

Supplementary Material 1. Aerobic exercise progression protocol

Week	Duration (minutes)	Intensity (PCERT Level)
1	10	4
2	15	4
3	15	5
4	20	5
5	20	6
6	30	6

PCERT, Pictorial Children's Effort Rating Table.

Supplementary Material 2. Youth and parent post-intervention questionnaires**Youth Questionnaire**Overall Satisfaction

Please answer the following questions about your overall experience with this program.

1. How would you rate the quality of the program that you completed?
 4 Excellent 3 Good 2 Fair 1 Poor

2. Did you get the kind of help you wanted in this program?
 1 No, definitely not 2 no, not really
 3 yes, generally 4 yes, definitely

3. To what extent has this program met your needs?
 4 Almost all of my needs have been met 3 most of my needs have been met
 2 only a few of my needs have been met 1 none of my needs have been met

4. If a friend or relative were to sustain a concussion, would you recommend this program to them?
 1 No definitely not 2 No, I don't think so
 3 Yes, I think so 4 Yes, definitely

5. How satisfied are you with the amount of help you received in this program?
 1 Quite dissatisfied 2 Indifferent or mildly dissatisfied
 3 mostly satisfied 4 very satisfied

6. Has participating in this program helped you to deal more effectively with concussion?

- ⁴ Yes, it helped a great deal ³ Yes, it helped somewhat
² No, it really did not help ¹ No, it seemed to make things worse

7. In an overall, general sense, how satisfied are you with this program?

- ⁴ Very satisfied ³ Mostly satisfied
² Indifferent or mildly dissatisfied ¹ Quite dissatisfied

8. If you were to seek help again for a concussion, would you come back to this program if it was available?

- ¹ No definitely not ² no, I don't think so
³ Yes, I think so ⁴ Yes, definitely

The Rehabilitation Program

Please answer the following questions your experience with the rehabilitation program that you completed.

9. I enjoyed the exercise program.

- Strongly Agree Agree Disagree Strongly Disagree

10. I think the exercise program was:

- Very Helpful Somewhat Helpful Somewhat Unhelpful
 Very Unhelpful

11. The exercise intensity manual helped me understand how the exercise should feel.

- Strongly Agree Agree Disagree Strongly Disagree

12. I was able to maintain the proper exercise intensity prescribed by my research therapist.

- Strongly Agree Agree Disagree Strongly Disagree

13. How often were you able to complete the home exercise program?

Always Sometimes Rarely Never

I was able to complete _____ / 18 days of my home exercise program.

14. I think the education and support that I received was:

Very Helpful Somewhat Helpful Somewhat Unhelpful

Very Unhelpful

15. Which aspect of the rehabilitation program do you think was most helpful?

Aerobic exercise Coordination exercise Education and Support

16. Which aspect of the rehabilitation program do you think was least helpful?

Aerobic exercise Coordination exercise Education and Support

17. I received enough support from the research therapist in order to complete the exercise program effectively.

Strongly Agree Agree Disagree Strongly Disagree

18. More frequent appointments with the research therapist would have helped me complete the exercise program more effectively.

Strongly Agree Agree Disagree Strongly Disagree

Telerehabilitation Platform

Please answer the following questions about your experience with receiving care remotely via telerehabilitation.

19. The videoconferencing system was simple and easy to use.

Agree 1 2 3 4 5 6 7 Disagree

20. The way I interacted with the videoconferencing was pleasant.

Agree 1 2 3 4 5 6 7 Disagree

21. I could easily communicate with the research therapist using the videoconferencing system.

Agree 1 2 3 4 5 6 7 Disagree

22. Using the videoconferencing system, I was able to see the research therapist as well as if we had met in person.

Agree 1 2 3 4 5 6 7 Disagree

23. I experienced technical problems connecting to the videoconferencing system.

Agree 1 2 3 4 5 6 7 Disagree

24. Technical issues decreased my ability to complete the program effectively.

Agree 1 2 3 4 5 6 7 Disagree

25. Whenever there was a technology issue it was resolved quickly.

Agree 1 2 3 4 5 6 7 Disagree

26. I felt I was able to express myself effectively during videoconferencing appointments.

Agree 1 2 3 4 5 6 7 Disagree

27. I felt comfortable communicating with the research therapist during videoconferencing appointments.

Agree 1 2 3 4 5 6 7 Disagree

28. Videoconferencing appointments were an appropriate method for delivering this rehabilitation program.

Agree ¹ ² ³ ⁴ ⁵ ⁶ ⁷ Disagree

29. This telerehabilitation program improved my access to concussion services.

Agree ¹ ² ³ ⁴ ⁵ ⁶ ⁷ Disagree

30. This telerehabilitation program saved me time travelling to a concussion specialist clinic.

Agree ¹ ² ³ ⁴ ⁵ ⁶ ⁷ Disagree

We appreciate your feedback – Thank you!

Parent Questionnaire

Overall Satisfaction

Please answer the following questions about your overall experience with this telerehabilitation program.

1. How would you rate the quality of the program that your child completed?
⁴ Excellent ³ Good ² Fair ¹ Poor

2. Did your child get the kind of help you wanted from this program?
¹ No, definitely not ² No, not really
³ Yes, generally ⁴ Yes, definitely

3. To what extent has the program met your child's needs?
⁴ Almost all of my needs have been met ³ Most of my needs have been met
² Only a few of my needs have been met ¹ None of my needs have been met

4. If a friend or relative's child were to sustain a concussion, would you recommend this program to them?
¹ No definitely not ² No, I don't think so
³ Yes, I think so ⁴ Yes, definitely

5. How satisfied are you with the amount of help your child received in this program?
¹ Quite dissatisfied ² Indifferent or mildly dissatisfied
³ Mostly satisfied ⁴ Very satisfied

6. Has this program has helped your child to deal more effectively with concussion?

⁴ Yes, it helped a great deal ³ yes, it helped somewhat

² No, it really did not help ¹ No, it seemed to make things worse

7. In an overall, general sense, how satisfied are you with the program that your child completed?

⁴ Very satisfied ³ mostly satisfied

² Indifferent or mildly dissatisfied ¹ Quite dissatisfied

8. If you were to seek help again for a concussion, would you come back to this program if it was available?

¹ No, definitely not ² No, I don't think so

³ Yes, I think so ⁴ Yes, definitely

The Rehabilitation Program

Please answer the following questions about your impressions of the rehabilitation program that your child completed.

9. My child enjoyed the exercise program.

Strongly Agree Agree Disagree Strongly Disagree

I don't know

10. I think the exercise program was _____ for my child:

Very Helpful Somewhat Helpful Somewhat Unhelpful

Very Unhelpful

11. The exercise intensity manual helped my child understand how the exercise should feel.

Strongly Agree Agree Disagree Strongly Disagree

I don't know

12. My child was able to maintain the proper exercise intensity prescribed by the research therapist.

Strongly Agree Agree Disagree Strongly Disagree

I don't know

13. How often was your child able to complete the home exercise program?

Always Sometimes Rarely Never I don't know

14. I think the education and support my child received was:

Very Helpful Somewhat Helpful Somewhat Unhelpful

Very Unhelpful I don't know

15. Which aspect of the rehabilitation program do you think was most helpful for your child?

Aerobic exercise Coordination exercise Education and support

16. Which aspect of the rehabilitation program do you think was least helpful for your child?

Aerobic exercise Coordination exercise Education and support

17. I think my child received enough support from the research therapist in order to complete the exercise program effectively.

Strongly Agree Agree Disagree Strongly Disagree

18. I think more frequent meetings with the research therapist would have helped my child complete the exercise program more effectively.

Strongly Agree Agree Disagree Strongly Disagree

Telerehabilitation platform

Please answer the following questions about your impressions of receiving care remotely via telerehabilitation.

19. The videoconferencing system was simple and easy for my child to use.

Agree ¹ ² ³ ⁴ ⁵ ⁶ ⁷ Disagree

20. The way my child interacted with the videoconferencing system was pleasant.

Agree ¹ ² ³ ⁴ ⁵ ⁶ ⁷ Disagree

21. My child could easily communicate with the research therapist using the videoconferencing system.

Agree ¹ ² ³ ⁴ ⁵ ⁶ ⁷ Disagree

22. Using the videoconferencing system, my child was able to see the research therapist as well as if they had met in person.

Agree ¹ ² ³ ⁴ ⁵ ⁶ ⁷ Disagree

23. My child experienced technical problems connecting to the videoconferencing system.

Agree ¹ ² ³ ⁴ ⁵ ⁶ ⁷ Disagree

24. Technical issues decreased my child's ability to effectively complete the program.

Agree ¹ ² ³ ⁴ ⁵ ⁶ ⁷ Disagree

25. Whenever there was a technology issue it was resolved quickly.

Agree ¹ ² ³ ⁴ ⁵ ⁶ ⁷ Disagree

26. My child was able to express him/herself effectively during videoconferencing appointments.

Agree 1 2 3 4 5 6 7 Disagree

27. I felt comfortable having my child communicate with the research therapist using videoconferencing appointments.

Agree 1 2 3 4 5 6 7 Disagree

28. Videoconferencing appointments were an appropriate method for delivering this rehabilitation program.

Agree 1 2 3 4 5 6 7 Disagree

29. This telerehabilitation program improved my ability to access concussion services for my child.

Agree 1 2 3 4 5 6 7 Disagree

30. This telerehabilitation program saved my family time travelling to a concussion specialist clinic.

Agree 1 2 3 4 5 6 7 Disagree

We appreciate your feedback – Thank you!