverty line. Of the mental health professionals and services available in South Africa, most are based in urban areas, highlighting that mental health services are out of reach to the majority of South Africans who live in rural communities. And, as mental health services are predominantly limited to white middle-class individuals, many people living in poverty do not have the financial means to seek professional help¹⁴.

The need for mental health care for differently-abled children appears to be even bigger than that of adults. In South Africa in 2013, there were 116 504 learners in the Special Need schooling sector who attended 448 institutions and were served by 10 252 educators¹⁵. Under the Children's Act (2007), government is responsible for ensuring that comprehensive social services are provided for children, with priority being given to funding of services in poor communities, and to ensure that these services are accessible to children with disabilities. However, although non-government organisations (NGO) are rendering services which are mandated by the Act, funds paid to them do not cover the full cost of providing these services. NGOs working in the disability sector have expressed grave concerns regarding accessing government funding¹⁶.

Based on the consulted literature, it was evident that mental health services for differently-abled children in South Africa were scarce.

In South Africa, interventions that use sport for the development of young people, have shown evidence that such interventions can enhance psychosocial wellbeing of at-risk youth;

¹⁰ Stuhl, A. and Porter, H. (2015). Riding the Waves: Therapeutic Surfing to Improve Social Skills for Children with Autism. *Therapeutic Recreation Journal*, Vol. XLIX, no. 3, pp 253-256.

¹¹ Pauw, I. (2011). *The stigma of mental illness*. Available from: <https://www.health24.com/mental-health/living-with-mental-illness/the-stigma-of-mental-illness-20120721>

¹² Williams D, Herman A, Stein D, Heeringa S, Jackson P, Moomal H, Kessler R: Twelve-month mental disorders in South Africa: prevalence, service use and demographic correlates in the population-based South African Stress and Health Study. *Psychol Med*. 2008, 38 (2): 211-220.

¹³ Jamison KR: The many stigmas of mental illness. *Lancet*. 2006, 367 (9509): 533-534.

¹⁴ Cosme, G. (2015). *Lack of mental health services in South Africa*. Available from: <http://www.ginocos.me/blog/lack-of-mental-healthcare-south-africa>

¹⁵ Republic of South Africa Departments of Social Development, and Women, Children and People with Disabilities, and The United Nations Children's Fund (UNICEF). 2012. *Children with Disabilities in South Africa: A Situation Analysis 2001-2011*. Available from:

https://www.unicef.org/southafrica/SAF_resources_sitandisability.pdf.

¹⁶ Ibid.

using a sport and a psychosocial curriculum¹⁷. There is however no literature on surf therapy as a sport for development programme, and its effect on differently-abled children in South Africa.

Immediate results from surfing interventions for differently-abled children have been reported in international literature. For example, anecdotally, many positive outcomes were reported by researchers, surf instructors, and parents; including observed increased self-confidence, gains in social development by interacting with the volunteer surf instructors and other participants, and decreased anxiety¹⁸.

Stuhl and Porter (2015)¹⁹ reported that surf therapy camps resulted in significant outcomes for assertion and empathy, responsibility and engagement, and positive functioning, emotional wellbeing, resilience, self-esteem, vitality, friendship, social trust, physical health, and enjoyment in the outside environment.

RESEARCH METHOD

The research method consists of the research approach, research setting and sample, data collection and analysis, and ethical considerations.

Research approach

A qualitative research approach was followed in this study. Qualitative research is used to gain a deeper understanding of a specific topic²⁰. Willig (2013)²¹ writes that qualitative research is interested in understanding how people make sense of the world and how they experience events. As such, a qualitative approach to this study was appropriate, as it allowed W4C to explore the experiences of the Noluthando group of children with ASD during their participation in the surf therapy programme, as well as the attitudes of teachers toward these children.

Research setting and sample

In August 2017, 18 learners from Noluthando were enrolled in a 10-week pilot surf therapy programme based at Monwabisi beach, Khayelitsha. The pilot programme sessions were offered weekly, once a day, in the mornings, and ran from August to November 2017.

The programme provided learners with:

1. Caring adults, in the form of surf coaches and mentors;
2. A safe space, in the form of the beach to access a challenging but fun task, that was surfing and/or swimming in the sea; as well as
3. Weekly surf therapy sessions, including trying challenging new tasks, such as floating or swimming with their coaches, and standing on a surfboard in flat water.

¹⁷ As reported by Snelling, M. (2015). *Breaking cycles of violence. one wave at a time: A formative evaluation of the Waves for Change surf therapy programme*. A dissertation submitted in partial fulfillment of the requirements for the award of the Degree of Master of Philosophy (Programme Evaluation). School of Management Sciences, Faculty of Commerce, University of Cape Town.

¹⁸ Armitano, C. N., Clapham, E. D., Lamont, L. S. & Audette, J. G. (2015). Benefits of surfing for children with disabilities: A pilot study. *Palaestra*, 29(3), 31-34.

¹⁹ Stuhl, A. & Porter, H. (2015). Riding the Waves: Therapeutic Surfing to Improve Social Skills for Children with Autism. *Therapeutic Recreation Journal*, Vol. XLIX, no. 3, pp 253-256.

²⁰ Sanders, K., Cogin, J.A., & Bainbridge, H.T.J. (2014). *Research methods for human resource management*. New York: Routledge.

²¹ Willig, C. (2013). *Introducing qualitative research in psychology*. Berkshire, United Kingdom: McGraw-Hill Education.

The setting for the research was the weekly surf therapy sessions on the Monwabisi beach. The study sample consisted of 18 Noluthando learners, 11 the W4C surf mentors, as well as three teachers from Noluthando (of which one is a qualified occupational therapist).

Data collection and analysis

Two qualitative data collection methods were used to collect primary data, namely direct observation, and unstructured interviewing. In addition, secondary data was collected through the revision of existing literature on surf therapy and differently-abled children²².

Direct observation allows the researcher to observe certain situations or people and to gather rich information on the participants experiencing a specific event. Direct observation suggests a more detached approach to collecting data, where the researcher is watching rather than taking part; while striving to be as unobtrusive as possible and not bias the observations²³. For the purpose of this research, direct observation was employed as a data collection method by the W4C surf mentors, the W4C training manager, as well as the W4C monitoring, evaluation and learning director.

Unstructured interviewing involves direct interaction between the researcher and a respondent or group. With unstructured interviewing the researcher may have some initial guiding questions or core concepts to ask about, but there is no formal structured instrument or protocol. Unstructured interviewing is particularly useful for exploring a topic broadly²⁴. For the purpose of this research, unstructured interviews were conducted with W4C surf mentors, as well as the Noluthando teacher who accompanied the learners during each surf therapy session.

A thematic data analysis (TA) approach was followed to recognise and analyse patterns of content and meaning in the data collected. TA is a method well suited to varying needs and requirements of research projects, including health and well-being research²⁵.

Research ethics and limitations

The research project was guided by the following principles: privacy and confidentiality, voluntary participation, informed consent, do no harm, and data security. As such, the research project was handled in an ethical manner; while the dignity, rights and well-being of participants were considered.

It is also important to note that the study was an internal W4C research project. As such, the research findings are not representative of any larger population and should be interpreted with the necessary discretion.

RESEARCH FINDINGS

The purpose of the Noluthando pilot was to explore the feasibility and immediate outcomes of W4C's surf therapy programme on a different target group; aiming to make this structured extra-curricular programme available to differently-abled children and ultimately promote

²² Such as Armitano, C. N., Clapham, E. D., Lamont, L. S. & Audette, J. G. (2015). Benefits of surfing for children with disabilities: A pilot study. *Palaestra*, 29(3), 31-34; and Stuhl, A. and Porter, H. 2015. Riding the Waves: Therapeutic Surfing to Improve Social Skills for Children with Autism. *Therapeutic Recreation Journal*, XLIX(3), 253-256.

²³ Web Center for Social Research Methods. *Qualitative Methods*. Available from: <http://www.socialresearchmethods.net/kb/qualmeth.php>

²⁴ Ibid.

²⁵ Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

inclusive education. In addition, the findings of the study would be used to inform recommendations for scaling the programme to more and larger groups of differently-abled children.

Key immediate outcomes

A number of key immediate outcomes as a result of the W4C surf therapy programme were found amongst the participants; which are noted below. Direct quotes are additionally provided, which were used to identify the themes in the data collected.

More confidence

"A highlight was when W4C mentor Luxolo, who had been working patiently and in a structured way with two learners who were scared to get their faces wet, got them to kneel down in the water, and all together splash their faces. By the end of the session, the children were soaked and stoked!"

- W4C surf mentor.

"The teacher told us that the children weren't very social and don't interact with each other a lot. One of the children was often last to get in the water. As coaches we would always shout for him, praise him, and encourage him to get him in the water. In the last two weeks, the other children have begun to encourage him too; they started to shout for him and clap for him before we do! It's great to see them interacting. He went into the water more and more."

- W4C surf mentor.

Improved social interaction

"The children were increasingly showing an appreciation for the W4C programme. For example, usually getting them to leave school and get in the bus was very challenging and time-consuming, but as the programme continued, they were increasingly in the bus and sitting and waiting to leave for the surf therapy sessions with almost no instruction!"

- Noluthando teacher and occupational therapist.

"The children are more social at W4C than at school. In general children with their cognitive functions are quite independent and don't do much group play or interaction. Empathy, and understanding that someone else's feelings can be different to their own, is difficult for them. At the programme, they've shown a little more willingness to engage with each other, and to act as a group, which is great."

- Noluthando teacher and occupational therapist.

An increase in communication initiation

"Introducing the W4C Kilo – a 'follow-the-leader' style group energizer, performed in a circle – also proved effective and increased the learners' attempts to communicate with the W4C surf mentors. Call and response, copying actions and group activities were good for the learners. The learners were initially very independent and didn't interact with the coaches easily. But this changed when they did the W4C kilo exercise."

- W4C surf mentor.

Increased verbal output (speaking more)

"One of the boys doesn't usually greet anyone. Last week, he specifically said hello to me though, and the teachers noticed and commented that it's something new for him to communicate in that way."

- W4C surf mentor.

Improvement in peer relationships, as well as interaction and bonding with adults

"I have seen so many changes – self-confidence, communication and social interaction. In general children with their cognitive functions are quite independent and don't do much group play or interaction. Since being at Waves for Change, the children have shown a willingness to engage with each other, build friendships and high fives...lots of high fives!"

– Noluthando teacher.

"The W4C 'bananas' shaka sign is great for the children, as they respond well to ritual and structure. At school, children who never used to really interact with me will give the 'bananas' sign whenever they see me, which means they're associating me, that sign, and surfing together."

- Noluthando teacher and occupational therapist.

Less aggressive outbursts

"These children need routine and structure. For two weeks there were roadworks between Noluthando and the W4C beach programme, and the school bus had to take a different route. One of the young girls would cry and have aggressive outbursts, and only stop crying when they arrived at the W4C site. We thought this means she thought they weren't coming, and got upset at the change in routine. It meant she's come to count on W4C as part of her structure and routine, and something she looked forward to."

- W4C surf mentor.

Personal development of W4C surf mentors

The W4C surf mentors reported increased personal development as a result of facilitating the surf therapy sessions to the Noluthando learners. The pilot programme was beneficial to the W4C mentors, who have not only reported that they enjoyed the experience of working with a different target group, they have also reported an increased, deep understanding of mental illness and autism. An important outcome of their better understanding of and empathy toward differently-abled children, is the positive effect such has on the widely prevalent stigmatisation of mental illness in South Africa.

"Some of the children in the group were non-verbal, and some were verbal but didn't understand what was being said. This encouraged us as mentors to use pictures and hand-gesture demonstrations to share with the learners the lesson of the day. The W4C 'bananas' hand sign – a trademark gesture in the surf therapy programme – proved to be particularly effective as the learners identified it as time to go surfing and got excited."

- W4C surf mentor.

"At first I was scared. I thought to myself: 'these kids don't think like us, how will I talk to them?'. As time went by we made friends with them and got to know them. They are good kids and we became good mentors."

- W4C surf mentor.

"I think of working with the children from Noluthando as challenging my challenge and turning it into a success."

- W4C surf mentor.

"At first they were all scared of the water, but now they are all comfortable. I think this is because as coaches we learnt how to become very supportive, and we created a safe space for the learners."

- W4C surf mentor.

CONCLUSION

At the end of the ten week pilot programme, it became evident that surf therapy was beneficial to the Noluthando learners. Although the effects in the classroom and home environment must still be monitored, the research found the effects of the programme were positive on the participating children, reporting more confidence, improved social interaction, an increase in communication initiation, increased verbal output, an improvement in peer relationships, and less aggressive outbursts.

In addition, the immediate effects of the Noluthando pilot programme extended to the W4C surf coaches and mentors. Some of these effects included increased confidence to work with differently-abled children, improved non-verbal communication, an increased understanding of and empathy toward mental illness, with a decreased stigmatisation toward people with mental illnesses.

Based on the research results and shown immediate results, it was concluded that the W4C surf therapy programme may be appropriate and feasible for differently-abled learners; thus contributing to inclusive education and access to structured extra curricular programmes.

RECOMMENDATIONS

It was recommended by Noluthando that the pilot programme was scaled in 2018; Noluthando similarly requested adding a second group to the existing W4C surf therapy programme. Supported by operational and contextual research, it was recommended that W4C works with Noluthando staff and mental health professionals to adapt the existing W4C curriculum specifically for differently-abled children, such as those on the autism spectrum, to ensure an even more significant effect of surf therapy on these children.

An evaluation of the medium-term effects of surf therapy on this target group was recommended, including the indirect effects on the classroom and home environments. This would be done by a follow-up study on the pilot programme participants during their ongoing participation in the W4C surf therapy programme in 2018. This will provide W4C with more data and research to inform and scale surf therapy programmes to differently-abled children.

The development and piloting of a programme evaluation tool that is autism friendly and that differently-abled children can understand was recommended, to assess the learners' experience and perspective of the programme, as well as overall programme effect.

Lastly, linkages with relevant Western Cape Government Departments, such as the Department Education, Department of Health and Department of Social Development were recommended to assist growth of and increased access to the W4C surf therapy programme, specifically to children who are differently-abled. These linkages are particularly important in assisting that the barriers for differently-abled children to participate in structured extra curricular programmes are removed, as access to such programmes appeared to have to be approved at a Provincial Government level, which may increase challenges for local schools and institutions in accessing such programmes when needed.