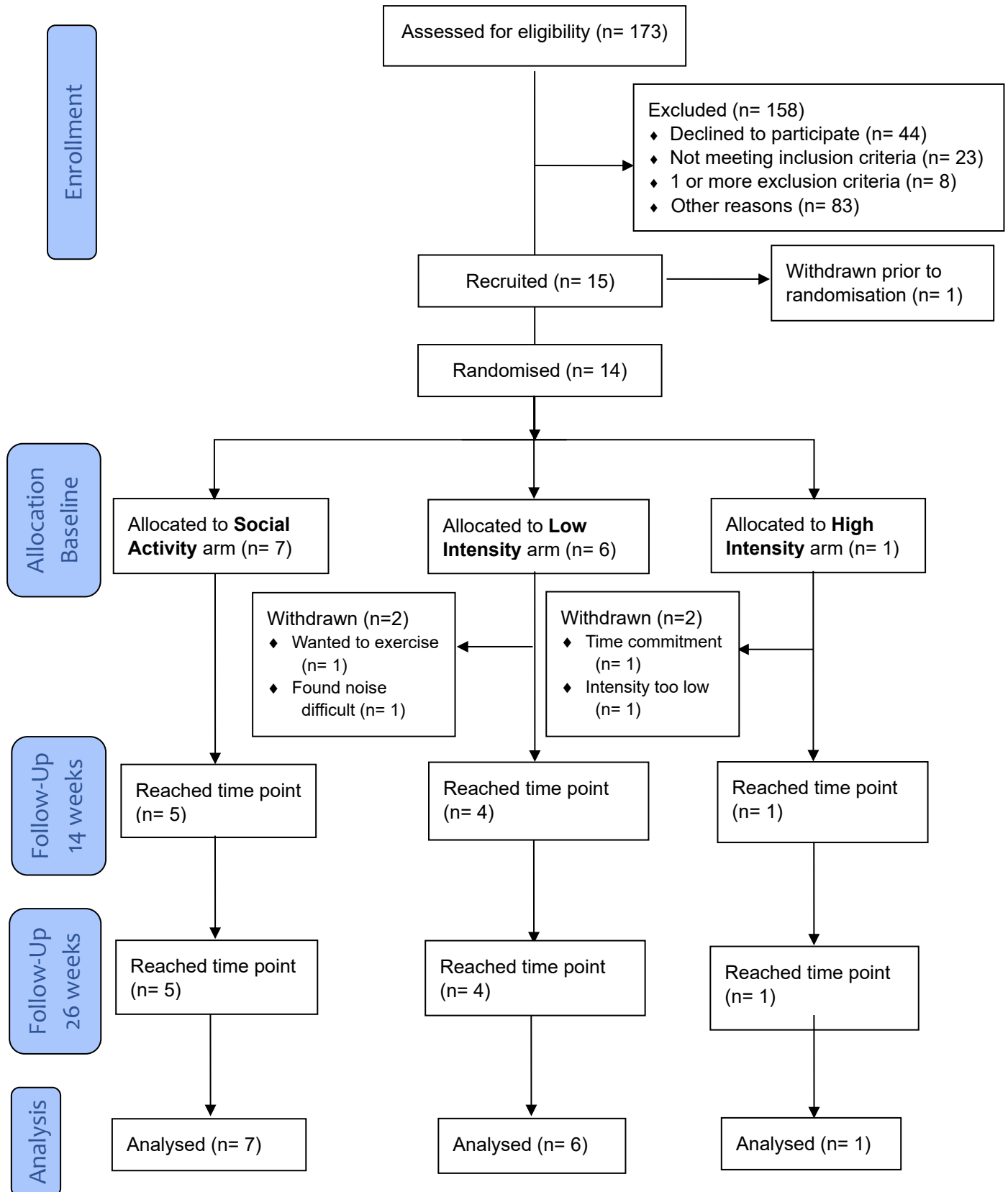


Participant Flow



Baseline Characteristics

	Social (N=7)	Low intensity (N=6)
Age (years): median (IQR)	16 (13, 17)	14 (14, 16)
Gender: n(%)		
Male	0	5 (83.3%)
Female	7 (100%)	1 (16.7%)
Self identified gender: n(%)		
Male	0	5 (83.3%)
Female	7 (100%)	0
Gender diverse/non-binary	0	1 (16.7%)
Ethnicity: n(%)		
White British	2 (28.6%)	5 (83.3%)
Other White background		1 (16.7%)
Indian	3 (42.9%)	0
Pakistani	1 (14.3%)	0
Asian	1 (14.3%)	0
CDI total score: median (IQR)	23.00 (16.00, 31.00)	22.00 (21.00, 30.00)
YPAQ: median (IQR)		
Sports (mins/week)	30 (0, 195)	0 (0, 0)
Leisure (mins/week)	180 (0, 480)	55 (0, 120)
School (mins/week)	65 (60, 100)	60 (30, 240)
Other (mins/week)	0 (0, 0)	0 (0, 180)
Sedentary time (mins)	5212 (4958, 5691)	4885 (4492, 5044)
Light activity (mins)	755 (658, 881)	851 (825, 851)
Moderate activity (mins)	691 (610, 1009)	784 (749, 1052)
Vigorous activity (mins)	14 (4, 25)	29 (2, 35)

Note: As there was only 1 person in the high intensity group, the data for this person has been excluded.

Outcome Measures

Feasibility outcome	Result	Target – Stop-Go criteria
Recruitment	3 sites recruited	3 sites
Referrals for screening	Average cumulative referrals 20 per month across 2 sites	16-20 YP per month/site
Randomised (% of eligible YP)	8.1% (14/173)	> 10% of eligible YP
Retention	71.4% (10/14 randomised)	High level of retention of YP
Adherence to sessions	Sessions attended/sessions invited. 78.7% (214/272) overall	YP's attendance at sessions to be more than 66%.
Acceptability	Acceptability was good Completion of questionnaires was high (>80%), and attendance at sessions was high (79%)	Acceptability of intervention & questionnaires to YP.
	The REPs and MHSWs were willing to engage in the training, and to deliver intervention sessions.	REPs and MHSWs acceptability of training and willingness to deliver sessions.
Adherence to the intervention protocol	Issues with the structure and content of the intervention sessions were identified, particularly with the behaviour change 'healthy living' element	Adherence to the intervention protocol by intervention staff.
Completion of trial measures	>80% data completion (supplementary materials s2, 3,4) Economic (resource use) outcomes: CSRI completed 14 weeks 76.9% (10/13); 26 weeks 61.5% (8/13) EQ-5D-5L & CHU-9D 76.9% (10/13) 14 Weeks; 69.2% (9/13) 26 weeks Heart rate data not reliably collected during sessions. Data collected indicated adherence to session target. 65% of accelerometer data returned at 26 weeks	More than 80% of main outcome measures completed at 14 weeks. Successful completion of resource use data for 80% of patients at baseline and 26 weeks. Feasibility of collecting average and peak heart rate and accelerometer data at 14 and 26 weeks.
Identify additional sites for full trial	Interest to participate from 3 additional sites	Identify 5 additional sites

Adverse Events

No Serious Adverse Events were reported.

Description of Adverse Events	n
COVID-19 infection	3
Self-harm	2
Cold Symptoms	1
Stress	1
Anxiety	2
Panic attack	1
Worsening low mood	2
Physical Pain	2
Stomach ache	1
Dizziness	1
Migraine and Nausea	1