

Investigating the role of team based physical activity in  
mental health interventions for young people

Georgina Bone

DClinPsy Thesis Volume 1

2018

University College London

## **UCL Doctorate in Clinical Psychology**

### **Thesis declaration form**

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

Name:

Date:

## Overview

This thesis explores the role that physical activity and, in particular, the role of a football based group could play in interventions for young people with existing mental health difficulties.

Part one is a literature review which uses a systematic approach to explore existing primary research papers. It explores the current evidence regarding the impact of any physical activity interventions on young people aged 18 or below who have existing mental health difficulties.

Part two is the empirical research paper exploring a football group running in north-east London for young people who have contact with either mental health or social services. Its aim was to better understand how the young people attending this group and the adult stakeholders involved in the group have experienced it. This is a qualitative study utilising semi-structured interviews with 13 attendees and adult stakeholders.

Part three is a critical appraisal offering reflection on the research process. This particularly addresses the challenges of recruitment and conceptual and methodological issues including the role of service users within the research. It concludes with a reflection on the experience of conducting the research and the ensuing change in personal understanding of the phenomenon.

## Impact statement

This thesis explores the potential relationship between mental and physical health and whether or not physical activity can be useful in supporting young people with mental health difficulties. This is in the context of very limited previous research in this area and so the outcomes of this research are primarily important in building on what knowledge has already been accrued. Developing a better understanding of both the current literature available in this specific area and how a football group is experienced by its stakeholders and attendees will also inform future research methods.

The relationship between physical and mental health is not yet fully understood and so understanding the way this group was experienced may point towards potential mechanisms of change. In turn this can be used to direct future research in this area. On dissemination, it can also be hoped that it may promote increased interest in this area and encourage other researchers to investigate this area.

Beyond this, in recent years, there have been several high-profile football clubs which have used football groups as a way of linking in with communities and offering their support to their local communities, especially for people with physical and mental health difficulties. This has been done with only a limited evidence base behind them, and there is little consensus on their value or how they should be run. More knowledge around the potential impact of these groups, both positive and negative will help to assess whether they are of use to communities and to shape their development.

Despite the interest from professional football clubs, this sort of group remains relatively uncommon in NHS settings and yet, could potentially be

introduced as many of the required facilities already exist in the community. Should the research eventually indicate that it can be of value to young people with mental health difficulties, they could be introduced into CAMHS sites nationally. This thesis represents one step towards this.

On a narrower level, a better understanding of how attendees and adult stakeholders experience this particular group will also allow the group to shape itself. The information gained in this thesis will therefore be disseminated to the football group in question. This will be done through their project co-ordinator and by providing them with access to any published material. Again, on a wider context the research will be disseminated via publication in research journals and directly to other interested resources, for example if the participants in the group are interested to hear about the results they will be provided with information and should the CAMHS and social services which refer to the group be interested, they will have access to this information too.

## Table of Contents

Overview.....	2
Impact statement .....	3
List of Figures:.....	8
List of Tables: .....	8
Acknowledgements.....	9
Part 1: Literature review .....	10
1.1 Abstract.....	11
1.2 Introduction.....	12
1.3 Method .....	15
1.3.1 Data sources and inclusion and exclusion criteria .....	15
1.3.2 Search strategy .....	17
1.3.3 Critical analysis.....	21
1.4 Results.....	22
1.4.1. Overview.....	22
1.4.2 Quantitative Studies .....	24
1.4.3 Qualitative Studies .....	30
1.5 Discussion.....	38
1.5.1 Critique of results.....	38
1.5.2 Limitations of review .....	40
1.5.3 Clinical implications .....	42
1.5.4 Further research .....	42

1.6 References.....	44
Part 2: Empirical paper .....	49
2.1 Abstract.....	50
2.2 Introduction.....	51
2.2.1 Review of literature.....	51
2.2.2 The football project.....	55
2.2.3 Study aims and rationale.....	56
2.2.4 Research question .....	57
2.3 Method.....	58
2.3.1 Setting .....	58
2.3.2 Participants.....	58
2.3.3 Ethics.....	58
2.3.4 Inclusion and exclusion criteria .....	59
2.3.5 Sampling method .....	60
2.3.6 Response Rate .....	60
2.3.7 Basic Demographics .....	61
2.3.8 Procedures.....	61
2.3.9 Design .....	64
2.3.10 Assessing quality .....	65
2.4. Results.....	66
2.4.1 Research question .....	66
2.4.2 Use of frequency descriptors.....	66

2.4.3 Themes .....	66
2.4.4 Taking a different approach .....	69
2.4.5 Accepting other people's experiences.....	71
2.4.6 Developing positive changes, overcoming challenges.....	74
2.4.7 Enduring challenges.....	76
2.4.8 Small important changes.....	77
2.4.9 Socialising (in an isolating world) .....	79
2.5 Discussion.....	81
2.5.1 Summary of the main findings.....	81
2.5.2 Relationship with current literature.....	81
2.5.3 Interpretation of results .....	83
2.5.4 Limitations of the research.....	85
2.5.5 Scientific and Clinical Implications .....	89
2.6 References.....	92
<b>Part 3: Critical Appraisal.....</b>	<b>96</b>
3.1 Challenges of recruitment .....	97
3.2 Conceptual and methodological issues .....	100
3.3 Service user involvement.....	102
3.4 My understanding of the phenomenon.....	105
3.5 References.....	110
Appendix A: Individual scores for the quality assessment tool .....	111
Appendix B: Ethical approval with consent forms and information sheets .....	121

B.1 Letter confirming HRA approval .....	121
B.2 Ethics form confirming approval for adult stakeholders .....	124
B.3 Consent form .....	127
A.3 Attendee information sheet .....	128
B.4 Adult stakeholder information sheet .....	131
Appendix C: Interview Schedules.....	133
C.1 Interview schedule for young people .....	133
C.2 Adult interview schedule.....	136
Appendix D: Process of Thematic Analysis .....	139
D.1 Initial coding (stage 2) .....	139
D.2: Searching for themes (stage 3).....	140
D. 3 Example of quotation lists relating the theme (stage 5 and 6) .....	142
Appendix E: Feedback request with template email.....	144

**List of Figures:**

Figure 1: Flow chart of search process .....	20
Figure 1: Chart identifying themes and a summary of codes for each theme.....	68

**List of Tables:**

Table 1: Search Terms and Order for the Psychinfo Database.....	19
Table 2: Paper type and critical appraisal outcomes.....	23
Table 1: Participant Demographics.....	63

## Acknowledgements

Firstly, I would like to express my gratitude to my research supervisors Oliver Mason and Jessica Deighton. Without their support, this project would not have taken the form it has and I would also like to thank Bettina Friedrich who was always willing to meet and allow me to take advantage of her extensive knowledge and experience. To the wider course, I also extend my thanks, especially to my course tutors, Rachel Whatmough who saw me through the trials of first year and Kate Sherratt who filled her shoes and more in second and third year.

To all those who participated in the project, I am immensely grateful and admire their willingness to contribute to this research. To the project co-ordinator of the football group I am also indebted. They went above and beyond the call of duty with a smile at all times, matched only by the project's peer support worker whose dedication was infectious. Although we did not complete any interviews together, I greatly valued the informal conversations we were able to fit in.

My friends I thank for understanding when I did not have the time or energy to meet. To those also doing doctorates, your support, encouragement and excellent senses of humour have got me through. One day we will be able to look back and laugh at everything we put ourselves through. My family I thank for their faith in me, help with wedding planning and proof reading and Gus for always being willing to donate his favourite dog toys and best tail wagging to my stress management cause.

Finally, and most importantly I dedicate this thesis to my husband Andrew, without whom I most certainly would not have completed it. Despite the impact this project has had on our lives, his enduring support and love remind me every day of what is truly important in this life and for that I will always be thankful.

## Part 1: Literature review

Physical Activity as an intervention for young people with existing mental health difficulties; a systematic review of the evidence

## 1.1 Abstract

*Aims:* The aim of this review is to explore the role that physical activity can play in the mental health of young people with an existing mental health disorder. It will look specifically at whether physical activity can have a positive impact on mental health difficulties, wider difficulties and what possible areas may be a factor in this.

*Method:* This review sought to understand the relationship between physical activity and mental health in young people with existing mental health difficulties. A systemic search retrieved 10 papers which used a mixture of qualitative and quantitative methods to address this question. The standard quality assessment criteria (Kmet, Lee, & Cook, 2004) is used to support the analysis of this information.

*Results:* Any conclusions are limited by the sparse qualitative and quantitative data on this subject. The data does, however, suggest that a physical activity intervention is not likely to be harmful and may have some positive benefit for mental health outcomes in young people with existing mental health difficulties.

*Conclusion:* Considerable further research is needed to better evaluate physical activity as a therapeutic intervention. This should include comparisons with treatment as usual and as an adjunct to treatment as usual. Qualitative information is also likely to help define a currently broad field of possible ways to understand the role physical activity could play in therapeutic interventions.

## 1.2 Introduction

Physical activity is currently a loosely defined term and can encompass a wide variety of areas including team sports, aerobic exercise, resistance training and yoga. For the purposes of this review physical activity is defined as “any bodily movement produced by skeletal muscles that requires energy expenditure” (World Health Organisation, 2018).

Whilst it has been recognised for some time that engaging in physical activity can offer substantial physical health benefits for the general population (Department of Health Physical Activity Health Improvement and Protection, 2011), utilising physical activity to support adults with mental health problems has become an increasing area of research (Mason & Holt, 2012). A growing body of evidence suggests that not only can undertaking physical activity improve the physical health of adults with mental health difficulties (Garber et al., 2011), but that it can also lead to improvements in their mental health difficulties as well (Faulkner & Biddle, 1999).

Undertaking physical activity has been connected to improvements in anxiety and depression (e.g. Stathopoulou, Powers, Berry, Smits, & Otto, 2006) in adults as well as stress and mental wellbeing (Mason, Curl, & Kearns, 2016). Poor mental health has also been related to sedentary behaviour in adolescents between 10 and 19 years of age (Hoare, Milton, Foster, & Allender, 2016).

Despite this recognition, the research relating to physical activity and young people is less extensive (Biddle & Asare, 2011). The Department of Health recommends that young people should undertake at least 60 minutes of exercise a day, however, it is indicated that many young people in the general population do not

achieve this amount (Department of Health Physical Activity Health Improvement and Protection, 2011). Perhaps in relation to this, there has been a greater interest in the role that physical activity plays in the lives of young people and there has been considerable interest in using physical activity to promote weight loss in obese young people (Stoner et al., 2016).

Most of the research relating specifically to the relationship between young people's mental health and physical activity has looked at this within the context of the general population. Several studies have utilised various forms of physical activity interventions as part of mainstream school curriculum (Steiner, Sidhu, Pop, Frenette, & Perrin, 2013). These studies have typically drawn participants from mainstream schools and introduced additional physical activity either in the form of Physical Education or extracurricular activities and used measures of mental wellbeing, physical wellbeing, cognition or behaviour (Biddle & Asare, 2011). The participants may be randomly selected from the whole school population or alternatively may be identified because their behaviour is considered problematic while they are school or they have specific disorders or learning difficulties e.g. Autism spectrum disorder or Attention deficit hyperactivity disorder (Bahrami, Movahedi, Marandi, & Sorensen, 2016).

There have been several systematic reviews looking at the data produced through this research and some have focused specifically on changes in measures of mental health (e.g. Larun, Nordheim, Ekeland, Hagen, & Heian, 2006). These reviews have noted that the relationship between physical activity and mental health outcomes is less clear in young people than it seems to be in adult populations. Larun et al. (2006) argue that a very limited number of studies and poor methodological quality make drawing any firm conclusions challenging. There is, however, some

suggestion of a positive relationship between physical activity and mental health outcomes.

One possible challenge with these reviews, however, is the broad nature of the studies they are addressing. Although there have been some studies looking at particular activities such as yoga (Weaver & Darragh, 2015), most of the main reviews have looked at wide ranging activities which have been used with a wide range of young people. For example Biddle & Asare, (2011) included reviews drawing from studies whose participants attend mainstream school or specialist settings, physically healthy or with physical health problems like obesity and young people with mental health problems or no recognised difficulties. Despite this breadth of samples, the data on specific interventions or specific groups is very limited and this may also be hampering forming any clear conclusions.

It would appear reasonable to argue that such a diverse range of studies may be diluting or artificially raising the relationship between physical activity and mental health within particular subgroups. For example, in many of the studies involving mental health outcomes in young people from mainstream schools, the baseline of scores on measures e.g. the BDI-II are already mostly within the normal range and it may be that this can tell us little about whether physical activity should be used as a therapeutic activity for people with existing difficulties.

As no systematic review identified has included more than a few studies with participants all scoring within clinical ranges or with an existing diagnosis (e.g. Biddle & Asare, 2011; Larun, Nordheim, Ekeland, Hagen, & Heian, 2006), it seems reasonable to ask whether there are now enough studies to explore the relationship with a more specific population. This would allow physical activity's potential as a

therapeutic activity for young people to be explored specifically rather than being mixed in with the exploration of it as a maintenance or preventative measure. For these reasons, this review aims to explore whether there are grounds to consider physical activity as a possible therapeutic activity designed to improve mental health outcomes in young people with existing mental health difficulties. More specifically it will aim to answer two questions; firstly, whether physical activity is associated with a positive impact on mental health outcomes in young people with existing mental health difficulties and secondly, whether there are key areas which people report as being helpful or may indicate potential areas of benefit. As the literature in this field is limited it is unlikely that this review will be able to offer definitive answers to these questions but it will aim to provide direction for future studies and identify questions which are yet to be explored.

### 1.3 Method

#### 1.3.1 Data sources and inclusion and exclusion criteria

As described above, there is a limited amount of research that has been undertaken on physical activity for young people with existing mental health difficulties and a general lack of definition in the terms used in this area. Consequently, the literature search was kept as broad as possible to avoid unintentionally excluding relevant papers. The search used seven databases namely: Psychinfo, Web of Science, CINAHL, EMBASE, AMED, HAPI and SPORTDiscus. Both qualitative and quantitative papers were reviewed but because of the nature of these papers the inclusion and exclusion criteria were slightly different. Quantitative papers were included if the study participants were under 18 years of age or if this was not reported the mean age was under 18 years. This age was identified as the criteria for this review because it adheres to the legal definition of child in the UK.

This was decided on as an appropriate cut off because the review was specific to young people and so some cut off, however arbitrary, was needed. It is also in line with the thresholds for many CAMHS services across the country although it is recognised that there are teams which work with young people in their twenties. As such it is possible that some studies may have been missed which focused more on young adults in their twenties which could have been valuable however this threshold was felt to be the best fit for the study.

The research participants had a diagnosed common mental health difficulty or were seeking support from services for a common mental health difficulty. The measures also needed to include a specific mental health measure, for example the BDI-II looking specifically at depression rather than a composite measure of which mental health was only one part. The intervention also needed to be primarily based on physical activity rather than this being one component of a larger programme.

Papers were also excluded if the intervention targeted a population whose primary problem was a physical health difficulty such as physical ill health or obesity. Studies were also excluded if the participants all primarily had eating disorders as a physical activity would generally be viewed with caution in this population. If the intervention was designed primarily to improve physical health e.g. to lose weight or the measures did not look specifically at mental health, for example if they focused only on behaviour or cognitive function, the papers were excluded.

With regard to the qualitative studies, the only differences to these criteria were that participants could be over the age of 18 and without diagnosed mental health difficulties, but the focus of the study needed to be on interventions for this population; for example, studies exploring parents' views on a sports intervention for

young people with mental health difficulties would be included. Additionally, if part of the project met inclusion criteria, they were included and only the area meeting inclusion criteria was included in the review.

### 1.3.2 Search strategy

As discussed above, the existing reviews of the research indicate that the quality is not high enough to draw any depth of conclusion and so it was decided to focus on papers published in peer reviewed journals in the hope of identifying a selection of papers with a high enough methodological quality. It is recognised that this does risk missing non-published or grey literature articles but it was felt that this provided the best opportunity for achieving the aims of the review.

Given the wide-ranging terminology used the search terms were kept broad. See Table 1 for an example of the search terms for Psychinfo. Given the extensive number of studies returned from the first seven stages, some common exclusion terms were included to reduce the search to a manageable number. Some of the smaller databases used were not able to include this extra step in the search and, in which case, these terms were excluded manually in the review stage.

The papers were then narrowed down to identify the final papers meeting the inclusion and exclusion criteria. Figure 1 provides full details of the steps of this process. As described above, the goal of this review was to provide insight into the specific application of physical activity as a therapeutic intervention and consequently very stringent criteria were applied to this broad range of studies. This introduced a number of challenges into this process as many of the studies partially met criteria, for example being an intervention which used physical activity as a large part of a more cognitive therapeutic intervention or where yoga was heavily

mixed with mindfulness approaches. It was not always possible to draw a distinct line with exclusion criteria but in these instances if it could clearly be seen how the physical activity may have impacted the outcomes, the study was included, but if only the intervention as a whole was discussed or there was no report of how physical activity related to the outcomes, the study was excluded.

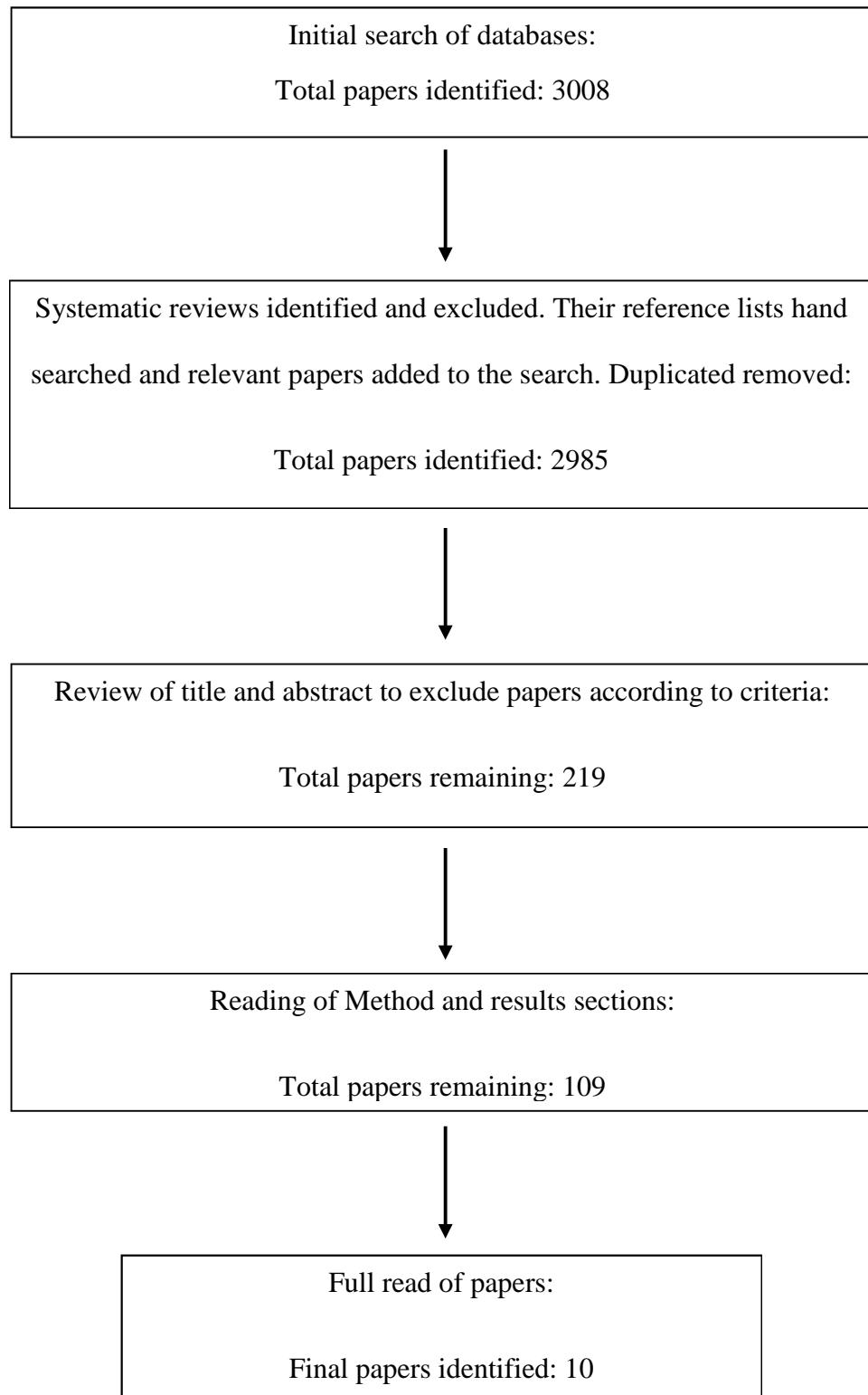
As part of this process, several systemic reviews were identified, however, these were only partially relevant, for example containing predominantly studies of the general population and one or two clinical studies. In order to identify the papers which fully met the inclusion criteria, the reviews themselves were excluded and the reference lists were hand searched and the relevant papers were extracted and added to the original search if they were not duplicates.

Regarding the qualitative papers, some of those identified partially met inclusion criteria. If it was not possible to separate the relevant sections of the paper, the papers were excluded, but for some papers it was possible to look at specific parts of the study, e.g. were a paper to explore views of suitable interventions with both young people and adults with mental health difficulties and it was possible to look only at the views regarding young people, this paper would be included.

Table 1: Search Terms and Order for the Psychinfo Database

Step	Search term
1	TS=(child* OR (young person*) OR (young people) OR kid? OR adolescen* OR teen* OR young* OR youth? OR boy? OR girl? OR (school age) OR juvenil* OR minor* OR *pubescen*)
2	TS=(sport? OR (physical activit*) OR adventur* OR wilderness OR exercis* OR outdoor OR gym* OR danc* OR (Tai Chi) OR yoga OR (martial art?) OR exertion OR (physical fitness) OR (physical train*) OR (physical strength) OR (resistance train*) OR (weight train*) OR athlet*)
3	#2 AND #1
4	TS=((service user?) OR client? OR participant? OR attendee* OR *patient OR (in treatment) OR (receiving therap*))
5	TS=((mental health problem*) OR (mental health difficult*) OR (mental health disorder*) OR psychiatr* OR anxiety OR OCD OR (obsessive complusive disorder) OR depress* OR psychosis OR (psychotic disorder*) OR schizophren* OR (schizoaffective disorder) OR phobi* OR bipolar OR (post traumatic stress disorder) OR PTSD OR panic OR (mood disorder) OR psychopathology OR (personality disorder) OR (conduct disorder) OR ASD OR autis* OR ADHD OR (attention deficit hyperactivity disorder))
6	#5 AND #4
7	#6 AND #3
8	TS= (cancer OR asthma OR diabetes OR HIV/AIDS OR (anorexia nervosa) OR (eating disorder) OR (cystic fibrosis) OR epilepsy OR concussion OR (premenstrual syndrome) OR (multiple sclerosis) OR (heart failure) OR dysmenorrhoea OR arthritis OR fibromyalgia OR scoliosis OR COPD OR (transient ischemic attack))
9	TS=(group OR intervention OR program* OR initiative OR class OR club OR meeting OR therapy OR session OR trial)
10	#9 AND #7
11	#10 NOT #8
12	TS=(mice OR rat)
13	#11 NOT #12
14	TS=(veteran OR (older adult) OR (over 65) OR elderly OR geriatric)
15	#13 NOT #14

Figure 1: Flow chart of search process



### 1.3.3 Critical analysis

Once identified the final papers were categorised to address the two review questions of whether physical activity can be associated with a positive impact on mental health outcomes in young people with existing mental health difficulties and secondly, whether there are key areas which people report as being helpful or may indicate potential areas of benefit. The papers were assessed using the critical analysis tool “standard quality assessment criteria for evaluating primary research papers from a variety of fields” (Kmet et al., 2004). This is a tool which offers separate criteria “checklists” for evaluating quantitative and qualitative paper. The checklist for quantitative papers consists of 14 questions to which it is judged how well the criteria has been met, either “yes” it has been met, “partial” or “no”. These are then scored accordingly and then total score for the paper can be calculated. A similar procedure is used for the qualitative papers but the checklist consists of 10 questions. The papers are then discussed in terms of their relative value in answering the above questions.

This quality assessment tool was selected because it was the only tool identified that would allow evaluation of the quality of a range of different primary papers including case studies, quantitative and qualitative studies within the same framework. This was sought after because of the dissipated nature of these studies and it was hoped that it could help to draw out any consistent strands across the papers.

## 1.4 Results

### 1.4.1. Overview

The final papers included three qualitative papers, five controlled or uncontrolled quantitative trials and two case studies. As described the standard quality assessment criteria was used to appraise the final papers and as with previous systematic reviews, there was a range of quality amongst the studies. Table 2 provides further details of these studies. As can be seen from Table 2 the scores for all papers range from 0.25 – 0.89. Despite this range all studies were still included in this review because of the scarcity of available studies. Their scores have, however, been used to highlight methodological flaws and difficulties in interpreting the findings. Individual scores for each question of the checklists for each paper is in Appendix A.

The papers will be discussed in reference to the two questions of the review and firstly, whether physical activity is associated with a positive impact on the mental health outcomes in young people with existing mental health difficulties

Table 2: Paper type and critical appraisal outcomes

Qualitative Papers	Type	Score
Dopp, R. R., Mooney, A. J., Armitage, R., & King, C. (2012). Exercise for adolescents with depressive disorders: A feasibility study. <i>Depression Research and Treatment, 2012</i>	Feasibility study (uncontrolled experimental)	0.68
Roshan, V. D., Pourasghar, M., & Mohammadian, Z. (2011). The efficacy of intermittent walking in water on the rate of MHPG sulfate and the severity of depression. <i>Iranian Journal of Psychiatry and Behavioral Sciences, 5</i> (2), 26–31	RCT	0.68
Brown, S. W., Welsh, M. C., Labbe, E. E., Vituli, W. F., & Kulkarni, P. (1992). Aerobic exercise in the psychological treatment of adolescents. <i>Perceptual and Motor Skills, 74</i> (2), 555–560	RCT	0.46
Hughes, C. W., Barnes, S., Barnes, C., DeFina, L. F., Nakonezny, P., & Emslie, G. J. (2013). Depressed adolescents treated with exercise (DATE): A pilot randomized controlled trial to test feasibility and establish preliminary effect sizes. <i>Mental Health and Physical Activity, 6</i> (2), 119–131	Feasibility RCT	0.89
Carter, T., Guo, B., Turner, D., Morres, I., Khalil, E., Brighton, E., ... Callaghan, P. (2015). Preferred intensity exercise for adolescents receiving treatment for depression: a pragmatic randomised controlled trial. <i>BMC psychiatry, 15</i>	Pragmatic RCT	0.89

Case studies	Score
Williams-Orlando, C. (2013). Yoga therapy for anxiety: a case report. <i>Advances in Mind-Body Medicine, 27</i> (4), 18–21	0.25
Eckstein, F., & Rueth, U. (2015). Adventure-based experiential therapy with inpatients in child and adolescent psychiatry: an approach to practicability and evaluation. <i>Journal of adventure education and outdoor learning, 15</i> (1), 53–63	0.45

Qualitative Papers	Score
Carter, T., Morres, I., Repper, J., & Callaghan, P. (2016). Exercise for adolescents with depression: valued aspects and perceived change. <i>Journal of Psychiatric and Mental Health Nursing, 23</i> (1), 37–44	0.70
Autry, C. (2001). Adventure therapy with girls at-risk: responses to outdoor experiential activities. <i>Therapeutic Recreation Journal, 35</i> (4), 289–306	0.75
Milligan, K., Badali, P., & Spiroiu, F. (2015). Using Integra Mindfulness Martial Arts to Address Self-regulation Challenges in Youth with Learning Disabilities: A Qualitative Exploration. <i>Journal of child and family studies, 24</i> (3), 562–575	0.75

### 1.4.2 Quantitative Studies

Several of the papers include various outcome measures which give some indication of how physical activity may impact on mental health outcomes. Although, looking particularly at the feasibility of asking young people with depression to take part in a physical activity based intervention for their depression, Dopp, Mooney, Armitage, & King (2012) also included measures of depression outcomes in the form of the Children's Depression Rating Scale, Revised (CDRS-R) and the Quick Inventory of Depressive symptomatology, Self-Report (QIDS-SR). After completing the 12 week intervention consisting of three exercise sessions a week, Dopp et al., (2012) found there to be a significant decrease in the young people's scores on the CDRS-R with an average decrease of approximately 20 points ( $p<0.001$ ). They also reported a decrease in scores for the QIDS-SR and that in many of the young people this decrease in scores, for both the QIDS-SR and the CDRS-R, were maintained or improved in the 3 month follow up assessment.

This would appear to suggest that physical activity can have a positive impact on mental health outcomes, however, this study was both small ( $n=13$ ) and there was no control arm of the study to allow a comparison of scores. In addition to this, the young people in this study not only had a suitable levels of depression severity (raw score of 36 or greater on the CDRS-R) but also reported low levels of physical activity. The participants also responded to flyers inviting them to take part in the study and so may, in that sense, have been a self-selecting group who were already willing to take part in such an intervention. These reasons were amongst those resulting in this study scoring a total of 0.68, which was roughly the mid-point in quality for these studies. This cannot be compared directly to the scores of RCTs in

other research areas however is likely to be lower than the mid-point of quality in more general terms. It also makes it difficult to make any firm conclusions, however, it does indicate that there may be some young people with depression for whom physical activity interventions may be of use, particularly those who might be interested in psychical activity but are currently engaging in below average levels.

Another study with significant methodological concerns explored the role of aerobic exercise in the psychological treatment of “psychiatrically institutionalised” young people (Brown, Welsh, Labbe, Vituli, & Kulkarni, 1992). In this, the young people were asked to complete an aerobic and running based exercise programme three times a week while also attending regular physical activity classes over nine weeks. The control group attended the usual physical activity classes. Due to the limited availability of detailed information in the paper it is difficult to follow comprehensively who was recruited to this study and how the Beck Depression Inventory (BDI) and Profile of Mood states (PoM) were used as outcome measures (e.g. when they were used). They reported significant decreases in depression and anxiety for both the treatment group and for the boys in the control group from midpoint to post-test. They reported an increase in anxiety for the girls in the control group but do not indicate significance. The validity of this significant result needs to be questioned however as it does not take into account the baseline scores.

A more reliable study might be one looking at the impact of walking in water on the rates of MHPG sulphate and severity of depression in adolescent girls (Roshan, Pourasghar, & Mohammadian, 2011). This study used the Hamilton Rating Scale for Depression (Ham-D) as a measure of depression severity along with readings of *3-Methoxy- 4-Hydroxyphenylglycol sulphate* (MHPG sulphate) in urine

which the authors highlight as indicating a diagnosis of depression. MHPG sulphate is the main metabolite of norepinephrine and excreted in urine. Reduced levels of MHPG sulphate are thought to be indicative of depression because it represents decreased neurotransmitter responses, specifically norepinephrine which has been associated with the diagnosis of depression (Roshan et al., 2011).

A total of 24 adolescent girls with a diagnosis of depression and Ham-D score of 18 or over (suggesting severe depression) participated in the study. The intervention group were asked to walk in a pool of water three times a week for six weeks. The control group did not take part and was not given “any anti-depressant treatment”. After six weeks the authors reported a significant decrease in the intervention groups Ham-D score’s when compared to the control group.

This study again scored 0.68 on the critical appraisal tool and as an RCT it offers a useful control group who received no treatment. There was no reported blinding of either investigators or participants, however, and although larger than some studies there appears to have been a maximum of 24 young people split between the intervention and control arms which suggests that the groups were again small. It is also unclear what is meant by “any anti-depressant treatment” and whether the intervention group received any other treatment. This study does indicate that an activity such as walking in water can have a positive impact on the mental health of girls with severe depression. It is, however, unclear what level of support or “contact hours” the young people had with mental health professionals and it is possible that the young people in the intervention arm may have spent far more time with professionals and consequently could have felt more supported or have found

the increased contact during the project beneficial. This may have acted as a confounding factor.

The two studies with the highest score (0.89) on the critical appraisal tool were the studies by Hughes et al., (2013) and Carter et al., (2015). Both were RCT's and the study by Hughes et al., (2013) again looked at the role of exercise in the treatment of adolescents with depression. The study itself focused on feasibility and establishing effect sizes but also provides some indication of the role that physical activity might play. A total of 26 participants took part in the study with 19 of the original 26 also being followed up at six months. The groups were an exercise intervention or a stretch intervention. The stretching intervention was designed to provide a control group where the participants were able to be in the same environment with the same amount of contact with the project, but did not significantly raise their heart rate and limited energy expenditure. They used the CDRS-R as a primary measure of depression and the measures were taken at baseline, weeks 3, 6, 9 and 12 (the end of the intervention) and again at follow-up in weeks 26 and 52. Adherence and client satisfaction were also recorded. All of the participants had a diagnosis of Major Depressive Disorder but several also had other co-morbid disorders including ADHD and anxiety.

By the end of the 12 week intervention, Hughes et al., (2013) found that the depression scores on the CDRS-R for both groups had decreased significantly ( $p=0.034$ ). Post hoc tests indicated that the biggest differences between the groups was at weeks 6 and 9 with the exercise group scores improving most rapidly. At follow-up 100% of the exercise group were reporting remitted depression and in the stretching group, 80% achieved a good clinical response with 70% attaining

remission by the six month point. Of those who returned for the follow-up at 52 weeks, a total of 15 participants, all those remaining from the exercise group continued to report complete remission and 88% of the stretching group reported remission with one of the 8 remaining participants reporting on going depressive symptoms.

In their discussion it is highlighted that the similarity in response between the groups may indicate that it was the increased contact with services and clinical input which led to an improvement in mental health outcomes (Hughes et al., 2013). Alternatively, they also suggest that the stretching group may not have been an effective non-physically active control as, although the energy expenditure was kept low in the group, the average heart rate in sessions was high with the stretching group reaching approximately 71% of maximum heart rate while the exercise group achieved approximately 81%. Although this is a significantly different percentage of maximum heart rate, it still indicates that the stretching group may have been more active than was expected.

Finally in Carter et al, (2015) they utilised a study design comparing treatment as usual with an intervention including treatment as usual with an additional exercise based group. The exercise intervention was a 12 session, aerobic, preferred intensity programme lasting six weeks. All the participants were seeking support from mental health services for depression and the only exclusion criteria was the presence of medical conditions which would make exercise unsafe. As such, many of the young people participating in the study had other co-morbid difficulties. The children's depression inventory 2 (CDI-2) was used as the primary outcome

measure and a total of 87 young people were recruited to the study and randomised across the control and exercise group.

At the end of the six week intervention, there was no significant difference between the two groups in terms of the CDI-2 scores in change from baseline. At the six month follow-up, however, there was a significant difference in the CDI-2 with the exercise group showing greater improvement from baseline. It is suggested that this may indicate the positive effects of exercise over a longer time period, despite the young people in the exercise group not continuing to exercise at a greater level than the control group.

Both of these studies (Carter et al., 2015; Hughes et al., 2013) are fairly methodologically sound with the reduction in scores being mostly due to the difficulties in blinding participants to their group when using interventions such as these. They do, however, highlight a difficulty with studies on this treatment, as it is arguably unethical to either withhold treatment entirely from a control arm or to provide only an exercise intervention, compared against treatment as usual, especially when the evidence for physical activity as a therapeutic option for mental health difficulties in young people is still not well understood. There are also ongoing issues with fairly small sample sizes, especially at follow-up, though most of the studies report that the intervention was well received by the participants.

Overall these studies have focused on the use of physical activity in treating depression in young people. There is some indication that interventions can have a positive impact on mental health outcomes relating to depression and at least exercise does not appear to have a negative effect. When compared to treatment as normal, there was some indication that, over a longer time period, physical activity

can improve outcomes and it is also possible that both higher intensity and stretching based interventions can have a positive impact. Without further, high quality, studies however it is impossible to draw a firm conclusion.

What appears to be even less clear is whether it is the physical activity itself or other factors which may lead to improvement. It may be simply that the extra support of mental health professionals is of greatest impact (e.g. Roshan et al., 2011) or that the nature of the exercise is important (e.g. Carter et al., 2015; Hughes et al., 2013), not perhaps for physical reasons but for the way in which it is perceived by the young people taking part.

#### 1.4.3 Qualitative Studies

There have been a very limited number of studies which focus on gathering qualitative data on the experiences of undertaking a physical activity based intervention and this data may go some way to answer the second question of this review and one that is raised by the information reviewed above. Namely, whether there are key areas which have been identified or reported as being helpful or indicate areas of potential interest or benefit. In turn these areas may prove useful in identifying specific areas to measure, in order to better understand the mechanisms of change behind a physical activity intervention and indeed whether mental health outcomes are mediated by other factors within an intervention.

This review identified three qualitative papers addressing young people's experiences of physical activity interventions as well as two papers which provided illustrated case studies of young people undertaking exercise based interventions.

The scores on the critical appraisal tools were mixed, ranging from 0.25 for one of the case studies through to 0.75 for some of the qualitative studies. In these papers there is also more variation in diagnosis and the nature of the intervention. The lowest scoring papers were those including illustrative case studies and these appear to have been positioned from a perspective of highlighting the potential value of utilising physical activity interventions and, as such, may be highly selective in their use of cases.

One of the papers looked at the use of yoga therapy for a 17 year old female with anxiety and panic disorder as well as secondary depression (Williams-Orlando, 2013). In this case the young person was seen for four individual sessions of yoga and then six sessions of a group based “wholistic and mindfulness-based stress reduction course” (WMBSR), which used yoga poses alongside mindful breathing practises to support stress reduction. By the end of the fourth individual session the study reported that the young person felt “significantly better”, that “her anger was gone” and she was “sleeping much better and eating more”. The study reported that the young person particularly commented on the use of breathing to manage panic attacks. The study also reported that after completing the entire intervention, including the WMBSR course, the young person had noticed a reduction in her anxiety and the frequency of her panic attacks and increased confidence in managing episodes of panic (Williams-Orlando, 2013). This was reportedly measured by psychiatric evaluation as well as self-report but it is not clear how this was done.

Using this case study, the author states that yoga is of particular use as an intervention because of its combination of movement, breathing, medication and relaxation training. It allows the intervention to take on a holistic approach rather

than being limited to a single level of intervention. While this may be an important factor in the value of a physical activity, that although in appearance it operates on a single plane, its mechanisms lie in several, there are also considerable flaws in the representation which should question its accuracy. Primarily, the paper also states that near the end of the individual sessions the young person had been able to complete a stressful event and gained employment, the successful achievement of both of which may have been considerable factors in the young person feeling less anxious. It is, of course, possible that it was the yoga intervention which allowed the young person to cope well enough with their anxiety to achieve these goals (Williams-Orlando, 2013).

Additionally, it is not clear how these perspectives were gathered, for example whether the young person completed an anonymised interview or questionnaire or whether they were simply reported as part of a conversation with the therapist, or indeed whether they are observations from the therapist which the young person as had little input in shaping.

Moving to a different area of intervention, Eckstein & Rueth, (2015) use case studies to discuss the role of adventure therapy in supporting young people in inpatient psychiatric centres. Many of the available papers on adventure and wilderness therapy were excluded because although they often involve very high levels of physical activity, the intervention as a whole also includes individual and group psychological therapy and other approaches as deemed useful. As these components have not been looked at in isolation, it is impossible to have any sense of whether or not the physical activity is a factor in any change on mental health outcomes. In this paper, however, the focus is on the addition of adventurous

physical activities which complement the ongoing psychiatric support for the young people and how the physical activity may produce opportunities for psychological intervention or for personal change.

One case study described the impact of indoor climbing on an 11-year-old boy who was admitted to hospital because of anxiety and refusing to attend school. The young person was initially afraid of climbing, but was able to climb the hospitals indoor climbing wall. It is the view of the authors that this then allowed the young person to take on the greater challenge of a much larger outdoor wall. The authors argue that because of this experience of overcoming his fear of climbing, he was able to use this success and generalise it to a wider variety of situations such as taking public transport and eventually returning to school (Eckstein & Rueth, 2015).

It is implied in this case study that the physical activity allowed the young person to develop skills in anxiety management and that the success of climbing a large outdoor wall (28 metres) helped to build his confidence in his own abilities and self-esteem (Eckstein & Rueth, 2015). In turn, this may have impacted on his ability to manage his anxiety in other situations by providing him with evidence of his ability to cope with anxiety provoking situations.

In a further case study, a young person was able to use the difficulty of finding a route on the climbing wall as a metaphor for other difficulties in her life and this then generated thought about how to manage the situation. Another case study included a small group exploring a creek and it is argued that the beauty of the environment alongside the challenge helped the young people involved to find a balance between being more curious and excited (in the case of the young people with depression) and being more careful and considerate of others in order to be able

to continue exploring (in the case of the young people with hyperactive disorders). A further young person with OCD and particular thoughts around keeping her clothes clean and tidy was able to use the support of her peers and possibly the incentive of exploring to continue despite her clothes becoming dirty (Eckstein & Rueth, 2015).

These cases seem to indicate that areas of interest to the authors would be the value of adventure which is outside the young person's usual experiences and the manner in which the lessons learnt through activity can be generalised to wider difficulties (Eckstein & Rueth, 2015). One might suggest that these physical activities provide a "test run" for the development of skills and beliefs which are useful to the young person in managing mental health difficulties. On top of this Eckstein & Rueth, (2015) also point out that while these activities can be used in a deliberately therapeutic manner, they can also simply be fun for young people who are struggling with mental health difficulties.

Regarding the qualitative studies, one study partnered the quantitative study looking at the role of exercise in treatment of depression in adolescents (Carter et al., 2015) and provided a qualitative perspective on the adolescents experiences (Carter, Morres, Repper, & Callaghan, 2016). This paper scored a total of 0.70 on the critical appraisal tool and used semi-structured interviews with participants who had been allocated to the intervention arm. These were the young people who had been part of the preferred intensity circuit training programme (Carter et al., 2015). A total of 26 participants were interviewed and a thematic approach was taken in the analysis of the interviews. 10 themes were generated which the authors collapsed into two categories.

The first category was the valued aspects of the intervention and the themes identified within this were as follows: the importance of choice, a shared experience, a sense of achievement, being distracted, feeling calm and having routine. This intervention specifically used preferred intensity exercise rather than asking young people to meet a certain expectation and it seems that this approach was particularly valued. Many of the quotes used in the study highlight the young person being able to tailor the exercise around their mood and ability, often with surprising results. Also emphasised by the young people was the knowledge that everyone taking part was going through a similar experience of mental health difficulties which was helpful, whether they discussed it or not.

In an interesting combination, one third of the participants also reported that exercise acted as a distraction from other difficulties and allowed them to simply focus on the exercise. The intervention also led to perceived changes which formed the second category and participants reported physiological change in the form of improvements in sleep, increases in energy after the sessions and also psychological changes in the form of increased motivation to socialise, ability to make positive changes and desire to engage in education. Improvements in mood were also reported along with increased self-efficacy, improved exercise habits and social behaviour. Using this data Carter et al., (2016) suggest a cycle of change linking increased confidence with increased mood, improved sleep, increased energy and enhanced motivation. They propose that this cycle captures some of the changes in mood seen by the intervention group and suggests ways in which the physical activity intervention directly and indirectly impacts on mental health outcome measures. They do, however, also state that the young people do not need to have experienced all of these or pass through all of these areas in any particular order.

Rather, the intervention may provide some kind of milieu in which an individualised positive cycle of change can establish itself.

One major area of concern with this study, however, is that the young people in the control arm were not interviewed and as there was no significant difference in the quantitative results, it may have been helpful to see if the control group had similar experiences or whether these areas of change and help were specific to the intervention arm. There was also no report of verification methods such as triangulation.

A further study undertaken in 2001 looks at the role of the adventure activities including backpacking and a high ropes course in the support of “at risk” girls (Autry, 2001). These adolescent girls were considered at risk of criminal activity but were all staying at a psychiatric residential camp. The residents of this camp were reported to have difficulties such as aggressiveness, depression, a history of abuse, eating disorders, suicidal ideation, truancy and substance abuse difficulties. The study was, therefore, included because the participants were members of this population and, therefore, were receiving psychiatric help and likely to be experiencing some degree of mental health difficulty although these were not specifically identified. The focus of the interview also looked particularly at the use of the backpacking and high ropes course rather than at wider therapeutic processes, although it is likely that these will also have had an influence on the girls’ perceptions.

The young people were interviewed using a semi-structured format and the data was analysed using the “process of constant comparison”. Through this process four themes were developed which were “the outdoor adventure/experiential

activities brought out an awareness and existence of trust in oneself and others”, “the girls gained a sense of empowerment from participating in the adventure activities”, “teamwork improved during the experiential activities” and “the girls recognised personal values they gained within the experiences”. Although these were the main themes developed Autry, (2001) also highlighted that the girls struggled to transfer these skills and developments to other areas when they were away from the activities, despite often wanting to do so. Again, this paper, while generating interesting ideas, did not report any verification methods and their methods of analysis are not entirely clear.

The final paper identified in this review looks at the use of mindfulness based martial arts to support young people with learning disabilities (Milligan, Badali, & Spiroiu, 2015). This paper focuses on young people who have existing learning disabilities but are seeking help for “self-regulation challenges” which, in this context, includes anger management difficulties, generalised anxiety disorder, separation anxiety disorder, ADHD and emotional regulation challenges. Although other participants did take part in questionnaires, seven participants also took part in semi-structured interviews along with five of their parents which were analysed using a thematic approach.

The intervention was a 20 week martial arts programme with weekly sessions utilising mindfulness, cognitive therapy and behaviour modification and activation in the context of a martial art. The sessions utilised an initial meditation followed by the discussion of a particular skill and then the use of a yoga warm up and the learning of martial arts techniques to practically apply this skill.

From the interviews with young people and their parents, a large number of themes were identified which appear to have been recorded under four main categories. The first is “youth goals for attending Mindfulness Martial Arts” which contained the themes based around enhancing a sense of mastery, improving emotional wellbeing and improving relationships with peers. The second category was “key MMA components and Associated Outcomes” which included the themes around behavioural outcomes, tolerance and improving communication. The third category was “programme delivery” and described the process and challenges of developing an integrated therapy. The final category was “negative aspects of MMA” and in this feasibility factors were identified although there was no consistency in these factors.

This study scored a total of 0.75 on the critical appraisal tool suggesting that it is a relatively robust study, but it was limited by a lack of detailed explanation around its sample strategy and data analysis. Although the themes generated from this study are useful in terms of helping to generate ideas for areas of further exploration, they are somewhat formulaic in nature and the sheer number of them suggest that it might have been possible to unite these concepts under some superordinate themes which might have made the data more manageable.

## 1.5 Discussion

### 1.5.1 Critique of results

As the results of this review indicate, the research currently available on physical activities for young people with existing mental health difficulties is very mixed and there is a considered range in quality of studies although most are at the lower end of the scale. Some of the more recent RCT studies have shown a better

methodological quality (Carter et al., 2015; Hughes et al., 2013) both reaching 0.89 on the appraisal tool, however, they do not appear to show substantial agreement in relation to exercise. One would suggest that there was no significant difference to control groups but with exercise providing slightly faster results and more complete remission from symptoms, although this must be tempered by the possibility that, in young people at least, stretching may also be seen as a physical activity and that this study was, therefore, unintentionally a comparison of two treatment groups (Hughes et al., 2013). On the other hand, Carter et al., (2015) would suggest that an effect of exercise is not seen until follow-up.

Despite these differences, there may be some common threads within the research. Overall, it appears that negative impacts of exercise on young people have not been found and indeed, one may go so far as to say that some positive benefit may be possible, particularly in self-selecting groups of young people with existing mental health difficulties, particularly depression. Some of the areas which may influence this is the length of time the interventions last for as there had been considerable variation on this. Also, a factor may be the way which in the exercise is perceived by the young people. For example, in those studies that reported it, the interventions were generally well received and drop out from the intervention itself was fairly low. Should an exercise be perceived as too hard or not realistically achievable, however, responses may be different. Providing the right dosage of exercise might be important.

Qualitative studies also point towards the acceptability of physical activity as an intervention. What is noticeable in the studies discussed is that the young people involved do not appear to focus on the actual activity as much, for example weight

lifting or running. Instead they seem to describe factors which could be considered more generic to physical activity in general. For example, that it can operate as a distraction from other concerns and that it leads to positive physiological changes. Additionally many of the young people involved in the study by Carter et al., (2016) described the value of shared experience and Autry, (2001) described the theme of teamwork, both of which seem to combine well with the theme of improved peer relations in Milligan et al., (2015) . Beyond this there is a broader sense of physical activity being an intervention which, while it has its rewards, requires time and effort, both of which are factors that can build routine and a sense of self-efficacy (Carter et al., 2016) without requiring young people to invest in a model they are unfamiliar with e.g. CBT.

### 1.5.2 Limitations of review

This review attempted a systematic approach using a quality assessment tool, as described above. On reflection, however, this tool was not useful in developing an understanding of the literature. Currently, there is too little research to be able to use the tool to only select the papers of higher methodological quality and given the disparity in the papers, it is probable that a narrative approach would have been more instructive. This is especially the case with the qualitative papers as the methodological approaches were often poorly described and could be seen more as generating possible ideas rather than offering a robust approach to understanding the phenomena. It was however of some use as a developmental tool for myself to consider the criteria and how they might be utilised with a different selection of papers.

This review was also focused on a very specific set of inclusion and exclusion criteria in an effort to provide a counterpoint to larger but broader reviews where there is too little similarity between papers to draw conclusions. Although this has been useful in exploring the evidence specific to young people with existing mental health difficulties, it also has several limitations. This review includes only 10 studies of a variety of methods and many of those studies are of questionable methodological quality. Any conclusions which arise from this study must be viewed in the context of the data available being thin. In relation to this, narrowing the criteria to such an extent may have led to suitable papers being missed because they did not appear to meet inclusion criteria in the initial searches. This is a particular issue because of the lack of consensus of terms in this area and so it is possible that studies using more unusual terms were missed in the original search. Hopefully the use of hand searching has offset this risk, but some papers, however, may still have been missed.

Additionally, although the participants were from a narrower population, the physical activities were not and the widely differing sports and activities may have operated in very different ways. There may, for example, be a large difference between the potential value of an intensive, individual aerobic programme versus a yoga group. The very limited number of studies meant that it was not possible to explore this, but it also means that it is very difficult to draw any clear conclusions because the mechanisms of each intervention may be different.

Finally, due to the resource limitations of the study, papers which only included composite scores, for example of measures which included individual sections for mental health, social measures, school attainment etc., but were

combined into a total score for the final paper, had to be excluded. Were the individual data sets available, there may have been more studies which could have been included in this review which would have increased the available data.

### 1.5.3 Clinical implications

The papers collected for this review appear to suggest that at the very least physical activity is not harmful for young people experiencing mental health difficulties and that future research would be of value. The current research appears to suggest that it could indeed be a useful tool in supporting young people with mental health difficulties but that it may not directly influence mental health; rather the intervention may provide an accessible vehicle for therapeutic support in a manner which promotes the young people's sense of wellbeing and resilience. However, while this is a potential avenue to explore, there is not enough research of sufficient quality available at the current time to support this definitively.

### 1.5.4 Further research

Further research on this topic would be helpful as the current research seems to indicate some degree of promise for physical activity as a long or short-term intervention. To date there is minimal information available on the impact physical activity may have on anxiety disorders and too few fully powered RCTs. Equally as it is ethically questionable both to withhold interventions for young people with mental health difficulties or provide them solely with only minimally tested and poorly understood interventions, research which explores activity as an adjunct to treatment as usual or using wait list controls may be particularly helpful.

Additionally, it is very difficult to have a control group in which no physical activity at all is undertaken, studies which look at perhaps and individually targets percentage increase in physical activity could be fruitful. Further research into whether preferred intensity or target intensity is more helpful could be of use.

Alongside this, further qualitative research is likely to be a fruitful approach as the field of physical activity is so broad and understanding the experiences of participants may provide further suggestions or insight into mechanisms of change. This in turn may provide much needed direction for quantitative research.

## 1.6 References

Autry, C. (2001). Adventure therapy with girls at-risk: responses to outdoor experiential activities. *Therapeutic Recreation Journal*, 35(4), 289–306. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=jlh&AN=106701088&site=ehost-live&scope=site>

Bahrami, F., Movahedi, A., Marandi, S. M., & Sorensen, C. (2016). The Effect of Karate Techniques Training on Communication Deficit of Children with Autism Spectrum Disorders. *JOURNAL OF AUTISM AND DEVELOPMENTAL DISORDERS*, 46(3), 978–986. <https://doi.org/10.1007/s10803-015-2643-y>

Biddle, S. J., & Asare, M. (2011). Physical activity and mental health in children and adolescents: a review of reviews. *British Journal of Sports Medicine*, 45(11), 886–95. <https://doi.org/10.1136/bjsports-2011-090185>

Brown, S. W., Welsh, M. C., Labbe, E. E., Vituli, W. F., & Kulkarni, P. (1992). Aerobic exercise in the psychological treatment of adolescents. *Perceptual and Motor Skills*, 74(2), 555–560. <https://doi.org/10.2466/PMS.74.2.555-560>

Carter, T., Guo, B., Turner, D., Morres, I., Khalil, E., Brighton, E., ... Callaghan, P. (2015). Preferred intensity exercise for adolescents receiving treatment for depression: a pragmatic randomised controlled trial. *BMC PSYCHIATRY*, 15. <https://doi.org/10.1186/s12888-015-0638-z>

Carter, T., Morres, I., Repper, J., & Callaghan, P. (2016). Exercise for adolescents with depression: valued aspects and perceived change. *Journal of Psychiatric and Mental Health Nursing*, 23(1), 37–44. <https://doi.org/http://dx.doi.org/10.1111/jpm.12261>

Department of Health Physical Activity Health Improvement and Protection. (2011).

Start Active , Stay Active. *Report*, 62.

[https://doi.org/https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/216370/dh\\_128210.pdf](https://doi.org/https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf)

Dopp, R. R., Mooney, A. J., Armitage, R., & King, C. (2012). Exercise for adolescents with depressive disorders: A feasibility study. *Depression Research and Treatment*, 2012. <https://doi.org/10.1155/2012/257472>

Eckstein, F., & Rueth, U. (2015). Adventure-based experiential therapy with inpatients in child and adolescent psychiatry: an approach to practicability and evaluation. *JOURNAL OF ADVENTURE EDUCATION AND OUTDOOR LEARNING*, 15(1), 53–63. <https://doi.org/10.1080/14729679.2013.844573>

Faulkner, G., & Biddle, S. (1999). Exercise as an adjunct treatment for schizophrenia: A review of the literature. *Journal of Mental Health*, 8(5), 441–457. <https://doi.org/10.1080/09638239917157>

Garber, C. E., Blissmer, B., Deschenes, M. R., Franklin, B. A., Lamonte, M. J., Lee, I. M., ... Swain, D. P. (2011). Quantity and quality of exercise for developing and maintaining cardiorespiratory, musculoskeletal, and neuromotor fitness in apparently healthy adults: Guidance for prescribing exercise. *Medicine and Science in Sports and Exercise*, 43(7), 1334–1359.

<https://doi.org/10.1249/MSS.0b013e318213fefb>

Hoare, E., Milton, K., Foster, C., & Allender, S. (2016). The associations between sedentary behaviour and mental health among adolescents: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, 13(1). <https://doi.org/10.1186/s12966-016-0432-4>

Hughes, C. W., Barnes, S., Barnes, C., DeFina, L. F., Nakonezny, P., & Emslie, G. J. (2013). Depressed adolescents treated with exercise (DATE): A pilot randomized controlled trial to test feasibility and establish preliminary effect sizes. *Mental Health and Physical Activity*, 6(2), 119–131.  
<https://doi.org/http://dx.doi.org/10.1016/j.mhpa.2013.06.006>

Kmet, L., Lee, R., & Cook, L. (2004). *Standard quality assessment criteria for evaluating primary research papers from a variety of fields*. Alberta Heritage Foundation for Medical Research.

Larun, L., Nordheim, L. V., Ekeland, E., Hagen, K. B., & Heian, F. (2006). Exercise in prevention and treatment of anxiety and depression among children and young people., (3), CD004691.

<https://doi.org/10.1002/14651858.CD004691.pub2.www.cochranelibrary.com>

Mason, O. J., & Holt, R. (2012). A role for football in mental health: the Coping Through Football project. *The Psychiatrist*, 36, 290–293.

<https://doi.org/10.1192/pb.bp.111.036269>

Mason, P., Curl, A., & Kearns, A. (2016). Domains and levels of physical activity are linked to adult mental health and wellbeing in deprived neighbourhoods: A cross-sectional study. *Mental Health and Physical Activity*, 11, 19–28.

<https://doi.org/10.1016/j.mhpa.2016.07.001>

Milligan, K., Badali, P., & Spiroiu, F. (2015). Using Integra Mindfulness Martial Arts to Address Self-regulation Challenges in Youth with Learning Disabilities: A Qualitative Exploration. *JOURNAL OF CHILD AND FAMILY STUDIES*, 24(3), 562–575. <https://doi.org/10.1007/s10826-013-9868-1>

Roshan, V. D., Pourasghar, M., & Mohammadian, Z. (2011). The efficacy of

intermittent walking in water on the rate of MHPG sulfate and the severity of depression. *Iranian Journal of Psychiatry and Behavioral Sciences*, 5(2), 26–31.

Stathopoulou, G., Powers, M. B., Berry, A. C., Smits, J. A. J., & Otto, M. W. (2006). Exercise Interventions for Mental Health : A Quantitative and Qualitative Review. *CLINICAL PSYCHOLOGY-SCIENCE AND PRACTICE*, 13(2), 179–193. <https://doi.org/10.1111/j.1468-2850.2006.00021.x>

Steiner, N. J., Sidhu, T. K., Pop, P. G., Frenette, E. C., & Perrin, E. C. (2013). Yoga in an Urban School for Children with Emotional and Behavioral Disorders: A Feasibility Study. *Journal of Child and Family Studies*, 22(6), 815–826. <https://doi.org/10.1007/s10826-012-9636-7>

Stoner, L., Rowlands, D., Morrison, A., Credeur, D., Hamlin, M., Gaffney, K., ... Matheson, A. (2016). Efficacy of Exercise Intervention for Weight Loss in Overweight and Obese Adolescents: Meta-Analysis and Implications. *Sports Medicine*, 46(11), 1737–1751. <https://doi.org/10.1007/s40279-016-0537-6>

Weaver, L. L., & Darragh, A. R. (2015). Systematic Review of Yoga Interventions for Anxiety Reduction Among Children and Adolescents. *American Journal of Occupational Therapy*, 69(6), 1–9. <https://doi.org/10.5014/ajot.2015.020115>

Williams-Orlando, C. (2013). Yoga therapy for anxiety: a case report. *Advances in Mind-Body Medicine*, 27(4), 18–21. Retrieved from <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=emed13&NE WS=N&AN=24067321%5Cnhttp://www.scopus.com/inward/record.url?eid=2-s2.0-84896060665&partnerID=40&md5=e9122732bf784f170518daab682db7a1%5Cnhttp://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=referenc>

World Health Organisation. (2018). *Global action plan on physical activity 2018-2030.*

## Part 2: Empirical paper

The Role of Team Based Physical Activity in Mental Health

Interventions for Young People

## 2.1 Abstract

*Aims:* While football can be a divisive topic, some programmes are using the sport as the basis for therapeutic groups aimed at young people with mental health difficulties. The project in this study supports young people in contact with mental health or social services. It aims to help young people re-establish social links and hopes to reduce both the level of provision and length of time young people need access to services.

*Method:* Young people between 16 and 20 who had attended the group were approached alongside adult stakeholders involved in the group. Those who consented were interviewed to gain an understanding of their experiences of the group. Their responses were explored using a thematic analysis.

*Results:* A total of six themes were developed. These were “taking different approach”, “accepting other people’s experiences”, “developing positive changes, overcoming challenges”, “enduring challenges”, “small important changes” and “socialising (in an isolating world)”.

*Conclusion:* These themes highlight how the perceived value of this group may lie in its ability to create an environment in which positive developments can be facilitated. Developments which may be helping to build up attendee’s mental health rather than directly tackling symptom reduction and can be shaped by the needs of the individual.

## 2.2 Introduction

### 2.2.1 Review of literature

Physical activity has been associated with the treatment of mental health for many years. Even in ancient Greece, the values of exercise were expounded. In spite of this, or perhaps because of it, the research evaluating the role physical activity could play in the treatment of people with mental health difficulties has been limited.

Recent years have seen a revival of interest in the role of physical activity in the general population (e.g. Mason & Holt, 2012). It is now recommended by the UK government that all children between the ages of 5 and 19 should achieve at least 60 minutes of moderate to vigorous intensity exercise a day, potentially up to several hours of exercise a day (Department of Health Physical Activity Health Improvement and Protection, 2011). Research exploring the impact of physical activity on adults with mental health difficulties also suggests it could be a useful tool (Stathopoulou et al., 2006). Indeed, government guidelines cite the potential benefits to mental health as a factor for promoting exercise in adults but they do not cite this as a factor for young people (Department of Health Physical Activity Health Improvement and Protection, 2011).

In many ways it is easier to explore the potential impact of different types of physical activity on young people of school age as Physical Education remains a compulsory part of the school week although this does make it almost impossible to find comparison groups where no physical activity occurs. Consequently, there has been some research undertaken which investigates the impact of either additional activity or different types of activity on young people of school age (Larun et al., 2006). Some of this research has focused on physical health and weight management

but others have also looked at mental health outcomes (Goldfield et al., 2015), with some of these studies indicating that exercise can lead to an improvement in mental health outcomes (Brown, Pearson, Braithwaite, Brown, & Biddle, 2013) but others suggesting that the impact is not significant or limited to particular groups (Larun et al., 2006). Larun et al (2006) in their systematic review indicate that whilst there may be a modest effect of exercise on depression and anxiety scores in young people from the general population, there does not appear to be a significant effect of exercise on either depression or anxiety scores for young people receiving treatment for mental health difficulties. They point out, however, that the number of studies are so small and the quality so low that it is difficult to draw firm conclusions for any population and cannot provide answers as to why such a difference between general and treatment populations might exist. In their more recent systematic review Brown et al. (2013) point to an overall positive effect of exercise on depression scores in young people. This review did not differentiate whether young people were in treatment or not, but reported that “the majority of studies targeted at risk groups for depression” and the remainder were from the general population. Again, there were a small number of studies and the authors highlight a range of baseline scores for depression. This study, however, cannot indicate how this effect might change dependent on whether the studies were groups according to clinical treatment as with Larun et al. (2006). In all of these studies though, in spite of the differences, all reported outcomes are of quantitative measures of depression or anxiety.

Many reviews were analysed together in a “review of reviews” (Biddle & Asare, 2011). The evidence for the use of physical activity for young people was again reported as mixed. They emphasised that sedentary behaviour has consistently been shown to have a negative impact on mental health. The generally poor

methodological quality of research, however, makes it difficult to draw any firm conclusions about whether physical activity can alleviate depression or anxiety in young people. They tentatively suggest that the research shows a trend in this direction but there is currently no clear understanding of any change mechanism which may be involved.

Some studies have begun to address this issue and Whitelaw, Teoton, Swift, & Scobie (2010) suggest that there is a link between increased physical activity and mental wellbeing as opposed to symptom reduction. They hypothesise that there may be several factors involved in this including developing a sense of belonging and increased social interaction, alongside physical aspects such as increased core body temperature and changes to the serotonergic systems and psychological factors such as increased self-worth and distraction from stressful events.

The above papers, however, focus predominantly on the impact of exercise on the general population of school age children and it is, therefore, difficult to use them to identify any role that physical activity may have on young people with existing mental health difficulties or who have contact with mental health services specifically. Even though Larun et al. (2006) looked specifically at in-treatment groups, they could only identify 3 studies. This was explored by Staal & Jesperson (2015) in a qualitative study of people attending a sports club for people with mental health difficulties, but in young people only aged between 18 and 30. They highlighted the physical contact of sports as well as the importance of being good to yourself, actively doing something to get better, having more energy and developing meaningful relationships.

A small number of studies have looked specifically at young people under the age of 18 who have either a diagnosed mental health disorder or had contact with mental health services. As described in further detail in the above literature review, these are of mixed methodological quality and span several decades. Recent RCT studies indicate mixed results with one suggested that there is not a significant difference between an exercise and a control group, although exercise appeared to provide a faster effect and more complete remission across the group (Hughes et al., 2013). This was, however, a study in which the control group was a stretching group which could be argued to be a form of exercise. Conversely, another suggests that any effect of exercise is not seen until six month follow-up (Carter et al., 2015). Another RCT, albeit with more noticeable methodological concerns, suggests a significant decrease in depression scores after walking in water for six weeks when compared to a control group (Roshan et al., 2011). A feasibility study without a control group (Dopp et al., 2012) showed a significant decrease in scores for young people on a depression score which was also either maintained or improved upon at a three month follow up.

Overall these studies may point towards a positive impact on physical activity on depression in young people, but they are a very limited number of studies and many have significant methodological questions which may have confounded the results. They also do not provide any information regarding the impact of physical activity on anxiety. It is still, therefore, far from clear what the impact of physical activity may be on young people with mental health difficulties and the breadth of activities used in these studies also make it very difficult to identify whether there are specific aspects of the activity which are important and whether this would have any influence on symptom reduction or resilience building.

## 2.2.2 The football project

The football group was developed with the intention of using football to provide support to people who have had contact with mental health services. It utilises a recovery orientated approach and is focused primarily on social inclusion. It purports to address outcomes including providing routes back into employment or education, reigniting social skills and improving self-esteem, physical health and confidence. It also aims to reduce participant's reliance on substances and improve their relationships with health professionals (Ten Year Report, 2018).

Having initially been implemented for adults (aged 18 and over) the group was opened to young people between 12 and 18 in 2014. The referral criteria are wide ranging with young people attending from Child and Adolescent Mental Health Services, social services and youth offending teams. The group is run in north east London and accepts referrals from across north east London and Essex. All sessions are run by a qualified football coach and a qualified mental health professional. The sessions run twice a week between 4:00pm and 5:30pm and the young people can attend both sessions or one a week depending on their preference. There is no requirement to commit to a set number of sessions but regular, weekly, attendance is encouraged. The sessions are entirely football based and start with a warm up which is run by the coaches or some of the young people if they are comfortable with this. The bulk of the session consists of a combination of skills training and matches depending on the number of young people attending. The session finishes with a cool down and the young people then leave. There is no planned social time within the group, other than playing football but the group does also sometimes organise trips such as to professional football matches which the young people could join. If there are any social difficulties arising within the group, e.g. bullying, the session is

stopped and the problem discussed. The football activity is started again once the matter has been resolved by the group.

### 2.2.3 Study aims and rationale

As can be seen above, the literature looking specifically at young people with existing mental health difficulties or who are currently accessing mental health or social services is very limited. It is not currently possible to draw firm conclusions on whether physical activity is useful in the treatment of these mental health difficulties. Additionally, there is little indication as to how this intervention might prove useful to young people and as such it is difficult to narrow down any quantitative approach to explore its effectiveness. This study will, therefore, focus on the experiences of the young people participating in the group and the adult stakeholders (such as referrers and coaches). It is reasoned that better understanding of how those involved in the group have experienced it may help to identify aspects of the group which have seemed to be most useful and of value to the young people. It is hoped that adding this to the current literature will help to identify more specific avenues for exploration, which in turn should lead to a more fruitful investigation of the potential mechanisms of change and effectiveness of this intervention.

This study occurred in the context of a wider research project which both facilitated and limited this project. The wider research project was an independently funded project using mixed methods to explore the experiences of attendees of the adult wing of the football group. This wing of the project has been running since 2006 and runs four times a week with each session lasting for two hours. The project used measures and semi-structured interviews to explore the impact of the football group on attendees. This study was incorporated into the larger project which allowed access to funding and facilitated wider support from those running the group

as they were already engaged in the wider research project being undertaken. It did however place some constraints on the shape of this research which will be discussed at the relevant points of this thesis.

The study adopted a qualitative approach utilising a semi-structured interview format and thematic analysis. It was felt that this approach would provide the best opportunity for those involved with the group to identify their personal experiences and thoughts about the group. Thematic analysis was used (Braun & Clarke, 2006) as it was designed to be a thorough but accessible and flexible approach to qualitative analysis. This was particularly key given that there is minimal research in this area and little theory on how physical activity influences mental health which might suggest prioritising other more focused or streamlined approaches. Additionally, a central part of this study was for it to be accessible to both participants and researchers alike and to include service users wherever possible. The accessibility of thematic analysis provides an opportunity to do this and to allow the analysis to be shaped at least in part by the participants of the project.

#### 2.2.4 Research question

For the above reasons, this study asked broad questions in order to avoid directing the focus towards areas of interest to the researcher rather than the participants. It asked “how have the participants and adult stakeholders experienced the football group?” It is hoped that this question encapsulated what is important and valued by the various people involved in the project, but also able to capture other possible areas of interest for future research and the development of the service.

## 2.3 Method

### 2.3.1 Setting

This study took place within community NHS settings and all of the participants involved were connected to the NHS or social services in the area. The interviews all took place either at local NHS sites which were convenient for the participants or at the grounds used by the football group. One interview was conducted over the phone as the young person was not comfortable meeting face to face, but the interview was still conducted from and recorded in an NHS building.

### 2.3.2 Participants

The football group accepted referrals from anyone between the ages of 12 and 18 who had contact with a child and adolescent mental health service, the criminal justice system or social services. The young people usually had either a diagnosis of existing mental health difficulties or were considered to have “emerging difficulties”.

### 2.3.3 Ethics

Ethical approval was sought both through the NHS Ethics Board for the young people being interviewed and the UCL Ethics Committee for the adult stakeholders. Regarding the NHS application, this was requested for participants aged 16 or over only. This was done because the larger research project was only interviewing adults and so it made administrative sense to remain in-line with the application which was already in progress when this study was being designed. Also it was felt that the adaptations which might be necessary for interviewing much younger people such as facilitating a time when their parents or carers could either attend with them for at least bring them to the appointment may not have been

possible given the time constraints of a DClinPsy course (such as only being available to interview on two days a week).

While there were problems with this decision because it limited the participant pool considerably, it also encouraged the recruitment of people who had attended the group previously so as to give a longer term understanding of the group's impact. This was felt to be a particularly useful aspect of the study because no identified previous research had explored the views and experiences of attendees in the longer term although some quantitative research had included measures based follow up over approximately a year. It was hoped that this would allow the exploration, not only of the immediate impact of the group but also any lasting effects or valued aspects which were only noticed in different settings for example when the young people were leaving school or starting work.

Ethical approval was obtained from both boards as shown in Appendix B. A requirement of approval was that all recruitment was to be completed via the project co-ordinator. This role is described in greater detail below.

#### 2.3.4 Inclusion and exclusion criteria

The people included in this study were either young people who had attended the group, mental health professionals from services who referred young people to the group or staff members involved in running the group. All participants were 16 years or older at the time of the interview. Although all participants were required to have had contact with the football group either as a referrer, staff member or attendee, they were not required to be attending the group at that time and so it was, therefore, possible that participants in the study had dropped out of the group or had not attended for some time.

The only exclusion criterion was if an individual's level of English language was not good enough to be able to effectively communicate in the semi-structured interview; however, this did not lead to anyone being excluded from the study.

### 2.3.5 Sampling method

All participants of the group, past and present, who met the inclusion criteria were identified by the co-ordinator of the football group project. The project co-ordinator then tried to contact them to see if they would be interested in being part of the project. This initial stage was kept as inclusive as possible in an effort to capture the greatest breadth of views on the group as possible, although some people were not approached and this was assessed on an individual basis. For example, if a young person was known to have moved out of area or be currently unwell enough to manage an interview or be distressed by the offer.

Those individuals who expressed interest in the study were then followed up by the project co-ordinator as described in the procedures section. A similar approach was used to identify the adult stakeholders; however, it was more selective as greater focus was given to those who had referred multiple clients to the group or had had contact with it in other ways in order to identify those who were more aware of the group. This selection of referrers was then contacted via email or telephone as described in the procedures section. All staff members involved in the running of the young person football group were contacted directly.

### 2.3.6 Response Rate

There was initially estimated to be a pool of approximately 90 young people who would meet the criteria for the study. This was not an exact number as it was taken from the group registers and the date of birth information was not complete for

every participant, however, it was believed to be a good enough estimate without accessing the young person's medical files.

One challenge of requiring the project co-ordinator to manage the recruitment of the young people alongside all the other demands of their job role was that recruitment had to be done when they had the time available and that they were not able to keep a complete record of all of the young people that they approached. It is conservatively estimated that approximately 50 young people were approached although it is likely to have been more than this. There was also some attrition due to incorrect contact details, young people moving out of area or being deemed too unwell to contact. Of these, seven attended for interview. Regarding the adult stakeholders, a total of eight referrers and staff were approached for an interview and six completed an interview.

### 2.3.7 Basic Demographics

Table 3 below shows the basic demographics of the interview group and whether they were a current attendee of the group, past attendee or adult stakeholder. One adult stakeholder wished to withhold their age however it can be estimated that all participants were between the ages of 16 and 75 and identified a range of ethnicities.

### 2.3.8 Procedures

Potential candidates for this study were identified by the football group project co-ordinator, in accordance with ethic requests. Any young person who had attended the group between the ages of 12 and 18 and were now 16 years or older were contacted by the project co-ordinator to see if they would be interested in

participating in the study. This ensured that only the project co-ordinator had access to the young person's medical records or knowledge of their individual needs.

This contact could be either in person, by telephone or letter dependent on what the project co-ordinator felt the young person would prefer. Should they be interested in taking part in the study they were provided with further verbal information and an information sheet, (see Appendix B). If they were then happy to take part they were offered an interview time by the project co-ordinator. This was at least 24 hours after the young person was approached to give them time to think about whether they wanted to be involved. Should the young person choose to attend the interview, they were met by the project co-ordinator and the interviewer and their signed consent was obtained by the project co-ordinator. The project co-ordinator then left and the interview progressed. They could also be interviewed over the phone if they preferred.

The adult stakeholders were identified by the project co-ordinator but were contacted by the interviewer directly. This was either over the phone or by email. Those who responded with interest were provided with further information and an information sheet. Were they still interested, an interview date was arranged and written consent was obtained prior to the start of the interview. One interview from the adult stakeholders was conducted by a researcher involved in the project exploring the adult wing of the football group but as they also commented directly on the young person group, these sections were included. The same procedure as detailed above was followed for this participant but they were interviewed by a different researcher.

Table 1: Participant Demographics

Participant	Gender	Age	Ethnicity	Attending?
1	Male	20	White British	Attended
2	Male	17	British Asian	Attended
3	Male	19	British Asian-Pakistani	Attending
4	Male	17	British Asian-Pakistani	Attended
5	Female	20	Black British - Caribbean	Attended
6	Male	18	Black British – Caribbean	Attending
7	Female	36	White British	Adult
8	Female	27	White British	Adult
9	Female	Withheld	White British	Adult
10	Male	16	White British	Attending
11	Male	50	Black Brazilian-Caribbean	Adult
12	Female	52	Black British-Caribbean	Adult
13	Male	56	Other	Adult

All participants were offered the opportunity to ask any questions they wished at any time. They were all reimbursed £20 as recompense for their travel and other expenses.

### 2.3.9 Design

This was a qualitative study utilising semi-structured interviews to better understand the experiences of people involved in the football group. The number of participants needed for this study was between 10 and 20 as suggested by Braun & Clarke, (2006). All data was stored in accordance with confidentiality and security guidelines.

As described above it uses semi-structured interviews (see Appendix C for the interview schedule) and these interviews were audio recorded and transcribed orthographically. The transcripts were analysed using Thematic Analysis (Braun & Clarke, 2006). This approach identifies six main steps in conducting the analysis. Step one is for the researcher to familiarise themselves with the data; step two is to generate the initial codes; step three is to search for themes; step four is to review themes; step five is to define and name these themes and step six is to produce the completed report. These steps were followed as described by Braun and Clarke (2006). See Appendix D for images of the diagrams and processes used in the different phases to identify the themes. As the language and style of the interviews were quite different given the various ages, views and occupations of the individuals being interviewed, considerable time was spent moving between the first two stages to ensure that parity was given to the interviews despite differences in expression and length. To best manage the large amounts of information, a chart was also developed to help keep track of all the data, assist in summarising the themes in a more

accessible manner and provide a clear means of sharing the information when needed (Buckley & Waring, 2013).

### 2.3.10 Assessing quality

To assess the quality of the research, credibility checks were included. In particular, feedback from additional people and testimonial validity were planned. Feedback for others proved possible in the form of support from supervisors and summaries were provided to the adults who had been interviewed with a request for feedback to ascertain whether they felt it was an accurate analysis of their experiences. See Appendix E for details. There is some debate regarding the value of credibility checks in qualitative research, particularly whether they are of value in all types of research. Given the primarily phenomenological nature of this study and the focus on understanding the participants experiences through their own words, I felt that they would be appropriately used here, as it would give the participants an opportunity to express whether they felt the analysis reflected their experiences and to ensure that they were still a part of the process of analysis (Elliott, Fischer, & Rennie, 1999; Pistrang & Barker, 2012).

Unfortunately, there were no responses within the time frame needed for this project and in hindsight the accessibility of a summary sheet is debatable. There may have been a much better response if it had been possible to feedback back to participants verbally. The group attendees were also offered the opportunity to receive summaries and give feedback but all but one declined. A judgement was made not to send the feedback to this individual as it appeared they only agreed because they felt required to rather than a willingness to provide feedback. They were instead informed that a summary of results would be disseminated to the

football group and if they wanted further information they could contact the project co-ordinator.

## 2.4. Results

### 2.4.1 Research question

The following themes are based around developing a better understanding of how the attendees and adult stakeholders experienced the football group.

### 2.4.2 Use of frequency descriptors

The research question described two separate groups, the attendees and the adult stakeholders. This was intended to be purely descriptive; however, there were some differences between the two. Initially identifying separate themes for each group was considered, but as the analysis progressed I felt these different perspectives were instead adding to the depth of common themes so the two groups were combined. This made describing the frequency with which themes were raised more complicated. For example, if a theme was present in half the interviews but these seven were all attendees and no adults then that could be interpreted differently. Therefore, there is reference to numerical frequency when it adds to the understanding of the information, but often general terms such as which subgroup the theme was most drawn from proved more illuminating.

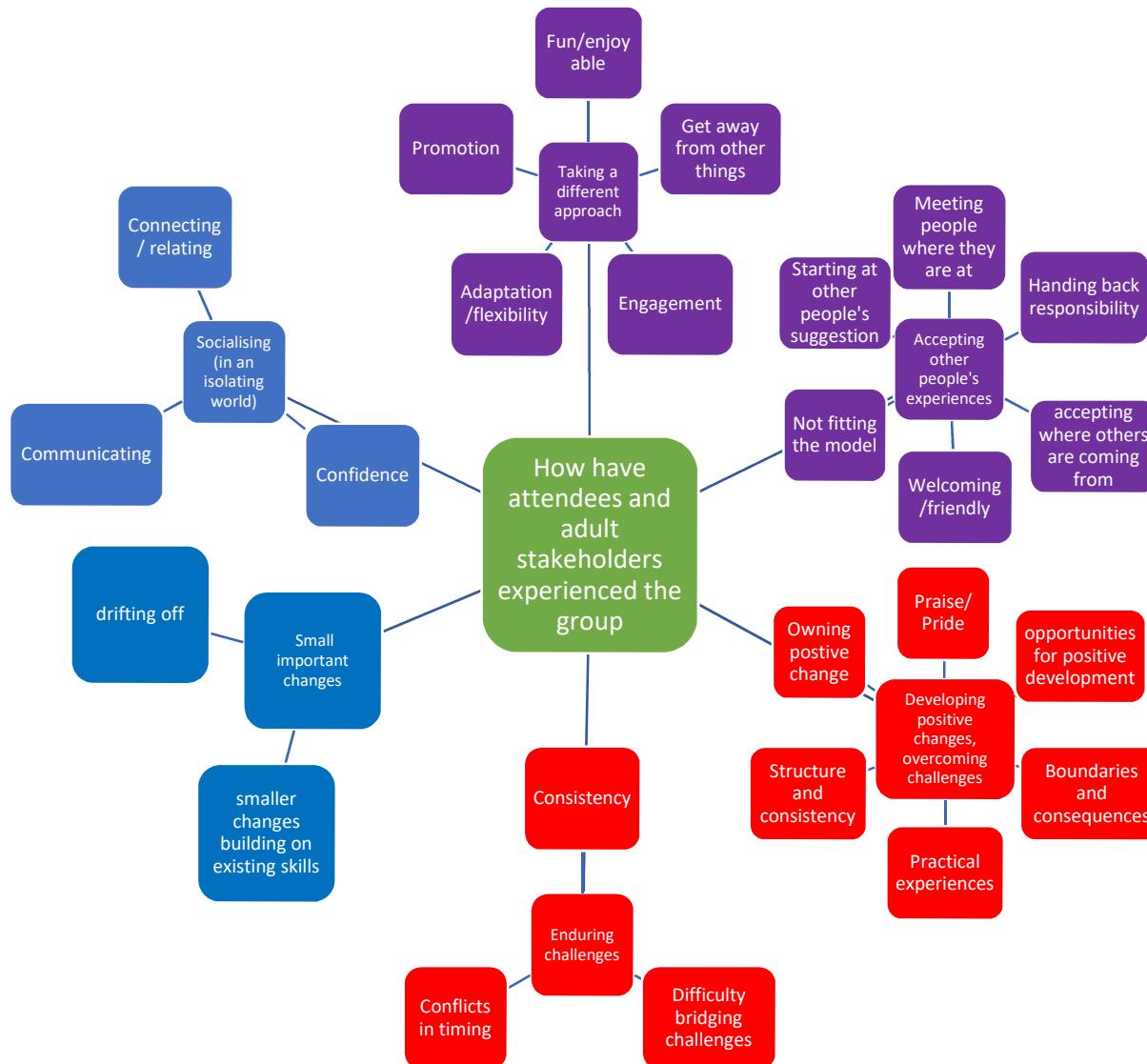
### 2.4.3 Themes

Six themes were developed. See Figure 2 for a diagram of these themes with the summary of codes related to them. The colour co-ordination on Figure 2 indicates the closest of many relationships between themes but no direction of causality is suggested. “Taking a different approach” is particularly related to “Accepting other people’s experiences”, because acceptance was considered something different and

equally taking a different approach helped promote acceptance throughout the group. Beyond this, these themes related to “developing positive changes, overcoming challenges” and it was also recognised that not all challenges can be overcome directly and there were still “enduring challenges”. A key part of the group seemed to be the role of “small important changes”, a challenge itself where the group was not portrayed as something pivotal for attendees, with changes being small enough not to notice at first and attendees simply drifting away. Finally, “socialising (in an isolating world)” at once stands alone as something that is inevitable in team sports and equally dependent on these small changes for its success.

The themes are ordered as above to attempt to provide as clearer narrative as is possible. It is not intended to indicate any order of importance as the themes are considered interdependent. For reference, quotes are provided throughout to illustrate themes. For each quote the participants number (as shown in Table 3) and transcript line is provided alongside a description of whether the participant is an attendee or adult stakeholder.

Figure 1: Chart identifying themes and a summary of codes for each theme



#### 2.4.4 Taking a different approach

Every interview participant highlighted this theme. It is broad because the different approach could be anything. For some, it was the football group adding structure to their day, for others, their one chance to socialise each week. For this reason, it is so titled to represent the variety of individual things or choices that were noted as being done differently. Foremost of these was the importance placed on the attendee's having fun. Put simply:

2) 54 (attendee) "whenever I went there I enjoyed it"

The participants gave the impression of this being in contrast with other aspects of the attendees' lives. As all attendees are considered at risk of developing mental health or social difficulties, it is unsurprising that there could be difficult aspects in their lives. The group represented something set aside from this. As one of the adult stakeholders described:

8) 34 (adult) "it's not traditional mental health so a lot of young people are like I'm not sitting on a couch and talking to you but if you kick a football around for a bit they'll totally tell you everything ... a different way to engage young people in a way that they truly enjoy"

This also emphasises the opportunity for young people to focus on things they enjoy instead of entirely on difficult areas. In turn, as this participant suggests, it may facilitate engagement.

Many attendees also described appreciating having a different place to go and a different experience away from difficult topics. In this way the football operated as a distraction from challenges:

1) 56 attendee “it’s kinda like a distraction almost … in some ways … It’s like got a lot going on well not the most pleasant things and then you kind of go there and it’s just like put it in the back of the mind innit it is just concentrate on what you’re doing is kinda nice”

The adult stakeholders also raised how the group allows for a different kind of engagement. As described above it is not a traditional mental health intervention and the belief was held by all but one stakeholder that this would allow better engagement. It was also thought that football could lessen barriers between attendees and staff, particularly when the adults play too. One adult highlighted that their lack of skill gave them a chance to show their human and fallible side.

Although adaptation should be expected in any intervention, this was also highlighted as different because the adaptation was discrete. Football increased the flexibility of the group and the focus from the staff team was to adapt to the needs of the group so that everyone could take part.

8) 400 adult “they were always really good about changing up the rules of the game to suit they’d make it sound like they’d just come up with it … and you would never know that it’s because that young person can only do this”

The difference in promotion was also discussed; the challenges of promoting an unusual service as well as being able to promote it firstly as a football group. Although the focus is on supporting people with their difficulties, it is done indirectly through football rather than asking attendees to absolutely acknowledge having a “mental health difficulty”, something they may be reluctant to do. This was only discussed directly by one attendee but most of the adults.

#### 2.4.5 Accepting other people's experiences

Strongly related to the idea of taking a different approach is being accepting of other people's experiences. As a first step of acceptance, almost all the young people described how welcoming staff were. This was important in encouraging attendees to both try out and remain with the group:

- 10) 12 attendee “and it turns out that it's actually quite a welcoming place and I decided to attend that one session and kept on going from there”

This linked with most of the attendees saying they were strongly encouraged to attend the group rather than volunteering for it. As one attendee said:

- 6) 30 attendee “My parents said that I should go to the group”

There was a sense that the attendees were pushed towards the group rather than choosing it. This needed to be accepted by staff to recognise that attendee's behaviour may reflect their initial uncertainty about attending.

Whilst the areas described above were strongly reported by attendees, the rest of this theme was generated more from adult interviews. One concept underpinning the adults' ideas was meeting the attendees where they were at, not requiring them to achieve any threshold, just to understand where they were and what might be a good step forward for them. It was the role of staff to work the group around the attendees, not the other way around.

- 12) 463 adult “so it's trying to ... improve them wherever they're from wherever they were”

While another highlighted,

11) 423 adult “I just see every human being different so that’s fine, age size, it doesn’t matter, just come along. I’ll work with you”

Of equal importance was genuinely accepting where attendees were coming from.

The adults focused on recognising they may not know how any attendee would behave or feel and to accept, without judgement, how they had behaved in the past and prevent this unduly influencing future positive opportunities.

This was highlighted by one attendee who had been rejected from other groups:

2) 142 attendee “I stopped playing football before that, and I used to play with my cousins and stuff but I just stopped playing to that because they didn’t want me there it was because I loved football, it was a bit like, I, this is the one place where I can play football”

This accepting, non-judgmental approach gave the attendees a chance to be defined as something other than their past as was articulated by one of the adult stakeholders.

8) 479 adult “for years they’d been defined as bad boys, ... you’re rotten apples and now they were being defined as actually you’re the older boys in this group, you’re inspiring the younger people that come”

Another adult also highlighted:

12) 698 adult “you’re always thinking that they need something particularly expert in the field of psychology ... that is for young people need this huge focus on some complex therapy and what in fact they’re needing is some acceptance, someone to listen them, yeah accepting them as they are um but

hinting at you could do this if you want to but neither making it a bit, I don't know, repetitive indoctrination or something you know. We model what's want we what we would like and when you're ready, we're here um and shockingly that seems to work quite well"

This captures how minimal pressure is placed on attendees to change, instead the opportunity to do something different is provided but change is the attendee's choice. This handing back of responsibility for was a key part of many of the adult's experiences with the group.

There can also be limits to acceptance. One attendee described struggling with another group who would not pass the ball and several adults spoke of being careful about who attended to be sure it maintained its flexible and supportive atmosphere. One adult also said how difficult being accepting can be when an attendee's behaviour is aggressive or there is conflict. Two others also talked about having to address their own preconceptions of some attendees.

Additionally, the discussions around gender suggested a complexity around the idea of acceptance. Everyone interviewed strongly indicated that gender was not a factor in the group and that everyone was welcome and yet there were very few girls participating in the group and only one was willing to be interviewed. It was felt by the interviewer that this insistence on gender not being an issue seemed to reflect more of a desire and intention for it not to be an issue when there was clearly a discrepancy in the number of girls and boys attending the group. This may represent a wider social perception of football but it may also indicate limitation in the referral or retention of girls to the group.

#### 2.4.6 Developing positive changes, overcoming challenges

Developing positive changes and overcoming challenges might be considered the watchword of this group. Taking a different approach and accepting other people's experiences form part of the foundation for an environment where positive changes can occur. This theme has two aspects; the hope of attendees developing positives and the willingness to openly tackle and overcome challenges. These positives might be internal changes or a chance to work towards socially acceptable goals, as encapsulated by participant 10 in the challenge of attending but the positive change in his mood when they did:

10) 79 attendee “when I've been low at home just been stuck indoors and not doing activities or sports, it's one thing that actually gets me out people I know that I should really just go to this, it's going to keep me healthy, it's going to, I'm just going to socialise and I'm just going to have because I love football so it's something that I should be doing no matter how I feel”

This group also provided the opportunity to feel pride and to experience praise. Most of the adults described this as being an important part:

8) 485 adult “your parents are coming down to cheer you on and drop you off and they're proud of you and this is something you can do to be proud of you and I think that makes such a difference to that group of lads that you could just see their shoulders rise with pride ... and the team, the staff team were so good about making them know how proud they were every week they came”

Despite not often talking about it directly, pride was apparent when most of the attendees spoke about positive changes and it seemed to be a factor both in their

enjoyment and being able to make changes that were relevant to them rather than experiencing themselves as a passive recipient of change.

One factor in this room for change was giving attendees “live” experiences of openly working through difficulties and practising more positive interactions when social challenges arose during group sessions. Two attendees commented on the value of practising communicating skills and of having help to work through difficulties:

4) 69 attendee “like if she could see something was wrong she would, she would ask, is there something wrong? She would pull you over and talk to you”

Additionally, when things were going well, it gave attendees a concrete experience of improved self-worth and pride rather than talking about it in an abstract sense:

8) 696 adult “it’s their self-worth and that’s invaluable … I can’t give to you in a room talking to you”

Another aspect of this practical experience is the structure and consistency of the group. This was mostly identified by adults but two attendees also emphasised how helpful the weekly structure had been. The practicalities of a team sport were also used to therapeutic advantage. For example, if attendees are not interacting with each other, doing a drill which requires team work to encourage communication.

One aspect also raised was the attendee’s boundaries. This was described by one attendees who felt pushed into playing competitive football.

5) 52 attendee “I used to play professionally and then he came up to me at the end and said um you should get back into it [I: wow] (participant laughs) and that kind of scared me so I didn’t want to go back because I felt like “Oh the pressures on””

Although this was only reported by one person, it is important to recognise boundaries also applying to what attendees feel comfortable with and understanding what positive change looks like to attendees rather than assuming they would find something positive.

#### 2.4.7 Enduring challenges

Throughout these interviews on-going challenges were recognised. Although the consistency offered by the group was helpful, there were also difficulties maintaining the number of attendees. It had been harder to contact and encourage young people to attend the group in comparison to the adults group and there were times when only one or two young people attended, especially when the weather was poor. This was frustrating to some but also meant the attendees could have almost 1:1 skills coaching and more individual attention to their needs.

Another challenge reported by almost everyone was managing conflicting timings with the school day. The difficulty finding a time to run a weekday group without clashing with school hours meant that young people attending mainstream school struggled to take advantage of the group. Equally if attendees returned to mainstream school they often had to stop attending, depriving them of support through that transition. These difficulties are illustrated below:

7) 377 adult “but not every kid can always go on that day you know, if they have a tutor or if they have um I don’t know like a swimming lesson that they

do goes ... sometimes I've asked kids about going, they don't finish school until 4 and it starts at 4, 4.30"

Although these challenges were almost universally recognised, there was no obvious resolution in sight, given their current resources. As one adult explained:

12) 286 adult "the children are at school and the adult ... if an adult wants to do um get work, you arrange an appointment during the day and you see them because you work 9-5 but the children don't finish school until 3.30 and the groups running, the adult groups running and ... finishes at 4 o'clock and um the kids are just finishing school then, your finishing at 5 o'clock and your thinking how much can you do?"

Another issue was the difficulty accessing the locations via public transport. Although staff were very willing to help young people to attend the group, they did not have the resources to do so. Consequently, young people who may benefit from the group but are too anxious to get there on their own, are not able to access the resource.

#### 2.4.8 Small important changes

This theme was derived from a smaller collection of comments. It could perhaps have been combined into "developing positives, overcoming challenges" and "enduring challenges", however, it represents some of the differences in perspectives of the attendees and stakeholders so was kept as a separate theme. The groups' focus on small changes made them manageable and the attendees were clearly able to build on them but they could be rather imperceptible at first. This is both important and a challenge as the smaller demands and promoting gradual, meaningful development are clearly seen as valuable. As a challenge, however, it appeared to make the group

seem less important in some ways than a clearer cut “intervention”. Many attendees reported drifting off when there were competing demands or more interesting activities and the small changes they noticed at the time did not provide enough staying power, despite the contrasting emphasis from the adults of the positive changes that they saw in the attendees.

All the attendees reported a mix of small changes and these seemed to have built on skills that they already had. Participant 1 described the following:

1) 89 attendee “I guess I could say I felt a bit less stressed about certain things because it’s like well I’m like quite an active sporty person so it’s like err well I find like when I do sports, when I go for a run or I do something to kind like [I: u-huh] I don’t know it just helps release it kind of thing”

Another attendee raised this point:

5) 292 attendee “definitely at school … it definitely er gave me um, a confidence boost and when you do have confidence, you are more likely to engage with your peers rather than like recl- like stand at the back you just watch”

In this case, although the increase in confidence might have been a small thing it had important consequences for this attendee. From all the attendees it was clear that they valued the changes that they had made but they might only have been obvious in hindsight. The adults also picked out the importance of having something to build on:

9) 227 adult “if you get one bit right then you can try another bit”

As described above, these small changes sometimes did not seem to offer much reason for attendees to stay if there were other demands. Often the attendees had to think quite hard to give a reason for their leaving as described by participant 2.

2) 38 attendee “I think the first time I stopped it was just because it was summer and I went on holiday I think … and just didn’t come back”

What is of note is that participant 2 did then return to the group several months later when they started to struggle with their mood again. This shows that attendees can drift back just as much as away. In that sense the group itself can be a small change which is available whenever needed. This small thing of an hour or two a week playing football could be an important change if someone found their mental health difficulties increasing again, especially as it is a change that the attendee can instigate for themselves when waiting lists for other services might span into months.

#### 2.4.9 Socialising (in an isolating world)

This was a theme which drew very strongly from attendee’s interviews. It is described last because it is a theme which is at once product and means of the above themes but could also stand alone. Being a team sport, socialisation is almost inevitable but these opportunities for positive change, promoting acceptance and doing things differently also influenced how the social aspects of the group developed.

Many of the attendees identified socialising with other young people as an important part of the group including their communication skills improving and finding it easier to talk. One attendee described the following as being a positive part of the group:

3) 28 attendee “talk around new people, um communication telling them how do you feel and all that”

Other attendees also picked out how it could be helpful when other attendees knew what to do if someone was struggling. Conversely another attendee spoke about it sometimes being difficult to know what to do or say if someone was not interacting in a socially acceptable way.

Despite this challenge, many attendees described an increase in confidence in how they interacted with others and not worrying about social interactions as much. One attendee captured this with the following:

2) 167 attendee “I think I’ve um got a lot more confident about um what I look like, who I am [I: mm] and just um not being afraid of all the little stuff [I: mm-hm] about what other people think and I just do now, what makes me happy”

This confidence was seen by many as something they generalised beyond the group, for example in school or being more willing to try new things.

One of the most reported aspects of this theme was the opportunity to relate to and connect with other people. It was clear that confidence and communication skills were a part of developing these connections and that they did not always go as well as might be hoped. Nonetheless all the attendees spoke about making friends at the group. The adults also identified the belief that building these connections in a safe, monitored environment would give the attendees a chance to firstly practise these skills but also to realise that they are capable of socialising with people they would have avoided before.

## 2.5 Discussion

### 2.5.1 Summary of the main findings

This thematic analysis was conducted to address the question; How have attendees and adult stakeholders experienced the football group? The themes developed were “taking a different approach”, “accepting other people’s experiences”, “developing positive changes; overcoming challenges”, “enduring challenges”, “small important changes” and “socialising (in an isolating world)”. All themes seemed both related to and indeed reliant on each other.

Taking a different approach and accepting other people’s experiences could be seen as the bedrock of the group and these seemed to help develop a therapeutic milieu in which positive developments could be hoped for and challenges openly tackled and overcome. Despite this there were clearly still enduring challenges and the groups’ focus on supporting small, individual changes which the attendees could build into less tangible but significant changes in mood, confidence and self-worth, to name a few, meant that there was a risk of the group being undervalued or attendees simply drifting off. Finally, there was the theme of socialising, both a stand-alone theme because of the social nature of a team sport but also the project of all the other themes as attendees developed the skills and, hopefully, desire to interact together in a positive, respectful and above all, accepting manner.

### 2.5.2 Relationship with current literature

Given the limited research on sports based groups for young people with existing mental health difficulties there is little research which it can be directly compared with. There is some overlap with the existing research, however, as Williams-Orlando (2013) suggested that part of the value of a yoga intervention is that it can take into account a several aspect of an individual’s life and offer up

potential for change in all areas at once rather than operating on a single plane; an idea that seems to be supported by the interdependency noted in this studies themes. Equally Eckstein & Rueth (2015) discussed concepts such as young people learning to generalise the skills developed through physical activity, working as a team and using physical activity as a metaphor.

There are also closer similarities with Carter, Morres, Repper, & Callaghan (2016) who identified themes around the ideas of achievement, distraction, routine, making positive changes, socialising more and engaging with education. Autry (2001) also highlighted the importance of trust, empowerment and the development of personal values, all of which have some parallels with the themes developed in this study.

Despite the similarities, the young people in Carter et al., (2016) study also highlighted changes in physical health, improved sleep, increased energy and the importance of choice which this study did not. Many of the themes offered by a martial arts based study also struck a different chord to this study with their focus on changing behavioural outcomes and programme delivery (Milligan et al., 2015).

Despite not having a directly comparable age range, this research can also be compared with football groups across the age range. One such review looked at the role of sporting activities in groups of mental health service users across the ages (Mason & Holt, 2012). They indicated that there were six themes held in common in some, or all, of the studies they included. These were “opportunities or social interaction and support”, “sense of meaning, purpose and achievement”, “role of the facilitating personnel”, “feeling safe”, “improved symptoms” and “identity”. Many of these themes have common threads with the current study, particularly socialising

and ideas of having purpose and identity. Improved symptoms were not highlighted in the same way in this study although improvements in other areas of their mental health were. In a more recent review looking specifically at football interventions similar groups of themes were identified (Friedrich & Mason, 2017). These themes were grouped into “elevated self-esteem/empowerment/independence”, “emotional well-being/pleasure/enjoyment”, “inclusion/belonging/connections” and “improving physical well-being”. Again, not all these correlated with this study as physical wellbeing was not particularly emphasised, however, enjoyment, empowerment, self-esteem and inclusion were all highlighted in this study.

Overall, what these themes focus on more than other studies is the idea of doing things differently, not just in terms of setting up the group differently but of the attendees having an experience which is different to how things have been in the past or how other aspects of their lives are when they attend. Alongside this is the requirement for acceptance, both accepting someone’s behaviour and how they position themselves in relation to others, as well as being prepared to meet attendees where they are without expectation and building trust by handing back responsibility. Another area which does not seem to have been explicitly identified in other similar research is the group focusing on small changes of the attendees making and choosing, rather than being more specifically focused on directly improving mood or symptoms of their mental health difficulties.

### 2.5.3 Interpretation of results

These themes do appear to corroborate some of the research that has been conducted thus far on physical activity based interventions. Like much of Autry, (2001); Carter et al., (2016) and Eckstein & Rueth, (2015) the themes focused not on symptom reduction but on the development of new skills and the opportunity to

socialise more and develop a useful structure or routine. Perhaps team sports such as football are particularly suited to giving attendees the chance to develop the latter two. It highlights the importance of acceptance, creating an intervention which does not say to its attendees that they must attend with the intention of changing this or that. Rather they are invited to play football and have fun in an environment that provides the opportunity to make a variety of changes.

It could be argued that this direction is particularly helpful to young people in general and particularly the attendees interviewed because discussion of mental health directly was noticeable in its absence. It was thought by some of the adults that there was a greater hesitation by the attendees in the youth wing to align themselves with the idea of mental illness. The groups' different focus on acceptance of everyone may have allowed some attendees to engage in the group when they would not have engaged in other "mental health groups". Although this question can be raised by the study, it cannot be answered with any certainty and would need to be explored more explicitly in a further study.

These themes may also be well understood within a systemic or particularly a narrative framework which may be of use to services. It seems that the group is particularly well suited to considering the individual in a holistic way, not only recognising all the parts of the individual that may make up the whole but also having more of an understanding of the system in which they operate. The themes certainly seem to embody some of the ideas of "problem free talk" and those such as doing something differently and acceptance can easily be fitted into ideas of providing the opportunity for attendees to build up a story which might not be heard in other parts of their lives. It may be that the changes incurred through this group may not be so much about intervening directly in problems but in helping attendees

to rediscover their own strengths and their own ways of solving their problems. How so ever one interprets these themes, what this study indicates is that there is considerable similarity between qualitative research, particularly around areas like social interaction, self-worth and having purpose, even when there is variation in the physical activity itself.

Many of the quantitative studies involving young people who already have recognised mental health difficulties have focused on symptom based measures e.g. Dopp, Mooney, Armitage, & King, (2012), Hughes et al., (2013) and Roshan, Pourasghar, & Mohammadian, (2011).. Indeed many of the reviews, see Biddle & Asare, (2011) have used symptom based measures as a requirement for study inclusion. This may mean that the primary outcome measures are targeting a secondary, and inconsistent, gain. The changes generated by the group do not appear to be directly related to symptom reduction, rather they support the idea that symptoms may reduce as a result of other changes such as an increase in confidence, recognition that they are not alone or feeling accepted by peers and staff, which in turn reduce social withdrawal or improve engagement with other mental health professionals or challenge their beliefs about anxiety. These factors may then lead to a reduction in symptoms or simply to the attendees feeling more able to manage their symptoms if it has any effect at all.

#### 2.5.4 Limitations of the research

Although useful in many ways, there are still significant limitations to this research. It goes some way to identifying what have been the key aspects of this group for several subgroups of people involved but it falls short of identifying any clear mechanism of change.

It is recognised that the methodology chosen might not have been seen as an ideal approach to answer a question such as how a group has been experienced but the semi-structured interview and thematic analysis format was selected for several reasons. Firstly, because it fitted best with the demands of a DClinPsy course and allowed me to undertake the research while also meeting other course demands. It also was a methodology being used in the larger research project and my supervisor had some experience of using it. I also felt that it was the best fit for a novice researcher while still being able to answer the question from a phenomenological stand point.

Despite this it is possible that an ethnographic approach might have been more helpful. It would have provided an opportunity for a more in-depth exploration of the group and how those involved experienced it on a day to day basis. It may have reduced the possibility of the participants giving only positive accounts of the group and allowed the possibility of the researcher observing smaller interactions which might not have been recalled in interviews (Curtis & Curtis, 2011).

Unfortunately, it was not possible to complete an ethnographic study because of the time commitment required. For example, in the window available for data collection, the group was running on my allocated placement days and I would not have been able to take the time off from placement because I was facilitating group sessions and committed to individual therapy sessions. Additionally, the nature of the group with attendees potentially joining for occasional sessions when they are able to and being able to simply turn up on the day, it would have been very difficult to gather informed consent from everyone involved and, given the smaller size of the group, difficult to justify not gathering consent when it is highly likely observations or comments relating to each individual would form part of the analysis and write up

of the study. Whilst this might have been achievable over a longer time frame, it is unlikely that this could have been achieved within six months.

This project aimed to interview not only current attendees but also young people who had ceased attending the group. It was hoped that this would allow a better understanding, not just of what was important in the group but why attendees might leave and what the legacy of the group might be. It proved very difficult to recruit either current or past attendees and although we did interview several young people who had attended the group up to two years ago, it would be immensely valuable to hear more from this group. Of those who were interviewed, there was some difficulties for them in recalling the details of the group. They were able to speak more broadly about how they had experienced the group and what they still recalled as being particularly helpful as they were able to focus on changes which had had a significant impact on their lives or the way they approached challenges. They also appeared more able think critically about the group which may have been because they had more distance from it or did not feel obliged to be positive about a group they were currently attending.

Despite this very useful information, the young people who had been away from the group for a long time struggled to recall more detailed experiences which would have been useful. It may have been more helpful to have a different interview schedule which focused on different aspects, depending on when the young people had attended the group or perhaps to have sent them the schedule before the interview so that they would have some time to reflect on their experiences and recall more detail. Additionally, some of the young people approached from this group, did not want to discuss the football group because it was a reminder of a difficult time in their lives which they felt they had “moved on” from. This may have meant that the

previous attenders interviewed were a more self-selecting group than had first been hoped and that perhaps those more willing to be interviewed where those still accessing support or who had particularly agreed with the groups view point of mental health being something that everyone has, it's just that sometimes our health can be better or poorer and we might need to access help when it is poorer.

This project also had an age restriction of a minimum of 16 years for all participants. This was instigated so as to be in line with the wider adult based research project and because it was thought it would be impractical to try to arrange interview times to fit around the availability for the parents or carers as well as the young person, the project co-ordinator and a DClinPsy student.

Having completed the study, it was noticeable that those in the young person wing were less willing to be involved than the adults approached for the larger project; they also tended not to talk about mental health directly in the interviews and when they did there was some hesitation around using these words or discussing topics such as drug use. One interpretation of this is that the young people were less comfortable discussing their mental health and that it felt less safe to do so. This may be because it is something relatively new to them and for many the decline in their mental health may have been seen as particularly negative. Despite these concerns it did significantly reduce the pool of potential participants and limited insight into the views of the younger attendees.

This project also does not allow for the view of parents and any changes that they had noticed that attendees might have dismissed. There were also some young people who initially expressed interest and then suddenly declined. There were likely many reasons for this but one that did seem to be a factor was being too nervous or

not confident enough to be interviewed by a stranger, despite the support and encouragement offered by the project co-ordinator. It is possible that for some, having parents involved might have made this seem less intimidating.

#### 2.5.5 Scientific and Clinical Implications

As described above this study does imply that there are some common themes emerging for the qualitative literature on physical activity for young people with existing mental health difficulties. Interestingly they do not seem to support the idea that attendee's experience of the group directly tackles and reduces the symptoms of their mental health difficulties. Instead it would seem that the consequences of attending, this football group at least, are the attendees having the opportunity of making positive changes across the breadth of their day to day lives and having experiences which are fun, accepting and generally marked as different.

This strongly implies that the direction of current research in terms of a focus on monitoring symptom change may not be as helpful as hoped in developing a more solid evidence base. It may be very hard to identify a pattern of symptom reduction when this may not be the primary effect of the group. If it is guided by the narratives of the attendees, their goals or beliefs might not be around feeling less depressed or anxious. Indeed, they may not recognise these disorders in themselves. If the group's value is instead in having the flexibility to help the attendees shape their next steps, it stands to reason that the outcomes for each individual will be different. This might make changes harder to quantify but measures which capture not only symptom levels but quality of life and similar aspects may better capture its effects. It is hard to identify a specific measure based on this study however the importance of socialising was highlighted by every attendee and many adults

discussed self-worth and attendees may have described something similar when talking about confidence and pride.

This broader approach may make the research more complex but would eventually lead to a better empirical understanding of the ways in which these groups can have an impact on the attendees. Eventually it would be possible to break down these groups as a means of identifying the key components of change.

Regarding the clinical implications of this study, it would appear that football could be a valuable tool in creating a group setting which is focused on fun and skill development rather than solely on mental health difficulties and problem based talk. Although there are challenges in instigating a group such as this, it seems that its value is in offering a way of engaging young people who may not be willing to engage with more traditional mental health interventions. On top of this, it can provide a long running intervention which is broad enough to support people with a vast range of challenges and to meet the attendees where they are rather than needing them to meet specific inclusion criteria. It offers a level of flexibility which may be unusual in more structured mental health interventions. It may be harder to quantify than some more direct interventions but it seems clear that it was very much appreciated by the attendees and this was reflected in the views of the adult stakeholders involved. Given the tremendous strain on CAMHS services this type of group may provide an option to promote consistent contact as it can be run mostly by football coaches and unqualified staff, with only one qualified mental health professional present.

In short this may be a group that helps to builds resilience and change and as such, may be a valuable addition to CAMHS services. It offers an opportunity to

provide support that is not focused on symptom reduction and may be well suited to engaging some young people. There is however a great need for further, methodologically robust, evidence to explore both whether the above hypotheses are sound and how to overcome the challenges that were highlighted through this study.

## 2.6 References

Autry, C. (2001). Adventure therapy with girls at-risk: responses to outdoor experiential activities. *Therapeutic Recreation Journal*, 35(4), 289–306.

Retrieved from  
<http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=jlh&AN=106701088&site=ehost-live&scope=site>

Biddle, S. J., & Asare, M. (2011). Physical activity and mental health in children and adolescents: a review of reviews. *British Journal of Sports Medicine*, 45(11), 886–95. <https://doi.org/10.1136/bjsports-2011-090185>

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.  
<https://doi.org/10.1191/1478088706qp063oa>

Brown, H., Pearson, N., Braithwaite, R., Brown, W., & Biddle, S. (2013). Physical Activity Interventions and Depression in Children and Adolescents. *Sports Medicine*, 43(3), 195–206. <https://doi.org/10.1007/s40279-012-0015-8>

Carter, T., Guo, B., Turner, D., Morres, I., Khalil, E., Brighton, E., ... Callaghan, P. (2015). Preferred intensity exercise for adolescents receiving treatment for depression: a pragmatic randomised controlled trial. *BMC PSYCHIATRY*, 15.  
<https://doi.org/10.1186/s12888-015-0638-z>

Carter, T., Morres, I., Repper, J., & Callaghan, P. (2016). Exercise for adolescents with depression: valued aspects and perceived change. *Journal of Psychiatric and Mental Health Nursing*, 23(1), 37–44.  
<https://doi.org/http://dx.doi.org/10.1111/jpm.12261>

Curtis, B., & Curtis, C. (2011). Ethnographic Research - studying groups in natural

settings. *Social Research A Practical Introduction*, (April 2017), 85–103.  
<https://doi.org/10.4135/9781526435415>

Department of Health Physical Activity Health Improvement and Protection. (2011). Start Active , Stay Active. *Report*, 62.  
[https://doi.org/https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/216370/dh\\_128210.pdf](https://doi.org/https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf)

Dopp, R. R., Mooney, A. J., Armitage, R., & King, C. (2012). Exercise for adolescents with depressive disorders: A feasibility study. *Depression Research and Treatment*, 2012. <https://doi.org/10.1155/2012/257472>

Eckstein, F., & Rueth, U. (2015). Adventure-based experiential therapy with inpatients in child and adolescent psychiatry: an approach to practicability and evaluation. *JOURNAL OF ADVENTURE EDUCATION AND OUTDOOR LEARNING*, 15(1), 53–63. <https://doi.org/10.1080/14729679.2013.844573>

Elliott, R., Fischer, C. T., & Rennie, D. L. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology*, 38, 215–229.

Friedrich, B., & Mason, O. J. (2017). “What is the score?” A review of football-based public mental health interventions. *Journal of Public Mental Health*, 16(4), 144–158. <https://doi.org/10.1108/JPMH-03-2017-0011>

Goldfield, G. S., Kenny, G. P., Alberga, A. S., Prud'homme, D., Hadjiyannakis, S., Gougeon, R., ... Sigal, R. J. (2015). Effects of Aerobic Training, Resistance Training, or Both on Psychological Health in Adolescents with Obesity: The HEARTY Randomized Controlled Trial. *JOURNAL OF CONSULTING AND CLINICAL PSYCHOLOGY*, 83(6), 1123–1135.

<https://doi.org/10.1037/ccp0000038>

Hughes, C. W., Barnes, S., Barnes, C., DeFina, L. F., Nakonezny, P., & Emslie, G. J. (2013). Depressed adolescents treated with exercise (DATE): A pilot randomized controlled trial to test feasibility and establish preliminary effect sizes. *Mental Health and Physical Activity*, 6(2), 119–131.

<https://doi.org/http://dx.doi.org/10.1016/j.mhpa.2013.06.006>

Larun, L., Nordheim, L. V., Ekeland, E., Hagen, K. B., & Heian, F. (2006). Exercise in prevention and treatment of anxiety and depression among children and young people., (3), CD004691.

<https://doi.org/10.1002/14651858.CD004691.pub2.www.cochranelibrary.com>

Mason, O. J., & Holt, R. (2012). A role for football in mental health: the Coping Through Football project. *The Psychiatrist*, 36, 290–293.

<https://doi.org/10.1192/pb.bp.111.036269>

Mason, O. J., & Holt, R. (2012). Mental health and physical activity interventions: A review of the qualitative literature. *Journal of Mental Health*, 21(July), 274–284. <https://doi.org/10.3109/09638237.2011.648344>

Milligan, K., Badali, P., & Spiroiu, F. (2015). Using Integra Mindfulness Martial Arts to Address Self-regulation Challenges in Youth with Learning Disabilities: A Qualitative Exploration. *JOURNAL OF CHILD AND FAMILY STUDIES*, 24(3), 562–575. <https://doi.org/10.1007/s10826-013-9868-1>

Pistrang, N., & Barker, C. (2012). Varieties of Qualitative Research: A Pragmatic Approach to Selecting Methods. In *APA handbook of research methods in psychology* (pp. 5–18).

Roshan, V. D., Pourasghar, M., & Mohammadian, Z. (2011). The efficacy of intermittent walking in water on the rate of MHPG sulfate and the severity of depression. *Iranian Journal of Psychiatry and Behavioral Sciences*, 5(2), 26–31.

Staal, A., & Jesperson, E. (2015). Inclusion of Outsiders through Sports. *Physical Culture and Sport. Studies and Research*, 65(1), 31–40.

<https://doi.org/10.1515/pcssr>

Stathopoulou, G., Powers, M. B., Berry, A. C., Smits, J. A. J., & Otto, M. W. (2006). Exercise Interventions for Mental Health : A Quantitative and Qualitative Review. *CLINICAL PSYCHOLOGY-SCIENCE AND PRACTICE*, 13(2), 179–193. <https://doi.org/10.1111/j.1468-2850.2006.00021.x>

Whitelaw, S., Teuton, J., Swift, J., & Scobie, G. (2010). The physical activity - Mental wellbeing association in young people: A case study in dealing with a complex public health topic using a “realistic evaluation” framework. *Mental Health and Physical Activity*, 3(2), 61–66.

<https://doi.org/10.1016/j.mhpa.2010.06.001>

Williams-Orlando, C. (2013). Yoga therapy for anxiety: a case report. *Advances in Mind-Body Medicine*, 27(4), 18–21. Retrieved from <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=emed13&NEWS=N&AN=24067321%5Cnhttp://www.scopus.com/inward/record.url?eid=2-s2.0-84896060665&partnerID=40&md5=e9122732bf784f170518daab682db7a1%5Cnhttp://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=referenc>

### **Part 3: Critical Appraisal**

This critical appraisal is focused on exploring some of the challenges, debates and reflections which arose as part of completing the research project outlined above in Part 2 of this thesis. The study sought to provide insight into the broad question of how attendees and adult stakeholders experienced the football group. It was hoped that this would contribute to a better understanding of the nature of physical activity based interventions for young people with existing mental health difficulties. In turn it is hoped that this might inform future research both qualitative and quantitative as there is little consensus in the current research as to the potential usefulness, or not, of such interventions.

This appraisal looks specifically at some of the challenges faced in recruitment and methodological issues that were encountered and is followed by a reflection on the changes in my understanding of the role of a football group such as this and the role of physical activity in general. This includes a more detailed exploration of my epistemological stance as well as my experiences of completing this research and how this shaped some of my views on the project.

### 3.1 Challenges of recruitment

As described in Part Two, there were considerable difficulties in recruiting for this study. Many of the questions around this were predicted, for example our participant pool was composed, in the majority, of young people who had attended the group as much as two or three years prior and although we were keen to focus on this group, we were far from clear about how they might respond to requests for them to participate. An unexpected question was the potential impact of recruiting for the project via the project co-ordinator. This was requested by the ethics board to ensure the young people particularly were approached by someone they knew. In theory they should have then felt more comfortable in accepting or refusing the offer

and that the project co-ordinator would know them well enough to judge if they were, for example, well enough to complete the interview.

This was clearly a sensible approach but it did create difficulties. One of these was that the project co-ordinator needed to recruit participants alongside all the other requirements of their job. This meant that they did not have the opportunity to give the referrals process their full attention at times and although they clearly did the best they could with the extra workload it did introduce some delays. The time pressure from the project may also have meant that the recruitment process was not as thorough as it could have been and as I was not able to assist directly, it was impossible to accurately record how many young people were approached and whether they expressed interest before choosing not to be interviewed. Fortunately, the project co-ordinator was very open in their decision-making in the recruitment process and although we could not state for certain the number of attendees approached, we could estimate this. Additionally, they were clearly supportive of ensuring an as unbiased group of participants as possible. They could have only selected those who they thought would give a favourable report of the group, but I was able to work closely enough with them to see that they clearly also asked young people who were less regular attenders or who had left the group quite quickly. It seems likely that any bias generated in the recruitment process was more around the participants with positive experiences maybe being more willing to attend for the interview.

A further possible introduction of bias was that although the purpose of using the project co-ordinator was to ensure young people felt comfortable to participate, I also had to wonder whether this had unintended consequences too. The project co-ordinator was very well known to everyone approached and had developed strong

therapeutic relationships with many of them. While it might have given some young people the confidence to contribute, it may also have meant that anyone who had not had a positive experience of the group might have felt more concerned about contributing in case the project co-ordinator recognised their input. The project co-ordinator was very mindful of this and all participants were assured that any input would be anonymous and that the project coordinator would not know what they had said but, it may have led to a greater bias of the results. My stance as a researcher and outsider may in fact have been more encouraging to some. My focus on consistency of approach may also have made it easier to record information such as who was approached, but the co-ordinators more therapeutic approach of deciding how the individual might prefer to be offered the project might equally have been more encouraging.

As a project it was decided not to approach young people under the age of 16. This was again discussed in Part Two in more detail and it was decided that it would be best from an administrative perspective to remain with the same ethical considerations as the adult wing of the project. On balance it would have added to the project to hear the voices of younger attendees, however, this would likely require some changes to the project. Unlike the reports from a similar interview process in the adult wing of the project, the young people seemed more wary of the interview process. Although many of their contributions were very poignant and perceptive, in interviews they often did not seem willing to talk openly about mental health at first. This may have been, as suggested by a member of staff in the interviews, that the younger people generally saw mental health difficulties as something which reflected badly on them, rather than seeing mental health as something everyone has and not something to be embarrassed about. Also, there was

a sense from some of the young people that particularly when first struggling with low mood or anxiety for example, this is seen as something frightening and to be hidden whether because it would be seen as a failing or because it was seen as a “derailment” of their lives rather than something that could be lived with or resolved.

It may also simply have been that having had mental health difficulties for only a short period of time, they were not used to talking about it and had not found a language that they were comfortable with. A useful development of the project would be to include younger people but the interview process would need to be changed. Perhaps having the interviewer step away from the outsider role and spending time in the football group itself for those currently attending. Or perhaps, offering a longer interview or multiple sessions so that the young people had more time to feel confident with the process and interviewer and to also give them more time to think about what they would like to say and find a way of saying it.

### 3.2 Conceptual and methodological issues

As this research aimed to establish the views of several groups involved in the football project, establishing a way of balancing these differing views was not always straightforward. There was a readily identified descriptive difference between the young people who attended the group and the adult stakeholders involved in the project in various forms. As became apparent through the interviews, the two groups did also identify different aspects of the group as being important. They were rarely in direct opposition with each other but the emphasis did change. There was also a difference in the way that these two groups expressed themselves in interview which appeared to relate to the point made above. The adults who were all either involved in the project on a regular, almost daily, basis or mental health professionals or both clearly already had a well-established language for talking about the young people

they work with and the groups they are involved in. Adult interviews were noticeably longer and they also spoke more confidently about topics such as mental health and offered more information without prompting.

This may have been both due to being more confident in this practised language but also in that they were rarely talking about their own mental health difficulties. The young people on the other hand seemed to find it harder to find the words to express themselves and were more hesitant to do so even then. It seemed to me that both additional interviews or time for them to work out what to say might have been helpful but also that, whereas the adults situated their points in various contexts or explanations, the young people were much more direct, meaning that even when they were able or willing to make their point immediately and without prompting, their interviews were much shorter.

It was here that I most noticed my multiple roles of clinician, researcher and student. As a researcher I was clear that these interviews needed to be given equal weight but I was also aware the adult interviews felt far more familiar to me, especially those from referrers and therapists and I could work much more fluently through the process of the analysis with these interviews. At first glance the attendees' interviews seemed sparse and over simplified in their context. This also raised my concerns as a student that the context would not be seen as useful enough to be a "successful" thesis that would make the grade and allow me to qualify as a mental health professional.

Aware of these conflicting roles I was keen to ensure through practise, if not initially through thought, that I was not preferentially focusing on the more familiar transcripts. I spent substantially more time (given the differences in length) working

through the attendees' transcripts, thinking through what was meant, reflecting on what they were saying and "boiling down" the comments made by the adults. The hope was firstly, to make me more fluent in working with the attendees' transcripts but secondly to create a parity of language across the transcripts, which I could then use to develop the codes and later the themes. This did mean that I created a second level of coding, the first as directed by Braun & Clarke, (2006) and the second, which could be termed a "summary code", a code that would be fitting across all the transcripts and capture a particular idea, no matter how differently expressed.

Although not diverting from the procedure outlined by Braun & Clarke (2006), it could be seen as an additional step.

### 3.3 Service user involvement

A key aim of this project had also been to use service user involvement, not just in terms of hearing their voices in this project but having their involvement in the research process. This had been planned from the outset with the intention of including peer support workers in the process of interviewing and analysing the results as well as shaping the overall project. The nature of the group and the way the research opportunity was developed meant that there was service user involvement in the earliest stages, however, other aspects proved to be impossible to create within the timescale and limitations of the thesis.

We had planned to have a peer support worker jointly interview the adult stakeholders with me, however, I was only available to interview on certain days due to competing demands on a DClinPsy student's time. Sadly, these were days that the peer support worker was working at another post and although they offered to change days, I felt that this would be taking advantage of their keenness to support the project as I could offer no flexibility myself, in the end we simply had to proceed

with the interviews without the added benefit of doing them jointly. This in turn meant that I could not ask the support worker to contribute to the analysis or provide feedback on it, as part of the process of triangulation, as they were not familiar with the interviews. Given that the transcripts extended into a great many pages, I could not reasonably ask someone to go through all these when they would not be able to take time out of the rest of their job roles to do so.

I felt that these decisions, although materially damaging to the project, as we lost a significant degree of insight into the project, were the better choices to make. It highlighted the challenge of including service users in research and the risks of using their input in a way that is solely consumptive. Although it was clear that we were going to consume these views and process them in accordance with the ideas of thematic analysis (Braun & Clarke, 2006a) there was within this some nature of compensation; both in the form of payment in vouchers but also in those involved having agreed to attend because they wanted to share their views. As it turned out, most were keen to support the group and wished to contribute to its longevity. They undertook the interview understanding that their thoughts would be processed and hopefully published and that this information would be disseminated both to them and the wider world to use as they choose.

Asking for support within the research process themselves was a more complex question for me. It was important to ensure that any role taken was not tokenistic and the research was designed with this in mind, for example using thematic analysis as it is a qualitative tool that is recommended for novice researchers and is considered to need the least training. Semi-structured interviews also offered a degree of support and structure to support a novice interviewer. Not

only did I feel this approach would suit a service user involved in the research process but I also felt that it would suit my position as a novice researcher.

Despite these efforts, as I was unable to conduct the interviews jointly, I felt it would be too much to ask them to contribute solely to the analysis as described above and not just in terms of the impact on their time. Although I would consider myself a novice researcher, as a trainee clinical psychologist I do have considerably more experience than many people in working with large amounts of information and holding several viewpoints in mind at any one time. I am also practiced in managing the emotional impact that people's stories may hold for me and in working to maintain an understanding of what is "content" and what is my response to this. Asking anyone to work on a piece of qualitative analysis without this experience now seems to me to be a larger request than I first thought. Although I had taken steps to ensure that I kept the methodology as appropriate as possible, I am not sure that I would have adequately prepared any service user to work through it and I am not sure that I would have been adequately prepared to support them with it. I hope that this project has given me enough of an understanding of this to be better positioned in the future.

Beyond this I also failed to adequately take into account issues of power and of privilege in this project. As described above, I made the decision not to include the service user in interviews because I felt that it would take advantage of their willingness and place inappropriate demands on their limited time. I had to make this as a snap decision while booking an interview with a participant. On reflection, I should have delayed booking the appointment until I had discussed this with the service user because it is very possible that they experienced my lack of communication and judgement of what was best as disempowering and not

considerate of their wishes. One perspective and framework which I could have used to think more deeply about including service users prior to starting this study is the idea of “three R’s” – Role, Relations and Responsibilities (Jordan, Rowley, Morriss, & Manning, 2015). Although I did consider the potential roles of the service user, I was so focused on including them in interviews that I did not factor in other parts of the research that they could have been involved in. For example, in dissemination and in asking for feedback. Additionally, I did not make my thoughts or reasoning clear enough in my decisions and did not developed an equal enough relationship. In contrast to Jordan *et al* (2015), I did engage in lots of “corridor meetings” with the service user but I did not formalise these adequately or keep them properly informed of the progress of the project. It is clear to me that I underestimated how much thought and planning was required to involve service users in research and although I felt I had good intentions and good knowledge of the research surrounding service user involvement, I did not actualise this effectively.

### 3.4 My understanding of the phenomenon

Given the time pressured nature of the doctorate and the need, in this timeline, to work on the literature review before starting the project, I knew that I would not be able to approach this from an “unknowing” stance. Also, given my past experience of working with young people it was inevitable that I had heard some of their views on the role of exercise for them. A purely inductive stance would be impossible and so my position was perhaps best explained simply, like most researchers, as a combination of inductive, deductive and abductive (Barker, Pistrang & Elliott, 2016). Given that my approach was more closely aligned with phenomenology than constructivism this mix of stances is not surprising, as my focus

was on better understanding the multiple perceived meanings and experiences of those involved in the group.

Taking a phenomenological stance requires the recognition that I already had some views regarding how physical activity and sport in particular might be received by young people with mental health difficulties. As mentioned above, I was already aware of the research conducted in the area and physical activity is somewhat unavoidable, so I already had my own views on this as well as having worked with young people in various settings and heard their thoughts on exercise.

From the beginning of the project I had sought to be aware of these views and try to prevent them influencing the research unduly. Nonetheless, I was surprised by the changes in my view point across this analysis. Many of the adults suggested that when working on the football project, they found some of their own beliefs changing and it seems that this was the case for me. I had expected the attendees to focus more on the biological impact of exercising and to describe more direct impacts on mood. Like many researchers before me I had automatically used mental health symptom measures as a criterion for my literature review and to some degree I had assumed that it was here that at least part of the impact would lie. My own experiences of “feeling better” after going for a run are also likely to have come into play here.

What the study suggests, however, is in this group at least, the impact is not directly about reducing the symptoms of mental illness but on promoting positive change, social inclusion and what a psychologist might term self-worth. For the attendees involved, although some did refer to helping them manage their mental health, the importance of the group seemed to lie in supporting more healthy aspects

of their mental health rather than in reducing unhealthy aspects. This immediately led me to the question of whether I had done the group a dis-service by conceptualising the analysis in this way. Would a stretched CAMHS service fund a group which is not directly targeting symptom control? Although this analysis hints at the systemic nature of a team based sports group and many CAMHS services utilise systemic theory in one way or another, I could not help but wonder how such an intervention would be perceived from a commissioning perspective.

Although this may not be an impact for science or any clinical practice beyond my own, this research has made me think far more deeply about the services that psychologists offer. It has again raised the questions of what clinical psychologists should be offering and how we define mental health. Much of my role throughout training has been about offering to help reduce someone's symptoms of mental illness, a task in which I recognise I certainly cannot guarantee success. Often little, if any, account has been taken of other aspects of mental health and I have rarely found anything available in the services to support people who want to focus on these areas. Yet here, in my own study is a strong indication that what these young people found most important and the adults found so refreshing was the opportunity not to focus on symptom reduction.

The responses of some of the attendees were striking; the ease with which they could say that the group had had little impact on many areas of their lives and yet the eagerness and sometimes even worry they expressed when they checked that it was still running. It has made me think again on how the many service users I have worked with may have perceived the focus on the recognised symptoms of anxiety and low mood for example when they too were missing many of the components which the football group seems to have provided. It seems to me that there is a large

gap between what the quantitative research in this area is focusing on, this is symptoms, and what the qualitative research suggests is important to the service users. I must wonder whether as a clinician I am tempted to the same end, not just to please commissioners but because there is something attractive in offering to alleviate symptoms. It is tangible and relatively consistent across clients with the same diagnosis. To focus as well or instead on what is, at least with the current state of research, less tangible and more individualistic is both daunting and requiring one to swim somewhat against the tide of most services.

Part of this querying for me was also related to my experience of writing this project up. Not only had I noticed the deterioration in my mental health when I spent a great many hours typing about the potential benefits of physical activity and social contact whilst sitting down, alone, for most hours of the day. I also had a unique experience of writing this while living on site at a private school with my husband, a deputy boarding-house master. A situation which meant that I could often hear young people working through a day that was full of opportunities with carefully planned timetables and afternoons almost entirely composed of sports activities. This was a poignant juxtaposition of lifestyles for me. Here was one group, with more opportunities to fill their time than perhaps they could manage and here was another group where staff were highlighting repeatedly that the attendees have no other opportunities, structure or resources to support them. If the members of one group faced mental health difficulties, perhaps an intervention targeted at reducing “ill health” would be all they wanted as they had the opportunities for building up their mental *health* in other settings but perhaps in the other, this is what a group such as the football group fulfils?

This is a simplified argument for the sake of clarity and one to which I do not have the answer but I believe that this project has impacted on me as a clinician by asking me again these questions which I had been rather conveniently ignoring. I think perhaps an interesting area of future research and an area of myself as a clinician to consider more widely would be to explore the potential impact of offering not only interventions targeted at reducing mental ill health but opportunities to promote positive mental health. It would be interesting to see if there is a difference in service users' experiences if these areas are combined or stand alone.

### 3.5 References

Barker, C., Pistrang, N., & Elliott, R. (2006). *Research methods in clinical psychology: An introduction for students and practitioners*. West Sussex, England: Wiley Blackwell

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.  
<https://doi.org/10.1191/1478088706qp063oa>

Jordan, M., Rowley, E., Morriss, R., & Manning, N. (2015). An analysis of the Research Team-Service User relationship from the Service User perspective: A consideration of “The Three Rs” (Roles, Relations, and Responsibilities) for healthcare research organisations. *Health Expectations*, 18(6), 2693–2703.  
<https://doi.org/10.1111/hex.12243>

## Appendix A: Individual scores for the quality assessment tool

Quantitative studies: Dopp, R. R., Mooney, A. J., Armitage, R., & King, C. (2012). Exercise for adolescents with depressive disorders: A feasibility study. *Depression Research and Treatment, 2012*

Criteria		Yes (2)	Partial (1)	No (0)	N/A
1	Question/objective sufficiently described?	X			
2	Study design evident and appropriate?		X		
3	Method of subject selection (and comparison group selection if applicable) or source of information/input variables (e.g. for decision analysis) is described and appropriate		X		
4	Subject (and comparison group, if applicable) characteristics or input variables/information (e.g. for decision analysis) sufficiently described?	X			
5	If random allocation to treatment group was possible, is it described?				X
6	If interventional and blinding of investigators to intervention was possible, is it reported?				X
7	If interventional and blinding of subjects to intervention was possible, was it reported?				X
8	Outcome and (if applicable) exposure measure(s) well defined and robust to measurement/misclassification bias? Means of assessment reported?		X		
9	Sample size appropriate?		X		
10	Analysis described and appropriate?	X			
11	Some estimate of variance (e.g. confidence intervals, standard errors) is reported for the main results/outcomes (i.e. those directly addressing the study question/objective upon which the conclusions are based)?		X		
12	Controlled for confounding?			X	
13	Results reported in sufficient detail?	X			
14	Do the results support the conclusions?	X			

Quantitative studies: Roshan, V. D., Pourasghar, M., & Mohammadian, Z. (2011). The efficacy of intermittent walking in water on the rate of MHPG sulfate and the severity of depression. *Iranian Journal of Psychiatry and Behavioral Sciences*, 5(2), 26–31

Criteria		Yes (2)	Partial (1)	No (0)	N/A
1	Question/objective sufficiently described?	X			
2	Study design evident and appropriate?	X			
3	Method of subject/comparison group selection or source of information/input variables described and appropriate?	X			
4	Subject (and comparison group, if applicable) characteristics sufficiently described?		X		
5	If interventional and random allocation was possible, was it described?		X		
6	If interventional and blinding of investigators was possible, was it reported?			X	
7	If interventional and blinding of subjects was possible, was it reported?			X	
8	Outcome and (if applicable) exposure measure(s) well defined and robust to measurement/misclassification bias? Means of assessment reported?	X			
9	Sample size appropriate?		X		
10	Analytic methods described/justified and appropriate?	X			
11	Some estimate of variance is reported for the main results?	X			
12	Controlled for confounding?		X		
13	Results reported in sufficient detail?	X			
14	Conclusions supported by the results?		X		

Quantitative studies: Brown, S. W., Welsh, M. C., Labbe, E. E., Vituli, W. F., & Kulkarni, P. (1992). Aerobic exercise in the psychological treatment of adolescents. *Perceptual and Motor Skills*, 74(2), 555–560

Criteria		Yes (2)	Partial (1)	No (0)	N/A
1	Question/objective sufficiently described?		X		
2	Study design evident and appropriate?	X			
3	Method of subject/comparison group selection or source of information/input variables described and appropriate?		X		
4	Subject (and comparison group, if applicable) characteristics sufficiently described?		X		
5	If interventional and random allocation was possible, was it described?		X		
6	If interventional and blinding of investigators was possible, was it reported?			X	
7	If interventional and blinding of subjects was possible, was it reported?			X	
8	Outcome and (if applicable) exposure measure(s) well defined and robust to measurement/misclassification bias? Means of assessment reported?	X			
9	Sample size appropriate?			X	
10	Analytic methods described/justified and appropriate?		X		
11	Some estimate of variance is reported for the main results?		X		
12	Controlled for confounding?		X		
13	Results reported in sufficient detail?		X		
14	Conclusions supported by the results?		X		

Quantitative studies: Hughes, C. W., Barnes, S., Barnes, C., DeFina, L. F., Nakonezny, P., & Emslie, G. J. (2013). Depressed adolescents treated with exercise (DATE): A pilot randomized controlled trial to test feasibility and establish preliminary effect sizes. *Mental Health and Physical Activity*, 6(2), 119–131

Criteria		Yes (2)	Partial (1)	No (0)	N/A
1	Question/objective sufficiently described?	X			
2	Study design evident and appropriate?	X			
3	Method of subject/comparison group selection or source of information/input variables described and appropriate?	X			
4	Subject (and comparison group, if applicable) characteristics sufficiently described?	X			
5	If interventional and random allocation was possible, was it described?	X			
6	If interventional and blinding of investigators was possible, was it reported?	X			
7	If interventional and blinding of subjects was possible, was it reported?			X	
8	Outcome and (if applicable) exposure measure(s) well defined and robust to measurement/misclassification bias? Means of assessment reported?	X			
9	Sample size appropriate?	X			
10	Analytic methods described/justified and appropriate?	X			
11	Some estimate of variance is reported for the main results?		X		
12	Controlled for confounding?	X			
13	Results reported in sufficient detail?	X			
14	Conclusions supported by the results?	X			

Quantitative studies: Carter, T., Guo, B., Turner, D., Morres, I., Khalil, E., Brighton, E., ... Callaghan, P. (2015). Preferred intensity exercise for adolescents receiving treatment for depression: a pragmatic randomised controlled trial. *BMC psychiatry*, 15

Criteria		Yes (2)	Partial (1)	No (0)	N/A
1	Question/objective sufficiently described?	X			
2	Study design evident and appropriate?	X			
3	Method of subject/comparison group selection or source of information/input variables described and appropriate?	X			
4	Subject (and comparison group, if applicable) characteristics sufficiently described?	X			
5	If interventional and random allocation was possible, was it described?	X			
6	If interventional and blinding of investigators was possible, was it reported?	X			
7	If interventional and blinding of subjects was possible, was it reported?			X	
8	Outcome and (if applicable) exposure measure(s) well defined and robust to measurement/misclassification bias? Means of assessment reported?	X			
9	Sample size appropriate?		X		
10	Analytic methods described/justified and appropriate?	X			
11	Some estimate of variance is reported for the main results?	X			
12	Controlled for confounding?	X			
13	Results reported in sufficient detail?	X			
14	Conclusions supported by the results?	X			

Qualitative studies: Williams-Orlando, C. (2013). Yoga therapy for anxiety: a case report. *Advances in Mind-Body Medicine*, 27(4), 18–21

Criteria		Yes (2)	Partial (1)	No (0)
1	Question/objective sufficiently described?		X	
2	Study design evident and appropriate?		X	
3	Context for the study clear?		X	
4	Connection to a theoretical framework/wider body of knowledge?			X
5	Sampling strategy described, relevant and justified?			X
6	Data collection methods clearly described and systematic?			X
7	Data analysis clearly described and systematic?		X	
8	Use of verification procedure(s) to establish credibility?			X
9	Conclusions supported by the results?		X	
10	Reflexivity of the account?			X

Qualitative studies: Eckstein, F., & Rueth, U. (2015). Adventure-based experiential therapy with inpatients in child and adolescent psychiatry: an approach to practicability and evaluation. *Journal of adventure education and outdoor learning*, 15(1), 53–63

Criteria		Yes (2)	Partial (1)	No (0)
1	Question/objective sufficiently described?	X		
2	Study design evident and appropriate?		X	
3	Context for the study clear?	X		
4	Connection to a theoretical framework/wider body of knowledge?		X	
5	Sampling strategy described, relevant and justified?		X	
6	Data collection methods clearly described and systematic?			X
7	Data analysis clearly described and systematic?		X	
8	Use of verification procedure(s) to establish credibility?			X
9	Conclusions supported by the results?		X	
10	Reflexivity of the account?			X

Qualitative studies: Carter, T., Morres, I., Repper, J., & Callaghan, P. (2016). Exercise for adolescents with depression: valued aspects and perceived change. *Journal of Psychiatric and Mental Health Nursing*, 23(1), 37–44

Criteria		Yes (2)	Partial (1)	No (0)
1	Question/objective sufficiently described?	X		
2	Study design evident and appropriate?	X		
3	Context for the study clear?	X		
4	Connection to a theoretical framework/wider body of knowledge?		X	
5	Sampling strategy described, relevant and justified?	X		
6	Data collection methods clearly described and systematic?	X		
7	Data analysis clearly described and systematic?		X	
8	Use of verification procedure(s) to establish credibility?			X
9	Conclusions supported by the results?	X		
10	Reflexivity of the account?			X

Qualitative studies: Autry, C. (2001). Adventure therapy with girls at-risk: responses to outdoor experiential activities. *Therapeutic Recreation Journal*, 35(4), 289–306

Criteria		Yes (2)	Partial (1)	No (0)
1	Question/objective sufficiently described?	X		
2	Study design evident and appropriate?	X		
3	Context for the study clear?	X		
4	Connection to a theoretical framework/wider body of knowledge?	X		
5	Sampling strategy described, relevant and justified?	X		
6	Data collection methods clearly described and systematic?	X		
7	Data analysis clearly described and systematic?		X	
8	Use of verification procedure(s) to establish credibility?			X
9	Conclusions supported by the results?	X		
10	Reflexivity of the account?			X

Qualitative studies: Milligan, K., Badali, P., & Spiroiu, F. (2015). Using Integra Mindfulness Martial Arts to Address Self-regulation Challenges in Youth with Learning Disabilities: A Qualitative Exploration. *Journal of child and family studies*, 24(3), 562–575

Criteria		Yes (2)	Partial (1)	No (0)
1	Question/objective sufficiently described?	X		
2	Study design evident and appropriate?	X		
3	Context for the study clear?	X		
4	Connection to a theoretical framework/wider body of knowledge?		X	
5	Sampling strategy described, relevant and justified?		X	
6	Data collection methods clearly described and systematic?	X		
7	Data analysis clearly described and systematic?		X	
8	Use of verification procedure(s) to establish credibility?	X		
9	Conclusions supported by the results?	X		
10	Reflexivity of the account?			X

## Appendix B: Ethical approval with consent forms and information sheets

### B.1 Letter confirming HRA approval



Dr Oliver Mason  
Senior Lecturer  
University College London  
1-19 Torrington Place  
London  
WC1N 6BT

Email: [hra.approval@nhs.net](mailto:hra.approval@nhs.net)

07 February 2017

Dear Dr Mason

#### Letter of HRA Approval

**Study title:** An evaluation of the effectiveness and benefits of the Coping Through Football programme in tackling physical and mental health.  
**IRAS project ID:** 207280  
**REC reference:** 16/LO/2023  
**Sponsor** University College London

I am pleased to confirm that HRA Approval has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications noted in this letter.

#### Participation of NHS Organisations in England

The sponsor should now provide a copy of this letter to all participating NHS organisations in England.

*Appendix B* provides important information for sponsors and participating NHS organisations in England for arranging and confirming capacity and capability. **Please read *Appendix B* carefully**, in particular the following sections:

- *Participating NHS organisations in England* – this clarifies the types of participating organisations in the study and whether or not all organisations will be undertaking the same activities
- *Confirmation of capacity and capability* - this confirms whether or not each type of participating NHS organisation in England is expected to give formal confirmation of capacity and capability. Where formal confirmation is not expected, the section also provides details on the time limit given to participating organisations to opt out of the study, or request additional time, before their participation is assumed.
- *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* - this provides detail on the form of agreement to be used in the study to confirm capacity and capability, where applicable.

Further information on funding, HR processes, and compliance with HRA criteria and standards is also provided.

It is critical that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details and further information about working with the research management function for each organisation can be accessed from [www.hra.nhs.uk/hra-approval](http://www.hra.nhs.uk/hra-approval).

## Appendices

The HRA Approval letter contains the following appendices:

- A – List of documents reviewed during HRA assessment
- B – Summary of HRA assessment

## After HRA Approval

The document "*After Ethical Review – guidance for sponsors and investigators*", issued with your REC favourable opinion, gives detailed guidance on reporting expectations for studies, including:

- Registration of research
- Notifying amendments
- Notifying the end of the study

The HRA website also provides guidance on these topics, and is updated in the light of changes in reporting expectations or procedures.

In addition to the guidance in the above, please note the following:

- HRA Approval applies for the duration of your REC favourable opinion, unless otherwise notified in writing by the HRA.
- Substantial amendments should be submitted directly to the Research Ethics Committee, as detailed in the *After Ethical Review* document. Non-substantial amendments should be submitted for review by the HRA using the form provided on the [HRA website](http://www.hra.nhs.uk), and emailed to [hra.amendments@nhs.net](mailto:hra.amendments@nhs.net).
- The HRA will categorise amendments (substantial and non-substantial) and issue confirmation of continued HRA Approval. Further details can be found on the [HRA website](http://www.hra.nhs.uk).

## Scope

HRA Approval provides an approval for research involving patients or staff in NHS organisations in England.

If your study involves NHS organisations in other countries in the UK, please contact the relevant national coordinating functions for support and advice. Further information can be found at <http://www.hra.nhs.uk/resources/applying-for-reviews/nhs-hsc-rd-review/>.

If there are participating non-NHS organisations, local agreement should be obtained in accordance with the procedures of the local participating non-NHS organisation.

## User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application

IRAS project ID	207280
-----------------	--------

procedure. If you wish to make your views known please email the HRA at [hra.approval@nhs.net](mailto:hra.approval@nhs.net). Additionally, one of our staff would be happy to call and discuss your experience of HRA Approval.

**HRA Training**

We are pleased to welcome researchers and research management staff at our training days – see details at <http://www.hra.nhs.uk/hra-training/>

Your IRAS project ID is **207280**. Please quote this on all correspondence.

Yours sincerely

Rekha Keshvara  
Assessor

Email: [hra.approval@nhs.net](mailto:hra.approval@nhs.net)

*Copy to: Ms.Jenise Davidson, University College London Hospitals*

B.2 Ethics form confirming approval for adult stakeholders

 <b>Ethics Application Form for Non-Invasive Research on Healthy Adults</b>	
SECTION A	APPLICATION DETAILS
<b>A1</b>	<b>Project details</b>  Project title: An Evaluation of the Coping Through Football Programme  Date of submission: 8.6.17  Proposed start date: 20.6.17  Proposed end date: 8.12.17

<b>A2</b>	<b>Principal researcher</b>				
<i>(Note: A student – undergraduate, postgraduate or research postgraduate – cannot be the principal researcher for ethics purposes).</i>					
Full name: Oliver Mason					
Position held: Senior Lecturer					
Research Department: CEHP					
The principal researcher must read and sign (electronic signature or scanned pdf with signature are acceptable) the following declaration. Please tick the box next to each of the statements below to acknowledge you have read them and provided all required information.					
<table border="1"><tr><td><ul style="list-style-type: none"><li>I will ensure that changes in approved research protocols are reported promptly and are not initiated without approval by the Departmental Ethics Committee, except when necessary to eliminate apparent immediate hazards to the participant.</li><li>I have completed a risk assessment for this programme of research and hereby confirm that the risk assessment document will be discussed with any researcher/student involved in this programme of research (currently or in the future). I will ensure that all researchers/students sign the risk assessment form following this discussion.</li></ul></td><td>x</td></tr><tr><td></td><td>x</td></tr></table>		<ul style="list-style-type: none"><li>I will ensure that changes in approved research protocols are reported promptly and are not initiated without approval by the Departmental Ethics Committee, except when necessary to eliminate apparent immediate hazards to the participant.</li><li>I have completed a risk assessment for this programme of research and hereby confirm that the risk assessment document will be discussed with any researcher/student involved in this programme of research (currently or in the future). I will ensure that all researchers/students sign the risk assessment form following this discussion.</li></ul>	x		x
<ul style="list-style-type: none"><li>I will ensure that changes in approved research protocols are reported promptly and are not initiated without approval by the Departmental Ethics Committee, except when necessary to eliminate apparent immediate hazards to the participant.</li><li>I have completed a risk assessment for this programme of research and hereby confirm that the risk assessment document will be discussed with any researcher/student involved in this programme of research (currently or in the future). I will ensure that all researchers/students sign the risk assessment form following this discussion.</li></ul>	x				
	x				

<p>Risk assessment forms for projects can be <a href="#">downloaded from the Ethics section of the PaLS Intranet</a>.</p>	
▪ I have completed the <a href="#">Information Governance training provided by ISG</a>	x
▪ I have obtained approval from the UCL Data Protection Officer stating that this research project is compliant with the Data Protection Act 1998. My Data Protection Registration Number is: <u>Z6364106/2016/08/62</u> You can find a data protection registration form at: <a href="http://www.ucl.ac.uk/legal-services/research">http://www.ucl.ac.uk/legal-services/research</a>	x
<p><b>Note:</b> <u>your</u> data protection number could cover a whole programme of research. It is not always necessary to request a data protection number for each individual project.</p>	
▪ I have included examples of the Information Sheet and Consent Form for the proposed research. It will be made clear to the participants that they can withdraw from the study at any time, without giving a reason.	x
▪ I will ensure that all adverse or unforeseen problems arising from the research project are reported in a timely fashion to the UCL Research Ethics Committee.	x
▪ I will undertake to provide notification when the study is complete and if it fails to start or is abandoned.	x
▪ I have met with and advised students on the ethical aspects of this project/programme of research.	x
▪ I am satisfied that the proposed research complies with current professional, departmental and university guidelines.	x

**Signature: OM**

**Date: 8.6.17**

**A3 Contact details**

**Principal Researcher**

Full name: Oliver Mason

Position held Senior Lecturer

Research Department: CEHP

Email: [o.mason@ucl.ac.uk](mailto:o.mason@ucl.ac.uk)

Telephone:

**Additional applicant 1**

Full name: Bettina Friedrich

Position held: *postdoctoral researcher*

Research Department: CEHP

Email: [b.friedrich@ucl.ac.uk](mailto:b.friedrich@ucl.ac.uk)

Telephone:

**Additional applicant 2**

Full name: Georgina Bone

Position held: *D.CLin Psy. research student*

Research Department: CEHP

Email: [g.bone@ucl.ac.ucl](mailto:g.bone@ucl.ac.ucl)

Telephone:

*(Add further details on a separate sheet if there are more applicants to be covered by this form)*

**A4 Approval from the Departmental Ethics Committee**

*(Approval cannot be given by the principal researcher of this project – if necessary the application must be sent to an Ethics Officer from a different Research Department, or to the College Ethics Committee, for approval)*

**Declaration by the Research Department Ethics Chair:**

I have reviewed this project and I approve it.  yes

The project is registered with the UCL Data Protection Officer and a formal signed risk assessment form has been completed.

**Allocated Departmental Project ID Number for the approved application:**

\_CEHP2017561\_\_\_\_\_

Name of the Research Department Ethics Chair (type in): John King

Date: 8/6/2017

### B.3 Consent form



Centre Number:

Study Number:

Participant Identification Number for this trial:

#### CONSENT FORM

Title of Project: An Evaluation of the Coping Through Football Programme: COHORT 2

Name of Researcher: TBC

Please initial box

1. I confirm that I have read the information sheet dated 11.12.16 for the above study, or have had this read to me.

I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected.

3. I agree to take part in the above study.

4. I agree to my interview being audio recorded.

5. I agree to the use of anonymous quotes

---

Name of Participant

---

Date

---

Signature

---

Name of Person  
taking consent

---

Date

---

Signature



***Participant Information Sheet (Cohort 2)***

***An evaluation of the effectiveness and benefits of the Coping Through Football programme in tackling physical and mental health.***

We would like to invite you to help us learn more about some of the benefits, or otherwise, of having taken part in the Coping Through Football programme. This will involve asking you some questions at a face to face interview. You will be reimbursed for your travel and time.

***Why are we doing this?***

We are conducting this study because we want to better understand how and when the programme can be helpful or otherwise to its attenders. We hope to ask about one hundred past attenders of the programme about what they have got out of it, what they have gone on to do, and whether they felt the programme helped them achieve their goals.

***What would taking part involve?***

If you agree to take part, an interviewer would arrange a face to face meeting of about forty five minutes duration at your convenience. The interviewer may be a former user of the programme themselves as we believe that this will help you and others be open and honest. Alternatively, should you prefer, it may be a research member of the research team. The interviewer will check you have read this sheet, consented to take part and answer any questions you may have. The interview will ask for some details about your attendance at the programme followed by any changes for you that have taken place. These may include goals you had and whether you were helped to achieve them as well as other changes in your life.

We would record the interview unless you did not want that to happen in which case the interviewer would make some written notes.

Taking part does not in any way affect or alter the care you may be receiving from any part of the health service.

***What are the possible benefits of taking part?***

While there are no direct benefits to you, we hope that the research helps improve the programme and other schemes of this kind in the future.

***What are the possible disadvantages and risks of taking part?***

We aim to avoid any risks of taking part. In the unlikely event that you become distressed by our questions we would offer to put you in touch with a suitable service to obtain help should this be what you want to

happen. Please contact Oliver Mason (contact details below) should you feel you have reason to do so.

***What happens to my information?***

Only members of our research team will have access to your personal information. Any notes or recordings of you will be kept safely and confidentially. Audio recordings will be transcribed within a month of any interview and then destroyed/deleted from all media. No information regarding your identity will be passed to anyone not involved in the study. Your words may be used in the results of this study but only in a way that does not identify you personally. Your information will be kept confidentially for five years after the study. All information regarding your participation will be treated as strictly confidential and will only be used for research purposes.

***Who is organising and funding this study?***

The study is funded by the National Institute of Health Research. A research team from University College London is conducting the study in collaboration with the Coping Through Football programme.

For any queries or further information please contact Dr. Oliver Mason, Research Department of Clinical, Health and Educational Psychology, 1-19 Torrington Place, London, WC1E 7HB. Tel: 0207 679 8230 or via [o.mason@ucl.ac.uk](mailto:o.mason@ucl.ac.uk).

***Who has approved this study?***

This study was reviewed by London – Brent Research Ethics Committee, 80 London Road, Skipton House, London, SE1 6LH. Tel: 020 7972 2561.

***What to do if something went wrong?***

If you have a concern about any aspect of this study you should speak to the researchers who will do their best to answer your questions.

In the event that something does go wrong and you are harmed during the research and this is due someone's negligence then you may have grounds for a legal action for compensation against UCL, but you may have to pay your legal costs. The normal National Health Service complaints mechanisms will be available to you.

If you wish to complain, or have any concerns about any aspect of the way you have been approached or treated by members of staff you may have experienced due to your participation in the research, UCL complaints mechanisms are available to you. Please ask a member of the research team if you would like more information on this.

---

In the unlikely event that you are harmed by taking part in this study, compensation may be available to you. If you suspect that the harm is the result of the Sponsor's (University College London) negligence then you may be able to claim compensation. After discussing with a member of the research team, please make the claim in writing to Dr Oliver Mason who is the Chief Investigator for the research. Dr Mason will then pass the claim to the Sponsor's Insurers, via the Sponsor's office. You may have to bear the costs of the legal action initially, and you should consult a lawyer about this.

***Will my participation in this study be kept confidential?***

All information regarding your participation will be treated as strictly confidential and will only be used for research purposes.

***What will happen if I don't want to carry on with the study?***

Your involvement would stop immediately and you would be able to withdraw your consent for any information you have given to be used from that point forwards.



### ***Participant Information Sheet***

#### ***An evaluation of the effectiveness and benefits of the Coping Through Football programme in tackling physical and mental health.***

We would like to invite you to help us learn more about some of the benefits, or otherwise, of having taken part in the Coping Through Football programme. This will involve asking you some questions at a face to face interview. You will be reimbursed for your travel and time.

This study has been approved by Clinical, Educational and Health Psychology Research Department's Ethics Chair: No: 2017561

#### ***Why are we doing this?***

We are conducting this study because we want to better understand how and when the programme can be helpful or otherwise to its attenders. We hope to ask about one hundred past attenders of the programme about what they have got out of it, what they have gone on to do, and whether they felt the programme helped them achieve their goals.

#### ***What would taking part involve?***

If you agree to take part, an interviewer would arrange a face to face meeting of about forty five minutes duration at your convenience. The interviewer may be a former user of the programme themselves as we believe that this will help you and others be open and honest. Alternatively, should you prefer, it may be a research member of the research team. The interviewer will check you have read this sheet, consented to take part and answer any questions you may have. The interview will ask for some details about your attendance at the programme followed by any changes for you that have taken place. These may include goals you had and whether you were helped to achieve them as well as other changes in your life.

We would record the interview unless you did not want that to happen in which case the interviewer would make some written notes.

Taking part does not in any way affect or alter the care you may be receiving from any part of the health service.

#### ***What are the possible benefits of taking part?***

While there are no direct benefits to you, we hope that the research helps improve the programme and other schemes of this kind in the future.

***What are the possible disadvantages and risks of taking part?***

We aim to avoid any risks of taking part. In the unlikely event that you become distressed by our questions we would offer to put you in touch with a suitable service to obtain help should this be what you want to happen. Please contact Oliver Mason (contact details below) should you feel you have reason to do so.

***What happens to my information?***

Only members of our research team will have access to your personal information. Any notes or recordings of you will be kept safely and confidentially. Audio recordings will be transcribed within a month of any interview and then destroyed/deleted from all media. No information regarding your identity will be passed to anyone not involved in the study. Your words may be used in the results of this study but only in a way that does not identify you personally. Your information will be kept confidentially for five years after the study. All information regarding your participation will be treated as strictly confidential and will only be used for research purposes.

***Who is organising and funding this study?***

The study is funded by the National Institute of Health Research. A research team from University College London is conducting the study in collaboration with the Coping Through Football programme.

For any queries or further information please contact Dr. Oliver Mason, Research Department of Clinical, Health and Educational Psychology, 1-19 Torrington Place, London, WC1E 7HB. Tel: 0207 679 8230 or via [\[o.mason@ucl.ac.uk\]\(mailto:o.mason@ucl.ac.uk\)](mailto:o.mason@ucl.ac.uk).

***Will my participation in this study be kept confidential?***

All information regarding your participation will be treated as strictly confidential and will only be used for research purposes.

***What will happen if I don't want to carry on with the study?***

Your involvement would stop immediately and you would be able to withdraw your consent for any information you have given to be used from that point forwards.

## Appendix C: Interview Schedules

### C.1 Interview schedule for young people

#### **Interview Schedule**

- How did you get started at the CFT programme?
  - How were you introduced to the programme?
  - Did someone invite you?
  - Did you hear about it elsewhere?
- Are you currently attending the group?
  - If so, how long have you been attending the group?
  - If not, how long did you attend the group for?
- What do you think are the main aims or purposes of the group?
- How would you describe your general experience of the group?

#### **If young person currently attending the group**

- Do you feel that there has been anything particularly helpful or positive about attending the group?
- Do you feel that there has been anything particularly unhelpful or negative about attending the group?
- Do you feel like there has been a change in your physical health since attending the group?
- Do you feel like there has been a change in your lifestyle since attending the group?
  - E.g. exercise, drugs, alcohol, smoking, diet?
- Has attending the group affected your confidence or how you see yourself? If so, how?

- Has attending the group impacted on your friendship circles? If so, how?
- Has attending the group impacted on your experience of school or work? If so, how?
- Are there any aspects of the group that you have found challenging?
  - E.g. getting there, meeting new people, the level of exercise etc
- Are there any other changes in your life you feel are related to attending the programme?
- Are there any things which have got in the way of attending the group or would stop you wanting to attend?
- Would you be happy, in principle, to discuss your experiences in greater detail in the future?

**If young person not attending the group currently:**

- What led to you no longer attending the group?
  - Were there challenges that lead to you leaving?
  - If not, were there things when you attended that made attendance more difficult?
- While you were attending the group;
  - Did you feel that there was anything particularly helpful or positive about attending the group?
  - Did you feel that there was anything particularly unhelpful or negative about attending the group?
- Have you noticed any difference in your life now compared to when you were attending the group?
  - For example:

- Do you feel like there has been a change in your physical health since attending the group?
  - If yes, do you think this has been maintained since leaving the group?
- Do you feel like there has been a change in your lifestyle since attending the group?
  - E.g. exercise, drugs, alcohol, smoking, diet?
  - If yes, do you think this has been maintained since leaving the group?
- Did attending the group affect your confidence or how you see yourself? If so, how?
  - If yes, do you think this has been maintained since leaving the group?
- Did attending the group impact on your friendship circles? If so, how?
  - If yes, do you think this has been maintained since leaving the group?
- Did attending the group impact on your experience of school or work? If so, how?
  - If yes, do you think this has been maintained since leaving the group?
- Are there any aspects of the group that you found challenging (bear in mind stated reason for leaving)?
  - E.g. getting there, meeting new people, the level of exercise etc
- Are there any other changes in your life you feel are related to having attended the group?
- Would you be happy, in principle, to discuss your experiences in greater detail in the future?

## C.2 Adult interview schedule

### **Meaning**

- In your opinion, what is the main aim of Coping Through Football?
- Do you feel the participants have the same understanding of the aims of CFT?
- How do you understand your role in CFT? (What is your speciality?)

### **Change/Impact**

- How do you think the CTF project particularly helps with someone's recovery?
- How did CTF impact on the participants? Which area of their lives/behaviour was influenced most (e.g. physical health, mental health, self-confidence, social relationships/interaction, managing daily activities)
- What areas were impacted on the least?
- Do you think the participants expectations were met?

### **Social interaction**

- How would you describe the atmosphere among participants? What helps create the atmosphere? What hinders it?
- Have you ever experienced conflict within the group?
  - How do you react?
  - How do the participants react?
  - Do you think this impacts on the participants?
- Do you think participants benefit from CTF with regard to their social skills?

### **Performance**

- Do you think participants are happy with the level of exercise/play?

- Are there differences in the group in terms of fitness, football skills etc? Does this matter?
- What might happen if someone feels excluded?
- Do you watch for when people feel the game isn't suiting them?

### **Gender**

- Given that women's football could be seen as less in the public's mind, do you think that girls are accepted in the group? Should more be encouraged? How does this influence the group?
- Do you think they feel included in the game and otherwise? How do the male staff and players react?

### **Potential problems/issues?**

- What challenges or issues have you encountered?

### **Participants leaving**

- Do you think there is a “right time” to leave?
- What do you think are the common reasons for leaving?
- How would you describe the opportunities for young people when they start attending the group?
- Have you noticed changes in this as young people attend the group? If so is this initiated by attenders or professional involved in the group or others?
- Do you think your contact with CTF has had an impact on your view of people with mental health difficulties in any way?

### **Relative meaning**

- How important do you think CTF is in participants' lives relative to other influences?

### **Wrap up questions**

- Is there anything that you would like to change about CTF if you could?
- Is there anything you would like to discuss or anything you would like to add?

## Appendix D: Process of Thematic Analysis

### D.1 Initial coding (stage 2)

Transcript 8

1 I: So, um obviously this is focusing on the young person's side [P;  
2 yep] of the group and there may well be questions in her that you  
3 think actually I don't really have anything to say on those but that's  
4 completely fine [P: no worries] don't feel like you have to... (laughs)

5 P: (laughing) If I just come up with something to fill the space

6 I: Yeah, just come up with something. Um so um, and in terms of  
7 your role, and I know you've recently switched but what was your...

8 P: so, I was a clinical nurse specialist over at [team and location] um  
9 and I also worked with [the football group] before that as well [I: oh  
10 right] because I've worked with CAMHS in the trust for five years. [I:  
11 OK] so I worked at [location] inpatient unit where some of our  
12 young people attend and then I worked with the youth offending  
13 team in [location] which worked wonders for my young people  
14 going to [the football group] [I: right] and then some of my much  
15 younger people joined when I was in [location]

16 I: OK so you've got a real history/

17 P: I drag [project co-ordinator] with me everywhere. I'm like come-  
18 on we're doing [the football group]

19 I: (laughs) yep. Fantastic um and so in um you're in your mind what  
20 do you think kind of the main aim or aims of the group is?

21 P: I think with young people particularly it's always been you know  
22 the way I sell it to young people it's an opportunity to get out of  
23 your house because a huge part with young people is the social  
24 isolation a lot of them aren't attending main stream school [I: yep]  
25 so just the chance to get outside and be with other young people  
26 and use, burn off some steam particularly when I was working with  
27 the youth offending team it was about finding a positive outlet for  
28 their energy because that was a key thing and a lot of the young  
29 people I send were, had diagnoses of conduct disorder or  
30 oppositional defiance disorder um and certainly when we were  
31 working at [location], a lot of the young people we sent self-harmed  
32 or er had quite low mood and it was about showing them that  
33 actually there's this really positive thing you can do that you can  
34 engage [I: Yep] and it's not traditional mental health so a lot of  
35 young people are like I'm not sitting on a couch and talking to you  
36 but if you kick a football around for a bit they'll totally tell you  
37 everything. Um so I think for me it was really about that, a different  
38 way to engage young people in a way that they truly enjoy.

39 I: mm-hm, OK and um do you think that that the young people  
40 would have a similar view of what [the football group] is about or a  
41 different one?

42 P: Er I actually spoke to some of my young people about this back in  
43 the day because I'd be like Oh what are we putting on the posters

*Change range of  
services & ages  
using the group*

*P.C. - Key part*

*Sell it to young  
people. Get out of house  
out side helping with social isolation  
not attending main stream  
burn off steam & wouldn't  
be with others if*

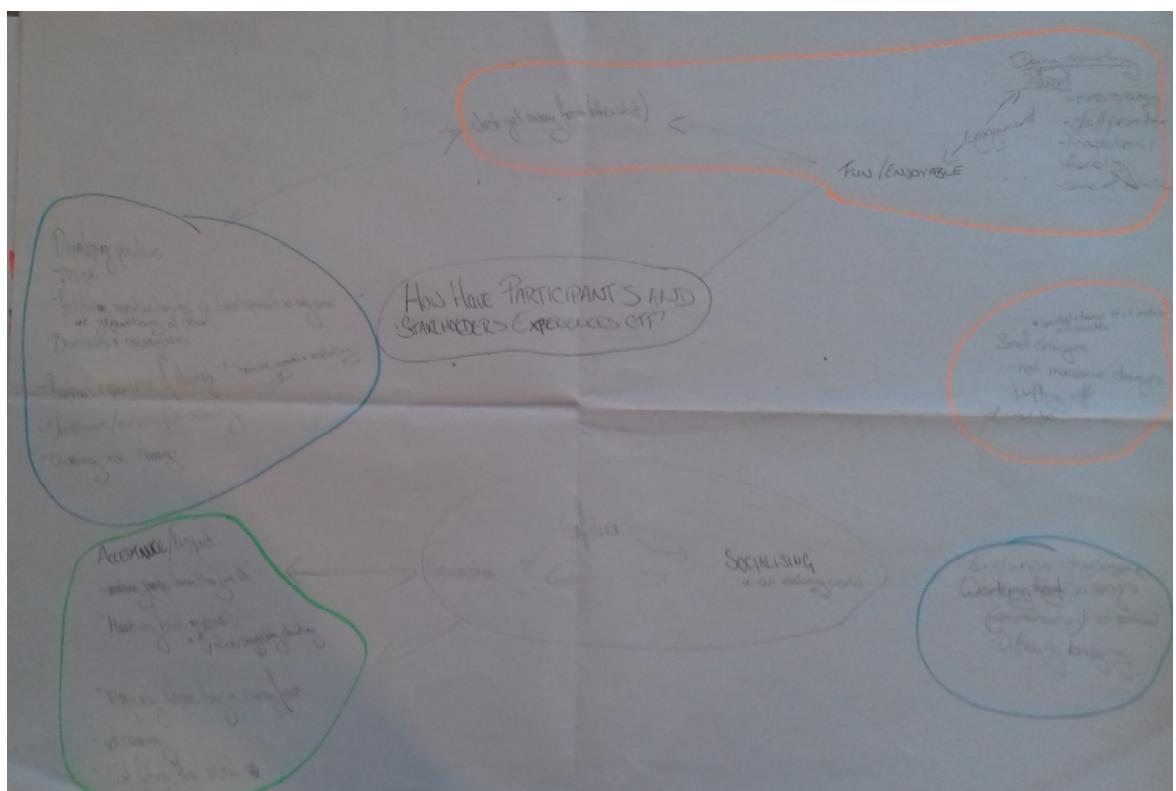
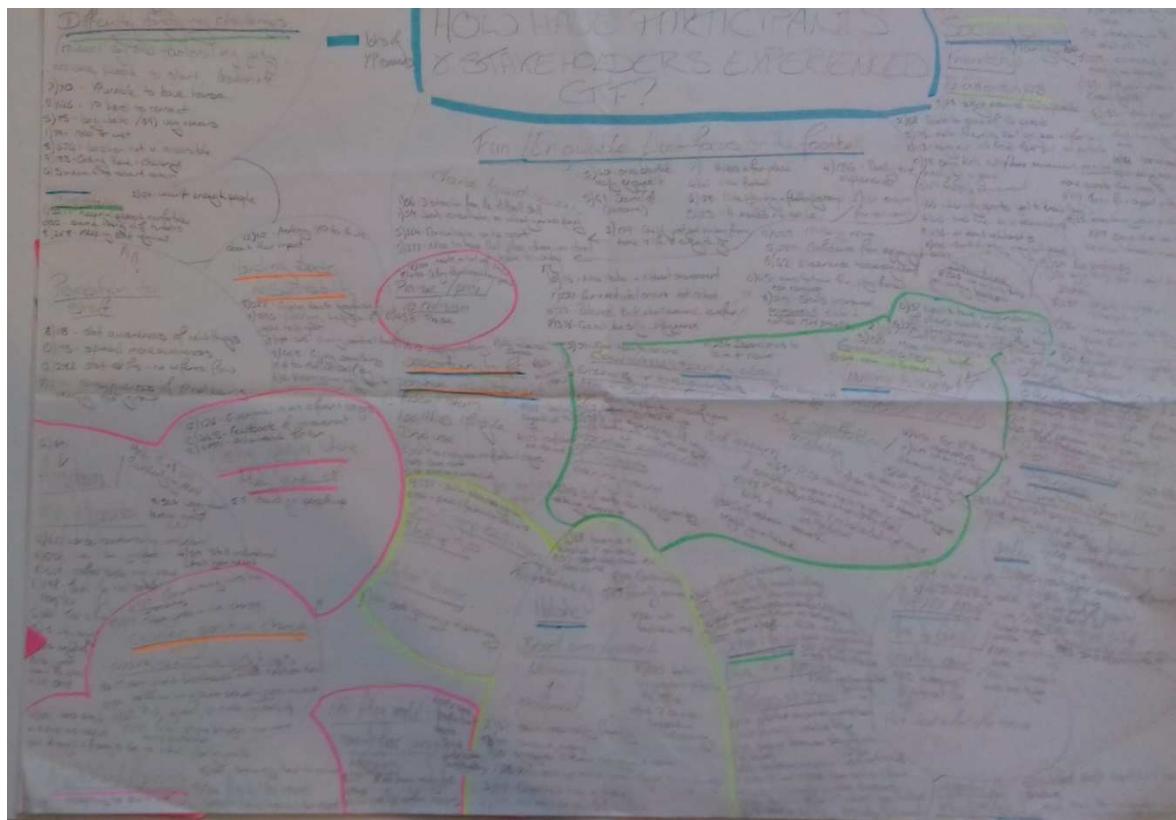
*Not traditional  
Different way to  
engage. Enjoy*

## D.2: Searching for themes (stage 3)

Codes copied to post notes very time the occurred to develop frequency map



## Codes accumulated into potential themes



### D. 3 Example of quotation lists relating the theme (stage 5 and 6)

Once thematic maps had been generated (see Figure 2) quotation lists were used to refine specifics of the themes and make writing the results smoother.

Theme	Summary codes	Quotes
Doing something differently	Fun/enjoyable	<p>1) 37 "It was good... enjoyable... er I wouldn't say there's any real negative points to it"</p> <p>2) 31 "it was alright yeah, it was quite, it was a fun place to be if you know what I mean"</p> <p>2) 54 "when I whenever I went there I enjoyed it"</p> <p>2) 142 "I stopped playing football before that, and I used to play with my cousins and stuff but I just stopped playing to that because they didn't want me there it was because I loved football, it was a bit like, I, this is the one place where I can play football so [I: mm] that's where I really wanted to go every Monday"</p> <p>3) 23 "It makes me smile"</p> <p>4) 10 "Cos even my mum has been telling me that I should start up again [I: Oh] and I do want to, just as soon as I actually come"</p> <p>4) 40 "quite fun actually ... Obviously because it was football and I like football"</p> <p>4) 186 Really positive [experience]</p> <p>5) 33 "something to look forward to and try"</p> <p>5) 38 "It was very fun and on my first day I was very nervous ... um they were very welcoming once I got started um, I really did enjoy it ... so I over all it was a good thing to do..."</p> <p>6) 34 "Yeah felt good"</p> <p>6) 45 "to have a good time and play football and er not compete"</p> <p>6) 128 "I like playing in the football group"</p> <p>7) 33 [helping them] "through an activity that they enjoy ... like obviously the football and I think for young people when you tell them they're going to get to go and play free football, they're like, Oh yeah, OK"</p> <p>7) 249 ", having [project coordinator] there, she's obviously, you know, the expert in the, [I: yeah] in mental health so, I'd like to think it's almost like having access to a mental health worker on a weekly basis ... you know because sometimes these kids have no-one to talk too and so if they can go there and something has bothered them they would then be able to open up and tell [the project coordinator] that [I: sure] because she'd be seeing them every week um she'd obviously</p>

	<p>be building a relationship with them in a much more fun and natural environment [I: yeah] than say someone like me that goes to see them at school [I: yeah] you know they're out they're doing something that they enjoy so I'd like to think that they'd be a bit more kind of comfortable to the point that they could open up and say "this has happened" or "this has bothered me" and that [the project coordinator] would then be able to help them with that"</p> <p>8) 34 "it's not traditional mental health so a lot of young people are like I'm not sitting on a couch and talking to you but if you kick a football around for a bit they'll totally tell you everything ... a different way to engage young people in a way that they truly enjoy"</p> <p>8) 62 "it gave them something to look forward to, it gave him, it set him a future"</p> <p>8) 160 "really really enjoying what he was doing and that was a huge thing for him"</p> <p>8) 218 "all of them saw their skills improve and enjoyed it and I don't think half of them even really noticed they were playing these games with mental health practitioners and stuff, they were more interested in their coaches from [football club] that had the uniform on and the badge [I: OK yeah] the big deal, we're the big deal, we'll train you properly, they were more interested in how bad us nurses and OT's were at football to be honest with you"</p> <p>9) 57 "I had feedback that he was enjoying it"</p> <p>10) 23 "just a relaxed go and kick a ball around and just have fun er something that you could just, ... chill out have fun"</p> <p>10) 90 "I remember back to the week before and I remember that it was fun and it was relaxed and if it's a relaxed environment and I feel bad then it's going to make me feel better so just do it"</p> <p>12) 98 ", during the session time, my role is um there to try to make sure the young people have an enjoyable time, that they enjoy themselves, that even though there may not be large numbers of them, that they are still getting something out of it, so getting some enjoyment"</p>
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## Appendix E: Feedback request with template email

Email Title: Summary of Coping Through Football research project findings

Dear XXXX

Once again, thank you for participating in the research project. Your thoughtful contribution was much appreciated and I have greatly enjoyed working on the project. As we discussed when we met, I have been completing an analysis of all the interviews I conducted and I have now enclosed a summary of my findings.

My research question was “how have the young people participating in the group and adult stakeholders experienced the coping through football group?” and using this I have developed six key “themes”. These themes are concepts which I felt appeared quite consistently across the interviews and are generated from the individual ideas discussed in the interviews.

I would be very interested in your feedback on these themes before I finalise them to see if you feel they reflect your thoughts on the group. Because of the wide-ranging participants in this project you may feel like some of the themes don’t link to your experiences but I would still very much appreciate your feedback.

If you have any feedback on the following please simply reply to this email and let me know. I have also included the themes in the email below in case you prefer to comment directly on the themes.

- Are there any themes which you agree with or reflect your experiences of the group?
- Are there any themes which you disagree with or feel don’t reflect your experiences?
- Is there anything that you feel is missing in these themes?

Best wishes,

George Bone

### **Summary of Findings:**

#### **Themes**

##### **Doing something differently**

This theme draws from comments for young people and adults alike. The young people participating in this project especially highlighted how the group allows them to go out and do something fun and enjoyable while getting away from the difficult parts of their lives. The adults also talked about the group being able to approach things in a flexible way and adapt to what the young people needed. In turn this allowed a different kind of mutual engagement. Several participants also spoke about the importance of consistency within the group and the difficulties of promoting a more unusual group. These ideas were combined into the theme of “doing things differently” because they seemed to address an approach which was experienced as different both to everyday life and other mental health service provision.

##### **Small important changes**

Related to the idea of doing things differently is the idea of making small but important changes. When discussing the group with young people, although everyone stressed how important it was, they did not often identify major life changes. Rather they talked about building on what they already had and making small shifts in the way they did or thought about things. Despite being small changes, they seemed to be meaningful. It was also raised by adults and young people alike that the group attendees tended to leave by simply drifting off, their time being taken up by other things such as school or exams. This drifting seems to relate both to the idea of providing a different type of service, one that the young person can leave and return to when needed, and a more integrated type of ending. For example, as the young person finds small changes building up into larger changes, the group perhaps stops being as important for them and they move elsewhere.

### **Developing positives, overcoming challenges**

This theme is particularly linked to the idea of making small important changes as it seems that most of these important changes were perceived as being positive for the young people involved. It was developed based on the ideas that were offered relating to praising the young people, encouraging them to “own” positive changes and having opportunities for positive development. This concept was particularly articulated by the young people who gave examples of how they developed more positive habits and ways of thinking while attending the group.

In addition to the above the ideas of using structure, boundaries and consequences and having practical experiences were highlighted and I felt that these related to how some of these positive experiences were brought into being. Both young people and adults picked out how useful the structure and boundaries of a football group can be. The adult participants also highlighted how the group enabled young people to have “live” and practical experiences of doing things differently and helping to scaffold positive development without directly focusing on them, for example modelling positive ways of managing conflict and helping the young people to work through differences on the pitch.

### **Enduring challenges**

It was raised by both young people and adults that there are still challenges which have not yet been overcome. These especially include conflicts in timing, for example if the young people are able to return to school or college. On the one hand this contributes to the “drifting off” described above and many represent the natural progression the group hopes to achieve but equally may mean that young people lose the supportive and resilience building aspects of the group when they are moving on the face bigger challenges. The location was also mentioned specifically as for young people it can be a long way to travel and although as the group is free it might mean young people can attend where the cost would otherwise be prohibitive, they are not always seen as being a nice environment e.g. down a narrow alleyway which may feel intimidating or within the territory of a rival gang.

### **Acceptance**

The young people involved focused primarily on how they felt welcomed and that everyone was friendly. Adults focused more on the importance of handing back responsibility to the young people in combination with being prepared to meet people wherever they are at. In this vein the young people attested to not have chosen to attend, rather having been persuaded and unsure when they first started. In a similar vein accepting people in a non-

judgment manner was also highlighted. Within this however was a recognition that this can be difficult at times and that people sometimes have preconceived ideas of how some young people will behave. It was also recognised that there may need to be limits to this acceptance as some young people do not seem to “fit the model” and may be asked to leave if it is felt that they are coming for the wrong reasons or not ready for the group.

### **Socialising (in an isolating world)**

This theme was one of the most frequently referred to by both young people and adults. They highlighted the value of the group in both giving young people the opportunity to interact with other young people who also are also dealing with various challenges. Many of the young people described having the chance to make new friends and improving their communication skills but also that they do not often maintain these contacts outside of the group. In addition to this was the idea of building confidence in various areas, particularly in social situations and in themselves.

