

Parkrun as self-managed cardiac rehabilitation: secondary analysis of a cross-sectional survey of parkrun in the UK

HAAKE, Steve <http://orcid.org/0000-0002-4449-6680>, JOHNSON, Thomas W., BOURNE, Jessica, QUIRK, Helen <http://orcid.org/0000-0003-2716-4681> and BULLAS, Alice <http://orcid.org/0000-0003-2857-4236>

Available from Sheffield Hallam University Research Archive (SHURA) at:

https://shura.shu.ac.uk/32210/

This document is the Supplemental Material

Citation:

HAAKE, Steve, JOHNSON, Thomas W., BOURNE, Jessica, QUIRK, Helen and BULLAS, Alice (2023). Parkrun as self-managed cardiac rehabilitation: secondary analysis of a cross-sectional survey of parkrun in the UK. Open Heart, 10 (2). [Article]

Copyright and re-use policy

See http://shura.shu.ac.uk/information.html

Supplementary file S2: Thematic analysis of 53 free-text comments

1. Community: value placed on being part of the parkrun community

1a. Belonging to a community

1300 I think park runs are brilliant social and community events as well as contributing to health and fitness

20589 [] is the only park run I have attended and it has been a friendly welcoming environment. I attend on my own and chat with other runners/volunteers occasionally, although this contact is not extensive **I do feel a part of a community** activity which is uplifting.

24122 I like feeling part of such a large and supportive community with thousands doing the same thing up and down the country at the same time on a Saturday morning. I feel proud of the number of events I have completed and attend each week partly to keep building on that total.

2632 Even though I can no longer run (Heart failure) parkrun still give me **the opportunity to walk with like minded parkrunners**. Lots of support from everyone. LOVE IT.

59676 The Joy of Park Run is the all inclusive feel it brings to me, as people of all abilities and walks of life all feel to be in **one big happy group** encouraging each other, to run, jog or walk its such a nice feeling

83636 I have been running for over 30 years. So I'm usually quite fit. I think parkrun is such a great idea **and has a wonderful community**. Everybody is out there to help everyone else. It's so friendly... In short, it makes me smile **to be a part of the parkrun community**.

1b. Taking part with other people

14475 Parkruns are a great way of doing speedwork or a fast tempo run with lots of other people.

18281 I have a knee replacement. I am not allowed to run. I work out on the rower every day. I have participated only once..but my wife does this regularly. **I should walk more often on the park run for social reasons.** Before my knee replacement i have run to keep fit most of my life.

28374 From a position of low confidence after a heart attack I now feel able to turn up to a Park Run and take part without any problems. This brings together fitness, ability and confidence. I can turn up on my own or with friends. **I have met and made new friends** as a result of getting involved in running at a Park Run.

69735 I had a major heart attack / cardiac arrest two years ago from which I all but died. It has been a long road back to health. My GP recommended Parkrun to me. It's a fantastic organisation and has made an immense difference to my recovery in terms of my overall health, fitness, confidence, well being etc. **The camaraderie and support of the participants has been invaluable, and I appreciate the new friends I've made though it.** I'd recommend it to anyone and I hope my survey answers convey all this adequately!

87977 well organised event ever week with no pressure or onus to attend .great social outing amazing amount of different people you meet .help to keep your fitness level up with the add incentive to compete against the clock

89222 Summing up the picture I paint with my answers. I subscribe to the belief that physical activity benefits everyone, from the healthy to the chronically ill. **parkrun is a friendly non competitive (apart from PB's) way to achieve this. Socially it is great a great way to meet people**. I volunteer as Run Director, results processor and all other roles. **This is stimulating mentally and socially**.

1c. Commitment to the community

1606 There is a commitment to take part, and to volunteer, for your self and for others.

26449 I have joined Parkrun to enjoy the friendship and commitment

1d. Perceived inclusivity of the community

23348 My competitive side, got carried away by the occasion! forgot that I am 73 and didn't listen to my body. The result was the return arrhythmia which I last had 8 years ago. I stopped Park Run and it has taken over 6 months to rest my heart and hopefully recover. Episodes are now infrequent and becoming further apart (6 weeks). If I return to Parkrun I be slow, steady and all the time trying to remember my age whist listening more carefully to signals from my body. It will be run/walk next time. I am a victim of my own stupidity and hope I have learn't a lesson from this. I think **the concept of Parkrun is brilliant and so inclusive**, encouraging many to take exercise who wouldn't normally, if I can't run again I may volunteer.

86833 I live in [] Canada. The nearest Parkrun is a 30 minute drive away at []. I am hoping there will be a Parkrun that opens closer to my home ([]) so that I won't have to drive to get to it. I would love it to be part of "my" neighbourhood, and will definitely volunteer as well

as run. **I love the philosophy and inclusiveness of Parkrun.** I would like to see more walkers, families, jogger-walkers taking part. Right now most participants are pretty competitive, and the walkers do not come back.

2. Fitness: using parkrun to build fitness

2a. Perceived improvements to general health

1300 I think park runs are brilliant social and community events as well as contributing to health and fitness

14475 Parkruns are a great way of doing speedwork or a fast tempo run with lots of other people.

15513 Parkrun has merely added to the range of activities I undertake on a regular basis to **maintain my fitness and general health**, as I have done since leaving school in 1968.

25297 Having been a runner for many years the ageing process and medical conditions i have prevented me from enjoying my running as much as i used to. Fortunately **park runs have enabled me to keep fit and active as well as all the other benefits**. Family holidays always include a park run. Also wonderful to run with my four grandsons.

28107 I hope my replies are not too nagative.Only been participating for three weeks, one week did not get recorded, and I am only a walker. **Park run is a super idea, and gives me incentive to do regular excercise.** I do also do a keep fit class once a week.

87977 well organised event ever week with no pressure or onus to attend .great social outing amazing amount of different people you meet .help to keep your fitness level up with the add incentive to compete against the clock .

89222 Summing up the picture I paint with my answers. I subscribe to the belief that physical activity benefits everyone, from the healthy to the chronically ill. parkrun is a friendly non competitive (apart from PB's) way to achieve this. Socially it is great a great way to meet people. I volunteer as Run Director, results processor and all other roles. This is stimulating mentally and socially.

98151 Unfortunately due to a calf injury I was unable to go to Parkrun. I then found it difficult to attend because of other commitments. I'm hoping to return soon and attend more regularly next year. I did enjoy the exercise and felt it was a good achievement completing the 5k and this was **a good way of increasing my fitness** and wellbeing.

2b. parkrun for rehabilitation

11223 I had a heart attack mid marathon followed by a TIA and MS diagnosis. Although 5k is generally not my distance **parkrun was a great way to get back to running** and I still attend regularly even though I am back to distance running.

47443 My resting heart rate has fallen to the low 40's from the mid 50's since starting parkrun. After consultation my my GP, he reduced my dose of bisoprolol (beta blocker) from 5.0mg to 2.5mg and then to 1.25mg (each time failed to increase my heart rate. I have now been taken off the beta blocker completely and recording a heart rate in the low 50's.

My cardiologist is investigating bradycardia but suggests the low heart rate is probably due to increased fitness levels.

69735 I had a major heart attack / cardiac arrest two years ago from which I all but died. It has been a long road back to health. My GP recommended Parkrun to me. It's a fantastic organisation and **has made an immense difference to my recovery in terms of my** overall health, **fitness**, confidence, well being etc. The camaraderie and support of the participants has been invaluable, and I appreciate the new friends I've made though it. I'd recommend it to anyone and I hope my survey answers convey all this adequately!

89927 Since starting park run I feel much fitter. Both my cardiologist and GP support me doing this activity. I have noticed that my heart rate has dropped, so much so that I have now been taken off bisoprolol (beta blockers)

2c. With fitness comes confidence

28374 From a position of low confidence after a heart attack I now feel able to turn up to a Park Run and take part without any problems. **This brings together fitness**, ability and confidence. I can turn up on my own or with friends. I have met and made new friends as a result of getting involved in running at a Park Run.

69735 I had a major heart attack / cardiac arrest two years ago from which I all but died. It has been a long road back to health. My GP recommended Parkrun to me. It's a fantastic organisation and **has made an immense difference to my recovery in terms of my** overall health, **fitness**, confidence, well being etc. The camaraderie and support of the participants has been invaluable, and I appreciate the new friends I've made though it. I'd recommend it to anyone and I hope my survey answers convey all this adequately!

79297 Main sport is touring cycling and **Park run has helped my** fitness and **confidence**. Like atmosphere at the run.

3. Encouragement: support to take part in parkrun

3a. parkrun as a whole

23348 My competitive side, got carried away by the occasion! forgot that I am 73 and didn't listen to my body. The result was the return arrhythmia which I last had 8 years ago. I stopped Park Run and it has taken over 6 months to rest my heart and hopefully recover. Episodes are now infrequent and becoming further apart (6 weeks). If I return to Parkrun I be slow, steady and all the time trying to remember my age whist listening more carefully to signals from my body. It will be run/walk next time. I am a victim of my own stupidity and hope I have learn't a lesson from this. I think the concept of Parkrun is brilliant and so inclusive, **encouraging many to take exercise who wouldn't normally, if I can't run again I may volunteer.**

31904 Feeling that you've helped someone by introducing them to Parkrun

59676 The Joy of Park Run is the all inclusive feel it brings to me, as people of all abilities and walks of life all feel to be in one big happy group **encouraging each other**, to run, jog or walk its such a nice feeling.

66700 **Was great at encouraging me to do some exercise** and drag my two sons out to do some exercise. I did 50 and they both completed 50 before leaving school. But what is beyond Parkrun ?

83636 I have been running for over 30 years. So I'm usually quite fit. I think parkrun is such a great idea and has a wonderful community. **Everybody is out there to help everyone else.** It's so friendly... In short, it makes me smile to be a part of the parkrun community.

3b. Social support to take part

24122I like feeling part of such a large and **supportive community** with thousands doing the same thing up and down the country at the same time on a Saturday morning. I feel proud of the number of events I have completed and attend each week partly to keep building on that total.

24762 My main reason for joining the parkrun is to give me the push to attend the events regardless of weather, get me up on Saturday morning, and allow two of my daughter's to bully me. Too easily to give in to:-too cold, not cold enough, too wet, wind in wrong direction and on and on and on.

2632 Even though I can no longer run (Heart failure) parkrun still give me the opportunity to walk with like minded parkrunners. Lots of support from everyone. LOVE IT.

69735 I had a major heart attack / cardiac arrest two years ago from which I all but died. It has been a long road back to health. My GP recommended Parkrun to me. It's a fantastic organisation and has made an immense difference to my recovery in terms of my overall health, fitness, confidence, well being etc. The camaraderie and **support of the participants** has been invaluable, and I appreciate the new friends I've made though it. I'd recommend it to anyone and I hope my survey answers convey all this adequately!

3c. Supported by health professional

23245 I had a pacemaker fitted 14 months ago. Swimming was my sport, but pacemakers do not respond to swimming exercise, they better respond to demands from running. In consultation with cardiology, I completed the NHS C25K course as I used to be a runner, though at my age I would prefer a non impact sport. It seemed logical to try some parkruns to sort of benchmark my progress. At home I have a flat 5.4K course that I try and complete 3-4 times a week. I am still listening to the C25K week 9 podcast. The pacemaker does limit how fast I can run as if I push myself I hit a brick wall where the computer limits my maximum pulse rate to 135bpm. I had a cold recently that stopped me running for 10 days, it took 4 runs to recover to my normal running times.

63891 I used to participate in many community runs and bike rides I restarted in May this year with the BBC Couch 2 5K programme with my wife. We graduated, but then I was diagnosed with an artery problem that requires surgery. **GP advised to walk, not run which I find frustrating.** And this is causing increased levels of stress. Following the surgery, I should be back to running properly.

85927 Since starting park run I feel much fitter. **Both my cardiologist and GP support me doing this activity**. I have noticed that my heart rate has dropped, so much so that I have now been taken off bisoprolol (beta blockers)

98537 Having been a keen jogger for most of my life I joined Parkrun intending to participate regularly but shortly after was diagnosed with a heart problem (AF plus poor ventricular contraction) so I decided that it would be wise to give up running - that is the sole reason that I only took part in two parkruns, which i think was more than a year ago now. More recently **a doctor has told me that my heart problem is not a reason to avoid running** so within the last few months I have been doing a gentle run a few times each week. I have surgery planned for the New Year, it will be an operation technique that I am told has never been used before in the UK - I will be the very first patient outside Belgium!! If this is successful my fitness may improve and will probably take part in Parkrun more frequently. Hope am not writing too much!

69735 I had a major heart attack / cardiac arrest two years ago from which I all but died. It has been a long road back to health. **My GP recommended Parkrun to me.** It's a fantastic organisation and has made an immense difference to my recovery in terms of my overall health, fitness, confidence, well being etc. The camaraderie and support of the participants has been invaluable, and I appreciate the new friends I've made though it. I'd recommend it to anyone and I hope my survey answers convey all this adequately!

4. Enjoyment: parkrun's feel-good factor

4a. parkrun elicits feelings of joy

20589 [] is the only park run I have attended and it has been a friendly welcoming environment. I attend on my own and chat with other runners/volunteers occasionally, although this contact is not extensive I do feel a part of a community activity **which is uplifting**.

14164 Parkrun has given me a focal point as part of recovery from heart operation and knee ACL repair; I had put on 2 stone in weight and struggled with depression post operations, after a lifetime sport - I'm now working my way back slowly and **parkrun has definitely brought** some fun back into my life recently

24419 They are good fun, well organised and allow timed runs to check my fitness progress. BUT THEY START TOO EARLY! 10 am would be fine.

2632 Even though I can no longer run (Heart failure) parkrun still give me the opportunity to walk with like minded parkrunners. Lots of support from everyone. LOVE IT.

30801 Prior to my last PR jn April 2018, **I enjoyed it immensely**. Unfortunately, despite being extremely healthy (seemingly) I suffered a cardiac arrest. My life was saved first by the other runners, who used a defibrillator, and then by the air ambulance and hospital staff who treated me. I have since been advised not not to partake in strenuous physical activity, so have yet to return to PR...

27950 Park run give me a feel good factor after the event that last all day

59676 The Joy of Park Run is the all inclusive feel it brings to me , as people of all abilities

and walks of life all feel to be in one big happy group encouraging each other, to run, jog or walk its such a nice feeling.

79297 Main sport is touring cycling and Park run has helped my fitness and confidence. Like atmosphere at the run.

83636 I have been running for over 30 years. So I'm usually quite fit. I think parkrun is such a great idea and has a wonderful community. Everybody is out there to help everyone else. It's so friendly... **In short, it makes me smile** to be a part of the parkrun community

98151 Unfortunately due to a calf injury I was unable to go to Parkrun. I then found it difficult to attend because of other commitments. I'm hoping to return soon and attend more regularly next year. **I did enjoy the exercise** and felt it was a good achievement completing the 5k and this was a good way of increasing my fitness and wellbeing.

4b. parkrun provides a sense of satisfaction

24017 After a quite heavy operation in April **I have been very pleased** to be able to return to park running with only a slight deterioration in my time.

24122 I like feeling part of such a large and supportive community with thousands doing the same thing up and down the country at the same time on a Saturday morning. **I feel proud of the number of events I have completed** and attend each week partly to keep building on that total.

98151 Unfortunately due to a calf injury I was unable to go to Parkrun. I then found it difficult to attend because of other commitments. I'm hoping to return soon and attend more regularly next year. I did enjoy the exercise and **felt it was a good achievement** completing the 5k and this was a good way of increasing my fitness and wellbeing.

5. Managing health conditions: using parkrun to help monitor and manage

5a Managing conditions

14164 **Parkrun has given me a focal point as part of recovery from heart operation** and knee ACL repair; I had put on 2 stone in weight and struggled with depression post operations, after a lifetime sport - I'm now working my way back slowly and parkrun has definitely brought some fun back into my life recently

17912 My health has changed in the last few months. Completing a parkrun at [] is now a significant objective in trying to improve my condition

47443 My resting heart rate has fallen to the low 40's from the mid 50's since starting parkrun. After consultation my my GP, he reduced my dose of bisoprolol (beta blocker) from 5.0mg to 2.5mg and then to 1.25mg (each time failed to increase my heart rate. I have now been taken off the beta blocker completely and recording a heart rate in the low 50's.

My cardiologist is investigating bradycardia but suggests the low heart rate is probably due to increased fitness levels.

86171 I had only done three park runs before I was told I needed a triple heart bypass. I already had five stents. I have been active all my life and even though I stopped the park runs I still went to the gym and worked out doing short runs on the treadmill among other things. For a month before my bypass I was walking for at least an hour a day. I was disappointed I had to stop the runs. Many years ago I belonged to an athletic club and have completed 26 marathons, the last when I was 57 years old. **I am determined to get back to the park runs**, four months after my bypass I am back in my own gym and my work on the treadmill alone is five reps of seven minutes at 8kph. At 72 I am still pushing myself. **The park run is the carrot dangling in front of me, my ambition to take part again is driving me on in my recovery**. I would love to be a role model for the over 65s, I still want to achieve a lot and at least get a 5k time down below 30 minutes. I am more than happy to be a guinea pig for the scientists, I am keen to see how far somebody like myself with my medical history can push the edges of the envelope.

89927 Since starting park run I feel much fitter. Both my cardiologist and GP support me doing this activity. I have noticed that my heart rate has dropped, so much so that I have now been taken off bisoprolol (beta blockers)

9000 When **my times started to deteriorate** I consulted my GP and this led to a diagnosis of heart failure and the subsequent installation of a pacemaker and defibrillater. I've belonged to an athletic class for over 50 years and Parkrun was **a useful gauge of my fitness** without entering races.

5b Monitoring conditions

5687 A less competitive environment (than a race) has enabled me to check on my health progress following a heart procedure, and it's side effects.

23245 I had a pacemaker fitted 14 months ago. Swimming was my sport, but pacemakers do not respond to swimming exercise, they better respond to demands from running. In consultation with cardiology, I completed the NHS C25K course as I used to be a runner, though at my age I would prefer a non impact sport. **It seemed logical to try some parkruns to sort of benchmark my progress.** At home I have a flat 5.4K course that I try and complete 3-4 times a week. I am still listening to the C25K week 9 podcast. The pacemaker does limit how fast I can run as if I push myself I hit a brick wall where the computer limits my maximum pulse rate to 135bpm. I had a cold recently that stopped me running for 10 days, it took 4 runs to recover to my normal running times.

24017 After a quite heavy operation in April I have been very pleased to be able to return to park running **with only a slight deterioration in my time.**

24419 They are good fun, well organised and allow **timed runs to check my fitness progress**. BUT THEY START TOO EARLY! 10 am would be fine.

27647 As I am in phase 4 of my Cardiac Rehab, using parkrun to measure improvements to my fitness

69735 I had OOHCA whilst running in parkrun, Feb 23, and had to have ICD fitted. I carried on running, more slowly, but ICD 'went off' twice, so had to stop running altogether. Hence, my odd answers. I previously had MI, PAD, DVT but could run after these.

6. Performance: participating against the clock

6a. Feelings of frustration

15513 I was so slow it depressed me, ur perhaps that was me, not the way I was treated

23348 **My competitive side, got carried away by the occasion!** forgot that I am 73 and didn't listen to my body. The result was the return arrhythmia which I last had 8 years ago. I stopped Park Run and it has taken over 6 months to rest my heart and hopefully recover. Episodes are now infrequent and becoming further apart (6 weeks). If I return to Parkrun I be slow, steady and all the time trying to remember my age whist listening more carefully to signals from my body. It will be run/walk next time. I am a victim of my own stupidity and hope I have learn't a lesson from this. I think the concept of Parkrun is brilliant and so inclusive, encouraging many to take exercise who wouldn't normally, if I can't run again I may volunteer.

2336 Unfortunately, my medical condition limits my running. As a former competitive athlete of a good standard **I found participating in Parkrun frustrating and no longer participate.**

86833 I live in [] Canada. The nearest Parkrun is a 30 minute drive away at [].

I am hoping there will be a Parkrun that opens closer to my home ([]) so that I won't have to drive to get to it. I would love it to be part of "my" neighbourhood, and will definitely volunteer as well as run.

I love the philosophy and inclusiveness of Parkrun.

I would like to see more walkers, families, jogger-walkers taking part. Right now most participants are pretty competitive, and the walkers do not come back.

957 Since my recent health problems I have been **unable to participate fully at a level that would satisfy my ego** so volunteer on an irregular basis. I have related some of my answers to indoor training on a running machine at 12-15kph.

6b. Competing against yourself

12741 Like most today, **I go along for a time - to test myself on a known course**. Many of my friends go for the kudos of "X Parkruns completed" or to win or be in the top Y. For me, I go occasionally **to see how I compare to the last time I went**. We have had a death in the family in recent weeks and it has mainly fallen to me to organise everything and keep people safe and consoled. This has seriously impacted my running which, in turn, impacts my cardio fitness and then my direct health.

22060 I had heart attack on 4 September and now on appropriate medication. I am slowly building back up my fitness mainly through walking. Will start cycling and golf this week. **My goal is to resume park run and better my previous best time.**

87977 well organised event ever week with no pressure or onus to attend .great social outing amazing amount of different people you meet .help to keep your fitness level up with **the add incentive to compete against the clock** .

6c. parkrun as a low-pressure environment

5687 A less competitive environment (than a race) has enabled me to check on my health progress following a heart procedure, and it's side effects.

24122 I like feeling part of such a large and supportive community with thousands doing the same thing up and down the country at the same time on a Saturday morning. I feel proud of the number of events I have completed and attend each week partly **to keep building on that total**.

89222 Summing up the picture I paint with my answers. I subscribe to the belief that physical activity benefits everyone, from the healthy to the chronically ill. **parkrun is a friendly non competitive (apart from PB's) way to achieve this.** Socially it is great a great way to meet people. I volunteer as Run Director, results processor and all other roles. This is stimulating mentally and socially.