

An evaluation in the Ottawa region of exercise programming for individuals with chronic health conditions



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Introduction

- Chronic diseases cause more deaths than all other causes combined and are a leading cause of disability¹. They are also among the most common, costly and preventable health conditions².
- A key risk factor for the development of chronic diseases includes insufficient physical activity³. Engaging in regular physical activity can be beneficial in the prevention and management of chronic health conditions.
- In the Ottawa region, the 'Heart Wise Exercise', 'Better Strength, Better Balance' and other community exercise programs offer classes that have been developed and certified specifically for individuals with chronic health conditions.
- Lead by certified fitness instructors, these classes promote the prevention and self management of chronic diseases, encourage aerobic exercise in a safe environment and aim to offer modifiable exercise options.

Objectives

- To characterize the type of chronic health conditions experienced by participants attending community exercise programs in the Ottawa area.
- To determine if these community exercise programs accommodate condition-specific needs of the participant.

Methods

Participant Recruitment

A convenience sample of community exercise class participants in Ottawa were invited to complete a questionnaire in-person after attending their class or online at their own convenience.

Data Collection

A twenty question self-report questionnaire (paper based and online via Google Forms) collected information on demographics, health history, compliance, accessibility and overall satisfaction with community exercise classes.

Data Input

All data were entered into Google Forms.

Data Analysis

Data were analyzed using descriptive statistics in Jamovi statistical software (version 8.0).

Results

DEMOGRAPHICS

Sample size

- A total of 106 questionnaires were completed by exercise class participants.

Sex

- 77.4% of participants were female and 22.6% were male.

Age

- Ages ranged from 46 to 94 years.
- Mean age: 74.5 ± 7.6

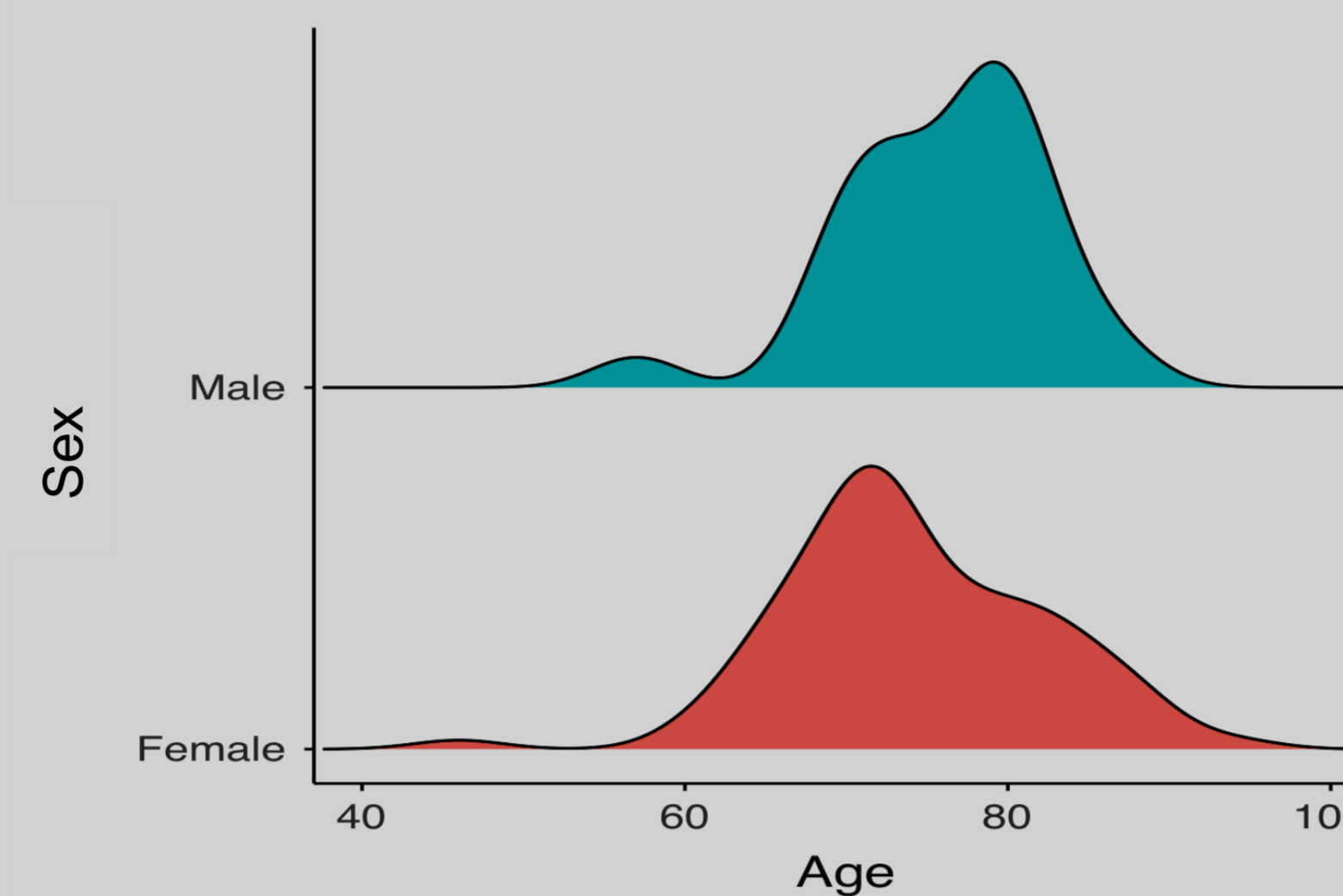


Figure 1. Age distribution stratified by sex

CHARACTERIZATION OF CHRONIC HEALTH CONDITIONS

Frequency

- The most commonly occurring health conditions included: arthritis (50.9%), hypertension (41.0%) and osteoporosis/osteopenia (36.5%).

Co-occurrence

- 77.4% of participants had two or more co-occurring chronic health conditions.
- Among the individuals with two or more conditions, the most commonly co-occurring included: hypertension & arthritis (29.3%), osteoporosis/osteopenia & arthritis (25.3%) and hypertension & osteoporosis/osteopenia (23.2%).

Other factors

- In addition to chronic health conditions, 42.6% of participants reported having musculoskeletal pain, primarily in their back, knees or hips.

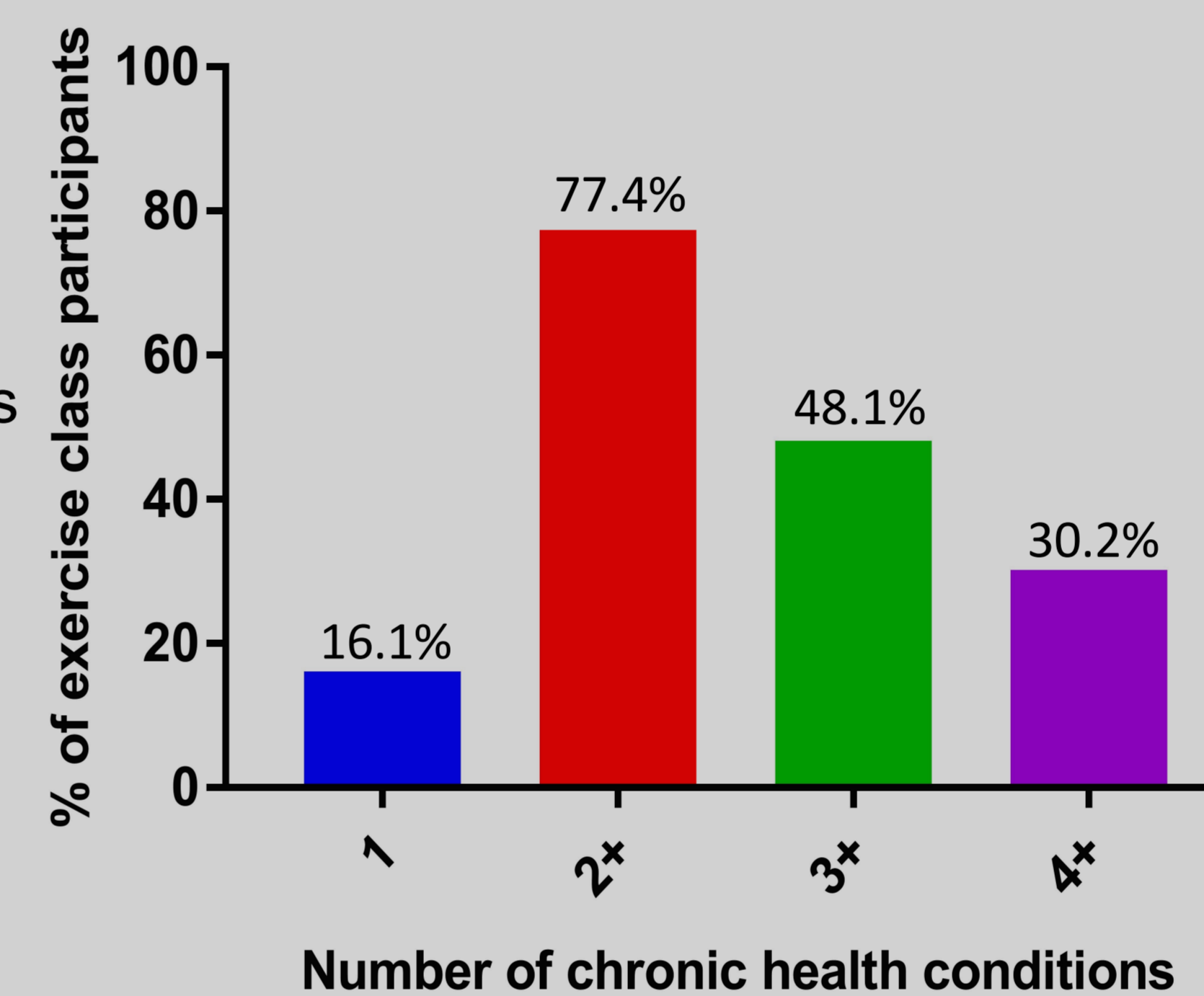


Figure 2. Prevalence of chronic health conditions

ACCOMMODATION CONSIDERATIONS

Exercise modifications

- 92.8% of participants believed that their class provided sufficient options for exercise modifications for people experiencing physical or mental health limitations.

Satisfaction

- Participant satisfaction on (1) program location; (2) date and time; (3) knowledge of fitness leader on chronic disease/health; (4) knowledge of fitness leader about exercise; (5) fitness leader assistance; (6) exercise options; (7) cost and; (8) social aspect/new friends was recorded using a five-point scale ranging from 'very unhappy' to 'very happy'
- 82.5% of responses were categorized in the 'very happy' category.

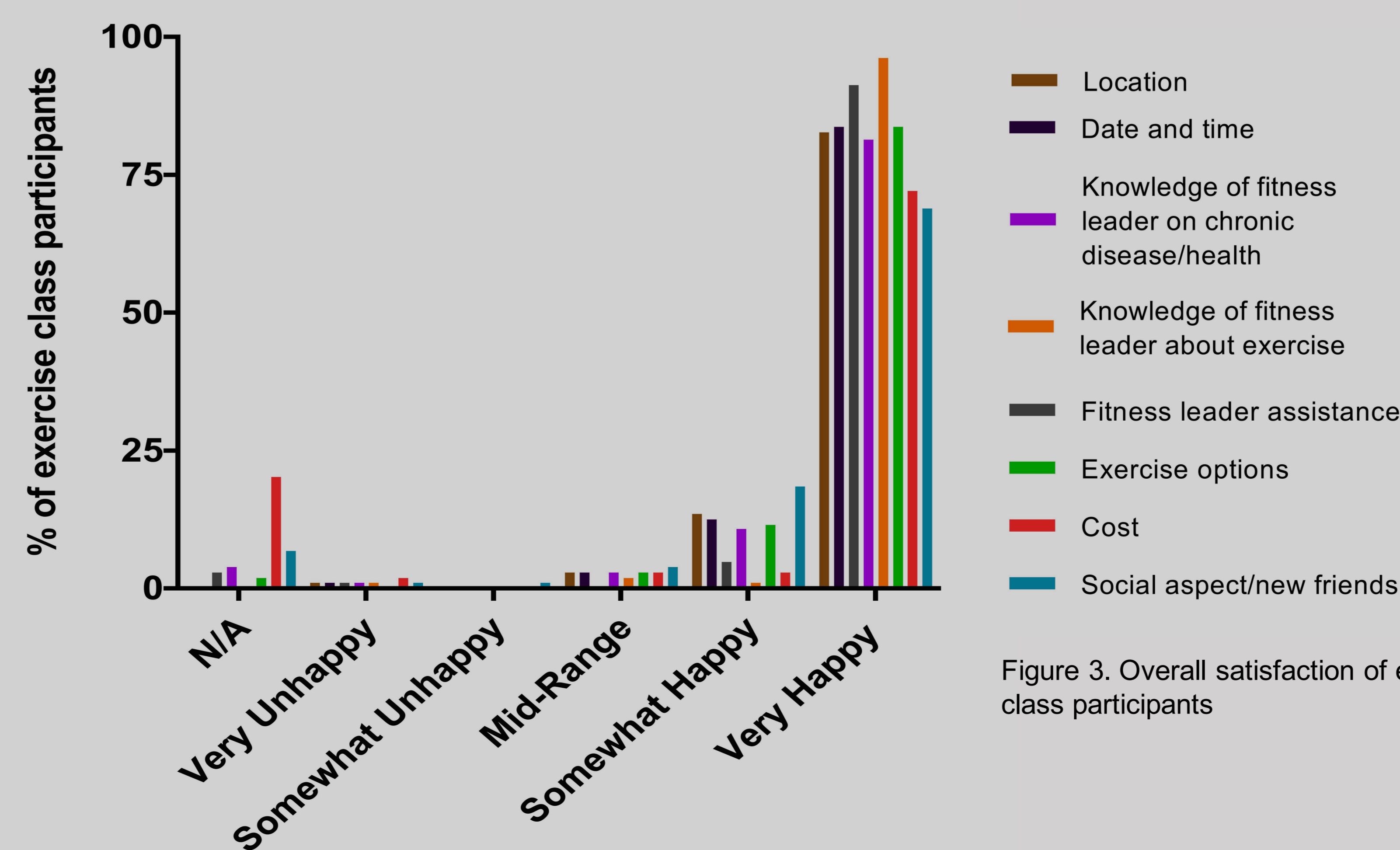


Figure 3. Overall satisfaction of exercise class participants

Discussion

- The most common co-occurring chronic health conditions experienced by participants were cardiovascular and musculoskeletal diseases.
- 81.7% of respondents attended their exercise class two or more times per week and 73.1% engaged in other exercise/physical activity in addition to their exercise classes.
- 31.5% of respondents reported meeting the Canadian Physical Activity Guidelines which state that adults should accumulate at least 150 minutes of moderate-to-vigorous intensity aerobic activity per week⁴.
- On a five-point scale, ranging from 'not at all' to 'very likely', 87.4% of respondents reported that they are 'very likely' to continue participating in community exercise classes.
- 35.9% of 'Heart Wise Exercise' class participants were unaware that they were specifically attending a 'Heart Wise Exercise' class.
- 81.4% reported that their fitness leader 'almost always' or 'always' invited them to inform them of any health conditions they may have.



Conclusions

- Overall, participants were very satisfied with community exercise classes in the Ottawa region.
- Moving forward, commonly co-occurring chronic health conditions should be considered in the development and refinement of community exercise programs to ensure appropriate accommodations continue to be met.
- Promotion and advertisement of exercise programs for persons with chronic health conditions within the community setting should be continued.
- Additionally, participants should continue to be encouraged to engage in aerobic exercise outside of class time in order to meet physical activity guidelines.

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