ParticipACTION after 5 years of relaunch: a quantitative survey of Canadian organizational awareness and capacity regarding physical activity initiatives

Guy Faulkner, PhD (1); Subha Ramanathan, PhD (1); Ronald C. Plotnikoff, PhD (2); Tanya Berry, PhD (3); Sameer Deshpande, PhD (4); Amy E. Latimer-Cheung, PhD (5); Ryan E. Rhodes, PhD (6); Mark S. Tremblay, PhD (7); John C. Spence, PhD (3)

This original quantitative research article has been peer reviewed.

Tweet this article

Abstract

Introduction: ParticipACTION is a Canadian physical activity communications and social marketing organization relaunched in 2007. This study assesses the capacity of Canadian organizations to adopt, implement, and promote physical activity initiatives. The four objectives were to compare findings from baseline (2008) and follow-up (2013) with respect to: (1) awareness of ParticipACTION; (2) organizational capacity to adopt, implement and promote physical activity initiatives; (3) potential differences in capacity based on organizational size, sector, and mandate; and (4) assess perceptions of ParticipACTION five years after relaunch.

Methods: In this cross-sectional study, representatives from local, provincial/territorial, and national organizations completed an online survey assessing capacity to adopt, implement, and promote physical activity. Descriptive statistics and one-way analyses of variance were conducted to examine the objectives.

Results: Response rate for opening an email survey invitation and consenting to participate was 40.6% (685/1688) and 540 surveys were completed. Awareness of ParticipACTION increased from 54.6% at baseline to 93.9% at follow-up (Objective 1). Findings at both baseline and follow-up reflected good organizational capacity to adopt, implement and promote physical activity (Objective 2) although some varied by organizational sector and mandate (Objective 3). Most respondents reported that ParticipACTION provided positive leadership (65.3%), but there was less agreement regarding ParticipACTION's facilitation of infrastructure (44.0%) or organizational will/motivation (47.1%)(Objective 4).

Conclusion: Canadian organizations continue to report having good capacity to adopt, implement, and promote physical activity. There was no discernible change in capacity indicators five years after ParticipACTION's relaunch although its broader contribution to the physical activity sector was endorsed.

Keywords: physical activity, health promotion, organizational capacity

Introduction

The development of organizational capacity to advocate for and implement physical activity initiatives remains crucial in addressing physical inactivity at a population level. The World Health Organization (WHO) has defined capacity building as "the development of knowledge, skills, commitment, structures, systems and

Highlights

- Canadian physical activity organizations continue to report having good capacity to adopt, implement, and promote physical activity initiatives.
- There was no discernible change in key dimensions of capacity over five years since ParticipACTION's relaunch.
- The majority of respondents agreed or strongly agreed that ParticipACTION had contributed to not only creating a more active Canada but contributed positively to the physical activity and sport sector.

leadership to enable effective health promotion."^{1,p.341} Capacity building is, therefore, a vital "upstream" component for promoting health and includes equipping individuals with the knowledge and skills to promote physical activity, thereby ensuring organizations are resourced and have the necessary infrastructure to support initiatives, form and sustain partnerships, and provide leadership and direction to work towards shared goals. It is not immediately clear how the high prevalence of physical inactivity in Canada^{2,3} can be effectively addressed without sufficient organizational capacity.4 Yet, evaluation of population-level initiatives tends to focus on individual-level behaviour change (e.g., physical activity behaviour) and not

Author references:

^{1.} School of Kinesiology, University of British Columbia, Vancouver, British Columbia, Canada

^{2.} School of Education, University of Newcastle, Newcastle, New South Wales, Australia

^{3.} Faculty of Kinesiology, Sport, and Recreation, University of Alberta, Edmonton, Alberta, Canada

^{4.} Faculty of Management, University of Lethbridge, Lethbridge, Alberta, Canada

^{5.} School of Kinesiology and Health Studies, Queen's University, Kingston, Ontario, Canada

^{6.} School of Exercise Science, Physical and Health Education, University of Victoria, Victoria, British Columbia, Canada

^{7.} Healthy Active Living and Obesity Research Group, Children's Hospital of Eastern Ontario Research Institute, Ottawa, Ontario, Canada

Correspondence: Guy Faulkner, School of Kinesiology, University of British Columbia, 2146 Health Sciences Mall, Room 4606, Vancouver, BC V6T 1Z3; Tel: 604-822-2990; Fax: 604-822-6842; Email: guy.faulkner@ubc.ca

more distal, systemic factors (e.g., organizational capacity) underpinning that behaviour change.⁵

The mission of ParticipACTION when it was relaunched in 2007 was to move beyond physical activity program delivery, and contribute to social marketing, communications, and partnership synergy in Canada.6 A particular emphasis was on encouraging and supporting the coordinated actions of other organizations, and contributing to capacity building within communities. Enhancing Canadian organizational capacity to mobilize and advocate for physical activity was thus identified as a key objective of ParticipACTION. Accordingly, we collected baseline data in 2007 assessing awareness of organizations regarding ParticipACTION, and perceptions of organizational capacity to mobilize and advocate for physical activity.7 This has provided the unique opportunity for on-going tracking and evaluation of the impact of ParticipACTION on organizational capacity, and capacity among organizations to implement ParticipACTION initiatives. Evidence suggests that key components of organizational capacity include coalition building, networking, planning, management, delivery and evaluation of programs, and acquisition and availability of resources for physical activity promotion. However, knowledge about organizational capacity and its development is limited.8

At baseline, we were interested in how ParticipACTION may become a stimulus and resource for developing capacity in terms of leadership (e.g. the process of developing partnerships, collaborations, and linkages within the community [see9]), policy making or "will" (e.g. the process of developing vision, mission, and political will of the target community to implement and sustain a health initiative), and infrastructure (e.g. the process of developing a supportive system and organization in the health sector, the skills, knowledge, and resources for health promotion).¹⁰ It was expected that an organization's capacity in terms of its leadership, will and infrastructure should influence the extent to which the initiatives of ParticipACTION could be adopted and implemented within those organizations.¹¹

Baseline data collection took place before ParticipACTION began disseminating information. Using an online survey, key Canadian informants (n = 268; response)rate 29.7%) representing provincial and national organizations from a range of sectors (e.g., sport, recreation, public health, education) reported on organizational awareness of ParticipACTION and their capacity for physical activity promotion.11 Findings indicated good organizational capacity in Canada to promote physical activity based on reported means of approximately 4.0 (on 5-point scales ranging from 1 = "not at all" to 5 = "very") for capacity to adopt, implement, and promote physical activity campaigns.¹¹ Although no specific patterns were observed, some differences were found by sector and mandate. For instance, organizations in the government sector reported greater capacity to adopt new campaigns compared to not-for-profit organizations. Additionally, organizations with an educational mandate reported greater capacity for adoption than public health/health care organizations. Finally, organizations with an educational mandate also reported greater capacity to implement physical activity initiatives compared to those with a sport and recreation mandate. Overall, this baseline study concluded that irrespective of size, sector or mandate, the majority of the surveyed Canadian organizations reported having the capacity to work with initiatives that would emerge from ParticipACTION.

Previous studies in Canadian health promotion initiatives have used a five-year time frame to assess changes in capacity development.^{10,12,13} Although it is possible that capacity changes within organizations may take longer than five years after the relaunch of ParticipACTION, we replicated the same methods in terms of sampling frame, procedures and measures as our baseline study.¹¹ The objectives of this study were to compare baseline (2008) and follow-up (2013) findings with respect to: (1) awareness of ParticipACTION among physical activity organizations; (2) organizational capacity to adopt, implement, and promote physical activity initiatives; (3) potential differences in capacity based on organizational size, sector and primary mandate; and also to: (4) assess perceptions of ParticipACTION five years after relaunch.

Methods

Invitations requesting participation in the study were sent via email with up to three additional reminder emails based on a

modified Dillman technique.14 An email marketing service called Mail Chimp¹⁵ was used to send emails and track the number of emails opened, and the undeliverable emails (bounces), and also provide an option to unsubscribe from future emails.¹⁶ This email service ensured that reminder emails were only sent to individuals who had not clicked on the survey link. Contacts for the 2008 baseline study (respondents and non-respondents), provincial lead organizations on an active school travel intervention, and members of the ParticipACTION Partner Network (a virtual network of Canadian organizations) were invited. Independent, crosssectional samples were used at baseline and follow-up as it was not possible to track organizations across the two studies. As a modification of our baseline protocol, we also emailed invitees prior to sending the survey invitation with a brief overview of the survey goals and a timeline for when it will be sent.¹⁷ Additionally, broader announcements of the survey were made (November to December 2012) via ParticipACTION and the ParticipACTION Partner Network to alert the physical activity sector that the survey was occurring from January to February 2013. Specific invitations were sent to individuals identified as a key contact having knowledge of their organization (e.g. directors, program coordinators) that specified "the survey should be completed by a representative from your organization who has a good knowledge of your organization to provide us with the most accurate feedback possible." Upon accessing the survey, invitees had the option to consent to participate, choose whether or not to continue with the survey, or to exit. A final question invited respondents to participate in a follow-up qualitative study. In total, 1688 unique respondents opened an email with a survey link. More information about outcome rate calculations is available elsewhere.16 The study received ethics approval from the Research Ethics Board at the University of Toronto.

Measures

The online instrument was modified from the baseline questionnaire in both official languages (French and English) using Survey Monkey. The baseline questionnaire was originally developed by members of the research team and evaluated by external reviewers who assessed the design of the instrument for ease of access, navigation, and completion. The same measures were used with the addition of items regarding perceptions of ParticipACTION's impact. Organizational characteristics assessed organizational size (<10, 10 to 39, 40 + employees), years involved in physical activity or health care promotion, scope of activity (i.e., local, provincial, national), organizational sector (i.e. government, not-for-profit, private), and primary mandate (i.e., public health/health care, sport and/or recreation, education). For every question in the survey, an additional "skip" response was made available for respondents choosing not to answer.

Awareness of ParticipACTION

Single-item questions assessed organizational knowledge about ParticipACTION: "Have you heard anything about ParticipACTION in the last 12 months?" (with a "Yes/No" response option); "Are you aware of any ParticipACTION resources?" (with a "Yes/No" response option); and "How did you hear about the "new" ParticipACTION?" (with the following response options: media [newspapers, television, radio, internet], government, from other organizations, word of mouth, and other).

Organizational capacity scales

Three organizational capacity scales with response options ranging from (1) "not at all" to (5) "very" assessed organizational capacity to: (a) adopt a new physical activity initiative (7-items; $\alpha = .92$); (b) implement a new physical activity initiative (11-items; $\alpha = .92$); and, (c) externally promote a new physical activity initiative (9-items; α = .87). Cronbach's alpha (α) provides an estimate of how well items in a scale are measuring the same concept (i.e., internal consistency).¹⁸ Values lie between 0 and 1 where values greater than 0.70 are generally interpreted as having good internal consistency.18 These scales were modified from validated scales developed for the Alberta Heart Health Project (AHHP)^{10,19} that specifically assessed organizational leadership,20 infrastructure7, and will,21 and demonstrated good reliability at baseline¹¹.

Perceptions of ParticipACTION

Perceptions of the impact of ParticipACTION on organizational capacity were also asked using the five-point Likert Scales ranging from (1) "strongly disagree" to (5) "strongly agree". These new items addressed leadership, infrastructure, and will, as well as perceptions of the broader impact of ParticipACTION. Responses of disagreement ("strongly disagree" and "disagree") were combined, and responses of agreement ("strongly agree" and "agree") were combined. Items were examined individually.

Statistical analysis

Descriptive statistics were estimated to address Objectives 1, 2 and 4 (i.e. to assess awareness of ParticipACTION, both original and new, and to report baseline levels of the three organizational capacity domains). To address Objective 3 (to explore potential differences of the three capacity domains), univariate, one-way analyses of variance (ANOVA), and independent samples t-tests were conducted to examine capacity score differences on each of the three capacity domains (i.e., to adopt, implement, and promote a new physical activity initiative) by each of the three organizational characteristics (i.e., size, sector, mandate). Pairwise comparisons were then conducted with statistical significance set at p < 0.05. As survey responses were missing at random, listwise deletion was used to handle missing data for each analysis.

Results

Response rate

Figure 1 illustrates the study flow and the response rate for the survey. The response rate for those opening an email with a survey link and consenting to participate was 40.6% (685 consenting/1688 unique recipients who opened an email with a survey link).

Respondent and organizational characteristics

Respondents from organizations working at provincial, territorial or local levels were relatively well distributed reflecting the Canadian population (see Table 1). One exception was Quebec, where the proportion of responses was roughly half of what would be expected based on the population distribution. The majority of respondents were between the ages of 35 to 50 years (238/532 = 44.7%), followed by 50 years and older (183/532 = 34.4%), and under 35 years of age (111/532 = 20.9%). Though a large proportion of respondents had been working as employees in a field related to physical activity and/or health promotion for 11 or more years (295/488 = 60.5%), most had been with their current organization for a decade or less (316/516 = 61.2%) (see Table 2).

With respect to the target population(s) for each organization's work related to physical activity, the majority focussed on school-aged youth (479/541 = 88.5%). Many also reported that they focussed on adults (277/541 = 51.2%), children ages 0 to 4 years (158/541 = 29.2%), older adults 65 years and above (180/541 = 33.3%), and staff within their organization (74/541 = 13.7%).

The follow-up sample reported here was similar to the baseline sample reported by Plotnikoff and colleagues¹¹ with several exceptions. There were fewer national and provincial organizations in the current sample (9.6% versus 29.6% national; 19.3% versus 30.6% provincial), and less organizations with 40 or more full-time employees (25.0% versus 46.6%). In the follow-up sample, there was also a lower proportion of organizations with an educational mandate (32.5% versus 48.0%), and a greater proportion of organizations from urban planning/transportation (1.3% versus 0%) and the private sector (4.6% versus 1.6%).

A single question on a 5-point Likert scale ranging from 1 = "not at all" to 5 = "very" asked respondents how confident they were that their answers accurately reflected their organization as a whole. Overall, respondents appeared confident that they were knowledgeable about their organization's physical activity promotion efforts, i.e. M (SD) = 4.24 (0.86).

Awareness of ParticipACTION (Objective 1)

Out of 669 respondents, the vast majority (93.9%) indicated they had heard of ParticipACTION since it was relaunched in 2007. Awareness was 54.6% in the baseline sample. Most respondents (502/626 = 80.2%) heard about ParticipACTION through media outlets (e.g. newspapers, television, social media). Several respondents were also members of the ParticipACTION Network (216/626 = 34.5%), involved in an Advisory Group or ParticipACTION initiative (131/626 = 20.9%), and/or heard of ParticipACTION through a presentation or webinar (86/626 = 13.7%), listserv



 TABLE 1

 Survey responses by province/territory among respondents working at provincial, territorial or local levels

| Province/Territory | Response of total sample n (%) | % of Canadian population ^a |
|-----------------------|-----------------------------------|---------------------------------------|
| British Columbia | 73 (14.9) | 13.3 |
| Alberta | 67 (13.6) | 11.1 |
| Saskatchewan | 18 (3.7) | 3.1 |
| Manitoba | 26 (5.3) | 3.6 |
| Ontario | 163 (33.2) | 38.7 |
| Quebec | 46 (9.4) | 23.1 |
| New Brunswick | 24 (4.9) | 2.2 |
| Nova Scotia | 35 (7.1) | 2.7 |
| Prince Edward Island | 7 (1.4) | 0.4 |
| Newfoundland/Labrador | 17 (3.5) | 1.5 |
| Yukon | 5 (1.0) | 0.1 |
| Northwest Territories | 5 (1.0) | 0.1 |
| Nunavut | 5 (1.0) | 0.1 |
| Total | 491 ^b (100) | 100 |

^a Based on Census figures for 2012 (Statistics Canada).

^b National respondents were not asked to choose a province/territory.

(71/626 = 11.3%), or through other mechanisms (e.g. partner organizations and colleagues) (63/626 = 10.1%).

Levels of three organizational capacity domains (Objective 2)

Table 3 shows baseline and follow-up capacity levels (to adopt, implement, and promote a new physical activity initiative) by organizational size, sector, and organizational mandate (Objective 2). Similar to baseline, organizations reported means of approximately 4.0 (on 5-point scales where 1 ="not at all" and 5 ="very") across the three capacity domains by each of the three organizational characteristics. Capacity levels were consistent at both time points with little variability as minimum and maximum differences between baseline and follow-up ranged from -.09 to +.11.

Differences in capacity based on organizational size, sector and mandate (Objective 3)

Effect sizes were small but there were two statistically significant differences by organizational size, sector or mandate (Objective 3; see Table 3). Organizations having no full time employees reported less capacity to implement a physical activity initiative in comparison to those organizations with full time employees. Also, public health organizations reported greater capacity to implement a physical activity initiative than sport and/or recreation organizations.

Perceptions of ParticipACTION (Objective 4)

The majority of respondents agreed or strongly agreed that ParticipACTION had contributed to creating a more active Canada (63.2%) and contributed positively to the physical activity and sport sector (72.9%) (see Table 4). In terms of specific capacity contributions, the majority of respondents reported that ParticipACTION had provided leadership (65.3%) but fewer 'agreed' or 'strongly agreed' that it had contributed to capacity and infrastructure (44%) or organizational will/motivation (47.1%).

Discussion

This study examined the impact of a national social marketing organization on capacity building among other national, provincial, and local organizations over

| TABLE 2 Organizational characteristics | | | | |
|---|---|---|------|--|
| | Organizational characteristic | Frequency ^a (n) | (%) | |
| How many years h | as your organization been involved in p | physical activity or health promotion? | | |
| Less than 5 years | , 0 | 61 | 11.5 | |
| 5-10 | | 73 | 13.8 | |
| 11-15 | | 51 | 9.6 | |
| 16-20 | | 39 | 7.4 | |
| More than 20 year | rs | 305 | 57.7 | |
| Total | | 529 | 100 | |
| Does your organiz | ation work mainly at the national, prov | incial or territorial, or local level? ^b | | |
| National | | 52 | 9.6 | |
| Provincial/territor | ial | 105 | 19.3 | |
| Local | | 348 | 64.1 | |
| Regional | | 5 | 0.9 | |
| Multiple levels | | 24 | 4.4 | |
| International | | 4 | 0.7 | |
| Other | | 5 | 0.9 | |
| Total | | 543 | 100 | |
| How many people | are there in your organization who wor | rk | | |
| full time? | 0 | 75 | 14.1 | |
| | 1-9 | 194 | 36.5 | |
| | 10-39 | 130 | 24.4 | |
| | 40 or more | 133 | 25.0 | |
| | Total | 532 | 100 | |
| part time? | 0 | 83 | 16.0 | |
| | 1-9 | 274 | 52.8 | |
| | 10-39 | 80 | 15.4 | |
| | 40 or more | 82 | 15.8 | |
| | Total | 519 | 100 | |
| volunteer? | 0 | 56 | 11.0 | |
| | 1-9 | 161 | 31.5 | |
| | 10-39 | 140 | 27.4 | |
| | 40 or more | 154 | 30.1 | |
| | Total | 511 | 100 | |
| Do you work in th | e government or education, not-for-pro | fit or private sector? ^c | | |
| Government or ed | ucation | 268 | 49.5 | |
| Not-for-profit | | 233 | 43.1 | |
| Private | | 25 | 4.6 | |
| Other | | 15 | 1.8 | |
| Total | | 541 | 100 | |
| Which mandate does your organization primarily fall into? | | | | |
| Public health or healthcare | | 52 | 9.6 | |
| Sport and/or recreation | | 256 | 47.3 | |
| Education 176 | | 176 | 32.5 | |
| Urban planning or transportation 7 | | 7 | 1.3 | |
| Other | | 50 | 9.2 | |
| Total | | 541 | 100 | |

^a Partially completed surveys were included.

^b "Regional", "multiple" and "international" were specified by respondents who chose the "other" category.

^c Organizational sector: "government" and "education" were combined since all educational facilities are affiliated with provincial education and school boards.

time. The participation rates increased from 269/902 = 29.7% at baseline to 685/1688 = 40.6% at follow-up, showing that twice as many organizations took part in the follow-up study.¹⁶ It is possible that a larger number of organizations were contacted at follow-up because of ease of reach through the virtual ParticipACTION Partner Network, and also that new physical activity organizations emerged since the relaunch of ParticipACTION. Awareness of ParticipACTION has increased from 54.6% at baseline to 93.9% at follow-up, clearly suggesting that the 'new' ParticipACTION is well established nationally in terms of recognition. The focus of this analysis was on providing a snapshot of organizational capacity five years after the relaunch of ParticipACTION.

There was little evidence of change over the last five years in capacity to adopt, implement, or promote physical activity initiatives, and minimal attribution of capacity changes to ParticipACTION. At both time points, organizations (to which respondents belonged) reported good capacity on all of these dimensions. Capacity means ranged from 3.83 to 4.10 on 5-point scales. Given the relatively high baseline scores, there may have been a ceiling effect with some organizations having limited room for improvement. Approximately 75% of the responding organizations reported operating for over ten years and it may be that such organizations have less scope for expanding capacity. Alternatively, for some organizations, particularly organizations that have recently emerged, it may take longer than five years to see changes in their capacity dimensions. The lack of comparable studies to the current one limits further interpretation of these possibilities. Notably, a temporal trend analysis of the ParticipACTION Report Card on Physical Activity for Children and Youth demonstrated positive changes in government and non-government strategies and investments in Canada over the last 12 years.²² This might be reflected in the good capacity reported by participants at least in the context of children and youth settings.

There were also minimal differences in organizational capacity as a function of organizational size, sector, or mandate. Specifically, capacity to adopt and to promote physical activity did not vary by any of these characteristics. However, and as might be expected, organizations with no full-time employees reported lower capacity

| TABLE 3 | |
|---|----------------|
| Organizational characteristic group mean scores on three capacity domains, 2013 (fo | ollow-up year) |

| | n | Capacity to adopt PA Initiative | n | Capacity to implement PA Initiative | n | Capacity to externally promote PA Initiative | |
|---|-----|---|-----|--|-----|---|--|
| | | M (SD) | | M (SD) | | M (SD) | |
| Organizational size (number of full time employees) | | | | | | | |
| 0 | 62 | 3.98 (0.99) | 66 | 3.63 (0.92) | 66 | 3.70 (0.91) | |
| 1-9 | 173 | 4.02 (0.82) | 181 | 3.97 (0.69) | 172 | 3.88 (0.72) | |
| 10-39 | 125 | 4.07 (0.90) | 126 | 3.95 (0.78) | 117 | 3.92 (0.83) | |
| 40 + | 129 | 4.08 (0.88) | 122 | 3.95 (0.84) | 117 | 3.79 (0.91) | |
| Total | 489 | 4.04 (0.88) | 495 | 3.91 (0.79) | 472 | 3.84 (0.83) | |
| | | $F (3, 485) = 0.24, p = .87, \eta^2 = .001$ | | F (3, 491) = 3.34, $p = .02^{a}, \eta^{2} = .02$ | | F (3, 468) = 1.35, p = .26, η^2 = .009 | |
| Baseline (2008) | 157 | 3.93 (0.70) | 176 | 4.00 (0.64) | 168 | 3.83 (0.77) | |
| Organizational sector | | | | | | | |
| Government or education | 250 | 4.08 (0.86) | 248 | 3.88 (0.80) | 229 | 3.80 (0.88) | |
| Not for profit | 206 | 3.98 (0.91) | 218 | 3.93 (0.78) | 210 | 3.89 (0.76) | |
| Private | 23 | 4.16 (0.78) | 21 | 4.09 (0.73) | 23 | 3.79 (0.87) | |
| Total | 479 | 4.04 (0.88) | 487 | 3.91 (0.79) | 462 | 3.84 (0.83) | |
| | | F(2, 476) = 0.86, $p = .42, \eta^2 = .005$ | | F (2, 484) = 0.80, $p = .45, \eta^2 = .006$ | | F (2, 459) = 0.57, $p = .57$, $\eta^2 = .003$ | |
| Baseline (2008) | 159 | 3.94 (0.70) | 179 | 4.00 (0.62) | 172 | 3.79 (0.83) | |
| Organizational mandate | | | | | | | |
| Public health or healthcare | 48 | 4.06 (0.92) | 49 | 4.16 (0.70) | 47 | 3.79 (0.84) | |
| Sport and/or recreation | 233 | 4.10 (0.82) | 236 | 3.83 (0.78) | 230 | 3.89 (0.74) | |
| Education | 159 | 4.01 (0.93) | 163 | 3.92 (0.84) | 147 | 3.75 (0.96) | |
| Total | 440 | 4.06 (0.87) | 448 | 3.90 (0.80) | 424 | 3.83 (0.83) | |
| | | $F(2, 437) = 0.60, p = .55, \eta^2 = .009$ | | F (2, 445) = 3.60, $p = .03^{\text{b}}, \eta^2 = .02$ | | F (2, 421) = 1.43, p = .24, η^2 = .01 | |
| Baseline (2008) | 152 | 3.98 (0.65) | 171 | 3.99 (0.64) | 165 | 3.81 (0.82) | |

Abbreviations: M, mean; PA, physical activity; SD, standard deviation.

Notes: Partially completed surveys were included; therefore some data are missing.

Missing data were handled using listwise deletion. Consequently, n varies.

All three capacity dimensions (adopt, implement, externally promote) were on a 5-point Likert scale ranging from 1 = "not at all" to 5 = "very".

One-way ANOVA tests with pairwise mean comparisons were used to examine organizational characteristic mean score differences on each of the three capacity domains.

^a Pairwise mean comparisons showed that organizations having 0 full time employees reported significantly lower capacity to implement PA initiatives compared to all other categories (p < .01). ^b Pairwise mean comparisons showed that there was one significant difference in that organizations having a public health or healthcare mandate had greater capacity to implement a PA initiative compared to those with a sport and/or recreation mandate (p < .03).

to implement physical activity initiatives but differences were not statistically significant. Similarly, public health organizations also reported greater capacity for implementation than sport/recreation organizations. The broader public health mandate of such organizations may be more in line with ParticipACTION, in contrast to the more specific mandates of sporting or recreation organizations. These differences were small in nature and caution is required in their consideration.

Respondents reported that ParticipACTION has had an impact on the physical activity

sector in Canada and in supporting a more active Canada. This is largely reflected in positive perceptions of the organization's contribution to leadership. As described by Faulkner and colleagues,23 ParticipACTION's strategic priorities were on social marketing, communication, and knowledge exchange. Between 2007 and 2012, ParticipACTION has launched three national social marketing campaigns, and developed the ParticipACTION Partner Network for knowledge exchange among Canadian organizations (see introduction, this issue).²³ In the baseline qualitative work, key stakeholders described a number of expectations they had for the new

ParticipACTION.24 One was that ParticipACTION's advocacy role should include driving a broad physical activity agenda through the creation of a national physical activity policy. ParticipACTION led the development and extensive consultation process for such a national strategy, Active Canada 20/20.25 All of these activities likely contributed to perceptions of national leadership. Others²⁶ have highlighted the importance of facilitating partnerships when building capacity to promote physical activity and sport. In contrast, ParticipACTION provided little or no direct infrastructure or resources to organizations in Canada. Accordingly,

TABLE 4 Perceptions of ParticipACTION

| | Items | Strongly disagree or disagree n (%) | Neutral n (%) | Strongly agree or agree n (%) |
|--|---|--|------------------|--|
| To what extent do you agree or disagree with the following statements? In the last five years ^a | | | | |
| a) | ParticipACTION has contributed to creating a more active Canada | 55 (9.2) | 164 (27.6) | 376 (63.2) |
| b) | ParticipACTION has provided leadership in terms of developing partnerships, collaborations and linkages with the physical activity and sport sector | 57 (9.8) | 144 (24.8) | 379 (65.3) |
| c) | ParticipACTION has increased the capacity (skills, knowledge and resources) of my own organization to promote physical activity | 171 (29.1) | 158 (26.9) | 259 (44.0) |
| d) | ParticipACTION has contributed positively to the physical activity and sport sector | 45 (7.7) | 115 (19.6) | 426 (72.9) |
| e) | ParticipACTION has provided leadership in promoting physical activity | 53 (9.0) | 115 (19.4) | 424 (71.6) |
| f) | ParticipACTION has increased motivation of our organization to promote physical activity within our sector | 168 (29.0) | 139 (24.0) | 273 (47.1) |

^a "Strongly disagree" and "disagree" were combined, and "strongly agree" and "agree" were combined.

ParticipACTION might have achieved what it was capable of, providing leadership and contributing to the creation of a unified awareness of physical (in)activity, given that investment is primarily at a provincial/territorial level for infrastructure and resources. Qualitative research at baseline found high levels of will and motivation to engage in physical activity promotion.⁴ Consequently, impact on this capacity dimension is likely to be less evident. Further qualitative research may be able to shed light on all of these possibilities in allowing a more in-depth examination of potential changes in organizational capacity that might be more nuanced in nature.

Limitations

Three important study limitations should be acknowledged. First, the cross-sectional design is inferior to a longitudinal design in examining change over time. There were also some differences in the two samples in terms of the nature and size of the organizations. These limitations should be considered in interpreting comparisons between 2008 and 2013 on organizational capacity (Objectives 2 and 3) but are less salient considering awareness (Objective 1) and perceptions of ParticipACTION (Objective 4). Second, the response rate was low at 40.6%. Though this was an improvement over the baseline response rate (29.7%), response bias is possible on the basis of these two limitations. However, there was diversity in the sample and a modified Dillman protocol was employed including a presurvey prompt and multiple follow-ups to improve response rates. Additionally, there is no way to account for the multitude of other factors that have influenced the physical activity sector, making it impossible to determine the true influence (or lack thereof) of ParticipACTION.

Conclusion

This study contributes to the limited literature examining change in organizational capacity. Findings demonstrate that Canadian organizations involved in physical activity and health promotion continue to report having good capacity to adopt, implement, and promote physical activity initiatives. This holds irrespective of organizational size, sector, or mandate. There was no discernible change in capacity indicators in the five years since the relaunch of ParticipACTION. However, ParticipACTION was considered by most as making a positive contribution to leadership on physical activity and the physiactivity sector more broadly. cal Awareness of ParticipACTION is very high. Our findings demonstrate that monitoring potential change in organizational capacity is possible at a population level,

and the present data can be used to inform ongoing and long-term evaluation of the impact of ParticipACTION.

Acknowledgements

This project was made possible by an operating grant from the Canadian Institutes of Health Research (MOP-123491). Guy Faulkner holds a Canadian Institutes of Health Research-Public Health Agency of Canada (CIHR-PHAC) Chair in Applied Public Health. Amy Latimer-Cheung and Tanya R. Berry receive support from the Canada Research Chairs Program.

Conflicts of interest

GF, TB, SD, AEL, RER, MST and JS serve on the ParticipACTION Research Advisory Group.

Authors' contributions and statement

GF conceptualized the design of the study and wrote the initial draft. SR led data collection and analysis. RP, TB, SD, AELC, RER, MST, and JCS provided input to study design, analysis, and interpretation, and in drafting and revising the paper. All authors have seen and approved the final manuscript.

The content and views expressed in this article are those of the authors and do not necessarily reflect those of the Government of Canada.

References

- Smith BJ, Tang KC, Nutbeam D. WHO Health Promotion Glossary: new terms. Health Promot Int. 2006;21(4): 340-5. doi:10.1093/heapro/dal033.
- 2. Colley RC, Garriguet D, Janssen I, Craig CL, Clarke J, Tremblay MS. Physical activity of Canadian adults: accelerometer results from the 2007 to 2009 Canadian Health Measures Survey. Health Rep. 2011;22(1):7-14.
- 3. Colley RC, Garriguet D, Janssen I, Craig CL, Clarke J, Tremblay MS. Physical activity of Canadian children and youth: accelerometer results from the 2007 to 2009 Canadian Health Measures Survey. Health Rep. 2011; 22(1):15-23.

- 4. Faulkner G, McCloy C, Plotnikoff RC, et al. ParticipACTION: Baseline assessment of the capacity available to the 'New ParticipACTION': a qualitative study of Canadian organizations. Int J Behav Nutr Phy. 2009;6. doi: 10.1186 /1479-5868-6-87.
- Finlay SJ, Faulkner G. Physical activity promotion through the mass media: inception, production, transmission and consumption. Prev Med. 2005;40(2):121-30. doi: 10.1016/j .ypmed.2004.04.018.
- 6. Latimer-Cheung A, Murmets K, Faulkner G. ParticipACTION: the national voice of physical activity and sport. In: Pate RR, Buchner DM, editors. Implementing Physical Activity Strategies. Champaign, IL: Human Kinetics; 2014. p. 61-70.
- Plotnikoff RC, Anderson D, Raine K, Cook K, Barrett L, Prodaniuk T. Scale development of individual and organization infrastructure for heart health promotion in Regional Health Authorities. Health Educ J. 2005;64: 265-70. Available from: http://journals .sagepub.com/doi/pdf/10.1177/00178 9690506400306ble
- Elliott SJ, O'Loughlin J, Robinson K, Eyles J, Cameron R, Harvey D, et al. Conceptualizing dissemination research and activity: the case of the Canadian Heart Health Initiative. Health Educ Behav. 2003;30(3):267-86. doi: 10.1177 /1090198103030003003.
- Robinson K, Elliott SJ, Driedger SM, et al. Using linking systems to build capacity and enhance dissemination in heart health promotion: a Canadian multiple-case study. Health Educ Res. 2005;20(5):499-513. doi: 10.1093/her /cyh006.
- Dressendorfer RH, Raine K, Dyck RJ, et al. A conceptual model of community capacity development for health promotion in the Alberta Heart Health Project. Health Promot Pract. 2005;6(1): 31-6. doi: 10.1177/1524839903259302.
- 11. Plotnikoff RC, Todosijczuk I, Faulkner G, et al. ParticipACTION: Baseline assessment of the 'new ParticipACTION': a quantitative survey of Canadian organizational awareness and capacity. Int J Behav Nutr Phy. 2009;6. doi: 10.1186/1479-5868-6-86

- 12. Ebbesen LS, Heath S, Naylor PJ, Anderson D. Issues in measuring health promotion capacity in Canada: a multi-province perspective. Health Promot Int. 2004;19(1):85-94.
- 13. Joffres C, Heath S, Farquharson J, et al. Defining and operationalizing capacity for heart health promotion in Nova Scotia, Canada. Health Promot Int. 2004;19(1):39-49.
- 14. Dillman DA. Mail and telephone surveys: the Total Design Method. New York: Wiley; 1978. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2328022/
- 15. Mail Chimp. How do I use Survey Monkey integration? 2013, February 7. Available from: http://kb.mailchimp .com/integrations/other-integrations /integrate-surveymonkey-with -mailchimp
- Ramanathan S, Faulkner G. Calculating outcome rates in web surveys. Can J Prog Eval. 2015;30(1). doi: 10.3138/cjpe.30.1.90.
- 17. Drummond FJ, Sharp L, Carsin A-E, Kelleher T, Comber H. Questionnaire order significantly increased response to a postal survey sent to primary care physicians. J Clin Ep. 2008; 61(2):177-85. doi: 10.1016/j.jclinepi .2007.04.012.
- Tavakol M, Dennick R. Making sense of Cronbach's alpha. International journal of medical education. 2011;2: 53-5. doi:10.5116/ijme.4dfb.8dfd.
- 19. Smith C, Raine K, Anderson D, et al. A preliminary examination of organizational capacity for heart health promotion in Alberta's regional health authorities. Promot Educ. 2001;Suppl 1:40-3.
- 20. Barrett L, Plotnikoff RC, Raine K, Anderson D. Development of measures of organizational leadership for health promotion. Health Educ Behav. 2005;32(2):195-207. doi: 10.1177 /1090198104271970.
- 21. Anderson D, Plotnikoff RC, Raine K, Cook K, Smith C, Barrett L. Towards the development of scales to measure 'will' to promote heart health within health organizations in Canada. Health Promot Int. 2004;19(4):471-81. doi: 10.1093/heapro/dah409.

- 22. Barnes JD, Tremblay MS. Changes in indicators of child and youth physical activity in Canada, 2005-2016. Can J Public Health. 2017;107(6):e586-e9.
- 23. Faulkner G, Yun L, Tremblay MS, Spence JC. Exploring the impact of the 'new' ParticipACTION: overview and introduction of the special issue. Health Promot Chronic Dis Prev Can. 2018;38(4):153-61.
- 24. Faulkner G, McCloy C, Plotnikoff RC, Tremblay MS. Relaunching a national social marketing campaign: expectations and challenges for the "new" ParticipACTION. Health Promot Pract. 2011;12(4):569-76. doi: 10.1177 /1524839909349180.
- 25. Spence JC, Faulkner G, Costas Bradstreet C, Duggan M, Tremblay MS. Active Canada 20/20: a physical activity plan for Canada. Can J Public Health. 2015;106(8):e470-3. Available from: https://journal.cpha.ca/index. php/cjph/article/viewFile/5041/3278
- 26. Marlier M, Lucidarme S, Cardon G, De Bourdeaudhuij I, Babiak K, Willem A. Capacity building through cross-sector partnerships: a multiple case study of a sport program in disadvantaged communities in Belgium. BMC public health. 2015; 15:1306. doi: 10.1186/s12889-015 -2605-5.