





Fun & Fitness

Using Exercise and Technology to Improve the Health of people with learning disabilities

Juliana Serrato, Assistant Psychologist, Greenwich Community Learning Disabilities Team

Dr Joel Parker, Consultant Clinical Psychologist, Greenwich Community Learning Disability Team

Louie Jenkinson, Greenwich CLDT service user, Fun & Fitness volunteer and Better employee

Stephanie Turner, Royal Borough of Greenwich

Daniel Bank, Better Sports Development Officer

April 2022





Contents

About	3
Executive summary	4
Overview	
Key findings	
Conclusion	5
Recommendations and Implications	5
Background	7
Overview of the project	
Evaluation purpose and design	
Purpose Design	9
Findings	13
Conclusions	19
Recommendations	22
Acknowledgements	23
References	24
Appendices	26





About

In the context of the significant health inequalities experienced by individuals with intellectual disabilities, Greenwich Community Learning Disability Team have worked in partnership with the Royal Borough of Greenwich's (RBG) leisure provider Better to offer bespoke exercise groups for people with intellectual disabilities in the borough. This programme, titled "Fun & Fitness" was offered initially on Zoom from February 2021, in the context of Covid-19, before transferring to a community leisure centre in July 2021. Health Innovation Network Innovation Grant funding was invaluable in terms of enabling the initial creation of a Band 4 post specifically focused on supporting the project, which was key in enabling the groups to be offered in a community setting and in project evaluation, as well as supporting the purchase of equipment for Fun and Fitness. The programme and approach have been developed with input from a range of professional disciplines and service user involvement and has been supported by multiple funding grants. A range of measures relating to physical and mental health, and quality of life have been repeated periodically through the programme. To date 85 group members have participated and a range of positive feedback has been received. Reflections of the process to date are offered, including in relation to the limitations of the approach and learning points, as well as ideas for further developing the project.





Executive summary

Overview

This report presents the findings of a pilot programme aimed at increasing activity levels in adults with learning disabilities. Fun & Fitness uses technology to encourage and support participants to increase physical activity. Changes in activity levels, biometric markers, as well as psychometric measures were tracked over time. Sources of qualitative data in the form of individual feedback and focus group were also used for project evaluation.

Key findings

- 1) Fun & Fitness aimed to engage 64 people by March 2022. From the start of the project in February 2021, 85 people have joined and 51 of whom remain regular members. Several participants have used Fun and Fitness as a springboard to engage with additional sports and activities outside of the group, such as swimming, boxing, and cycling.
- 2) Participants' feedback suggests that the social aspect of Fun & Fitness is highly valued, particularly exercising, and playing games with friends. This is notable both in terms of the project being developed in the context of the Covid-19 pandemic and at a time where in Greenwich, as in many localities there has been a reduction in the provision of traditional day services for people with learning disabilities. The project therefore appears to have been timely in relation to reducing social isolation. Linking the project in with Mencap's "Round the World" challenge, which enabled them to be given rewards based on hours of exercise entered into an online portal, also appeared to support motivation of group members. Confidence in accessing a community leisure centre increased over time, and some members have signed up for a gym membership.
- 3) Significant improvements in mental health outcomes were observed over time in terms of the repeated use of Health of the Nation Outcome Scales for People with Learning Disabilities (HoNOS-LD). Learning Disabilities in Clinical Outcomes in Routine Evaluation has suggested improvement at an arithmetic level, but yet to reach a point of statistical significance across the engagement in the group. In terms of quality-of-life repeated measure on the miniMANS-LD again suggest improvements at an arithmetic level, but this has yet to reach statistical significance. In terms of physical health measures there were no statistically significant changes. A comparison of mean scores indicates a slight decrease in weight and resting heart rate over time, as well as an increase in quality of life. The number of participants with high blood pressure also decreased after six months.





- 4) Using the fitness trackers has proven to a challenging element of the project, but focused and creative responses to this have enabled some progress to be made. Despite the barriers encountered by most members in using the fitness trackers consistently, it has been possible, with additional support, to demonstrate and encourage a small number of people to wear them with regularity. The information recorded on the trackers has been useful in indicating that technology can be a motivator to increase physical activity levels.
- 5) In addition, a service user who supported the sessions as a volunteer has been guided through completing additional training and is now accessing paid employment with Better.

Conclusion

The co-operative approach between Oxleas, Better and the Royal Borough of Greenwich has been key in evolving Fun & Fitness into a successful project and into a gateway for people with learning disabilities to access physical activity. The members value being part of the groups and there is evidence of better mental health outcomes. Involving technology has proven to be a challenge, and additional support was needed. Moving forward, Fun & Fitness will offer more challenging exercises and nutrition workshops to its regular members, therefore involving additional elements to encourage health behaviour change. The project can be considered highly successful in delivering "Fun" based on our evaluation and the consistent and sustained engagement this has supported has created a foundation for members to begin to move toward improved physical fitness and mental health.

Recommendations and Implications

- This project demonstrates the utility of partnership working between specialist learning disability services, local authorities, and leisure providers in terms of supporting people with learning disabilities to become more physically active.
- In the context of health inequalities and social exclusion of people with learning disabilities
 nationally, there should be an expectation on local authorities and health providers to work
 more proactively to offer opportunities to this population.
- On the basis of the data gathered as part of the service evaluation of Fun & Fitness, more formal research into the project/approach would be valuable.
- Given the scale of health inequalities faced by people with learning disabilities, Community
 Learning Disability Teams will benefit from a range of additional investment to support service
 users' physical health more proactively. Band 4 posts focused on promoting greater physical
 activity is one cost effective way of using this investment.
- Fun & Fitness offers a powerful model of one way of achieving this and it may be valuable to develop a workbook to share some of the key processes and learnings to support those in





other localities wanting to use a similar approach.

- In some localities other models may be more appropriate e.g., colleagues working in Cornwall
 have expressed an interest in developing Zoom groups on the basis of the large travel
 distance.
- Whilst some progress has been made with the use of fitness trackers, for many people with learning disabilities, to incorporate this into their fitness journey, significant time is likely to be required to support this. However, there is significant potential for this to be built into routine care and support for people with learning disabilities e.g., supported living providers be supported to use fitness trackers with people with those they support as a way of monitoring their current activity levels and to set goals for those wishing to become more active.
- As with the general population, significant changes in physical fitness and physical health outcomes may be best achieved by not only supporting increased physical activity, but also supporting healthy and nutritious eating.
- As people with learning disabilities become more physically active, supporting them to continue to access more challenging and strenuous forms of activity is also likely to require creativity and proactive approach.





Background

Health inequalities among people with LD

People with intellectual disabilities experience very large health inequalities compared to the general population in the United Kingdom. Based on data related to deaths of people with LD occurring in 2019, the average age of death of women was 59 and of men was 61 (University of Bristol Norah Fry Centre for Disabilities Studies, 2020). Overall, this is a 23-year difference compared to the general population- and local data confirms similar inequalities affecting people with intellectual disabilities who come under the care of local services in Oxleas NHS Foundation Trust, including those residing in Greenwich. A report by Public Health England (2020) shows an even larger disparity in the context of Covid-19, with young adults with LD being 30 times more likely to die from the illness than their counterparts in the general population. An analysis of health-care data from Scottish practices found adults with LD to have a higher prevalence of conditions such as epilepsy, gastrointestinal disorders and sensory impairments (Cooper et al., 2015). Mental health conditions are also more prevalent with estimates ranging between 25% and 54% of people with LD being affected (Raj et al., & Cooper, Smiley, Morrison, Williamson & Allan). Severe mental illness has been found to be 8.4 times more common for people with LD compared to those without (Mencap, 2021) and 37.1% of adults with LD are obese, which is significantly above the national average (Public Health England, 2020). What is more, during lockdown, families have reported that mental health, relationships, physical health and independence of the people they support have all deteriorated significantly (Mencap, 2022).

Barriers to physical activity

People with LD are shown to have lower levels of physical activity compared to the general population (McKenzie, Murray, & Murray, 2018). People with LD face many barriers to accessing physical activities, which contributes to the aforementioned health inequalities. An acceptance of an inactive lifestyle by carers and communication issues between family and paid carers have been cited as barriers facing people with LD from accessing physical activities (Cartwright, Reid, Hammersley & Walley, 2016). Additional barriers include limited accessible activities and transport difficulties preventing access to physical activities (Bossink, van der Putten & Vlaskamp, 2017). During lockdown, with services being reduced or stopped, people with LD were exposed to long periods of isolation and offered little support to remain active. While most of the population relied on technology to overcome some of the hurdles imposed by the pandemic, this was particularly difficult for people with LD, who often lack access to technology devices or depend on others to navigate them (Department of Health and Social Care, 2021). This population is therefore at greater risk of "digital exclusion".





Overview of the project

Conversations with MDT colleagues based in Greenwich Community Learning Disabilities Team (Oxleas), Royal Borough of Greenwich's Public Health Team and staff from Better (Royal Borough of Greenwich's preferred leisure provider), led to discussions about starting an accessible exercise group for people with Learning Disabilities, as it was thought that a more focused approach was required in addition to linking people in with existing opportunities. Greenwich Get Active (Greenwich Leisure Limited), were committed to developing an inclusive programme to help residents with a disability to become more active as recognised within their 2019-2023 physical activity and sports strategy. Service users with learning disabilities have been consulted and involved at all stages of the projects development and suggested the engaging as well as descriptive title of "Fun and Fitness" for the project. The group was piloted during one of the peaks of the coronavirus pandemic in early 2021 and ran digitally until restrictions were lifted. Therefore, service users' access to technology needed to be considered during the initial phase of the project.

The sessions were led by a fitness instructor with many years of experience and personal knowledge of some of the challenges faced by people with Autism, due to family caring responsibilities. Their professional knowledge and enthusiasm created a welcoming and inclusive environment for people with learning disabilities. The first Fun & Fitness sessions started at the beginning of February 2021 via Zoom and moved to a community leisure centre from July 2021, as Covid-19 restrictions had been reduced. A service user who volunteered to assist the team during sessions has also been a great contributor to the project. He has attended every session with enthusiasm and has been supported in undertaking an accredited qualification with Better and in applying for paid work. In the initial phase of the project it was clear that in spite of Better's positive attitude in offering the groups to people with learning disabilities, that input from Greenwich CLDT was invaluable in terms of thinking about the different adjustments different individuals needed, ensuring information about the groups was appropriately communicated, offering support to overcome barriers to accessing both online and in person sessions, supporting personalised approaches according to individual needs (e.g. mobility difficulties), using the groups as an opportunity to consider the physical health needs of group members more generally and ensuring a person centred approach drawing on existing knowledge of many group members and responding to unforeseen challenges (health difficulties during groups such as epileptic seizures, times when members have felt worried or unhappy and on rare occasions, supporting appropriate responses to complex/challenging behaviour that has occurred or conflict between group members). On this basis Psychology, Nursing, Occupational Therapy, Speech and Language Therapy and Physiotherapy colleagues have been involved throughout the project. Due to the range of input needed to support the group, the immediate popularity of the project and the amount of work required to comprehensively evaluate the project, it





quickly became clear that in addition to already busy professionals offering input into the project, for the project to be sustainable it would be essential to have a colleague whose post was focused on Fun & Fitness as a project. The large majority of the HIN grant was therefore used to advertise for a Band 4 post, two days per week for seven months, which was advertised so as to attract candidates wishing to pursue a career in Occupational Psychology, Nursing or Psychology. In the event 39 out of 40 applicants were psychology graduates and an Assistant Psychologist was appointed with several years of experience in working with people with learning disabilities, who has recently completed an MSc in Health Psychology, therefore offering an ideal skillset for both practically supporting the project and also its evaluation. The Assistant Psychologist came into post in late June, thus enabling her to become familiar with the project on Zoom briefly, ahead of it transferring to the community.

Physical activity in the form of chair-based exercises, light weightlifting and dance moves were the core elements of Fun & Fitness sessions on Zoom, with sports and games being added to the sessions once they began to be delivered in a community setting. The team created an open and safe space where participants could collectively choose what activity they wanted to do, as well as the soundtrack for the session. Everyone was given a fitness tracker and a record of their activity levels have been kept. Qualitative data in the form of individual feedback, case study and focus group have been gathered, as well as additional quantitative data involving biometric and psychometric measures.

Evaluation purpose and design

Purpose

The main purpose of this evaluation is to establish whether Fun & Fitness is a valued activity for service users, and to identify its impact on physical and mental health, as well as quality of life of adult with learning disabilities. The evaluation was designed to enable an understanding of the needs of people with learning disabilities in relation to physical activity and offer valuable insight in terms of how the project could be most usefully structured. Furthermore, the evaluation aimed to help establish whether a more formal research project might be warranted, and whether there is a case for ongoing funding to support and expand Fun & Fitness within local services and for similar projects to be developed more widely. It was also hoped that this could help refine and improve the groups and support the creation of a Fun & Fitness workbook/manual and to potentially inspire similar projects in south London, the South Thames region and nationally.

Design

Evolution of the groups/Intervention:





Adults with a learning disability resident in Greenwich were invited to take part in Fun & Fitness. Easy read material with relevant information was sent to service users and carers via post or email. In light of the restrictions imposed by the coronavirus pandemic, it was deemed appropriate to pilot the programme online. The sessions started at the beginning of February via Zoom and involved a combination of low to moderate intensity movement and resistance-based activities as detailed above which aimed to offer a modest degree of cardiovascular stimulation, as well as engaging all major muscle groups. Easy read information was developed to support group members and their carers to understand what would be happening in the groups and to remind them about appropriate clothing and having a bottle of water available (see appendix 1). The sessions, led by a fitness instructor, lasted for an hour and participants were given the option to join a morning or an afternoon session. It quickly became apparent that a proactive approach was required to support attendance at the sessions, as at times people experienced technical difficulties accessing Zoom links or forgot to login at the correct time. Email reminders with the relevant links were therefore sent the day before each group and a rota was created for one of the MDT colleagues involved in the project to be available to support anyone experiencing technical problems. Attendance steadily increased, with new members joining every week. A drop in attendance was observed when the coronavirus restrictions were lifted through April and May 2021, as members understandably were motivated to spend time outside of their home environments. The idea of Fun & Fitness moving to a communitybased leisure centre was discussed with group members and received a very positive response.

After 21 weeks online, Fun & Fitness made its debut at the Waterfront Leisure Centre, Woolwich. In the first week, 15 participants attended in person and 2 attended online. It was noted that some were well adapted to the online format and preferred to continue this way, and adjustments were made to allow for this to continue. In some instances, a creative approach has been needed to support some members to attend in person e.g., one member who has experienced hate crime repeatedly in the community has been escorted to sessions by an undergraduate placement student, highlighting the ways that stigma and discrimination also contribute to the health inequalities experienced by people with learning disabilities. After a few weeks, however, most members started attending in person and the online version was discontinued. The first session in the community, the Greenwich CLDT came together with the GLL staff to welcome participants, support workers and family members.

The second group started a few weeks later, opening opportunities for more people to take part. Both health and social care teams actively referred service users to the programme, and the two groups rapidly reached their capacity of 30 members in total. In October 2021, having a large waiting list of people interested in the activity, a third group was initiated, and 15 further participants started their journey into a more active lifestyle. Given that on a weekly basis even well attended sessions are below 80% of capacity, it has been possible to slightly increase the number of members of each group subsequently, as we have continued to receive referrals for Fun & Fitness even without further





active promotion. Sessions running in person have enabled an expansion in the range of activities that is offered as part of the groups. Most notably a games section has been added to the end of the groups incorporating activities such as table cricket and boccia, which groups members play with each other (see appendix 2).

Noticing the difficulties of most participants in using the fitness trackers, a separate session was offered, facilitated by a sports development officer from the Royal Borough of Greenwich, who has been a key contributor to the project. This group has assisted participants to set up the devices, and those who learned to use the trackers shared their knowledge with others. Easy read material was created, and the team liaised with carers to offer additional support.

Combining a variety of forms of data gathering, both qualitative and quantitative, provided credible information for project evaluation using a mixed methods design.

Qualitative methods

- Individual feedback: Tailored questionnaires to understand what members valued about the groups, their levels of activity outside of the groups, and suggestions for improvement.
- Focus group: Run in December 2021 and mediated by Oxleas staff members who were not directly involved with Fun & Fitness. Participants discussed for one hour, and the session was voice recorded. Thematic analysis was used to identify main themes.

Quantitative methods

- Demographic data: Age, gender, and ethnicity.
- Biometric data: Height (in meters), weight (in Kilograms), body mass index, blood pressure
 and resting heart rate, taken at baseline, after three months and after six months. Blood
 pressure was categorised into *normal* or *high*, and allocation to each group followed NHS
 quidelines (NHS, 2022).
- Psychometric data:
 - Health of the Nation Outcome for People with Learning Disabilities (Honos-LD, Roy et al., 2002) - eighteen-item standardised mental health questionnaire using a fivepoint rating scale where lower scores suggest better outcomes.
 - MiniMans-LD (Raczka et al., 2020) nine-items standardized questionnaire measuring quality of life using a five-point scale where lower scores imply better outcomes.
 - Learning Disability Clinical Outcome in Routine Evaluation 14 (LD-Core 14, Brooks et al., 2013) - fourteen-item standardized mental health questionnaire using a threepoint scale where lower scores indicate better outcomes.





- Attendance rate: a register was updated weekly, and the median attendance rate was calculated. Members with attendance rates equal or above the median were categorised into regular, otherwise occasional.
- Fitness tracker: Every participant was given a fitness tracker and step count data was collected at regular intervals. Participants self-reported using the trackers *consistently* or *sporadically*.

Non-parametric tests (Friedman's ANOVA and Wilcoxon Signed Ranks) were used to analyse quantitative data.





Findings

At the time of writing 85 individuals with intellectual disabilities have accessed Fun & Fitness since February 2020. Of these 51 remain active members. Given that at any time Greenwich Community Learning Disability Team is working actively with around 300 service users clinically, the number of people who have been engaged and remain involved has surpassed our expectations. Indeed, due to limits in the capacity of the groups we have stopped actively promoting them in the ways we did when initially setting them up, and there are likely to be more people with learning disabilities in Greenwich who could potentially benefit from attending. The mean attendance rate in the community was 62.6%. The groups have been successful in not only engaging large numbers of participants, but also offering something that people are motivated to continue to participate in. Across the project, on average eighteen participants took part. However, figure 1 shows how attendance has steadily increased across the 14 months of the project, in spite temporary blips, such as in May-June 2021 when the groups were still on Zoom as Covid regulations eased and in January 2022 when the Omicron variant was at its peak. Notably the last three weeks in March 2022 have had the highest attendance in the project's history to date, peaking at 35 members attending in a single week, illustrating the enduring popularity of the groups.



Figure 1: Total attendance of combined Fun and Fitness Groups

Fun & Fitness therefore provides a powerful example that when offered appropriately designed opportunities, people with learning disabilities are highly motivated to be physically active.





In total, fifteen participants provided biometric and psychometric data at baseline, and after three and six months. Of these, seven were males and eight were females, age ranging from 21 to 61 (M=36). The majority reported identifying as of White British background, fourteen attended Fun & Fitness regularly, and one person used the fitness tracker consistently (see table 1).

Table	1:	Participan	nt's charac	teristics

Table 1: Participant's characte	eristics	Total
		I Otal
		N=15 (100.0)
Age in years, mean (SD)		36 (11.03)
Gender, n (%)		
	Male	8 (53.3)
	Female	7 (46.7)
	Total	15 (100.0)
Ethnicity, n (%)		
	White British	8 (53.3)
	Black British	5 (33.3)
	Asian British	2 (13.3)
	Total	15 (100.0)
Attendance, n (%)		
	Regular	14 (93.3)
	Occasional	1 (6.7)
	Total	15 (100.0)
Use of fitness tracker, n (%))	
	Consistent	1 (6.7)
	Sporadic	14 (93.3)
	Total	15 (100.0)
Blood Pressure		
Baseline		
Baseinie	Normal	9 (60)
	High	6 (40)
3 months		
o months	Normal	6 (46.7)
	High	8 (53.3)
6 months		
o monuis	Normal	10 (66.7)
	High	5 (33.3)
		, ,

2 shows biometric data, as

well as HoNOS-LD, CORE-LD and MiniMANS-LD completed at the start of community-based groups, 3 months, and 6 months. Univariate analysis shows a statistically significant difference when comparing a standardized measure of mental health (HoNOS-LD) at baseline and after six months, X^{2} (2) = 8.14, p > 0.005 (see table 2), indicating a positive change over time. Although differences were not statistically significant in quality of life (MiniMANS-LD) and the additional mental health





measure (Core-LD), a comparison of mean values indicate a positive change after three months, and even further after six months. A slight decrease in mean values for weight and resting heart rate is observed over time, although these differences are not statistically significant.

Table 2: Univariate Analysis

Table 2: Univariat		Friedman's ANOVA							
		Ν	Mean Rank		SD	X² (DF)	р	Wilcoxon's Post hoc	
Veight									
	Baseline	15	2.40	89.13	23.29				
	3 months		1.67	87.01		4.13 (2)	0.12		
	6 months		1.93	87.23	25.04	()			
ВМІ									
	Baseline	15	2.37	32.36	9.8				
	3 months	15	1.70	31.82	11.0	3.49 (2)	0.17		
	6 months	15	1.93	32.02	11.0				
Resting Heart Rate									
	Baseline	15	1.97	85.13	14.36				
	3 months		1.90	81.93		0.46 (2)	0.79		
	6 months	15	2.13	82.80	11.80				
MiniMANS-LD									
	Baseline	15	2.30	15.53	3.66				
	3 months		2.03	14.87	3.50	3.25 (2)	0.19		
	6 months	15	1.67	13.93	4.25				
Core-LD									
	Baseline	15	2.20	143.73	57.83				
	3 months		2.17	146.53	83.64	3.37 (2)	0.18		
	6 months	15	1.63	130.67	75.51				
HoNos-LD									
	Baseline	15	2.53	11.27	5.77			Baseline v 3 months p=0.2	
	3 months		1.93	10.07	4.13	8.14 (2)	0.017		
	6 months	15	1.53	7.13	4.15			3 months v 6 months p =0.	

^{*.} p is significant at 0.05

An initial evaluation of the online programme was carried out in April 2021 and gathered the individual impressions of participants about their experience with Fun & Fitness on Zoom. The majority expressed that they enjoyed being part of the group and would recommend it to a friend. Some said that they had joined the group because they wanted to become more active, while others mentioned that it encouraged to exercise more. One participant mentioned "I want to keep fit" and another explained how they had been motivated to exercise during lockdown by saying "I'm taking walks in





my garden". The positive impact of the social elements of attending the groups also became evident, as most participants suggested that being part of Fun & Fitness online had helped them to extend their social network during lockdown restrictions. A few months after implementation in the community, 10 participants were asked to provide individual feedback of their experience at the leisure centre. When asked whether the groups made them feel better, 80% strongly agree. 90% said the groups were helpful in extending their social network, and a regular member described the importance of socialization by stating "I'm learning to meet new people and getting to know their names". The fitness trackers seemed to be an element of motivation to increase physical activity. 60% of people said they enjoyed using the devices and a member said "I will use the tracker to count my steps". Nonetheless, the majority said they forgot to wear the trackers or to recharge the batteries.

In December 2021 a focus group was conducted with three regular members. Thematic analysis was used with the following themes being identified i) barriers ii) suggestions, iii) highlights and iv) aims. The comments in this group identified social aspect of Fun & Fitness as of particular importance, especially after the lifting of lockdown restrictions, and meeting friends and playing different games were referred to as the highlights of the sessions. Suggestions were made for the programme to introduce more advanced exercises using gym equipment, while the barriers were mostly related to technology, and aims involved engaging on a broader approach to becoming healthier, like implementing a balanced diet. Some of the comments related to each identified theme:

Barriers:

"I'm not good on zoom"

"I forget to use my fitness tracker"

Suggestions:

"I'd like to use the treadmill and the bike as well"

"Maybe we can do the gym classes"

Highlights

"I love the games"

"I love making new friends"

Aims

"I'm trying to eat small portions"

"Fun & Fitness helps me to think a little different about my health"

Overall, the feedback strongly indicated a preference for in person sessions. This feedback informed





the decision to continue to run sessions in persons during the Omicron Covid-19 wave, with an enhanced risk assessment put in place, and agreed by health and safety managers from Oxleas NHS Foundation Trust.

At the initial stages of developing Fun & Fitness, the team consulted a service user led co-production group called Greenwich Research Net. The group consists of eight service user volunteers with intellectual disabilities who meet weekly alongside staff from Greenwich CLDT to make Trust and Service Wide changes to improve the lives of people with learning disabilities. In addition to naming the project as Fun & Fitness, Research Net members talked about difficult experiences in mainstream gyms and leisure settings, therefore helping the team to think of ways to make the environment and overall experience as supportive as possible for group members. Over time, it has been noted that Fun & Fitness members gradually felt more confident accessing a mainstream community setting. Being an inclusive programme where all abilities are welcome, the team is mindful in making adjustments to individual needs, offering extra support and adaptive equipment to ensure accessibility and inclusion. Examples of these are greeting participants at the entrance and escorting them around the premises, inviting cares to join the groups, providing step free access, offering a choice of chairs, limiting external noise, and having a member of Oxleas CLDT escorting a participant to and from the leisure centre while they experienced anxiety travelling independently.

Other people involved in the project have regularly shared valuable and constructive feedback, which have informed decisions to change or adapt the course of the programme, and also served as stimuli to the continuity of the project. Sophia, the enthusiastic fitness instructor who has been consistently leading the sessions since the online format, declared "The participants are amazing and have fully embraced the project. Positivity is expressed by everyone involved, the atmosphere is both inspiring and infectious which fills me with great joy and satisfaction as an instructor working with such an awesome group of people".

Four participants have been encouraged to use the fitness tackers regularly from November 2021, having completed the additional group specifically focused on using the trackers. While one has reported to have been using the device consistently, the others reported wearing it sporadically. It is therefore recognised that although all four people have shown an increase in weekly step count (see figure 2), this data may not be reliable in indicating increased physical activity levels.





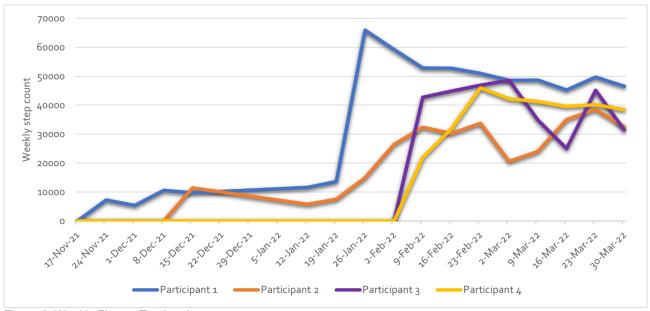


Figure 2: Weekly Fitness Tracker data

Even so, the participant who reported consistently using the tracker lost 6.2 Kg and decreased BMI from 29.9 to 27.7 after six months into Fun & Fitness. Moreover, positive changes were seen in all psychometric measures for this individual over time, as well as lifestyle changes. Since October 2021, they engaged in additional sports with other providers and have participated in tournaments. Taking part in sports had been their plan even before attending Fun & Fitness, and the project served as an inspiration to pursue their goal. During conversations with the team, they outlined some of the elements of using the fitness tracker that were important in encouraging consistent use. They did not start using the tracker immediately, but after taking part in the additional group to learn how to set up the device, they felt motivated to track their progress not only at Fun & Fitness, but also during other activities. Over time, they learned how to use the tracker application on their phone, and activity continued to be recorded even when they forgot to wear the tracker, which was reported to happen frequently. From learning to use the tracker to linking the device with the phone and consistently tracking activity, they have overcome several of the barriers encountered by people with learning disabilities, some of which are related to lack of support, access to electronic devices and adapted communication. It is important to recognise that the level of support this participant receives at their place of residence has also been of great significance to their progress and serves as an example of appropriate provision of support, which combined with additional elements can help people with learning disabilities to initiate positive health changes.



Conclusions

Implementing Fun & Fitness during the pandemic has been a thoughtful process. The uncertainty provoked high levels of anxiety, which slowly turned into excitement as the project progressed. The high engagement in the initial online sessions demonstrated that people were keen to get more active. It served as motivation to further develop the project, and transfer classes to the community. Reflecting on the challenges has been a thoughtful process, and due to the interest and commitment of everyone involved, the project has been a success. A story is being told where people with learning disabilities can access an activity that helps them become more physically active while expanding their social circles. A highlight of the initial stages was witnessing participants meet each other online, form connections and share common interests. This was transferred into the community groups, and interactions that had been initiated online were gradually strengthened. It has also been positive to watch participants becoming increasingly active, both within the group and through additional activities. Supporting people to embrace new opportunities such as an exercise group, which is often not readily available for people with learning disabilities, has been an enriching and exciting experience.

One of the most exciting stories that unfolded throughout this project is about a service user who started as a volunteer to assist the team and has been a great contributor to the project. He has attended every session delivered in the community with enthusiasm and has been supported in undertaking accredited qualifications, which have now been completed, and in applying for paid work with Better. He is now a leisure centre employee and continues to be a vital member of the team, committed in moving Fun & Fitness forward. Participating in the project has been a significant component of his professional development, and the experience has opened doors to a purposeful future.

The qualitative feedback obtained at various stages in the project clearly indicates that the groups are highly valued by service users and whilst data has not been gathered systemically, we have also received consistent positive feedback from carers, many of whom appear to enjoy the groups themselves. The quantitative data is also suggestive of positive change. Whilst only the HoNOS-LD measure demonstrates this at a statistically significant level, it is notable that all physical health, mental health and qualitative measure indicate arithmetic change in a positive dimension. It may be that more of these outcomes reach a point of statistical significance as i) a greater number of service users have measures repeated at multiple data point, given that the small sample of 15 individuals may have made this hard to demonstrate, ii) group members have a longer period engaging in the project. Fun & Fitness may act as a gateway into a healthier lifestyle more generally, based on some





of the additional developments described below and this may also increase the degree of change within quantifiable measures. It is also notable that metrics such as weight are notoriously difficult to achieve sustained change in relation to, so we are heartened by the encouraging trends.

It is recognised that several factors are involved in health behaviour change at multidimensional levels (Short & Mollborn, 2015), and although Fun & Fitness represents a small element, it has been serving as a gateway to initiate change. Based on feedback provided by participants, an additional group is being established and will target regular attendees who are interested in advancing their skills by engaging on gym equipment sessions. Their involvement will be addressed as a progression, and they will be encouraged to take on more complex exercises, with supervision from qualified fitness instructors who are experienced in working with individuals with learning disabilities. What is more, a partnership between Oxleas and Greenwich Development Cooperative Agency (GCDA) will offer a 12-week nutrition workshop to be administered alongside Fun & Fitness sessions. After completing the programme, participants will be invited to take part in cooking classes, and other members will be invited for the workshops. The initiative will encourage participants to make healthier food choices, which combined with regular exercise will potentially result in better health outcomes. In addition, the learning disabilities nursing team at Oxleas have suggested to run a health and wellbeing event alongside Fun & Fitness sessions, in which health care professionals would offer one-to-one advice and carry out individual health checks. Topics such as nutrition, weight management, blood pressure control, and coronavirus infection will be discussed with each participant according to their interests and needs, and easy read materials will be distributed. Conversations are underway and the dates will soon be released.

Some of the obstacles whilst running online were access to technology and support to use the Zoom platform. To ensure that everyone with the required technology was able to join, the team created easy read guides, and allocated a staff member to phone participants at the start of each session, talking them through the process of connecting to Zoom. Such adaptation was an essential measure to provide access and encourage engagement. Acknowledging the barriers in implementing the fitness trackers also allowed for adaptations to the original plan. Most people found it difficult to set up the devices, and additional support was offered. While such actions were crucial in helping people understand how to use their devices, they prove that technology is still largely inaccessible to people with learning disabilities.

Whilst the project has had many successes it is also important to consider some of the limitations. Due to the limited data that has been possible to record using fitness trackers, whilst the data that we have had is encouraging, we still have limited information of how attendance at Fun & Fitness has influenced participants physical activity more generally, although there are a number of





examples informing that it has led to broader engagement in a range of sports and exercise activities.

It is also important that whilst the quantitative data is encouraging, caution should be taken to not over interpret it. The data was gathered for service evaluation rather than research purposed. There was no control group, and the data was gathered at a time of unprecedented uncertainty in terms of the Covid-19 pandemic, potentially skewing findings. Some members had already been participating online before it was possible to gather quantitative data (although if anything this would likely have diluted the impact of change). There may have been some bias in the way questionnaire measures were administered although it was attempted to avoid doing this and most of them were administered by colleagues not directly participating in the project. We have not had the resources to follow up with outcomes measure for members who have dropped out of Fun & Fitness.

However, given the limited research concerning physical activity and people with learning disabilities, this project and its evaluation to date is still likely to be of interest to a wider audience and may have the potential to influence practice in the field of learning disabilities and inspire ideas for more formal research both on Fun & Fitness itself and some of the elements incorporated into the approach.

Outside of the groups many of the members still have reduced opportunities to engage in physical activity. For instance, the member who is unable to safely leave their home alone due to likely victimisation and hate crime, is a striking example of the fact that many people with learning disabilities live in fear (Beadle-Brown et al 2014). Whilst the project has enabled a leisure centre environment to become a safe and inviting place for people with learning disabilities and the staff working there have reached a point of not only routinely engaging with and supporting a significant number of people with learning disabilities, but also having a colleague with a learning disability in their team, nonetheless much of the local community remains frightening and environments of potential victimisation for many people with learning disabilities. Services remain underfunded and outside of Fun & Fitness many of the barriers to engaging physical fitness for people with learning disabilities remain and have in many ways been reinforced by austerity. To fully overcome these inequalities, ultimately transformative change in the direction of social justice is likely to be required. Nonetheless Fun & Fitness can be considered a step in the right direction and as the Taoist philosopher Lao Tsu is cited as saying "the journey of a thousand miles starts with a single step." One of the joys of being connected to this project has been to witness partnership work inspired by a vision of a society that genuinely cherishes and makes space for people with learning disabilities and each person offering their unique contribution has enabled something beautiful to be created that none of us could have imagined at the outset. So, whilst there is much more work to be done, we are reminded that hope is verb that is done together in community and not a noun that we hold alone in isolation (Weingarten, 2010), for it is too precious to be so easily lost. We therefore have





conviction that as we continue to walk forward in further developing Fun & Fitness, that the thousand miles will eventually be completed and that whilst it is not our duty to complete the work, nor is it our right to abandon our part in it. Walking in solidarity, whether we are an individual with a learning disability, a CLDT or RBG professional or a Better employee, we are unified in our interdependence and know that should our legs weary our friends and colleagues will carry us and we them in turn, until one fine day the destination is reached.

Recommendations

- This project demonstrates the utility of partnership working between specialist learning disability services, local authorities and leisure providers in terms of supporting people with learning disabilities to become more physically active.
- In the context of health inequalities and social exclusion of people with learning disabilities
 nationally, there should be an expectation on local authorities and health providers to work
 more proactively to offer opportunities to this population. Incorporating this into local authority
 physical activity strategies should be the norm.
- On the basis of the data gathered as part of the service evaluation of Fun & Fitness, a more
 formal research project into the project/approach would be valuable. This could consider the
 process of the project development, further consideration of the elements of partnership
 working and coproduction, as well as evaluation of groups members qualitative experiences
 and more quantitative data.
- Given the scale of health inequalities faced by people with learning disabilities Community
 Learning Disability services will require a range of additional investment to support service
 users' physical health if meaningful progress is to be made more proactively. A band 4 posts
 focused on promoting greater physical activity is one cost effective way of using this
 investment.
- Fun & Fitness offers a powerful model of one way of achieving this and it may be valuable to develop a workbook to share some of the key processes and learnings to support those in other localities wanting to use a similar approach.
- It will be important to continue to share the inspiring development of Fun & Fitness with different audiences. The project has been presented at the British Psychological Society Annual Faculty of Intellectual Disability Conference with positive feedback and an article has also been submitted to the same faculty bulletin. Consideration will be given to additional opportunities to present e.g., the faculty's South Thames Special Interest Group is likely to be interested and now that we have analysed data more thoroughly, we will consider publishing an article in a peer reviewed learning disability journal.





- In some localities other models may be more appropriate e.g., colleagues working in Cornwall
 have expressed an interest in developing Zoom groups on the basis of the large travel
 distance. We will explore ways of presenting Fun & Fitness to regional and national
 audiences focused on the physical health needs of people with learning disabilities.
- Whilst some progress has been made with the use of fitness trackers, for many people with learning disabilities, to incorporate this into their fitness journey, significant time is likely to be required to support this. However, there is potential for this to be built into routine care and support for people with learning disabilities e.g., supported living providers can be supported to use fitness trackers with people with those they support as a way of monitoring their current activity levels and to set goals for those wishing to become more activities.
- One of our learnings was that working with fitness trackers with a population of people with learning disabilities is a significant project in its own right. A research project focused on this in a more focused way is likely to be a valuable project.
- As with the general population, for significant changes in physical fitness and physical health outcomes, may be best achieved by not only supporting increased physical activity, but also supporting healthy and nutritious eating. We will therefore continue to record data to see the effects of incorporating the work with GCDA and nutrition into the Fun & Fitness process.
- As people with learning disabilities become more physically active, supporting them to continue to access more challenging and strenuous forms of activity is also likely to require creativity and proactive approach. This is something we will also continue to explore with the introduction of the fourth Fun and Fitness group.

Acknowledgements

This project would not have been possible without the involvement of Sophia Lowe, whose energy and enthusiasm has been key in keeping the sessions running smoothly. A very special thank you go to Daniel Bank, Better Sports Developments Officer who has been committed in making Fun & Fitness a safe and accessible space for people with intellectual disabilities at the Waterfront Leisure Centre. Jenny Ioseliani, Sukh Dogra and Clare Denny have also been key supports in Oxleas. Lastly, our gratitude goes to all members of Greenwich Research Net, who have kindly devoted their time to support the project's development.





References

Beadle-Brown, J., Richardson, L., Guest, C., Malovic, A., Bradshaw, J., & Himmerich, J. (2014). Living in Fear: Main Report. Mencap. Retrieved from Living in Fear final 200114 final (inclusionlondon.org.uk)

Bossink, L., van der Putten, A. A., & Vlaskamp, C. (2017). Understanding low levels of physical activity in people with intellectual disabilities: A systematic review to identify barriers and facilitators. *Research in developmental disabilities*, 68, 95–110. https://doi.org/10.1016/j.ridd.2017.06.008

Brooks, M.R., Davies, S.J., & Twigg, E. (2013). A measure for feelings – using inclusive research to develop a tool for evaluating psychological therapy (Clinical Outcomes in Routine Evaluation – Learning Disability). British Journal of Learning Disabilities, 41, 320-329. http://doi/10.1111/bld.12020

Cartwright, L., Reid, M., Hammersley, R., & Walley, R. M. (2017). Barriers to increasing the physical activity of people with intellectual disabilities. *British Journal of Intellectual Disabilities*, *45*(1), 47-55. http://doi/abs/10.1111/bld.12175

Cooper, S. A., Smiley, E., Morrison, J., Williamson, A., & Allan, L. (2007). Mental ill-health in adults with intellectual disabilities: prevalence and associated factors. *The British journal of psychiatry: the journal of mental science*, 190, 27–35. https://doi.org/10.1192/bjp.bp.106.022483

Department of Health and Social Care (2021). Social Care Sector COVID-19 Support Taskforce: report on first phase of COVID-19 pandemic. *People with Learning Disabilities and Autistic People Advisory report and recommendations.* Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/919162/6_People_with_Learning_Disabilities_and_Autistic_People_Advisory_Group_report_acces sible.pdf

McKenzie, K., Murray, K., & Murray, G. (2018). Encouraging physical activity in people with intellectual disabilities. *Nursing Times*, 114(8), 18-21. Retrieved from https://www.nursingtimes.net/roles/intellectual-disability-nurses/encouraging-physical-activity-in-people-with-intellectual-disabilities-16-07-2018/

Mencap (2022). Learning Disability Research and Statistics. Retrieved from https://www.mencap.org.uk/learning-disability-explained/research-and-statistics

Mencap (2022). *The devastating Impact of Lockdown*. Retrieved from https://www.mencap.org.uk/get-involved/campaign-mencap/socialcarecrisis

NHS (2022). *Overview. High Blood Pressure. Hypertension*. Retrieved from https://www.nhs.uk/conditions/high-blood-pressure-hypertension/

Public Health England (2020). Deaths of people identified as having learning disabilities with COVID-19 in England in the spring of 2020. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933612/COVID-19 learning disabilities mortality report.pdf

Public Health England (2020). Obesity and weight management for people with intellectual disabilities. Retrieved from https://www.gov.uk/government/publications/obesity-weight-management-and-people-with-intellectual-disabilities/obesity-and-weight-management-for-people-





with-intellectual-disabilities-guidance

Raczka, R., Theodore, K., & Williams, J. (2020). An initial validation of a new quality of life measure for adults with intellectual disability: The Mini-MANS-LD. *Journal of intellectual disabilities: JOID*, *24*(2), 177–193. https://doi.org/10.1177/1744629518787895

Raj, D., Stansfeld, S., Weich, S., Stewart, R., McBride, O., Brugha, T., Hassiotis, A., Bebbington, P. & Papp, M. (2016). Comorbidity in mental and physical illness (pp. 323-347). In S. McManus, P. Bebbington, R. Jenkins, & T. Brugha (Eds.), *Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014*. Leeds:NHS Digital.

Roy, A., Matthews, H., Clifford, P., Fowler, V., & Martin, D. (2002). Health of the Nation Outcome Scales for People with Learning Disabilities (HoNOS–LD). *British Journal of Psychiatry, 180*(1), 61-66. doi:10.1192/bjp.180.1.61

Short, S. E., & Mollborn, S. (2015). Social Determinants and Health Behaviors: Conceptual Frames and Empirical Advances. *Current opinion in psychology*, *5*, 78–84. https://doi.org/10.1016/j.copsyc.2015.05.002

University of Bristol Norah Fry Centre for Disabilities Studies (2020). *The Intellectual Disabilities Mortality Review Programme Annual Report 2019*. University of Bristol. Retrieved from LeDeR 2019 annual report FINAL2.pdf (bristol.ac.uk)

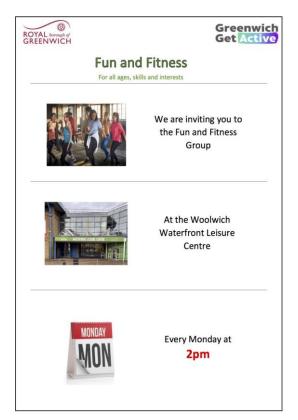
Weingarten, K. (2010). Reasonable hope: Construct, clinical applications and supports. *Family Process*, 49(1), 5-25.





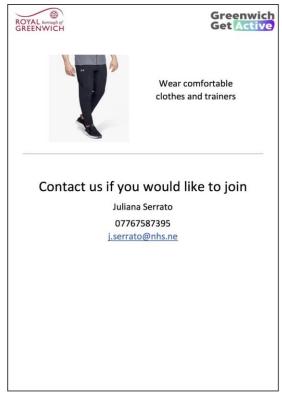
Appendices

Appendix 1: Easy read invitation letter











Appendix 2: Studio session, sports and games











