

## Introduction

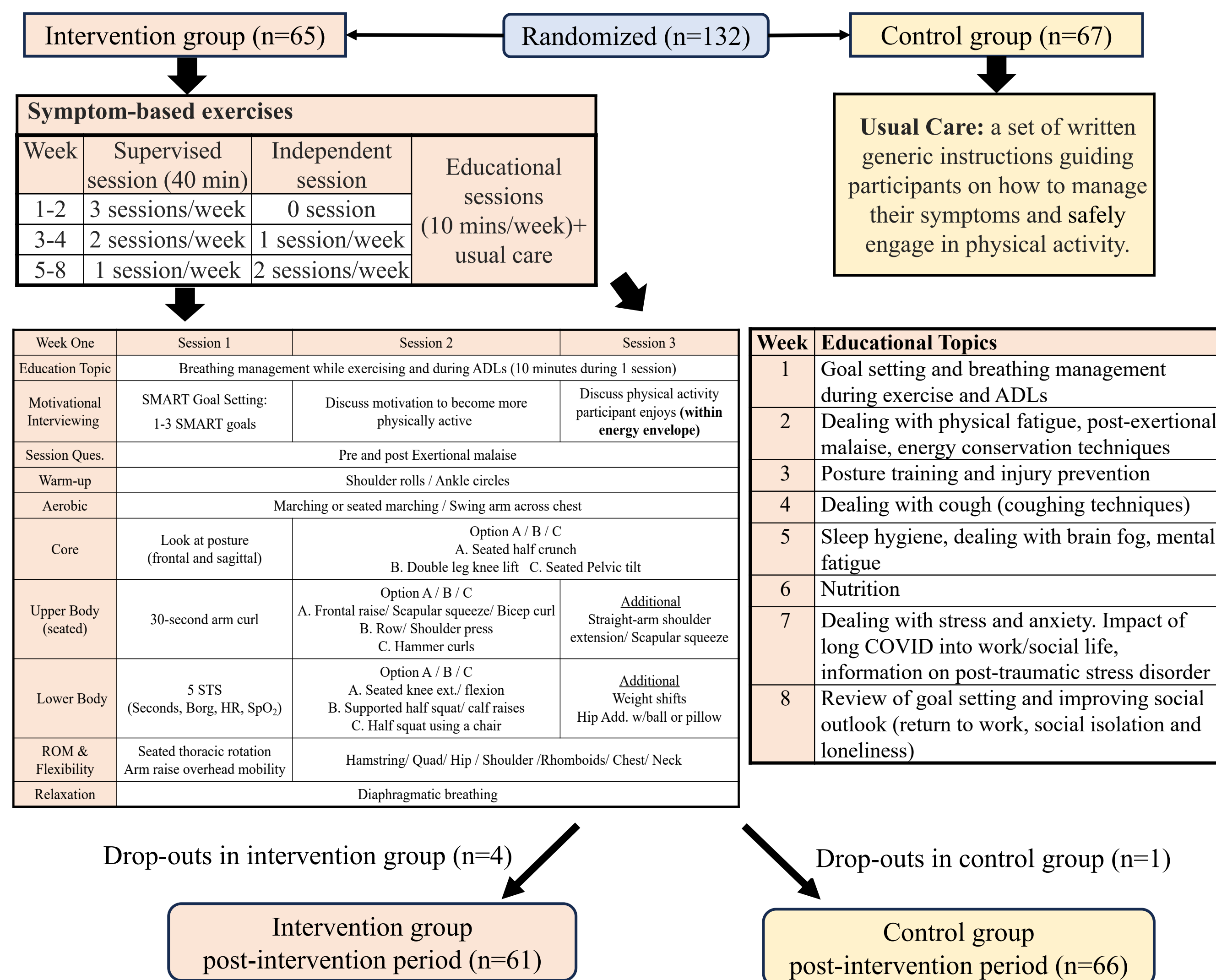
- Following a COVID-19 infection, numerous patients have reported over 200 persistent and disabling symptoms such as mobility issues, fatigue, brain fog, etc.
- There is a paucity of randomized controlled trials (RCT) focusing on rehabilitation for individuals with long COVID.
- Our team has completed an RCT on virtual physical rehabilitation in individuals living with long COVID. Considering the wide array of symptoms in these individuals and their varying paths to recovery, there has been ongoing debate regarding the significance of exercise in managing this condition. Thus, comprehending participants' satisfaction and experience with the program is crucial.

### Objectives:

To explore the satisfaction and experience of individuals living with long COVID with an 8-week virtual rehabilitation program consisting of exercise and education components.

## Methods

- Data extracted from a prospective, multicentered, assessor-blind RCT which includes people living with long COVID in the provinces of Quebec and Ontario. After screening 132 individuals were considered in the RCT.



### SATISFACTION SURVEY

After the 8-week program, participants in the intervention group received a Remote electronic data capture (REDCap) link for a satisfaction survey containing 15 questions assessing the program's importance, their satisfaction, experience on a 5-point Likert scale, along with an open comments section.

## Results

Among the 61 individuals who completed the rehabilitation program, 57 participants filled the satisfaction survey.

Long-COVID satisfaction survey	
Response Rate (n)	93.4 % (57)
Sex	
Male (n)	30% (17)
Female (n)	70% (40)

SATISFACTION SURVEY					
Questions	Response rate % (n)				
Offering this rehabilitation program for people living with COVID-19 is a:	Bad idea 5 % (3)	2% (1)	Neutral 7% (4)	28% (16)	Good idea 58% (33)
The rehabilitation program for people living with COVID-19 was: (level of challenge/ skill/ effort)	Too easy 2% (1)	5% (3)	Just the right difficulty 72% (41)	16% (9)	Too difficult 5 % (3)
I found the rehabilitation program for people living with COVID-19 to be: (interconnectedness/ multiplicity)	Too simple 0%	9% (5)	Just the right difficulty 79% (45)	12% (7)	Too complex 0%
	Useless 5 % (3)	2% (1)	Neutral 16% (9)	28% (16)	Helpful 49% (28)
	Annoying 2% (1)	2% (1)	Neutral 16% (9)	26% (5)	Pleasant 54% (31)

Questions	Response rate % (n)				
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
My family and/or friends liked that I participated in the rehabilitation program.	56% (32)	23% (13)	17% (10)	2% (1)	2% (1)
The exercises provided in the program were relevant to me.	49% (28)	33% (19)	9% (5)	9% (5)	0
I see the need for this virtual rehabilitation program in my life.	51% (29)	31% (18)	9% (5)	4% (2)	5% (3)
I think I benefited from this exercise program.	49% (28)	33% (19)	10% (6)	4% (2)	4% (2)
I felt confident to perform all exercises without assistance.	61% (35)	21% (12)	7% (4)	9% (5)	2% (1)
It was easy to learn how to perform the exercises.	61% (35)	30% (17)	4% (2)	5% (3)	0
It was easy to connect with the kinesiologists via Zoom.	79% (45)	16% (9)	2% (1)	3% (2)	0
I wouldn't have been able to participate in the program if I didn't have a family member helping me during the sessions.	2% (1)	0	82% (47)*	2% (1)	14% (8)
I would recommend this virtual rehabilitation program to others.	58% (33)	25% (14)	12% (7)	0	5% (3)
The length of the program was good.	33% (9)	37% (21)	12% (7)	9% (5)	9% (5)
The number of exercises was good.	40% (23)	39% (22)	11% (6)	7% (4)	3% (2)
I intend to continue to do the exercises even after the program has finished.	42% (24)	39% (22)	11% (6)	5% (3)	3% (2)

\*No family member was needed to help participants

Positive comments		
About the program	Kinesiologist	'extremely helpful, dynamic, versatile, and cheerful kinesiologist' 'kinesiologist took the time to explain the benefit of each exercise for my situation'
	Exercises	'exercises that challenged me without pushing me beyond my limits' 'The program made me feel alive again'
	Program setting	'my interventions with the Kin greatly helped me out of a PEM and worked me back to an appropriate workout in intensity and duration' 'I think it's a good idea to take us through a reconditioning program that's ADAPTED to our personal condition.'
Impact on Health		'objectify my abilities a little more and to feel less guilty about what I wasn't managing to do, to set myself more realistic goals and to have more self-confidence by feeling supported' 'Over the course of the program, I felt a weekly improvement.' 'I've even been able to go on light mountain hikes again.... my exercise periods have become energizing moments that provide a better balance with the other energy-consuming elements of my daily life.'
	Education	'understanding of how to integrate activities gradually and dose them very gently, and of the importance of taking into account all the activities and demands of daily life in order to manage my energy.' 'Small attainable goals, knowing the signs of when to stop pushing and learning to help my breathing.'
Recommend to others		'I'd highly recommend this program for people with a long Covid'

- Eight individuals (14%) commented negatively on how the program affected their symptoms. Four respondents (7%) found the program not suitable.

Negative comments	
Kinesiologist	'The kinesiologist was very difficult to understand and used a lot of English words'
Exercises	'After most sessions I was unable to be productive later in the day.' 'My independent sessions for the most part gave me PEMs which I need to avoid.' 'Physical activity is not recommended for people with long COVID'
	'There was a non-negligible cognitive load to adding this program to my weekly routine.'
Program setting	'It would have been easier if the 8-week study would have allowed for periods of recovery where appointments would be scheduled, which would have allowed to adapt the frequency of the appointments based on the response of the participant'
	'There was a non-negligible cognitive load to adding this program to my weekly routine.'
	'I wasn't able to recover from the soreness and pains in between the appointments'
Impact on Health	'Now I'm back to running and long walks. But cognitively I still have enormous difficulty.'

### Suggestions given by the participants:

- Longer program to allow for extended recovery periods
- Multidisciplinary approach

## Conclusion

Most of the participants were highly satisfied with the virtual rehabilitation program. Further adaptations are required for those facing symptom exacerbation post-sessions.

## Partners



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