Strategies for Fostering Quality Participation Among Persons with Disabilities in Community-Based Exercise Programs

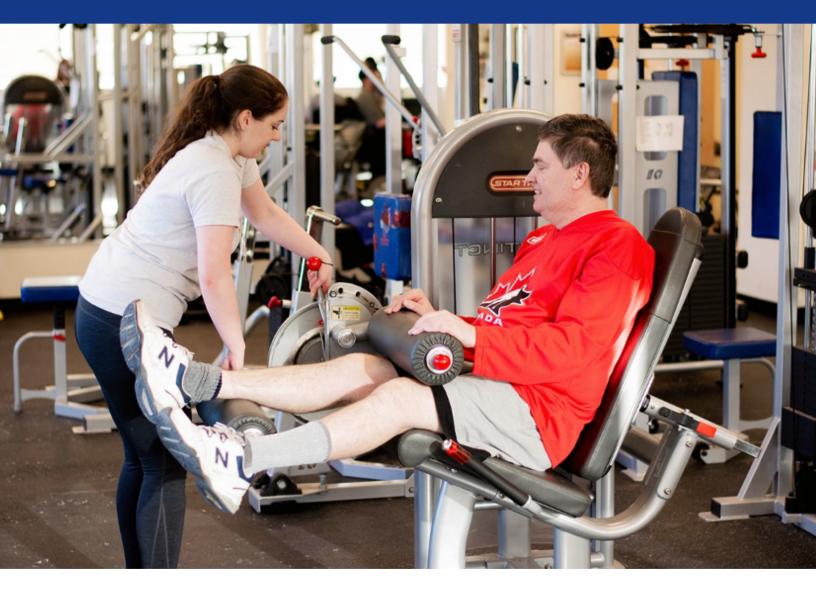




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PREFACE OVERVIEW

Strategies for Fostering Quality Participation Among Persons with Disabilities in Community-Based Exercise Programs is a tool that guides program providers through the content of a strategy matrix that can be used "on-the-ground" in community-based exercise programs to help foster quality participation among persons with disabilities. This tool can be used in the development of new exercise to assess how programs, existing programming may be altered to promote quality experiences, and to train program staff or volunteers.

This tool is based on findings from an accompanying scientific paper: Tomasone JR, Man KE, Sartor JD, Andrusko KE, Martin Ginis KA, & Latimer-Cheung AE, 'On-the ground' strategy matrix for fostering quality participation experiences among persons with disabilities in community-based exercise programs, Psychology of Sport and Exercise, 2023,

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WHY WE MADE THIS TOOL

Community-based exercise programs...

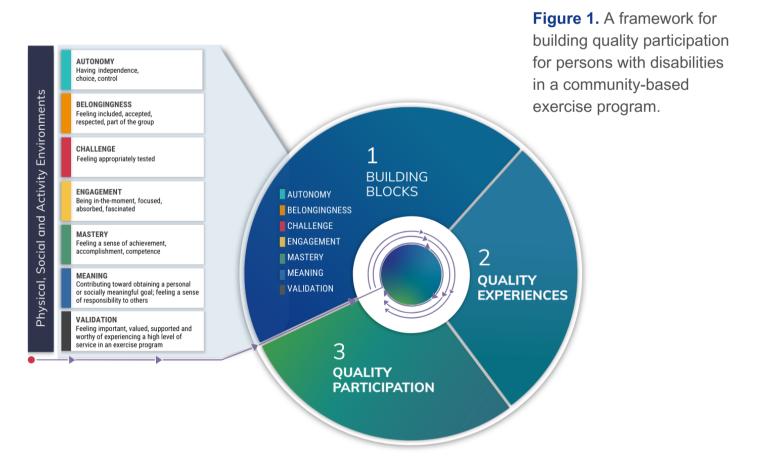
Community-based exercise programs typically provide community-dwelling individuals with an opportunity to engage in leisure-focused (i.e., rather than rehabilitation-focused) physical activity. Programs for persons with disabilities include accessible exercise equipment and knowledgeable exercise professionals, both of which contribute to developing exercise routines tailored to the needs of each participant. Community-based exercise programs are a means to enhance full and effective participation in physical activity among persons with disabilities.

Full and effective participation...

Full and effective participation is possible when a person with a disability is participating to the extent that they choose, and that they have a positive subjective experience when participating. That is, both quantity and quality of participation must be considered.

Quality Participation...

Quality participation can be conceptualized as one's subjective participatory experience and is the result of repeated and sustained quality experiences. Quality participation is achieved when individuals with a disability view their involvement in exercise as satisfying and enjoyable, and experience outcomes that they consider important.



Seven building blocks contribute to a positive quality experience for persons with disabilities in community-based exercise programs:

AUTONOMY	ENGAGEMENT
Having independence,	Being in-the-moment, focused,
choice, control	absorbed, fascinated
BELONGINGNESS	MASTERY
Feeling included, accepted,	Feeling a sense of achievement,
respected, part of the group	accomplishment, competence
CHALLENGE Feeling appropriately tested	MEANING Contributing toward obtaining a personal or socially meaningful goal; feeling a sense of responsibility to others
VALIDATION Feeling important, valued, supported and worthy of experiencing a high level of service in an exercise program	Validation is a new building block that was added to the quality participation framework in the exercise context.

The environment within which the building blocks are fostered matters too. The three conditions necessary for fostering quality participation are:

PHYSICAL ENVIRONMENT Physical and structural components of the immediate and surrounding setting

ACTIVITY ENVIRONMENT Nature of the activity itself

SOCIAL ENVIRONMENT

Relationships formed within the setting, as well as societal attitudes towards the activity

Quality experience is individual and dynamic:

- Participants will place different values on the building blocks and conditions; the way one participant experiences quality may not be exactly the same as another participant.
- The value participants place on each building block and condition may change over time. For example, a sense of belonging may be important at the start of an individual's participation, but challenge and meaning may be more important later on in their participation.
- How one participant experiences the building blocks and conditions may be different from how another participant experiences the building blocks and conditions.

Different <u>strategies</u> can be used to foster quality experience among persons with disability in community-based exercise programs. Some key considerations when selecting strategies to foster quality experience include:

- Utilize strategies that align with your program's priorities and participants' needs. It is critical to
 consider your specific program's priorities and ask your participants why they are participating.
 Understanding your program's and participants' unique needs will help you identify which building
 blocks and conditions you should focus on and, ultimately, help you to prioritize your strategies.
- Consider that one strategy could influence numerous building blocks and conditions of quality participation, as many strategies target multiple building blocks and conditions of quality participation.
- Recognize that it may not be possible or necessary to use all the strategies; however, implementing more strategies will likely increase the potential for creating a quality experience.

HOW WE MADE THIS TOOL

This tool is the product of a multi-step research process (Tomasone et al., 2023). First, we surveyed and talked to providers from community-based exercise programs to identify strategies used to foster quality experience in their programs. Next, experts from the fields of adapted physical activity, health behaviour change, disability, and exercise programming assessed the strategies and offered their input on the quality experience building block and conditions that each strategy targets. We then organized the strategies, building blocks, and conditions into a matrix. Finally, we sought feedback from providers to understand how a tool would be most useful "on-the-ground" in community-based exercise programs. We designed the tool based on providers' input.

WHAT IS IN THE TOOL?

This tool includes strategies for fostering quality exercise experiences in community-based exercise programs for persons with disabilities. In this tool, the strategies are presented in three different formats that may have unique utility for readers:

Strategies with Expert Agreement

"Strategies with Expert Agreement" is a table that presents a selection of the strategies for each building block and condition of quality participation, all of which reflect agreement by the engaged experts. For each quality participation building block/condition and selected strategies, there is an example of a community-based exercise program that excels at fostering that building block/condition.

High-Yield Strategies

"High-Yield Strategies" is a table that presents 14 strategies that target 4 or more building blocks and conditions of quality participation. Thus, these strategies are high-yield in that fostering them targets many building blocks and conditions of quality participation.

Full Strategy Matrix

The "Full Strategy Matrix" that was synthesized in the accompanying scientific paper for this tool (Tomasone et al., 2023). This matrix maps each strategy onto the quality participation building blocks and conditions and indicates experts' level of agreement with the mapping. The matrix also provides "on-the-ground" examples of how each strategy can be fostered in community-based exercise programs.

HOW TO USE THIS TOOL

Providers from community-based exercise programs suggest that you can use this tool in several ways:

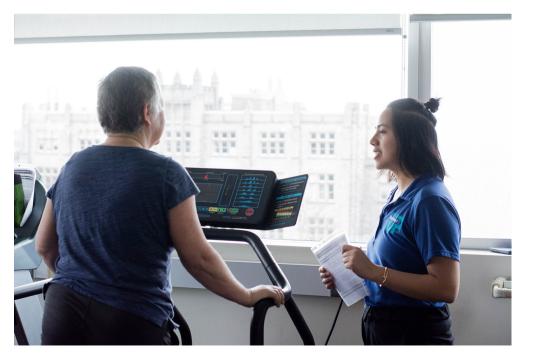
- To develop new exercise programs that foster quality participation.
- To assess the feasibility of implementing a strategy within your program's context before tailoring the strategy to your program.
- To identify which quality participation building blocks and conditions are primarily targeted by the strategies currently implemented in your program.
- To assess where and how existing programming may be altered to further promote quality experiences.
- To train new program staff or volunteers. Specifically, the strategies can be used to offer providers guidance about how to foster positive exercise experiences for persons with disability, and to justify why certain features of the program exist.

Strategies with Expert Agreement

The following table presents a selection of strategies for each building block and condition of quality participation, all of which reflect agreement by the experts engaged in, and programs who contributed to, our research study (Tomasone et al., 2023). For each quality participation building block, condition, and selected strategies, there is an example of a community-based exercise program that excels at fostering the given building block or condition. Note that the details about the community-based exercise programs featured in this tool were accurate prior to the COVID-19 pandemic. While the specifics of program operations may have changed due to COVID-19, the strategies are still relevant for creating quality experiences in programs as we navigate pandemic recovery.

For each building block and condition of quality participation, the table contains:

Strategies and Examples	Other Strategies and Examples	Featured Program
Presented strategies reflect high level of agreement and high program use.	Presented strategies reflect moderate-to-high levels of agreement and moderate-to-high program use.	Program that fosters the given construct. For more information about the featured programs, see this tool's Appendix.





Autonomy Having independence, choice, control

Strategies and Examples

1. Invite participants to give their input on the development of their exercise routine

Example: Allow participants to have input in determining the frequency, intensity, duration, and type of exercise; Participants have the option to select from a variety of structured physical activity options

2. Allow participants to determine their own exercise goals in collaboration with a qualified trainer

Example: In a preliminary meeting, the participant identifies their personal goals and the trainer provides feedback, subsequently helping to build a program to achieve these goals

3. Allow participants to set their own goals for changes they would like to see in their daily lives

Example: When performing exercises, try to relate movements to functional activities so participants can identify goals for their daily lives

Other Strategies and Examples

4. Transfer physical activity knowledge pertaining to exercise methods and skills, so that participants can exercise independently outside of the exercise program

Example: Provide online links and videos for at home workouts; Provide participants with their programs so they can perform them individually

5. Provide participants with the option to fundraise for their own membership fees

Example: Participants collect pledges for the program's special events in order to subsidize their own participation fees

6. Provide continued exercise opportunities to participants after they have graduated from or completed the program

Example: Offer another exercise program that helps transition participants to mainstream gyms

7. Provide opportunities for participants to engage in physical activity outside of the program session

Example: Include a voluntary option to drop-in to the gym outside of program session time

8. Support participants' mastery perceptions by demonstrating an understanding and acceptance of all participant abilities

Example: Respect participants' personal preferences and decisions for how they want to exercise

Featured Program

Power Cord St. Catharine's. ON

Program Description

Power Cord offers wheelchair accessible exercise programming to individuals with spinal cord injury, multiple sclerosis, and lower limb amputations. The goal of Power Cord is to improve physical fitness, functional independence, and psychosocial well-being.

Program Structure

Power Cord offers individual sessions in an open gym environment. Participants choose which exercises to focus on; common types of training include aerobic exercise, resistance exercise, circuit training, locomotor training, functional electrical stimulation, hand cycle exercise, stretching, balance, tilt table, and standing frame training.

How Power Cord fosters Autonomy

At Power Cord, participants are involved in the goal setting process and provide input into their exercise programs based on their goals. Since participants can choose which exercise to focus on during their session, they have control over the duration and amount of exercise they participate in.

Belongingness Feeling included, accepted, respected, part of the group

Strategies and Examples

1. Engage in communication with the program participants outside of the program hours/sessions

Example: Circulate monthly newsletters about the program community, upcoming events, etc.

2. Provide opportunities for participants to socialize

Example: Provide opportunities for participant socialization during exercises, between exercises, and outside of program times

3. Allow participants to continually re-enroll in the program, after they have graduated from or completed the program.

Example: Structure the program to be on-going; do not limit enrolment to only new participants

Other Strategies and Examples

4. Group together participants with similar abilities and needs (for group-based exercise program)

Example: For circuit-based exercise, divide participants into groups based on similar mobility impairments, so the exercises can be tailored and adapted to the participants' abilities

5. Encourage participants to provide peer-based motivation for one another.

Example: Volunteer provides positive reinforcement when participants motivate one another

6. Include activities where participants may work together (for group-based exercise program)

Example: Partner ball tosses, battle ropes, etc.

7. Orient the participant when they first join the program

Example: Introduce them to program leaders, staff members, and volunteers, as well as any other individuals they will be working with directly

8. Create opportunities to get to know the participants beyond their identity in the program as an exerciser

Example: Ask participants about their lifestyle and interests; Host social sessions after weekly exercise sessions to get to know participants

9. Have program characteristics that promote acceptance and inclusion from the general public

Example: Advertise the facility as an all-inclusive, safe space for persons with and without mobility impairment

Featured Program

Walk it Off Recovery Newmarket. ON

Program Description

Walk it Off Recovery provides exercise-based recovery, education, and support to those who are living with spinal cord injury, neurological dysfunction, stroke, acquired brain injury, and/or limited mobility. The goal of Walk It Off Recovery is to improve the quality of life of participants and increase independence by maximizing recovery.

Program Structure

At Walk it Off Recovery, one-on-one sessions are offered with a physiotherapist or kinesiologist. Sessions are 1 hour or 3 hours and often begin with Nervous System Activation Technique. Exercises typically focus on strength and conditioning through repetitive load-bearing exercise for the body, and passive range of motion exercises.

How Walk it Off Recovery fosters Belongingness

Working one-on-one with a staff member/volunteer provides participants with the opportunity for socialization. At Walk it Off Recovery, participants can also engage in and develop camaraderie with other members in between exercises. Walk it Off Recovery provides even further opportunity to develop camaraderie at social events outside of exercise sessions.

Challenge Feeling appropriately tested

Strategies and Examples

1. Create individualized exercise programs to suit the current needs of the participant

Example: Integrate add-ons or variations to exercises to increase difficulty at a participant's discretion (for group-based exercise program)

2. Intermittently conduct a formal reassessment and update a participant's exercise program

Example: Create and monitor a timeline for all participants to be reassessed every 6 months

3. Prescribe exercises that push participants to their comfortable limit

Example: Be willing to respectfully challenge the participant to improve, instead of being complacent about improvements regarding exercise

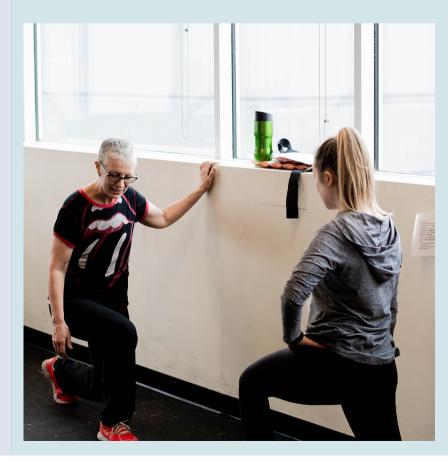
Other Strategies and Examples

4. Create voluntary friendly competition between participants on a voluntary basis

Example: Plan monthly 'challenges' such as throwing competitions, obstacle courses, etc.; Recognize individuals who succeed in program competitions

5. Provide cues or reminders to ensure that participants are working hard to complete their exercises

Example: Providers count participant's repetitions out loud; visually indicates movement start and end points



Featured Program

Neuro Fit Kitchener and Cambridge, ON

Program Description

Neuro Fit is a customized exercise program for individuals who have neurological conditions such as multiple sclerosis, Parkinson's disease, stroke, spinal cord injury, and/or limited mobility. This program is supported by the YMCA and seeks to strengthen the continuum of care from health care settings to the community.

Program Structure

The program supervisor (R.Kin) and instructors create exercise routines tailored to the individual and their goals. Neuro Fit focuses on strength, balance, and mobility through a circuit-based program. Participants attend 2 workout sessions per week.

How Neuro Fit fosters Challenge:

Neuro Fit creates individualized exercise programs tailored to meet the physical needs of each participant. While group programming occurs during warm-up and cool-down, the participant completes their workout session independently in order to suit their current needs. Program instructors monitor participants' progress for the conduction of reassessments.

Engagement Being in-the-moment, focused, absorbed, fascinated

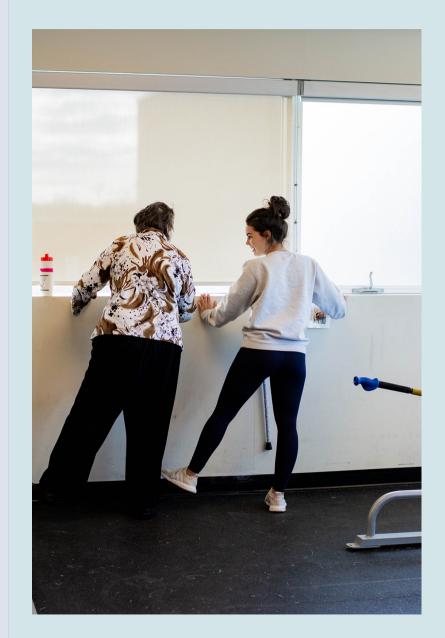
Strategies and Examples

1. Provide participants with educational opportunities relevant to physical activity

Example: Provide informal education regarding the benefits of exercise during the exercise session; Provide the opportunity for participants to learn more about the benefits of exercise specific to their condition(s)

Other Strategies and Examples

Only one strategy was agreed upon by experts to target Engagement.



Featured Program

Harmony In Action Windsor, ON

Program Description

Harmony In Action seeks to enrich the lives of adults with developmental and/or physical disabilities by providing opportunities to succeed through positive social inclusion, individual choice, independence, and rights.

Program Structure

Harmony In Action offers group-based sessions with specialized exercise equipment. The program focuses on strength and mobility and utilizes specialized exercise equipment and outdoor exercise facilities specialized for adults with disabilities.

How Harmony In Action fosters Engagement

Harmony In Action provides educational opportunities relevant to physical activity such as teaching participants about healthy eating and the effects of exercise.

Mastery Feeling a sense of achievement, accomplishment, competence

Strategies and Examples	Other Strategies and Examples	Featured Program					
1. Provide cues or reminders to ensure that	4. Gradually provide less direct support for the participant, when appropriate (for individual-based exercise program)	MacWheelers Hamilton, ON					
participants maintain proper technique when exercising	Example: As participants gain confidence and improve at their exercises, provide hands-off support or support only when it is needed	Program Description MacWheelers is an exercise program for					
Example: Count sets and repetitions with the	5. Use a stepped approach to increase the complexity of a participant's exercises	adults with spinal cord injury offered at the McMaster Physical Activity Centre of Excellence. The MacWheelers program					
participant; Place hands at the start and end points of	Example: Start with a basic, simplistic exercise and slowly introduce components to add difficulty such as weights, therabands, added movements, etc.	provides an inclusive and accessible opportunity for adults living with spinal					
movements, etc.	6. Record or log exercises performed	cord injury to engage in regular community exercise.					
2. Provide constructive feedback to participants	Example: Have participants or staff members/ volunteers write down the amount of time, weight, sets and repetitions of exercises that are completed	Program Structure MacWheelers offers both individual a					
Example: Correct a participant's technique if they are performing the exercise incorrectly 3. Use verbal persuasion to increase a participant's confidence	 7. Demonstrate the proper technique for exercises Example: Model the exercise before instructing the participants to follow; Allow participants to observe other members completing a task 8. Show participants their progressions between assessments using quantitative analysis Example: Use machines that can display/ show percentages of improvement in range of motion, weight, etc. to participants 	group sessions, and the program focuses on helping participants increase strength and aerobic capacity. Registered physiotherapists, kinesiologists, and exercise physiologists work together with the participant to create individualized exercise programs based on the participant's goals.					
participant's confidence in their ability to perform the activity Example: Provide the participant with feedback on their performance, and emphasize what they're doing correctly	 9. Have health professionals (physiotherapist, trainer, etc.) provide advice and guidance to participants during the session Example: A physiotherapist is on site, trains staff members/ volunteers, or works directly with a participant at each session 10. Provide clear instructions with adequate detail for performing exercises Example: Use straight forward language, demonstrate exercises, and identify range of motion of movements before the participant tries the exercise 	How MacWheelers fosters Mastery At MacWheelers, constructive feedback and instruction on how to perform the exercise is provided to participants, and exercise changes, improvements, and physical indicators of health are documented as a means for the participant to recognize their own improvement.					

Strategies and Examples

1. Encourage participant selfreflection, and examination of personal goals and how exercise is making them feel

Example: Have participants fill out a short journal entry each session

2. Encourage participants to voluntarily get involved in physical activity research studies

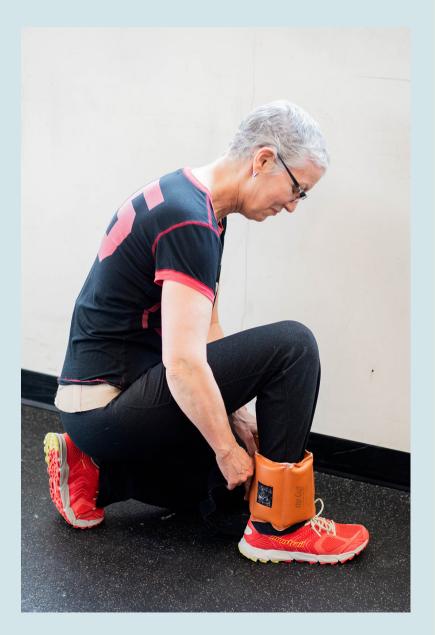
Example: If the program has received flyers or information about research studies, the staff members/ volunteers will mention them to participants and post the information in the facility

3. Post research findings of sitespecific studies in the facility

Example: Communicate study results through word of mouth of staff members/ volunteers; Put up posters of study results in the facility

Other Strategies and Examples

Only three strategies were agreed upon by experts to target Meaning.



Featured Program

ICAN / CERD Sudbury, ON

Program Description

The Independence Centre and Network (ICAN) is a program that aims to help persons with physical disabilities live independently and inclusively in the community through individualized support and rehabilitation services. ICAN serves individuals with spinal cord injury, stroke, multiple sclerosis, cerebral palsy, and/or limited mobility.

Program Structure

Program sessions are one-on-one and 45 minutes. Physiotherapists and occupational therapists perform assessments on the abilities of the participants and identity exercises that are needed to improve mobility and function. Active and passive range of motion is emphasized at ICAN.

How ICAN fosters Meaning

ICAN encourages self-identification and selfreflection of the physical benefits of exercise and provides formal opportunities for participants to learn about the benefits of their behaviour through a discussion-based format.

Strategies and Examples

1. Follow up with participants after they graduate out of the program

Example: Follow up with participants at 3 months post program completion via a phone call or personal meeting

2. Set up feedback opportunities on an ongoing basis for participants to offer personal suggestions and input on the program

Example: Use a comment box so participants can voice their opinions; Create a participant representative role on the organizing board

3. Provide adequate training to staff members/ volunteers to ensure a high level of service in the program

Example: Ensure that staff members/ volunteers have specific training in physical activity for the population

Other Strategies and Examples

Only three strategies were agreed upon by experts to target Validation.



Featured Program

Revved Up Kingston, ON

Program Description

Revved Up provides an accessible place for persons with physical and developmental disabilities to exercise and enhance their quality of life.

Program Structure

Program sessions are 1 hour in length and are offered twice weekly on an individual basis. Exercises focus on strength, balance, and mobility with cardio training and strength training.

How Revved Up fosters Validation

Revved Up strives to provide a high-level of service in the program by ensuring that volunteers undergo extensive training; this includes online modules with a required quiz and in-person training. Furthermore, Revved Up follows up with graduated participants by allowing them to continually re-enroll in the program.

Physical Environment Physical and structural components of the immediate and surrounding setting

membership subsidies

Physical Environment	Physical and structural components of the immediate and surrour	nding setting
Strategies and Examples	Other Strategies and Examples	Featured Program
1. Offer the program out of an inclusive and safe facility such as a community centre	4. Provide access to clean drinking water for program participants Example: Have an accessible water fountain inside the gym	TIME at the Abilities Centre Whitby, ON
or private facility Example: Ensure the space has accessible doorways and elevators, or ramps; that the equipment is accessible and set up to allow for the use of mobility aids	 5. Have accessible washrooms on site Example: The stalls have enough room for a wheelchair and service dog (in some cases both), as well as handles near the toilet. Accessible showers are also recommended 6. Ensure that the exercise setting is reserved during each session for program members only 	Program Description The Together in Movement and Exercise (TIME) program is an evidence-based and task-related exercise program that seeks to enhance the quality of life and citizenship for people of all ages and abilities by providing inclusive programs and services of the highest quality and values. TIME serves
2. Monitor facility temperature to ensure participants are exercising in the optimal environment	 Example: Book a space in a gym or exercise facility that can only be accessed with membership to the program 7. Acquire intuitive, easy-to-use exercise equipment 	populations with neurological conditions, those who are coping with the effects of aging, and those who experience weakness after an operation or extended hospital stay.
Example: Always make sure that the facility temperature is the same, and check it around 30 minutes prior to participants arriving	Example: Use a Nu-Step machine, which guides stepping movement and is easily accessible with a swivel seat 8. Provide close parking in reserved spots for program participants	Program Structure Sessions are 1 hour and are offered in a small group exercise format. TIME focuses on weight shifting, stepping, and aerobics. The program offers exercises such as balance and core training, squatting, leg lifts,
3. Arrange equipment within space to optimize ease of movement for participants	Example: Provide parking passes to participants who drive themselves, and ensure accessible parking is on-sit or in a nearby accessible location	side steps, step ups, walking around the track, and aerobic machines. How TIME fosters Physical Environment:
Example: Adopt an open gym concept; Ensure there is enough space for movement between areas with assistive devices	 9. Limit enrolment in sessions to ensure equal access to equipment Example: Avoid accepting new participants into sessions where current participants are often waiting to use the equipment 10. Increase financial accessibility to the program 	TIME is offered out of the Abilities Centre, which is a state-of-the-art facility for providing a welcoming, positive, and energized environment for exercise. The Abilities Centre is specifically designed to be an optimal environment for exercise programming for persons with disabilities.
	Example: Create new and different payment schedules or offer	

Social Environment Relationships formed within the setting, as well as societal attitudes towards the activity

Strategies and Examples

Other Strategies and Examples

Featured Program

1. Have staff members/ volunteers provide one-on-one social support for the participants (for individualbased exercise program)

Example: Engage in conversation with the participant; Have staff members/ volunteers show interest in participants and their lives (i.e., ask about how they have been since they last came to the program)

2. Have staff members/ volunteers provide encouragement and motivation

Example: Verbal persuasion to continue with the exercise, and comments such as "You can do it!"

3. Have staff members/ volunteers float or circulate constantly

Example: Monitor participants to ensure that they are performing their exercises; Provide positive feedback to individuals who are struggling or have negative attitudes 4. Keep the same staff members/ volunteers working with the same participant during exercise sessions (for individual-based exercise program)

Example: Designate a specific volunteer to introduce the participant to the exercise facility upon entry to the program, and ensure the same volunteer/staff member is consistently working with that participant

5. Recruit staff members/ volunteers with diverse personalities

Example: Recruit volunteers of various ages, personality traits, and educational backgrounds

6. Allow past program participants to return, volunteer at the program, and act as role models to current participants

Example: Graduates come back to socialize, interact, and speak with current participants; Graduates from the program volunteer to hold discussions/ focus groups on relevant topics

7. Practice open and continuous communication with the participant

Example: Ask questions to see how the participant is doing; Have staff members/ volunteers be genuine, friendly, and warm when interacting with participants so they feel comfortable

8. Train staff members/ volunteers to be sensitive to the social, accessibility, and physical activity needs of the population participating in the program

Example: Make suggestions for participant progression, rather than dictating or pushing progression on the participant; Ask a participant if they require assistance with mobility and ambulation

Level Up Fitness Academy Toronto, ON

Program Description

Level Up Fitness Academy aims to build healthier bodies, minds, and lives by bringing fitness to adults and youth with special needs, including autism spectrum disorder, Down syndrome, brain injury, and pervasive developmental disorder.

Program Structure

Level Up Fitness Academy offers private sessions and small sessions, the latter being free of charge to the client. The program focuses on strength, weight loss, balance, and mobility. Typical exercises include strength training (with weights) and functional training (sled pulls and sandbag carry).

How Level Up Fitness Academy fosters Social Environment

Level Up Fitness Academy provides one-on-one social support during private sessions, and staff provide encouragement and motivation to participants throughout these sessions. Staff members/volunteers work with the same participant during exercise sessions to ensure continuity. Staff members/volunteers with diverse personalities are recruited to Level Up Fitness Academy.

9. Enforce a zero-tolerance rule for inappropriate behaviour

Example: Gently remind participants to minimize disruptions during group exercise; Privately speak to participants who behave inappropriately and communicate the consequences of continued behaviour

10. Create an open, honest and supportive environment where differences are accepted rather than frowned upon

Example: Inform volunteers from the beginning (their orientation session) that the welcoming atmosphere is one of the most important parts of the program

Activity Environment Nature of the activity itself

Strategies and Examples

1. Provide variation in the modality of exercise instruction, according to the needs of the participant

Example: Instructors demonstrate exercises themselves, explain the exercise verbally, physically provide start and end points for movements, help participants move their bodies with the correct form, etc.

2. Perform prescribed exercises in an alternative format, if the machine or equipment that is needed is being used

Example: Suggest using a theraband for a chest press; Rotate the order of exercises in the participant's routine to use a free machine

3. Separate a participant's exercises by providing the option for intermittent breaks

Example: Indicate in a participant's exercise routine when breaks should be taken

Other Strategies and Examples

4. Offer modifications for exercises

Example: Have extra equipment (such as different weights, therabands, bosu balls, etc.) close by for adaptations to the chosen exercise

5. Ensure that the ratio of staff members/ volunteers to participants is low

Example: Book appointments for exercise sessions for adequate support and personnel to help during a participant's attendance; for individual-based exercise: 1:1; for groupbased exercise, 1:4

Canucks Autism Network

British Columbia

Program Description

Canucks Autism Network provides year-round sports and recreation programs for individuals and families living with autism while increasing awareness and providing training in communities across British Columbia.

Program Structure

Programming occurs after school, on evenings, and on weekends. Skating, basic swimming, physical literacy, multisport programs, biking, and fitness programs are offered. For children, the program focus is on FUNdamental experiences, and for youth and young adults, the focus is on being "Active and Fit for Life."

How Canucks Autism Network fosters Activity Environment:

The Canucks Autism Network offers a widespread number of activities that can be varied according to the needs of the participant. Furthermore, participants have the option to take intermittent breaks between exercise activities. The participant-to-staff ratio at Canucks Autism Network is low (1:1).

High-Yield Strategies

The following table presents 14 strategies that target 4 or more building blocks and conditions of quality participation. Thus, these strategies are high-yield in that using them can target multiple building blocks and conditions of quality participation. Strategies are only included if the experts had High/Moderate Agreement that they fostered a given building block or condition. The condition "Physical Environment" was not targeted by any of these high-yield strategies.

Note. An more accessible version of this table is presented on page 28.

Strategy	Example	Α	В	С	Е	Μ	Ме	V	PE	SE	AE
Support participants' mastery perceptions by demonstrating an understanding and acceptance of all participant abilities	Respect participants' personal preferences and decisions for how they want to exercise	X*				x		x		x	
Include activities where participants may work together (for group-based exercise program)	Partner ball tosses, battle ropes, etc.		Х*		х					х	х
Provide opportunities for participants to socialize	Provide opportunities for participant socialization during exercises, between exercises, and outside of program times		X*		x		x			х	
Group together participants with similar abilities and needs (for group-based exercise program)	For circuit-based exercise, divide participants into groups based on similar mobility impairments, so the exercises can be tailored and adapted to the participants' abilities		X*	х						х	х
Encourage participants to provide peer-based motivation for one another	Volunteer provides positive reinforcement when participants motivate one another		X*		х		x	Х			
Create individualized exercise programs to suit the current needs of the participant	Integrate add-ons or variations to exercises to increase difficulty at a participant's discretion (for group-based exercise program)			X*		х		х			х
Provide cues or reminders to ensure that participants are working hard to complete their exercises	Providers count participant's repetitions out loud; visually indicates movement start and end points			X*	х	x				x	

*Primarily identified with indicated building block or condition, but also fosters other building blocks and/or conditions

Table continued: The following table presents 14 strategies that target 4 or more building blocks and conditions of quality participation. Thus, these strategies are high-yield in that using them can target multiple building blocks and conditions of quality participation. Strategies are only included if the experts had High/Moderate Agreement that they fostered a given building block or condition. The condition "Physical Environment" was not targeted by any of these high-yield strategies.

Strategy	Example	Α	В	С	Е	Μ	Ме	V	PE	SE	AE
Gradually provide less direct support for the participant, when appropriate (for individual-based exercise program)	As participants gain confidence and improve at their exercises, provide hands-off support or support only when it is needed	х		x		Х*					x
Have staff members/ volunteers provide encouragement and motivation	Verbal persuasion to continue with the exercise, and comments such as "You can do it!"		x		x			x		X*	
Model/ demonstrate persistence in exercise through group taught sessions, pamphlets, stories, and workshops, etc.	Invite a graduate of the program to speak about their exercise journey and the challenges they overcame while being a part of the program				x	x	x			X*	
Allow past program participants to return, volunteer at the program, and act as role models to current participants	Graduates come back to socialize, interact, and speak with current participants; Graduates from the program volunteer to hold discussions/ focus groups on relevant topics		х				x	x		X*	
Practice open and continuous communication with the participant	Ask questions to see how the participant is doing; Have staff members/ volunteers be genuine, friendly, and warm when interacting with participants so they feel comfortable		х		x			x		X*	
Encourage the staff members/ volunteers to be eager and have positive attitudes while at the program	Instruct staff members/ volunteers to be friendly and welcome each member when they enter the gym		х		x			x		X*	
Provide variation in the modality of exercise instruction, according to the needs of the participant	Instructors demonstrate exercises themselves, explain the exercise verbally, physically provide start and end points for movements, help participants move their bodies with the correct form, etc.			x	x	x					X*

*Primarily identified with indicated building block or condition, but also fosters other building blocks and/or conditions

Full Strategy Matrix

Below is the full Strategy Matrix synthesized in the accompanying scientific paper for this tool (Tomasone et al., 2023). This matrix maps each strategy onto the quality participation building blocks and conditions and indicates experts' level of agreement with the mapping. The matrix also provides "on-the-ground" examples of how each strategy can be fostered in community-based exercise programs.

Note. An accessible version of this table is available on page 32

Aspect Fostered	Strategy	Example	Aspects of Quality Participation									
			А	В	С	Е	М	Me	V	PE	SE	AE
	Invite participants to give their input on the development of their exercise routine	Allow participants to have input in determining the frequency, intensity, duration, and type of exercise; Participants have the option to select from a variety of structured physical activity options										
	Allow participants to determine their own exercise goals in collaboration with a qualified trainer	In a preliminary meeting, the participant identifies their personal goals and the trainer provides feedback, subsequently helping to build a program to achieve these goals										
	Provide participants with the option to fundraise for their own membership fees	Participants collect pledges for the program's special events in order to subsidize their own participation fees										
Autonomy	Transfer physical activity knowledge pertaining to exercise methods and skills, so that participants can exercise independently outside of the exercise program	Provide online links and videos for at home workouts; Provide participants with their programs so they can perform them individually										
Auto	*Provide continued exercise opportunities to participants after they have graduated from or completed the program	Offer another exercise program that helps transition participants to mainstream gyms										
	Provide opportunities for participant to engage in physical activity outside of the program session	Include a voluntary option to drop-in to the gym outside of program session time										
	Allow participants to set their own goals for changes they would like to see in their daily lives	When performing exercises, try to relate movements to functional activities so participants can identify goals for their daily lives										
	Support participants' mastery perceptions by demonstrating an understanding and acceptance of all participant abilities	Respect participants' personal preferences and decisions for how they want to exercise										
	Engage in communication with the program participants outside of the program hours/sessions	Circulate monthly newsletters about the program community, upcoming events, etc.										
gness	Include activities where participants may work together (for group-based exercise program)	Partner ball tosses, battle ropes, etc.										
Belongingn	Provide opportunities for participants to socialize	Provide opportunities for participant socialization during exercises, between exercises, and outside of program times										
Bei	Group together participants with similar abilities and needs (for group-based exercise program)	For circuit-based exercise, divide participants into groups based on similar mobility impairments, so the exercises can be tailored and adapted to the participants' abilities										
	Encourage participants to provide peer-based motivation for one another.	Volunteer provides positive reinforcement when participants motivate one another										

	Allow participants to continually re-enroll in the program, after they have graduated from or completed the program.	Structure the program to be on-going; do not limit enrolment to only new participants		
	Orient the participant when they first join the program	Introduce them to program leaders, staff members, and volunteers, as well as any other individuals they will be working with directly		
	Create opportunities to get to know the participants beyond their identity in the program as an exerciser	Ask participants about their lifestyle and interests; Host social sessions after weekly exercise sessions to get to know participants		
	Have program characteristics that promote acceptance and inclusion from the general public	Advertise the facility as an all-inclusive, safe space for persons with and without mobility impairment		
	Create individualized exercise programs to suit the current needs of the participant	Integrate add-ons or variations to exercises to increase difficulty at a participant's discretion (for group-based exercise program)		****
	Provide cues or reminders to ensure that participants are working hard to complete their exercises	Providers counts participant's repetitions out loud; visually indicates movement start and end points		
enge	Create voluntary friendly competition between participants on a voluntary basis.	Plan monthly 'challenges' such as throwing competitions, obstacle courses, etc.; Recognize individuals who succeed in program competitions		
Challenge	Prescribe exercises that push participants to their comfortable limit	Be willing to respectfully challenge the participant to improve, instead of being complacent about improvements regarding exercise		
	Intermittently conduct a formal reassessment and update a participant's exercise program	Create and monitor a timeline for all participants to be re- assessed every 6 months		
	**Ensure staff members/ volunteers are knowledgeable about making appropriate exercise adaptations	Recruit staff members/ volunteers who have a health sciences, exercise, and disability, etc. background; Educate staff members/ volunteers on contraindications for exercise and safety in the gym		
nent	Provide participants with educational opportunities relevant to physical activity	Provide informal education regarding the benefits of exercise during the exercise session; Provide the opportunity for participants to learn more about the benefits of exercise specific to their condition(s)		
Engagement	*Be willing to make new times and dates available for program sessions to offer variety in scheduling and accommodate participants	If a program session is full, open up a new session time to take in more participants; Offer program sessions at multiple time points in the day to accommodate different participant preferences		
	Gradually provide less direct support for the participant, when appropriate (for individual-based exercise program)	As participants gain confidence and improve at their exercises, provide hands-off support or support only when it is needed		
	Provide cues or reminders to ensure that participants maintain proper technique when exercising.	Count sets and repetitions with the participant; Place hands at the start and end points of movements, etc.		
Mastery	Encourage participants to report back their action plans and progress to staff members/ volunteers	Volunteers ask participants if they have noticed changes in their strength and endurance.		
Mas	*Use a stepped approach to increase the complexity of a participant's exercises	Start with a basic, simplistic exercise and slowly introduce components to add difficulty such as weights, therabands, added movements, etc.		
	Provide clear instructions with adequate detail for performing exercises	Use straight forward language, demonstrate exercises, and identify range of motion of movements before the participant tries the exercise		
	Demonstrate the proper technique for exercises	Model the exercise before instructing the participants to follow; Allow participants to observe other members completing a task		
	Provide constructive feedback to participants.	Correct a participant's technique if they are performing the exercise incorrectly		

	Use verbal persuasion to increase a participant's confidence in their ability to perform the activity	Provide the participant with feedback on their performance, and emphasize what they're doing correctly					
	Record or log exercises performed	Have participants or staff members/ volunteers write down the amount of time, weight, sets and repetitions of exercises that are completed					
	Show participants their progressions between assessments using quantitative analysis	Use machines that can display/ show percentages of improvement in range of motion, weight, etc. to participants					
	Have health professionals (physiotherapist, trainer, etc.) provide advice and guidance to participants during the session	A physiotherapist is on site, trains staff members/ volunteers, or works directly with a participant at each session					
	**Encourage participants to voluntarily get involved in physical activity research studies.	If the program has received flyers or information about research studies, the staff members/ volunteers will mention them to participants and post the information in the facility					
Meaning	**Post research findings of site- specific studies in the facility	Communicate study results through word of mouth of staff members/ volunteers; Put up posters of study results in the facility					
	Encourage participant self- reflection, and examination of personal goals and how exercise is making them feel	Have participants fill out a short journal entry each session					
	Follow up with participants after they graduate out of the program	Follow up with participants at 3 months post program completion via a phone call or personal meeting					
Validation	Set up feedback opportunities on an ongoing basis for participants to offer personal suggestions and input on the program	Use a comment box so participants can voice their opinions; Create a participant representative role on the organizing board					
Ň	**Provide adequate training to staff members/ volunteers to ensure a high level of service in the program	Ensure that staff members/ volunteers have specific training in physical activity for the population					
	Ensure that the exercise setting is reserved during each session for program members only	Book a space in a gym or exercise facility that can only be accessed with membership to the program					
	Incorporate the latest evidence- based training techniques and exercise machines.	Taping muscles, using electric stimulation, use of mirrors; ZeroG treadmills, functional electric stimulation bicycles					
	Offer the program out of an inclusive and safe facility such as a community centre or private facility	Ensure the space has accessible doorways and elevators, or ramps; that the equipment is accessible and set up to allow for the use of mobility aids.					
lent	Acquire intuitive, easy-to-use exercise equipment	Use a Nu-Step machine, which guides stepping movement and is easily accessible with a swivel seat					
Physical Environment	Monitor facility temperature to ensure participants are exercising in the optimal environment	Always make sure that the facility temperature is the same, and check it around 30 minutes prior to participants arriving					
Physical	Have accessible washrooms on site	The stalls have enough room for a wheelchair and service dog (in some cases both), as well as handles near the toilet. Accessible showers are also recommended					
	Provide access to clean drinking water for program participants	Have an accessible water fountain inside the gym					
	Arrange equipment within space to optimize ease of movement for participants	Adopt an open gym concept; Ensure there is enough space for movement between areas with assistive devices					
	Provide close parking in reserved spots for program participants	Provide parking passes to participants who drive themselves, and ensure accessible parking is on-sit or in a nearby accessible location					
	Limit enrolment in sessions to ensure equal access to equipment	Avoid accepting new participants into sessions where current participants are often waiting to use the equipment					

Increase financial accessibility to the program	Create new and different payment schedules or offer membership subsidies			
Recruit staff members/ volunteers with diverse personalities.	Recruit volunteers of various ages, personality traits, and educational backgrounds			
Facilitate interaction between participants, individuals who are involved in different programs, and other staff at the facility	Begin the exercise session with a group meeting; Include activities where participants may work together (for group- based exercise program)			
Have staff members/ volunteers provide one-on-one social support for the participants (for individual-based exercise program)	Engage in conversation with the participant; Have staff members/ volunteers show interest in participants and their lives (i.e. ask about how they have been since they last came to the program)			
Keep the same staff members/ volunteers working with the same participant during exercise sessions (for individual-based exercise program)	Designate a specific volunteer to introduce the participant to the exercise facility upon entry to the program, and ensure the same volunteer/staff member is consistently working with that participant			
Welcome a family member or caregiver to be present (but not participate) at the program	Family members can join other community exercise programs at the facility			
Have staff members/ volunteers float or circulate constantly	Monitor participants to ensure that they are performing their exercises; Provide positive feedback to individuals who are struggling or have negative attitudes			
Have staff members/ volunteers provide encouragement and motivation	Verbal persuasion to continue with the exercise, and comments such as "You can do it!"			
Practice problem solving together with the participant.	Provider works with the participant to adapt exercises based on participants' concerns about an exercise.			
Model/ demonstrate persistence in exercise through group taught sessions, pamphlets, stories, and workshops, etc.	Invite a graduate of the program to speak about their exercise journey and the challenges they overcame while being a part of the program			
Utilize social media to facilitate the sharing of program participants' successes	Tag participants in posts where they achieve their goals; Send videos and photos to participants so they can share them with their own followers			
Allow past program participants to return, volunteer at the program, and act as role models to current participants	Graduates come back to socialize, interact, and speak with current participants; Graduates from the program volunteer to hold discussions/ focus groups on relevant topics			
Practice active listening to help the participants to feel supported and heard	Instruct staff members/ volunteers to validate the concerns of the participant; Instruct staff members/ volunteers to listen instead of providing advice to the participant			
Practice individualized consideration, where staff members/ volunteers address unique participant needs with compassion and empathy	Treat all participants as individuals; Ask participants about the way that they would most like to be supported			
Provide access to experts and services who can give the necessary emotional, tangible, and informational support for participants	Refer participants to online regional platforms to find personal resources; have contact information of relevant experts and services			
Practice open and continuous communication with the participant	Ask questions to see how the participant is doing; Have staff members/ volunteers be genuine, friendly, and warm when interacting with participants so they feel comfortable			
Have program leaders engage in community outreach to spread awareness of opportunities for persons with disability	Program leaders continually seek out partnerships with relevant stakeholders; Program leaders take part in community events and fundraisers			
Encourage the staff members/ volunteers to be eager and have positive attitudes while at the program	Instruct staff members/ volunteers to be friendly and welcome each member when they enter the gym			

	Train staff members/ volunteers to be sensitive to the social, accessibility, and physical activity needs of the population participating in the program	Make suggestions for participant progression, rather than dictating or pushing progression on the participant; Ask a participant if they require assistance with mobility and ambulation	
	Enforce a zero tolerance rule for inappropriate behaviour	Gently remind participants to minimize disruptions during group exercise; Privately speak to participants who behave inappropriately and communicate the consequences of continued behaviour	
	Ensure staff members/ volunteers are knowledgeable about the specific impairments or symptoms of the participants (in a confidential way)	Only provide non-identifying, relevant information about a participant's contraindications to exercise so that the staff member/ volunteer can properly support the participant	
	Create an open, honest and supportive environment where differences are accepted rather than frowned upon	Inform volunteers from the beginning (their orientation session) that the welcoming atmosphere is one of the most important parts of the program	
	Have staff members/ volunteers encourage participants to build and utilize their own support networks	Encourage participants to create/initiate or join common- interest groups together that are outside of the exercise program	
	Practice caring attitudes and be non-judgmental and empathetic during interactions with participants	Focus on participants' interests and their participation in the exercise program, rather than their impairment	
	Expand the inclusion criteria for the population eligible to sign up for the program	A program that normally works with individuals with cerebral palsy could expand it's network to work with stroke victims	
	Ensure that the program leaders are present at the program	Have the program leaders and directors drop in to the program sessions from time to time to meet and interact with participants	
	Have an experienced staff member/ volunteer present to provide support to junior staff members/ volunteers	Internship students or older volunteers self-identify at the beginning of the session, and can answer the questions of new volunteers	
	Offer modifications for exercises	Have extra equipment (such as different weights, therabands, bosu balls, etc.) close by for adaptations to the chosen exercise	
nent	Provide variation in the modality of exercise instruction, according to the needs of the participant	Instructors demonstrate exercises themselves, explain the exercise verbally, physically provide start and end points for movements, help participants move their bodies with the correct form, etc.	
Activity Environment	Ensure that the ratio of staff members/ volunteers to participants is low	Book appointments for exercise sessions for adequate support and personnel to help during a participant's attendance; For Individual-based exercise: 1:1; For group- based exercise, 1:4	
Activ	Perform prescribed exercises in an alternative format, if the machine or equipment that is needed is being used	Suggest using a theraband for a chest press; Rotate the order of exercises in the participant's routine to use a free machine	
	Separate a participant's exercises by providing the option for intermittent breaks	Indicate in a participant's exercise routine when breaks should be taken	

	High Agreement (75- 100%)	Aspec A B C M Me V PE SE AE	ts of Quality Participation Autonomy Belongingness Challenge Mastery Meaning Validation Physical Environment Social Environment Activity Environment
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*Strategy was agreed upon to best foster two or more building blocks/conditions of quality participation. **Strategy only exhibited low agreement.

High-Yield Strategies– Accessible Version

The following table presents 14 strategies that target 4 or more constructs of quality participation. Thus, these strategies are high-yield in that using them can target multiple constructs of quality participation. Strategies are only included if the experts had High/Moderate Agreement that they fostered a given construct. The construct "Physical Environment" was not targeted by any of these high-yield strategies.

*Primarily identified with indicated building block or condition, but also fosters other building blocks and/or conditions

Strategy: Support participants' mastery perceptions by demonstrating an understanding and acceptance of all participant abilities

Example(s): Respect participants' personal preferences and decisions for how they want to exercise

Aspects of Quality Participation

Autonomy* Meaning Validation Social Environment

Strategy: Include activities where participants may work together (for group-based exercise program)

Example(s): Partner ball tosses, battle ropes, etc.

Aspects of Quality Participation

Belongingness* Engagement Social Environment Activity Environment

Strategy: Provide opportunities for participants to socialize

Example(s): Provide opportunities for participant socialization during exercises, between exercises, and outside of program times

Aspects of Quality Participation

Belongingness* Engagement Meaning Social Environment

Strategy: Group together participants with similar abilities and needs (for group-based exercise program)

Example(s): For circuit-based exercise, divide participants into groups based on similar mobility impairments, so the exercises can be tailored and adapted to the participants' abilities Aspects of Quality Participation

Belongingness* Challenge Social Environment Activity Environment

Strategy: Encourage participants to provide peer-based motivation for one another Example(s): Volunteer provides positive reinforcement when participants motivate one another

Aspects of Quality Participation

Belongingness* Engagement Meaning Validation

Strategy: Create individualized exercise programs to suit the current needs of the participant Example(s): Integrate add-ons or variations to exercises to increase difficulty at a participant's discretion (for group-based exercise program)

Aspects of Quality Participation

Challenge* Mastery Validation Activity Environment

Strategy: Provide cues or reminders to ensure that participants are working hard to complete their exercises

Example(s): Providers counts participant's repetitions out loud; visually indicates movement start and end points

Aspects of Quality Participation

Autonomy Belongingness Challenge Engagement Mastery Meaning Validation Physical Environment Social Environment Activity Environment

Strategy: Gradually provide less direct support for the participant, when appropriate (for individual-based exercise program)

Example(s): As participants gain confidence and improve at their exercises, provide hands-off support or support only when it is needed

Aspects of Quality Participation

Challenge* Engagement Mastery Social Environment Strategy: Have staff members/ volunteers provide encouragement and motivation Example(s): Verbal persuasion to continue with the exercise, and comments such as "You can do it!"

Aspects of Quality Participation

Autonomy Challenge Mastery* Activity Environment

Strategy: Model/ demonstrate persistence in exercise through group taught sessions, pamphlets, stories, and workshops, etc.

Example(s): Invite a graduate of the program to speak about their exercise journey and the challenges they overcame while being a part of the program

Aspects of Quality Participation

Belongingness Engagement Validation Social Environment*

Strategy: Allow past program participants to return, volunteer at the program, and act as role models to current participants

Example(s): Graduates come back to socialize, interact, and speak with current participants; Graduates from the program volunteer to hold discussions/ focus groups on relevant topics

Aspects of Quality Participation

Belongingness Meaning Validation Social Environment*

Strategy: Practice open and continuous communication with the participant

Example(s): Ask questions to see how the participant is doing; Have staff members/ volunteers be genuine, friendly, and warm when interacting with participants so they feel comfortable

Aspects of Quality Participation

Belongingness Engagement Validation Social Environment*

Strategy: Encourage the staff members/ volunteers to be eager and have positive attitudes while at the program

 $\mathsf{Example}(\mathsf{s})$: Instruct staff members/ volunteers to be friendly and welcome each member when they enter the gym

Aspects of Quality Participation

Belongingness Engagement Validation Social Environment*

Strategy: Provide variation in the modality of exercise instruction, according to the needs of the participant

Example(s): Instructors demonstrate exercises themselves, explain the exercise verbally, physically provide start and end points for movements, help participants move their bodies with the correct form, etc.

Aspects of Quality Participation

Challenge Engagement Mastery Activity Environment*

Full Strategy Matrix – Accessible Version

Below is the full Strategy Matrix synthesized in the accompanying scientific paper for this tool: Tomasone JR, Man KE, Sartor JD, Andrusko KE, Martin Ginis KA, & Latimer-Cheung AE. (2023). This matrix maps each strategy onto the quality participation constructs and indicates experts' level of agreement with the mapping. The matrix also provides "on the-ground" examples of how each strategy can be fostered in community-based exercise programs.

*Strategy was agreed upon to best foster two or more aspects of quality participation.

**Strategy only exhibited low agreement.

Aspect Fostered: Autonomy

Strategy Fostered:

Invite participants to give their input on the development of their exercise routine Example(s): Allow participants to have input in determining the frequency, intensity, duration, and type of exercise; Participants have the option to select from a variety of structured physical activity options

Aspects of Quality Participation

Autonomy: high agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: low agreement Validation: low agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: low agreement

Strategy Fostered:

Allow participants to determine their own exercise goals in collaboration with a qualified trainer Example(s): In a preliminary meeting, the participant identifies their personal goals and the trainer provides feedback, subsequently helping to build a program to achieve these goals

Aspects of Quality Participation

Autonomy: high agreement Belongingness: no agreement Challenge: moderate agreement Engagement: low agreement Mastery: moderate agreement Meaning: low agreement Validation: low agreement Physical Environment: no agreement Social Environment: low agreement

Activity Environment: low agreement

Strategy Fostered:

Provide participants with the option to fundraise for their own membership fees Example(s): Participants collect pledges for the program's special events in order to subsidize their own participation fees

Aspects of Quality Participation

Autonomy: moderate agreement Belongingness: no agreement Challenge: no agreement Engagement: no agreement Mastery: no agreement Meaning: low agreement Validation: low agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: no agreement

Strategy Fostered:

Transfer physical activity knowledge pertaining to exercise methods and skills, so that participants can exercise independently outside of the exercise program Example(s): Provide online links and videos for at home workouts; Provide participants with their programs so they can perform them individually

Aspects of Quality Participation

Autonomy: high agreement Belongingness: no agreement Challenge: low agreement Engagement: low agreement Mastery: moderate agreement Meaning: no agreement Validation: no agreement Physical Environment: low agreement Social Environment: no agreement Activity Environment: moderate agreement

Strategy Fostered:

*Provide continued exercise opportunities to participants after they have graduated from or completed the program

Example(s): Offer another exercise program that helps transition participants to mainstream gyms

Aspects of Quality Participation

Autonomy: moderate agreement Belongingness: no agreement Challenge: low agreement Engagement: moderate agreement Mastery: moderate agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: low agreement

Strategy Fostered:

Provide opportunities for participant to engage in physical activity outside of the program session

Example(s): include a voluntary option to drop-in to the gym outside of program session time Aspects of Quality Participation

Autonomy: moderate agreement Belongingness: low agreement Challenge: no agreement Engagement: low agreement Mastery: low agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: low agreement

Strategy Fostered:

Allow participants to set their own goals for changes they would like to see in their daily lives Example(s): When performing exercises, try to relate movements to functional activities so participants can identify goals for their daily lives

Aspects of Quality Participation

Autonomy: high agreement Belongingness: no agreement Challenge: moderate agreement Engagement: low agreement Mastery: low agreement Meaning: moderate agreement Validation: low agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: low agreement

Strategy Fostered:

Support participants' mastery perceptions by demonstrating an understanding and acceptance of all participant abilities

Example(s): Respect participants' personal preferences and decisions for how they want to exercise

Aspects of Quality Participation

Autonomy: moderate agreement Belongingness: no agreement Challenge: low agreement Engagement: low agreement Mastery: moderate agreement Meaning: low agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: no agreement

Aspect Fostered: Belongingness

Strategy Fostered:

Engage in communication with the program participants outside of the program hours/sessions Example(s): Circulate monthly newsletters about the program community, upcoming events, etc.

Aspects of Quality Participation

Autonomy: no agreement Belongingness: high agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: low agreement

Strategy Fostered:

Include activities where participants may work together (for group-based exercise program) Example(s): Partner ball tosses, battle ropes, etc.

Aspects of Quality Participation

Autonomy: no agreement Belongingness: high agreement Challenge: low agreement Engagement: moderate agreement Mastery: no agreement Meaning: low agreement Validation: no agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: high agreement

Strategy Fostered:

Provide opportunities for participants to socialize Example(s): Provide opportunities for participant socialization during exercises, between exercises, and outside of program times

Aspects of Quality Participation

Autonomy: no agreement Belongingness: high agreement Challenge: no agreement Engagement: moderate agreement Mastery: no agreement Meaning: moderate agreement Validation: low agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: low agreement

Strategy Fostered:

Group together participants with similar abilities and needs (for group-based exercise program) Example(s): For circuit-based exercise, divide participants into groups based on similar mobility impairments, so the exercises can be tailored and adapted to the participants' abilities

Aspects of Quality Participation

Autonomy: no agreement Belongingness: high agreement Challenge: moderate agreement Engagement: low agreement Mastery: low agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: moderate agreement

Strategy Fostered:

Encourage participants to provide peer-based motivation for one another. Example(s): For circuit-based exercise, divide participants into groups based on similar mobility impairments, so the exercises can be tailored and adapted to the participants' abilities

Aspects of Quality Participation

Autonomy: no agreement Belongingness: high agreement Challenge: no agreement Engagement: moderate agreement Mastery: no agreement Meaning: moderate agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Allow participants to continually re-enroll in the program, after they have graduated from or completed the program.

Example(s): Structure the program to be on-going; do not limit enrolment to only new participants

Aspects of Quality Participation

Autonomy: low agreement Belongingness: high agreement Challenge: no agreement Engagement: moderate agreement Mastery: no agreement Meaning: low agreement Validation: low agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: low agreement

Strategy Fostered:

Orient the participant when they first join the program Example(s): Introduce them to program leaders, staff members, and volunteers, as well as any other individuals they will be working with directly

Aspects of Quality Participation

Autonomy: no agreement Belongingness: high agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Create opportunities to get to know the participants beyond their identity in the program as an exerciser

Example(s): Ask participants about their lifestyle and interests; Host social sessions after weekly exercise sessions to get to know participants

Aspects of Quality Participation

Autonomy: no agreement Belongingness: high agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: low agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Have program characteristics that promote acceptance and inclusion from the general public Example(s): Advertise the facility as an all-inclusive, safe space for persons with and without mobility impairment

Aspects of Quality Participation

Autonomy: no agreement

Belongingness: moderate agreement Challenge: no agreement Engagement: no agreement Mastery: no agreement Meaning: low agreement Validation: moderate agreement Physical Environment: low agreement Social Environment: moderate agreement Activity Environment: no agreement

Aspect Fostered: Challenge

Strategy Fostered:

Create individualized exercise programs to suit the current needs of the participant Example(s): Integrate add-ons or variations to exercises to increase difficulty at a participant's discretion (for group-based exercise program).

Aspects of Quality Participation

Autonomy: low agreement Belongingness: no agreement Challenge: high agreement Engagement: low agreement Mastery: moderate agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: moderate agreement

Strategy Fostered:

Provide cues or reminders to ensure that participants are working hard to complete their exercises Example(s): Providers counts participant's repetitions out loud; visually indicates movement start and end points

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: moderate agreement Engagement: moderate agreement Mastery: low agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: low agreement

Strategy Fostered:

Create voluntary friendly competition between participants on a voluntary basis. Example(s): Plan monthly 'challenges' such as throwing competitions, obstacle courses, etc.; Recognize individuals who succeed in program competitions

Aspects of Quality Participation

Autonomy: no agreement Belongingness: low agreement Challenge: high agreement Engagement: low agreement Mastery: moderate agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: low agreement

Strategy Fostered:

Prescribe exercises that push participants to their comfortable limit Example(s): Be willing to respectfully challenge the participant to improve, instead of being complacent about improvements regarding exercise

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: high agreement Engagement: low agreement Mastery: moderate agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: moderate agreement

Strategy Fostered:

Intermittently conduct a formal reassessment and update a participant's exercise program Example(s): Create and monitor a timeline for all participants to be re-assessed every 6 months

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: high agreement Engagement: low agreement Mastery: high agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: moderate agreement

Strategy Fostered:

**Ensure staff members/ volunteers are knowledgeable about making appropriate exercise adaptations Example(s): Recruit staff members/ volunteers who have a health sciences, exercise, and disability, etc. background; Educate staff members/ volunteers on contraindications for exercise and safety in the gym

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: low agreement Engagement: no agreement Mastery: low agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: low agreement

Aspect Fostered: Engagement

Strategy Fostered:

Provide participants with educational opportunities relevant to physical activity Example(s): Provide informal education regarding the benefits of exercise during the exercise session; Provide the opportunity for participants to learn more about the benefits of exercise specific to their condition(s)

Aspects of Quality Participation

Autonomy: low agreement Belongingness: no agreement Challenge: low agreement Engagement: moderate agreement Mastery: low agreement Meaning: low agreement Validation: low agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: no agreement

Strategy Fostered:

*Be willing to make new times and dates available for program sessions to offer variety in scheduling and accommodate participants

Example(s): If a program session is full, open up a new session time to take in more participants; Offer program sessions at multiple time points in the day to accommodate different participant preferences

Aspects of Quality Participation

Autonomy: low agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: low agreement Social Environment: no agreement Activity Environment: low agreement

Aspect Fostered: Mastery

Strategy Fostered:

Gradually provide less direct support for the participant, when appropriate (for individual-based exercise program)

Example(s): As participants gain confidence and improve at their exercises, provide hands-off support or support only when it is needed

Aspects of Quality Participation

Autonomy: high agreement Belongingness: no agreement Challenge: moderate agreement Engagement: low agreement Mastery: high agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: moderate agreement

Strategy Fostered:

Provide cues or reminders to ensure that participants maintain proper technique when exercising.

Example(s): Count sets and repetitions with the participant; Place hands at the start and end points of movements, etc.

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: moderate agreement Engagement: low agreement Mastery: high agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: moderate agreement

Strategy Fostered:

Encourage participants to report back their action plans and progress to staff members/ volunteers

Example(s): Volunteers ask participants if they have noticed changes in their strength and endurance.

Aspects of Quality Participation

Autonomy: low agreement Belongingness: no agreement Challenge: low agreement Engagement: moderate agreement Mastery: low agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: no agreement

Strategy Fostered:

*Use a stepped approach to increase the complexity of a participant's exercises Example(s): Start with a basic, simplistic exercise and slowly introduce components to add difficulty such as weights, therabands, added movements, etc.

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: high agreement Engagement: low agreement Mastery: high agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: moderate agreement

Strategy Fostered:

Provide clear instructions with adequate detail for performing exercises Example(s): Use straight forward language, demonstrate exercises, and identify range of motion of movements before the participant tries the exercise

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: low agreement Engagement: no agreement Mastery: moderate agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: moderate agreement

Strategy Fostered:

Demonstrate the proper technique for exercises Example(s): Model the exercise before instructing the participants to follow; Allow participants to observe other members completing a task

Aspects of Quality Participation

Autonomy: no agreement

Belongingness: no agreement Challenge: low agreement Engagement: low agreement Mastery: high agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: high agreement

Strategy Fostered:

Provide constructive feedback to participants.

Example(s): Correct a participant's technique if they are performing the exercise incorrectly

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: low agreement Engagement: no agreement Mastery: high agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: low agreement

Strategy Fostered:

Use verbal persuasion to increase a participant's confidence in their ability to perform the activity

Example(s): Provide the participant with feedback on their performance, and emphasize what they're doing correctly

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: high agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: no agreement

Strategy Fostered:

Record or log exercises performed

Example(s): Have participants or staff members/ volunteers write down the amount of time, weight, sets and repetitions of exercises that are completed

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: moderate agreement Engagement: low agreement Mastery: high agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: moderate agreement

Strategy Fostered:

Show participants their progressions between assessments using quantitative analysis Example(s): Use machines that can display/ show percentages of improvement in range of motion, weight, etc. to participants

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: moderate agreement Engagement: low agreement Mastery: high agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: moderate agreement

Strategy Fostered:

Have health professionals (physiotherapist, trainer, etc.) provide advice and guidance to participants during the session Example(s): A physiotherapist is on site, trains staff members/ volunteers, or works directly with a participant at each session

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: low agreement Engagement: low agreement Mastery: moderate agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: low agreement

Aspect Fostered: Meaning

Strategy Fostered:

**Encourage participants to voluntarily get involved in physical activity research studies. Example(s): If the program has received flyers or information about research studies, the staff members/ volunteers will mention them to participants and post the information in the facility

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: low agreement Validation: low agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: no agreement

Strategy Fostered:

**Post research findings of site-specific studies in the facility Example(s): Communicate study results through word of mouth of staff members/ volunteers; Put up posters of study results in the facility

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: low agreement Validation: low agreement Physical Environment: low agreement Social Environment: low agreement Activity Environment: no agreement

Strategy Fostered:

Encourage participant self-reflection, and examination of personal goals and how exercise is making them feel

Example(s): Have participants fill out a short journal entry each session

Aspects of Quality Participation

Autonomy: low agreement Belongingness: no agreement Challenge: low agreement Engagement: moderate agreement Mastery: moderate agreement Meaning: high agreement Validation: no agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: low agreement

Aspect Fostered: Validation

Strategy Fostered:

Follow up with participants after they graduate out of the program Example(s): Follow up with participants at 3 months post program completion via a phone call or personal meeting

Aspects of Quality Participation

Autonomy: no agreement Belongingness: moderate agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: no agreement

Strategy Fostered:

Set up feedback opportunities on an ongoing basis for participants to offer personal suggestions and input on the program

Example(s): Use a comment box so participants can voice their opinions; Create a participant representative role on the organizing board

Aspects of Quality Participation

Autonomy: low agreement Belongingness: low agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: low agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: no agreement

Strategy Fostered:

**Provide adequate training to staff members/ volunteers to ensure a high level of service in the program

Example(s): Ensure that staff members/ volunteers have specific training in physical activity for the population

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: no agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: low agreement

Aspect Fostered: Physical Environment

Strategy Fostered:

Ensure that the exercise setting is reserved during each session for program members only Examples(s):

Book a space in a gym or exercise facility that can only be accessed with membership to the program

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: moderate agreement Social Environment: low agreement Activity Environment: no agreement

Strategy Fostered:

Incorporate the latest evidence-based training techniques and exercise machines. Example(s):

Taping muscles, using electric stimulation, use of mirrors; ZeroG treadmills, functional electric stimulation bicycles

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: low agreement Engagement: no agreement Mastery: low agreement Meaning: no agreement Validation: no agreement Physical Environment: moderate agreement Social Environment: no agreement Activity Environment: moderate agreement

Strategy Fostered:

Offer the program out of an inclusive and safe facility such as a community centre or private facility

Example(s): Ensure the space has accessible doorways and elevators, or ramps; that the equipment is accessible and set up to allow for the use of mobility aids.

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: no agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: high agreement Social Environment: no agreement Activity Environment: no agreement

Strategy Fostered:

Acquire intuitive, easy-to-use exercise equipment Example(s): Use a Nu-Step machine, which guides stepping movement and is easily accessible with a swivel seat

Aspects of Quality Participation

Autonomy: low agreement Belongingness: no agreement Challenge: low agreement Engagement: low agreement Mastery: moderate agreement Meaning: no agreement Validation: no agreement Physical Environment: moderate agreement Social Environment: no agreement Activity Environment: low agreement

Strategy Fostered:

Monitor facility temperature to ensure participants are exercising in the optimal environment Example(s): Always make sure that the facility temperature is the same, and check it around 30 minutes prior to participants arriving

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: no agreement Physical Environment: high agreement Social Environment: no agreement Activity Environment: no agreement

Strategy Fostered:

Have accessible washrooms on site

Example(s): The stalls have enough room for a wheelchair and service dog (in some cases both), as well as handles near the toilet. Accessible showers are also recommended

Aspects of Quality Participation

Autonomy: low agreement

Belongingness: no agreement Challenge: no agreement Engagement: no agreement Mastery: no agreement Meaning: no agreement Validation: no agreement Physical Environment: high agreement Social Environment: no agreement Activity Environment: no agreement

Strategy Fostered:

Provide access to clean drinking water for program participants Example(s): Have an accessible water fountain inside the gym

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: no agreement Physical Environment: high agreement Social Environment: no agreement Activity Environment: no agreement

Strategy Fostered:

Arrange equipment within space to optimize ease of movement for participants Example(s): Adopt an open gym concept; Ensure there is enough space for movement between areas with assistive devices

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: no agreement Physical Environment: high agreement Social Environment: no agreement Activity Environment: no agreement

Strategy Fostered:

Provide close parking in reserved spots for program participants Example(s): Provide parking passes to participants who drive themselves, and ensure accessible parking is on-sit or in a nearby accessible location

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: no agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: moderate agreement Social Environment: no agreement Activity Environment: low agreement

Strategy Fostered:

Limit enrolment in sessions to ensure equal access to equipment Example(s): Avoid accepting new participants into sessions where current participants are often waiting to use the equipment

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: moderate agreement Social Environment: no agreement Activity Environment: low agreement

Strategy Fostered:

Increase financial accessibility to the program Example(s): Create new and different payment schedules or offer membership subsidies

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: no agreement Physical Environment: moderate agreement Social Environment: no agreement Activity Environment: low agreement

Aspect Fostered: Social Environment

Strategy Fostered:

Recruit staff members/ volunteers with diverse personalities

Examples(s): Recruit volunteers of various ages, personality traits, and educational backgrounds

Aspects of Quality Participation

Autonomy: no agreement Belongingness: moderate agreement Challenge: no agreement Engagement: no agreement Mastery: no agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Facilitate interaction between participants, individuals who are involved in different programs, and other staff at the facility

Example(s): Begin the exercise session with a group meeting; Include activities where participants may work together (for group-based exercise program)

Aspects of Quality Participation

Autonomy: no agreement Belongingness: high agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: low agreement Validation: low agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: low agreement

Strategy Fostered:

Have staff members/ volunteers provide one-on-one social support for the participants (for individual-based exercise program)

Example(s): Engage in conversation with the participant; Have staff members/ volunteers show interest in participants and their lives (i.e. ask about how they have been since they last came to the program)

Aspects of Quality Participation

Autonomy: no agreement Belongingness: high agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Keep the same staff members/ volunteers working with the same participant during exercise sessions (for individual-based exercise program)

Example(s): Designate a specific volunteer to introduce the participant to the exercise facility upon entry to the program, and ensure the same volunteer/staff member is consistently working with that participant

Aspects of Quality Participation

Autonomy: no agreement Belongingness: moderate agreement Challenge: no agreement Engagement: moderate agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Welcome a family member or caregiver to be present (but not participate) at the program Example(s): Family members can join other community exercise programs at the facility

Aspects of Quality Participation

Autonomy: no agreement Belongingness: low agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Have staff members/ volunteers float or circulate constantly

Example(s): Monitor participants to ensure that they are performing their exercises; Provide positive feedback to individuals who are struggling or have negative attitudes

Aspects of Quality Participation

Autonomy: no agreement

Belongingness: no agreement Challenge: no agreement Engagement: moderate agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: high agreement Social Environment: no agreement Activity Environment: low agreement

Strategy Fostered:

Have staff members/ volunteers provide encouragement and motivation Example(s): Verbal persuasion to continue with the exercise, and comments such as "You can do it!"

Aspects of Quality Participation

Autonomy: no agreement Belongingness: moderate agreement Challenge: low agreement Engagement: high agreement Mastery: low agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Practice problem solving together with the participant Example(s): Provider works with the participant to adapt exercises based on participants' concerns about an exercise

Aspects of Quality Participation

Autonomy: low agreement Belongingness: no agreement Challenge: low agreement Engagement: moderate agreement Mastery: low agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: no agreement

Strategy Fostered:

Model/ demonstrate persistence in exercise through group taught sessions, pamphlets, stories, and workshops, etc.

Example(s): Invite a graduate of the program to speak about their exercise journey and the challenges they overcame while being a part of the program

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: moderate agreement Mastery: moderate agreement Meaning: moderate agreement Validation: low agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: no agreement

Strategy Fostered:

Utilize social media to facilitate the sharing of program participants' successes Example(s): Tag participants in posts where they achieve their goals; Send videos and photos to participants so they can share them with their own followers

Aspects of Quality Participation

Autonomy: no agreement Belongingness: moderate agreement Challenge: no agreement Engagement: low agreement Mastery: low agreement Meaning: low agreement Validation: low agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: no agreement

Strategy Fostered:

Allow past program participants to return, volunteer at the program, and act as role models to current participants

Example(s): Graduates come back to socialize, interact, and speak with current participants; Graduates from the program volunteer to hold discussions/ focus groups on relevant topics

Aspects of Quality Participation

Autonomy: no agreement Belongingness: moderate agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: moderate agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: moderate agreement

Activity Environment: no agreement

Strategy Fostered:

Practice active listening to help the participants to feel supported and heard Examples(s): Instruct staff members/ volunteers to validate the concerns of the participant; Instruct staff members/ volunteers to listen instead of providing advice to the participant

Aspects of Quality Participation

Autonomy: no agreement Belongingness: moderate agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Practice individualized consideration, where staff members/ volunteers address unique participant needs with compassion and empathy Example(s): Treat all participants as individuals; Ask participants about the way that they would most like to be supported

Aspects of Quality Participation

Autonomy: low agreement Belongingness: moderate agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: high agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: no agreement

Strategy Fostered:

Provide access to experts and services who can give the necessary emotional, tangible, and informational support for participants

Example(s): Refer participants to online regional platforms to find personal resources; have contact information of relevant experts and services

Aspects of Quality Participation

Autonomy: no agreement Belongingness: low agreement Challenge: no agreement Engagement: low agreement Mastery: low agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: no agreement

Strategy Fostered:

Practice open and continuous communication with the participant Example(s): Ask questions to see how the participant is doing; Have staff members/ volunteers be genuine, friendly, and warm when interacting with participants so they feel comfortable

Aspects of Quality Participation

Autonomy: no agreement Belongingness: moderate agreement Challenge: no agreement Engagement: moderate agreement Mastery: no agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Have program leaders engage in community outreach to spread awareness of opportunities for persons with disability

Example(s): Program leaders continually seek out partnerships with relevant stakeholders; Program leaders take part in community events and fundraisers

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: low agreement Validation: no agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: no agreement

Strategy Fostered:

Encourage the staff members/ volunteers to be eager and have positive attitudes while at the program Example(s): Instruct staff members/ volunteers to be friendly and welcome each member when they enter the gym

Aspects of Quality Participation

Autonomy: no agreement Belongingness: moderate agreement Challenge: no agreement Engagement: moderate agreement Mastery: no agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Train staff members/ volunteers to be sensitive to the social, accessibility, and physical activity needs of the population participating in the program

Example(s): Make suggestions for participant progression, rather than dictating or pushing progression on the participant; Ask a participant if they require assistance with mobility and ambulation

Aspects of Quality Participation

Autonomy: low agreement Belongingness: moderate agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Enforce a zero tolerance rule for inappropriate behaviour

Example(s): Gently remind participants to minimize disruptions during group exercise; Privately speak to participants who behave inappropriately and communicate the consequences of continued behaviour

Aspects of Quality Participation

Autonomy: no agreement Belongingness: low agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Ensure staff members/ volunteers are knowledgeable about the specific impairments or symptoms of the participants (in a confidential way) Example(s): Only provide non-identifying, relevant information about a participant's contraindications to exercise so that the staff member/ volunteer can properly support the participant

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: low agreement Engagement: no agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: no agreement

Strategy Fostered:

Create an open, honest and supportive environment where differences are accepted rather than frowned upon

Example(s): Inform volunteers from the beginning (their orientation session) that the welcoming atmosphere is one of the most important parts of the program

Aspects of Quality Participation

Autonomy: no agreement Belongingness: high agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Have staff members/ volunteers encourage participants to build and utilize their own support networks Example(s): Encourage participants to create/initiate or join common-interest groups together that are outside of the exercise program

Aspects of Quality Participation

Autonomy: moderate agreement Belongingness: moderate agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: low agreement Validation: no agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Practice caring attitudes and be non-judgmental and empathetic during interactions with participants Example(s): Focus on participants' interests and their participation in the exercise program, rather than their impairment

Aspects of Quality Participation

Autonomy: no agreement Belongingness: moderate agreement Challenge: no agreement Engagement: low agreement Mastery: no agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Expand the inclusion criteria for the population eligible to sign up for the program Example(s): A program that normally works with individuals with cerebral palsy could expand it's network to work with stroke victims

Aspects of Quality Participation

Autonomy: no agreement Belongingness: low agreement Challenge: no agreement Engagement: no agreement Mastery: no agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: moderate agreement Activity Environment: low agreement

Strategy Fostered:

Ensure that the program leaders are present at the program Example(s): Have the program leaders and directors drop in to the program sessions from time to time to meet and interact with participants

Aspects of Quality Participation

Autonomy: no agreement Belongingness: low agreement Challenge: no agreement Engagement: no agreement Mastery: no agreement Meaning: no agreement Validation: moderate agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Strategy Fostered:

Have an experienced staff member/ volunteer present to provide support to junior staff members/ volunteers

Example(s): Internship students or older volunteers self-identify at the beginning of the session, and can answer the questions of new volunteers

Aspects of Quality Participation

Autonomy: no agreement Belongingness: low agreement Challenge: no agreement Engagement: no agreement Mastery: no agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: high agreement Activity Environment: no agreement

Aspect Fostered: Activity Environment

Strategy Fostered:

Offer modifications for exercises

Examples(s): Have extra equipment (such as different weights, therabands, bosu balls, etc.) close by for adaptations to the chosen exercise

Aspects of Quality Participation

Autonomy: low agreement Belongingness: no agreement Challenge: low agreement Engagement: low agreement Mastery: low agreement Meaning: no agreement Validation: no agreement Physical Environment: moderate agreement Social Environment: no agreement Activity Environment: moderate agreement

Strategy Fostered:

Provide variation in the modality of exercise instruction, according to the needs of the participant Example(s): Instructors demonstrate exercises themselves, explain the exercise verbally, physically provide start and end points for movements, help participants move their bodies with the correct form, etc.

Aspects of Quality Participation

Autonomy: low agreement Belongingness: no agreement Challenge: moderate agreement Engagement: moderate agreement Mastery: moderate agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: high agreement

Strategy Fostered:

Ensure that the ratio of staff members/ volunteers to participants is low Example(s): Book appointments for exercise sessions for adequate support and personnel to help during a participant's attendance; For Individual-based exercise: 1:1; For group-based exercise, 1:4

Aspects of Quality Participation

Autonomy: no agreement Belongingness: no agreement Challenge: no agreement Engagement: low agreement Mastery: low agreement Meaning: no agreement Validation: low agreement Physical Environment: no agreement Social Environment: low agreement Activity Environment: moderate agreement

Strategy Fostered:

Perform prescribed exercises in an alternative format, if the machine or equipment that is needed is being used Example(s): Suggest using a theraband for a chest press: Botate the order of exercises in the

Example(s): Suggest using a theraband for a chest press; Rotate the order of exercises in the participant's routine to use a free machine

Aspects of Quality Participation

Autonomy: low agreement Belongingness: no agreement Challenge: low agreement Engagement: low agreement Mastery: low agreement Meaning: no agreement Validation: no agreement Physical Environment: low agreement Social Environment: no agreement Activity Environment: high agreement

Strategy Fostered:

Separate a participant's exercises by providing the option for intermittent breaks Example(s): Indicate in a participant's exercise routine when breaks should be taken

Aspects of Quality Participation

Autonomy: low agreement Belongingness: no agreement Challenge: no agreement Engagement: no agreement Mastery: low agreement Meaning: no agreement Validation: no agreement Physical Environment: no agreement Social Environment: no agreement Activity Environment: high agreement