

1 **‘Ahhh it was like paradise, but inside’: children’s experiences and** 2 **perceptions of a free physical activity program**

3 As most Canadian children are not attaining the recommended 60 minutes of daily
4 physical activity, it is imperative that affordable and accessible programs are
5 implemented to help children become more physically active. Specifically, community-
6 based programs that are free and easy to access have shown to be advantageous for
7 promoting beneficial health behaviours at a population level. The Grade 5 ACT-i-Pass
8 (G5AP) is a community-based physical activity program in the mid-sized Canadian city
9 of London, Ontario that offers free programming to all grade 5 children (ages 9-11
10 years) at various recreational facilities across the city. The data from 28 focus groups
11 with past G5AP participants (n=101) were analyzed to understand the influence of the
12 program on children’s perceived physical activity levels, and to investigate the enablers
13 and/or barriers that children believe influenced their participation in, or access to, G5AP
14 programming. Five distinct themes were identified during the analysis, including two
15 themes describing participants’ perceived changes to their physical activity levels (i.e.,
16 additional physical activity opportunities, and well-being and self-efficacy), and three
17 themes explaining enablers and/or barriers to G5AP programming (i.e., program
18 structure and implementation, spatial accessibility of programming, and social supports
19 and constraints). The findings from the focus groups were used to generate
20 recommendations for current and future community-based physical activity programs as
21 a means to improve the health and well-being of children.

22 Keywords: physical activity, child, community-based, intervention, barrier,
23 enabler, qualitative, focus group

24 25 **Introduction**

26 Canadian children’s low physical activity levels are an ongoing public health concern,
27 with only 28% of children 5 to 17 years of age accumulating the recommended 60
28 minutes of moderate-to-vigorous physical activity daily (MVPA) (ParticipACTION
29 2022). Engaging in physical activity promotes beneficial outcomes for children,
30 including improved cardiovascular health and bone density (Janssen and LeBlanc 2010;
31 Poitra et al. 2016), lower risk of depression and anxiety (Biddle et al. 2019), greater

32 cognitive functioning and academic achievement (Castelli et al. 2007; Tomporowski et
33 al. 2008), higher self-esteem (Biddle et al. 2019), and greater spiritual development
34 (Lodewyk, Lu, and Kentel 2009). It is therefore important to establish strategies that
35 encourage children to be physically active for supporting their overall health and well-
36 being.

37 Community-based programs are a desirable method of health promotion as
38 they can account for a variety of determinants that can either increase participation in
39 physical activity opportunities (e.g., parents encouraging their children to be active,
40 interest in activities that elicit MVPA, and local recreation spaces) or restrict the
41 accessibility of recreational programming (e.g., lack of local recreation spaces,
42 insufficient transportation options, and financial constraints; Baker and Brownson
43 1998; West and Shores 2008). Community-based health promotion can expand
44 beyond the absence of diseases by promoting the physical, mental, emotional and
45 spiritual health and well-being of the community through population-level programs
46 and interventions that are tailored to meet the needs of a specific geographic area or
47 demographic group (McLeroy et al. 2003; Murphy 2014). Evaluations of physical
48 activity initiatives have found that community-based programs that provide children
49 with a supportive and appropriate environment can positively influence children's
50 physical activity levels (Beets 2012; West and Shores 2008). Thus, offering
51 accessible recreational opportunities outside of school could be a valuable approach
52 to bolstering children's physical activity levels (Beets et al. 2009).

53 Community-based health initiatives have nevertheless been critiqued for their
54 inability to promote substantial changes in health-related behaviours (Guldan 1996).
55 One challenge of creating effective, community-based health promotion programs is
56 recruiting and retaining participants. There are a variety of factors that influence

57 participation in and the accessibility of programs. Health behaviours are shaped by
58 and embedded in often intersecting socio-material structures, such as the local
59 gendered and cultural norms affecting perceived access to services, the accessibility
60 of resources (e.g., availability within different neighbourhoods and translated
61 materials), the quality of the transportation infrastructure (i.e., roads, bike lanes, and
62 public transportation), and the financial means to afford services (Christensen, Lærke
63 and Bentsen 2015; Pate et al. 2003; Ravensbergen et al. 2016). The combination of
64 societal expectations and environmental barriers can ultimately limit or encourage
65 engagement in health promotion efforts. Consequently, it is challenging to create a
66 program that applies to the whole community, which may result in decreased
67 effectiveness and lower participation in the program amongst certain socio-economic
68 groups (Nilsen 2006). Considering these challenges, evaluations of community-level
69 programs are vital in order to assess how a given program influences health outcomes
70 for different subgroups within the community and to discover cognitive, behavioural,
71 and environmental influences that shape health behaviours (Brodersen et al. 2007).

72 The Grade 5 ACT-i-Pass (G5AP) is a community-based physical activity
73 program in London, Ontario, Canada (Gilliland et al. 2015). With the generosity of
74 various public and private service providers (including, but not limited to, the Boys
75 and Girls Club, YMCA, and City of London Recreation), the program provides all
76 grade 5 elementary school children (ages 9-11 years) and an accompanying guest free
77 access to recreational programming across the city. To participate in the program,
78 parents complete either a paper or online copy of the registration form. Subsequently,
79 the child is mailed a pass that can be used to attend any of the designated G5AP
80 activity times. The G5AP encourages physical activity by removing some financial
81 constraints and informing children and their caregivers of the recreational

82 opportunities available to them across London, Ontario. Among children ages 9 to 11
83 years, previous quantitative evaluations of G5AP child- and parent-reported survey
84 data have shown that the pass is popular within subgroups associated with lower
85 physical activity levels, including girls, children from low-income households, and
86 children with low geographic accessibility to recreational facilities (Clark et al. 2018,
87 2019).

88 This study is an extension of prior evaluations of the G5AP, which have thus
89 far been quantitative and survey-based, by undertaking a qualitative exploration of
90 G5AP participants' perceptions of the program to develop a deeper understanding of
91 the complex factors that influence children's physical activity levels and access to
92 recreational programming from their perspectives. This qualitative study offers a rich
93 description of children's experiences with the pass from a large sample of program
94 participants (n = 101). The findings from this study not only provide suggestions for
95 future years of the G5AP, but also importantly point to recommendations for the
96 development and administration of community-based physical activity programs for
97 children. The purpose of this study is to investigate children's experiences and
98 perceptions of the G5AP, including gendered, socioeconomic, and geographic
99 differences in children's experiences. Through this research, the following questions
100 are explored: (1) how did the G5AP influence children's perceived physical activity
101 levels? and (2) what enablers and/or barriers did children feel they encountered when
102 accessing or participating in the G5AP?

103

104

105

106

107 **Methods**

108 ***Research approach***

109 This study was exploratory with a focus on the descriptions of past participants’
110 experiences and engagement in the program. As a result, a descriptive approach was
111 used to analyze the data. Margarete Sandelowski (2000, 336) defined qualitative
112 descriptive studies as a “comprehensive summary of an event in the everyday terms of
113 those events.” Unlike grounded theory, phenomenological, or ethnographic approaches
114 to qualitative research, descriptive studies offer more literal interpretations of the data,
115 prioritizing the exact words and language used by the participants (Sandelowski 2000).
116 Descriptive qualitative studies are considered appropriate for exploring the relationship
117 between health behaviours and determinants as the methods produce findings that
118 directly investigate the interactions between the participant and a particular determinant
119 (Colorafi and Evans 2016). Thus, a descriptive approach provided findings that
120 represented the experiences of G5AP participants and describe what and how different
121 factors influenced their participation in the program, ultimately creating suggestions for
122 community-based programming.

123

124 ***Participants and recruitment***

125 This study protocol was approved by Western University’s Non-Medical Research
126 Ethics Board (REB #103954). Participant recruitment began in the fall of 2015,
127 following the completion of a larger evaluation of the G5AP. Eligible participants were
128 children enrolled in a grade 6 class in the 2015-2016 school year who were registered
129 for the G5AP the previous year. Due to associations between demographic factors on
130 physical activity participation, the research team prioritized the inclusion of a sample of
131 children with a variety of demographic backgrounds to represent the varying

132 experiences of G5AP participants. To achieve this, the research team used the
133 neighbourhood demographics from the 2011 Census of Canada to select a variety of
134 schools based on the location (urban/suburban), median family income, and the quantity
135 of service providers in the school catchment areas (Clark et al. 2018). Elementary
136 school principals were contacted via email to discuss their school's participation in the
137 study. In total, ten schools were recruited to participate in this study. The participating
138 schools included an assortment of median family incomes of the school catchment
139 areas: two low-income schools (i.e., <\$60,000 CAD), five middle income schools (i.e.,
140 \$60,001 - \$90,000 CAD), and three upper-middle/upper-income schools (i.e., >\$90,001
141 CAD). The schools also varied by the number of local service providers (i.e.,
142 recreational facilities providing programming to G5AP participants) located within
143 1,600 metres from the school. There were five schools with a low number of local
144 service providers (i.e., zero or one facility), three schools having a moderate number of
145 local service providers (i.e., two facilities), and two schools having a high number of
146 local service providers (i.e., three or more facilities). A sample was randomly selected
147 from a list of children at each participating school who had parental consent to partake
148 in a focus group. This process resulted in a diverse group of study participants.

149 Of the 1,673 grade 5 children enrolled in the program, 101 G5AP registrants
150 (6.04%) across 10 elementary schools took part in 28 different focus groups. The
151 sample of participants was roughly balanced in terms of those who identified as users
152 (n=55) versus non-users (n=46) of the program, and girls (n=53) versus boys (n=48).
153 Nearly half of the participants were from middle-income areas of the city (n=49), with
154 the remaining participants living in low-income (n=30) and upper-middle/upper income
155 (n=22) areas. Participants were also located in areas with varying amounts of local

156 recreational facilities, including low (n=47), moderate (n=24), and high (n=30) number
157 of service providers.

158

159 ***Data collection: semi-structured focus groups***

160 Prior to the focus groups, members of the research team visited schools to meet with the
161 selected participants to further explain the purpose of the focus groups, and to distribute
162 parental information and child assent forms to ensure the parents/guardians and the
163 child consented to partake in the study. Subsequently, the whole research team met to
164 review the scripts and provide suggestions for the discussions to deliver consistent
165 facilitation of focus groups. Separate scripts were prepared for the user and non-user
166 groups, as questions concerning changes in physical activity levels and experiences
167 participating in the program did not apply to the non-user group.

168 Each focus group consisted of semi-structured conversations with two to four
169 participants. Focus groups were selected in place of individual interviews as they
170 provided participants with the opportunity to interact with peers, which can improve
171 data quality by providing a supportive environment with others that have similar
172 experiences (Morgan et al. 2002). The groups were mixed gender and were grouped into
173 either G5AP users or non-users. Participants were identified as users if they used the
174 pass at a recreational facility at least one time. Participants' gender status and school
175 were determined from a G5AP survey completed by a parent/guardian (Gilliland et al.
176 2015). Focus groups were conducted during lunch and recess time in a communal space
177 within the participating schools (library, cafeteria, or gymnasium), and participants
178 received food and refreshments. The average focus group duration was 33 minutes and
179 they ranged from 25 to 47 minutes. Participating schools either had two recess/lunch
180 periods lasting 40 minutes each (balanced school day) or two 15-minute recesses with

181 one 60-minute lunch period (traditional school day; Clark, Wilk, and Gilliland 2019).
182 Nutritious snacks were provided during each focus group and, wherever possible, the
183 research team finished focus groups at least 10 minutes before the end of the
184 lunch/recess period to give children time to play before returning to class. Additionally,
185 to preserve the quality of the conversations, focus groups were kept shorter than the full
186 period as the literature suggests that children can concentrate on an activity for about 45
187 minutes (Gibson 2007). There were four members of the research team who acted as
188 moderators for the focus groups and they were each supported by a second team
189 member who was responsible for notetaking and audio-recording. The moderators
190 consisted of post-doctoral and graduate students who had experience leading focus
191 groups and interviews with youth.

192 Before starting the discussion, participants were asked if they consented to the
193 discussion being audio-recorded, followed by introductions. To consider the power
194 dynamic between the participants and the interviewers, moderators informed
195 participants that they were free to discuss any subject matter they thought was relevant
196 to the discussion and that they did not have to respond to questions they were not
197 comfortable answering (Morgan et al. 2002). Participants were also informed that there
198 are no wrong answers and that their responses were confidential. The focus groups
199 consisted of five (non-user groups) or eight (user groups) open-ended questions, and
200 prompts were used to facilitate discussion or to expand on a topic. Questions focused on
201 their experiences during the program (e.g., what was your experience with the ACT-i-
202 Pass program?), factors that facilitated or hindered program use (e.g., what did you like
203 about the ACT-i-Pass program?), and possible solutions or changes that would
204 encourage participation in the G5AP (e.g., what would you change about the ACT-i-
205 Pass program that would make it better?). Focus groups proceeded until all questions

206 were answered and children felt they had no additional information to share with the
207 research team.

208

209 *Data analysis*

210 Conversations were audio-recorded and transcribed verbatim, resulting in 412 pages of
211 transcripts. The transcripts were de-identified and reviewed for accuracy by the
212 members of the research team. The focus groups were analyzed in the software NVivo
213 12 guided by Hsieh and Shannon's (2005) procedure for an inductive conventional
214 content analysis. A content analysis was deemed to be the appropriate method as it
215 provides a summary of children's experiences, which complemented the descriptive
216 approach of this study (Hsieh and Shannon 2005; Sandelowski 2000). This process
217 involved researchers interpreting the data from the focus group by coding and
218 identifying patterns in the discussions (Hsieh and Shannon 2005). Unlike a summative
219 quantitative approach or a theory-directed approach to content analyses, conventional
220 content analyses allowed researchers to explore the experiences of participants without
221 preconceived ideas, resulting in inductive category development and themes derived
222 from the conversations with children (Hsieh and Shannon 2005).

223 The analysis progressed in five steps. Figure 1 displays the coding process that
224 resulted from the analysis of the data, including examples of the codes, categories and
225 themes developed. First, the transcripts were reviewed by two team members (EO and
226 KR) to familiarize themselves with the data. The analysts did not moderate or
227 participate in the focus groups; as a result, they had no prior knowledge of the topics
228 covered in the conversations with participants before reading the transcripts.

229 Subsequently, these same team members re-read the transcripts, and began coding
230 words and statements based on key concepts. This process included documenting any

231 first impressions from the initial analysis, particularly the key ideas shared by the
232 participants concerning their physical activity levels during their grade five year and
233 their access to G5AP programming, including important discussion points, experiences
234 or suggestions repeated by multiple groups; and the tone and language used by
235 participants. This set of codes was then discussed with the wider team to inform how
236 the codes were organized into categories based on the context and their relation to one
237 another. Finally, categories were further combined into larger, overarching themes,
238 which were finalized through iterative team discussions.

239

240 *[Insert Figure 1]*

241

242 *Methodological rigour*

243 Various techniques were applied throughout the study to enhance the quality of the
244 analysis. Lincoln and Guba's (1985) criteria for trustworthiness were used to assess the
245 quality and accuracy of the themes created from the data (Colorafi and Evans 2016).
246 Trustworthiness consists of four components: (1) credibility (i.e., the results presented
247 represent the experiences of the focus group participants); (2) dependability (i.e., the
248 results being replicated if the study was conducted by another researcher); (3)
249 transferability (i.e., the applicability of the results to different groups or settings); and
250 (4) conformability (i.e., the impact of researchers' perspectives of the outcomes
251 presented). One technique utilized to add trustworthiness to the findings was the
252 adoption of critical friends by involving wider team members in the analysis process.
253 While analyst triangulation focuses on the reproducibility of the findings through
254 intercoder reliability and agreement (Campbell et al. 2013), critical friends aim to create
255 plausible findings based on the data collected for the study (Smith and McGannon

256 2018). This process challenges individual interpretations of the data by encouraging
257 researchers to reflect upon their comprehension of the data and to consider alternative
258 interpretations from other members of the research team (Smith and McGannon 2018).
259 For instance, in this study, the discussions about the initial codes, categories and themes
260 between the analysts and critical friends resulted in the restructuring of the themes due
261 to the nuances in boys' and girls' experiences in the program. KNF, SEC and JG were
262 the ideal individuals to act as critical friends for this study due to their expertise in
263 children's physical activity and health determinants, experience analyzing interviews
264 with children, and familiarity with content analysis. Additionally, the focus groups
265 included children from various demographic and economic backgrounds, which
266 provided rich data containing a variety of perspectives and experiences, ultimately
267 improving the transferability of the findings to children who reside in comparable urban
268 and suburban areas of similar high-income countries (Carter et al. 2014).

269 Reflexivity was used to recognize the influence of the researchers'
270 positionalities and knowledge of the subject matter on the findings (Rettke et al. 2018;
271 Mauthner and Doucet 2003). Specifically, Kezar (2002) argued that various aspects of
272 an individual's identity, such as education, social status and life experiences, can shape
273 the way a person interprets and adds meaning to information. The two primary analysts
274 (EO and KR) for this study were athletic adults and cis-gender women researchers.
275 Being adults may have affected the relatability of children's experiences and their
276 perceived barriers. Further, both analysts being athletic women brought a gendered
277 perspective from their involvement in sport and use of physical activity spaces. It is
278 important to consider how these experiences and social positions may have influenced
279 their interpretation of the data and the development of themes (Mason-Bish 2019; Shaw
280 2010). It was particularly important when looking at differences in the responses

281 between gender and socio-economic groups to critically reflect on the analysts'
282 knowledge of the literature and the amount of variation in responses that warranted
283 differences between groups. To consider different interpretations of the data, the
284 analysts met at multiple points during the analysis to have an open dialogue about the
285 codes, categories and themes developed during their independent analyses. Through
286 these discussions, the analysts reflected on the decision-making process when grouping
287 codes and categories and alternative interpretations of the data to develop a plausible
288 explanation of children's experiences in the program. This process involved continuous
289 journaling and discussions about the interpretation of the data, resulting in alterations to
290 the reorganization and renaming of codes, categories and themes.

291

292 **Results**

293 The analysis of the focus groups identified five distinct themes. The themes were
294 categorized based on each research question: (1) perceived alterations to participants'
295 physical activity; and (2) identified enablers and barriers to G5AP programming.

296

297 *Children's perceived physical activity levels*

298 Participants believed that the G5AP increased their physical activity levels, as
299 illustrated by two themes: (1) additional physical activity opportunities; and (2) well-
300 being and self-efficacy.

301

302 *Additional physical activity opportunities*

303 Participants who used the pass perceived an increase in their physical activity levels
304 during the program as the G5AP provided additional activity options after school. For
305 instance, one participant stated, 'I would play more soccer, so I was more active' (Boy,

306 G5AP user). Another child agreed with the sentiment, explaining, '[the G5AP] did
307 increase the amount I did them [sports]' (Boy, G5AP user). With the additional
308 activities available, some participants credited the G5AP for reducing engagement in
309 screen-based activities after school as, prior to the program, they would 'come home
310 and there was nothing to do except video games or draw' (Boy, G5AP user). As one
311 participant explained, 'Instead of thinking like "oh I'll just go to my room and play
312 video games" I was like "oh maybe I should go to the ACT-i-Pass"' (Girl, G5AP user).

313 In addition to the supplementary activities, participants felt that the free
314 programming available with the pass increased their physical activity levels, as 'it was
315 free so if you wanted to try it [an activity or sport], you could, and you didn't have to
316 pay for like a year of classes' (Boy, G5AP user). A handful of participants explained
317 how free programming offered additional physical activity opportunities that they were
318 previously unable to participate in due to enrolment fees. One participant explained, 'I
319 got to go skating and swimming and usually I don't do that stuff. But it was free, so I
320 went a lot' (Boy, G5AP user), with another participant sharing a similar sentiment,
321 stating, 'it encouraged me to try more sports, 'cause they are more open to me 'cause
322 they are free.' (Girl, G5AP user). Further, some participants highlighted the benefits of
323 free programming for low-income families that had limited access to recreational
324 opportunities since 'free is something that can get just any kid to probably do
325 something' (Girl, G5AP user). Participants mentioned that 'there will be students I
326 guess who don't have as much opportunities that others... as other students' (Boy,
327 G5AP user) and that the G5AP 'once helped out my friend who, she was like out of
328 money I don't know why, but she just didn't have money with her so I got her in with
329 the ACT-i-Pass' (Girl, G5AP user). Ultimately, providing free physical activity
330 opportunities supported parents as 'they're [service providers] too much money for

331 most people' (Girl, G5AP user) and allowed parents to 'just, like, drop [their children]
332 off and go without having to know every time if there was like different money
333 privileges' (Girl, G5AP user). The responses from the participants indicated that the
334 free, supplementary programming offered by the G5AP enabled participation in
335 additional recreational opportunities, resulting in perceived higher physical activity
336 levels.

337

338 *Well-being and self-efficacy*

339 Participants indicated that they enjoyed the activities available with the G5AP and they
340 developed physical activity-related skills through the program, which engaged them in
341 physical activity. Many of the participants who took part in the program described the
342 ACT-i-Pass as 'really awesome! It was a good time and I really enjoyed it' (Boy, G5AP
343 user) since 'I got to like try different activities at the gym. I got to do volleyball and
344 dodgeball and everything. I really loved it.' (Girl, G5AP user). Additionally,
345 participants, predominantly girls, indicated that they enjoyed that the G5AP provided 'a
346 whole bunch of activities that I've not tried before' (Girl, G5AP user) and 'encouraged
347 me to try more sports' (Girl, G5AP user). According to one child, 'Yeah, it [the ACT-i-
348 Pass] definitely did it for me [increased physical activity levels], 'cause this year I
349 actually started dance and then I started running' (Girl, G5AP user). Another participant
350 explained, 'Well at the time, I didn't do volleyball, so I tried volleyball, like something
351 new. I also did cheer 'cause like I've never done it before' (Girl, G5AP user). By
352 attempting new activities, participants felt they had expanded their physical activity-
353 related skills: 'I learned like bumping, spiking [volleyball skills]' (Girl, G5AP user).
354 Alternatively, the majority of boys felt the program provided extra activity options, but
355 'it wasn't any new sports for me' (Boy, G5AP user). As one boy explained, 'I do a lot

356 of activities, but it kind of just adds to more activities' (Boy, G5AP user). As a result,
357 boys wanted to maximize their use of the pass as they enjoyed being more active after
358 school: 'I'm gonna use this [the pass] a lot 'cause it's for free and it's for like a limited
359 amount of time... I'm trying to get as much exercise in as possible' (Boy, G5AP user).

360 Some participants also reported maintaining higher physical activity levels
361 following the program. Specifically, participants felt that the G5AP had a long-term
362 effect on their physical activity even after the one-year pass ended, explaining that they
363 'actually started dance and then I started running' (Girl, G5AP user) and 'it [ACT-i-
364 Pass programming] was my first time [playing basketball] and now I'm gonna try out
365 for the basketball team' (Girl, G5AP user). Another participant felt they were more
366 active following the program: 'My dad now is gearing to go find every single free skate
367 that's available and he's trying to get us to be able to go to stick and puck on Fridays
368 and free skates on Sundays and Wednesdays' (Boy, G5AP user). Overall, the program
369 introduced participants to new, enjoyable activities; helped them develop physical
370 activity-related skill sets; and encouraged enrollment in programming the following
371 year.

372

373 *Enablers and barriers to G5AP programming*

374 The following three themes reflected the factors that the participants felt facilitated or
375 hindered program participation: (1) program structure and implementation; (2) spatial
376 accessibility of programming; and (3) social supports and constraints.

377

378 *Program structure and implementation*

379 Participants discussed various aspects of the program design that affected their
380 participation in the program. First, some participants mentioned that the variety and

381 types of programming available with the G5AP enabled their participation. Participants
382 highlighted that the variety of activities ‘removed the restriction of the times’ (Boy,
383 G5AP user) as they could ‘use it anytime you want.’ (Girl, G5AP user). Another child
384 expanded on this idea by explaining, ‘it was also nice because they [the service
385 providers] were dotted around the city, so [it was] not just one place [that] was next to
386 where every single place was. It was spread out, so that north could get involved, south,
387 west, east’ (Boy, G5AP user). Several participants also felt that the selection of
388 activities encouraged the use of the pass, as there were a variety of activities that could
389 reach a broad assortment of interests. Specifically, participants spoke about the
390 combination of drop-in times where ‘you could just walk in and do something’ (Boy,
391 G5AP user), and weekly activities where ‘it was kind of like a schedule, so it was kind
392 of like a weekly thing’ as a favourable feature of the program (Girl, G5AP user).

393 Although the variety of programming facilitated the use of the pass, a number of
394 participants reported time constraints as a barrier to program participation, particularly
395 participants who were classified as non-users. Participants referred to pre-existing
396 commitments (e.g., organized sports, music lessons, and schoolwork) as barriers to
397 participating in the G5AP, with children explaining, ‘I couldn’t go to too many things,
398 ‘cause the schedule conflicts’ (Boy, G5AP non-user). This was particularly a barrier
399 amongst those who are already highly active. This was emphasized in the following
400 quote:

401 Well, I play sports so often, it’s kind of hard to fit in my schedule. I’m training four or
402 five times a week and then I have a game on the weekend and sometimes you just not
403 able to get it [the ACT-i-Pass] in your schedule with school and all that. (Boy, G5AP
404 non-user)

405 Likewise, other participants explained, ‘I do dance a lot of days of the week and I have
406 violin, so I didn’t really have much time to do whatever I want’ (Girl, G5AP non-user)

407 and ‘it’s like a soccer practice program where there are like tournaments and everything
408 and sometimes that would stop me from going anywhere with ACT-i-Pass’ (Girl, G5AP
409 user).

410 To alleviate the issue of schedules conflicting with program times, participants
411 suggested expanding the G5AP programming and activity options. During the focus
412 group discussions, participants described the need for ‘more variety of programs, like
413 different sports’ (Boy, G5AP non-user). As one participant recommended:

414 I wish, like, similar programs were on separate days, ‘cause I know a lot of weeks I
415 could never do it because the one thing that I really wanted to do that week I was
416 always busy... So it would be more helpful if the same thing was like twice in one week
417 in the ACT-i-Pass. (Boy, G5AP non-user)

418 A few participants expressed interest in a higher number of outdoor activities, such as ‘a
419 reserved area for like snowball fights and stuff’ (Boy, G5AP non-user), ‘set up a water
420 fight like you would have water balloons’ (Boy, G5AP non-user), or ‘tubing or skiing
421 would be fun’ (Girl, G5AP user). More social and unstructured activities were also
422 suggested: ‘If it [ACT-i-Pass programs] takes place at, like, [an anonymous] park and
423 we played like manhunt or whatever, some sort of communal thing where you can
424 gather up at a park or whatever’ (Girl, G5AP user). Alternatively, another participant
425 emphasized the need for adventurous activities: ‘If they don’t have archery then maybe
426 archery, because I’ve always wanted to try that’ (Boy, G5AP non-user).

427 Some participants highlighted mechanistic issues around receiving the physical
428 pass, distributing the pass, and replacing a lost pass. One child mentioned, ‘another
429 reason I couldn’t use it [the pass], I never got it. They never delivered it’ (Boy, G5AP
430 non-user), with another child explaining, ‘it [the pass] came to me two months late.’
431 (Girl, G5AP non-user). Another participant felt that losing their pass affected their
432 participation in the G5AP:

433 I went skating and then I lost it for the whole year, so we ordered another one. We got
434 the other one, and then somehow I don't know where my mom put it. Then I had found
435 it right at the end of the year, so I only got to use it twice for skating and then it was
436 expired. (Girl, G5AP user)

437 A handful of participants also highlighted challenges trying to acquire a new pass, with
438 one child explaining, 'I lost it, and they went to go get me one, but by the time I got it
439 [the pass], it was expired' (Girl, G5AP user). Since they did not have their pass,
440 participants 'only got it for a month' (Boy, G5AP user), 'only did it with a friend' (Girl,
441 G5AP user) or 'couldn't use it' (Girl, G5AP user). Overall, participants felt that
442 difficulties receiving or misplacing their pass limited the amount of time they could
443 utilize G5AP programming.

444 Moreover, some participants felt that limited information about the G5AP
445 reduced their use of the pass, as they were not aware of all the aspects of the program.
446 One child explained, 'when we signed up for this [the ACT-i-Pass], I had no idea there
447 was an email, I had no idea there was a bus, I had no idea of anything... just give more
448 information' (Girl, G5AP non-user). A couple of participants also reported difficulties
449 entering service providers due to the front desk staff being unaware of the G5AP, so 'it
450 was like really hard to get signed in' (Boy, G5AP user). When entering service
451 providers, one participant explained, 'the managers would all know about it, but when I
452 would go in for a drop-in program, the front clerk person wouldn't really understand
453 what that [the pass] was' (Boy, G5AP user).

454 To improve program awareness and clarify aspects of the G5AP to children,
455 many participants recommended additional promotions and resources to increase
456 program enrollment and pass use. Participants recommended continuing to provide in-
457 class presentations for recruiting children to the program, which is emphasized in the
458 following quote:

459 It [the presentation] was pretty helpful, because, like, it kinda told us a bit like about the
460 program, so like we would know a bit more about it before we go ask our parents ‘can
461 we have this, can we have this?’ (Girl, G5AP non-user)

462 Another child felt that the presenters ‘were energetic about it and they said that we
463 could do a lot of things with it and I was excited to test it [the pass] out’ (Girl, G5AP
464 non-user). Further, participants thought that reminders and promotions would overcome
465 the issue of forgetting about the pass. Through emails, children felt that the G5AP
466 would benefit from program co-ordinators sending ‘them something that says “have you
467 used the pass?” just to remind them and the child that they have it and they won’t forget
468 about it’ (Girl, G5AP non-user) and this would overcome the problem of ‘lost
469 information and I go searching through my room and then my room is a mess, so maybe
470 there should be like, some like email kinda thing where it has all your information on
471 there’ (Girl, G5AP non-user). Finally, participants wanted clarity about the locations
472 that accepted the pass by explaining, ‘at the places [service providers] that you could do
473 it [the program], they should have a sign that says “ACT-i-Pass is able to [be] use[d]
474 here”’ (Boy, G5AP user).

475

476 *Spatial accessibility of programming*

477 Participants described spatial accessibility as a barrier to G5AP programming.
478 Descriptions of the spatial accessibility encompassed the distance to G5AP service
479 providers and transportation options. The accessibility of service providers and
480 programming was described from two distinct perspectives based on the socioeconomic
481 status of the school. Participants that attended low- or middle-income schools felt they
482 ‘mainly [used local community center], just because they’re closer’ (Boy, G5AP user).
483 Transportation was also an issue highlighted by participants in lower-income areas as it
484 ‘sometimes would put restrictions on where we could go’ (Boy, G5AP non-user), with

485 another child mentioning, ‘we only use stuff in my neighbourhood cause my mom
486 doesn’t [have] that much money to [get] gas’ (Girl, G5AP user). Alternatively,
487 participants that attended middle- and upper-middle-income schools spoke of large
488 distances to selected service providers obstructing them from their preferred activities
489 and/or service providers: ‘The YMCA is kind of far and my parents don’t want to drive
490 me, or I don’t have anyone to drive me’ (Girl, G5AP user). Participants also mentioned
491 that they were already enrolled in the local recreational opportunities: ‘some of the
492 ACT-i-Pass programs were further away and the ones that were close to me, like the Y,
493 I already had a membership there so I feel like I didn’t get as much use out of it’ (Boy,
494 G5AP non-user). As a result, some participants noted that ‘it was a bit difficult [using
495 the pass], because where I live the only thing I really can do is a hockey arena but I’m
496 already signed up for that’ (Boy, G5AP non-user).

497 Going forward, participants felt that the G5AP needed to improve the
498 accessibility of programming. Participants emphasized that decreasing the distance to
499 recreational venues would improve the overall accessibility of the program:

500 [The ACT-i-Pass should] try to make things in different areas, because I think it seemed
501 that a place where all the dance programs were downtown or something and like all the
502 sports things were like more like the other part of London. (Girl, G5AP user)

503 Another participant explained the advantages of local programming options, stating, ‘if
504 it was close, I’d probably walk with my friends. We could commute together and if our
505 parents were busy with something we could probably just go’ (Boy, G5AP non-user).

506 An alternative solution suggested by participants was providing transportation to service
507 providers ‘it would be cool to have a bus just picking you up, because my parents are
508 usually busy’ (Girl, G5AP user). Participants proposed, ‘if [service providers] could
509 maybe have a bus here ‘cause I’d like to do that instead of my mom having to drive me
510 because we live in an area that’s farther away’ (Girl, G5AP user).

511 *Social supports and constraints*

512 Participants perceived their family and friends as influencers in their participation in the
513 program. One aspect of the G5AP that facilitated program use was the plus one option.
514 A majority of participants explained that the ability to bring a friend or family member
515 encouraged them to use service providers, as a companion created a comfortable
516 environment for play. One participant explained, ‘you’re not really going alone. Like if
517 you don’t know anyone, then you have a friend. So, say you’re doing golf, then you
518 would have a friend. Otherwise, you’re just with all these strangers’ (Boy, G5AP user).
519 Likewise, another participant enjoyed having a friend ‘‘cause a lot of times when you
520 see people you’re probably, like, too shy to introduce yourself, so it’s better when you
521 have friends with you’ (Boy, G5AP user). Participants also appreciated the opportunity
522 to spend time with friends and family. For instance, one child explained that ‘my uncle
523 and I go swimming there a lot more often, so I was like this could be actually good for
524 me and my family’ (Boy, G5AP user), with one participant expanding on this idea,
525 describing that the G5AP ‘was honestly awesome. Having my best friend with me, plus
526 it was free. We could stay there all we want. Ahhh it was like paradise, but inside’ (Boy,
527 G5AP user). Many participants agreed that ‘the thing that I liked about the ACT-i-Pass
528 the most is that you could bring someone with you, because then it’s like, great now I
529 can go for free with my friend’ (Boy, G5AP user). It was evident that participants felt
530 that involving friends and family in activities encouraged program participation.

531 While boys described their positive experiences having a plus one at activities,
532 some girls indicated that they underwent social challenges that restricted participation
533 and access to the program. One participant explained that they were unable to
534 participate in activities since ‘I never have anyone to go with me’ and ‘[I] don’t want to
535 be a loner’ (Girl, G5AP non-user). One child expanded on this concept, explaining how

536 they were unable to enjoy activities without a friend: ‘when I go alone, I’m kinda
537 bored... but then when someone is there, you’re like “OK! Let’s do this! Let’s see who
538 can do the best dive!”’ (Girl, G5AP user).

539 Family involvement in the program was also highlighted as a factor that
540 influenced G5AP participation. Some participants felt that encouragement from parents,
541 guardians and/or other family members improved access and use of the pass, where one
542 participant said ‘my parents wanted me to be more active’ (Girl, G5AP user).

543 Participants believed that their parents helped engage them in the program, with one
544 participant explaining, ‘my friends from other schools, they were also in grade five and
545 they got the ACT-i-Pass, and then all the parents agreed that we should all go together’
546 (Boy, G5AP user). Another participant talked about the benefits of their family
547 participating in activities: ‘My friends kind of helped me when they went into it, but
548 they didn’t really stick with it as much as I did, so I kind of had to keep myself going.
549 My brother really helped with that and so did my dad’ (Boy, G5AP user). Another
550 factor that participants emphasized was family members’ ability to provide or arrange
551 transportation to service providers: ‘my parents dropped me off and when they couldn’t
552 drop me off, I’d go with my parent’s friends’ (Boy, G5AP user).

553 Conversely, participants with busy families, primarily those who were unable to
554 use the pass, described limited access to G5AP programming. Participants talked about
555 family obligations limiting participation in the program, saying, ‘my parents take turns
556 working late and my dad also sometimes has to stay late too, so I’m home alone with
557 my brother and I can’t leave him there’ (Girl, G5AP non-user) or that ‘they work on the
558 farm, so they’re always busy’ (Boy, G5AP non-user). Similarly, another participant
559 mentioned, ‘I never have anyone to take me [to ACT-i-Pass programming]’ (Girl,
560 G5AP non-user). One participant felt their busy siblings hindered their ability to attend

561 G5AP programming: ‘I would have gone except like my parents are really busy with
562 my brothers, so my brothers were always... they have a lot of sports too and me, so they
563 couldn’t really drive me’ (Boy, G5AP non-user).

564 Moreover, a few participants explained that family obligations restricted their
565 ability to attend G5AP programming, as one participant stated, ‘well, my grandpa
566 recently had a hip surgery in the summer, and now he has no left hip, so he’s recovering
567 most of the summer and I was visiting him, so what’s why I didn’t get to use it often’
568 (Boy, G5AP non-user). A handful of participants also highlighted the challenges of
569 having separated/divorced parents, or a single caregiver, stating ‘My mom is in [another
570 town] learning and my dad had to take care of my baby brother, so I didn’t really have
571 time to use it’ (Girl, G5AP non-user) and ‘my dad lives in [another city], so like three
572 times during the month I go to his house for the week.’ (Boy, G5AP non-user).

573

574 **Discussion**

575 The purpose of this study was to explore children’s experiences and perceptions of the
576 G5AP, a free physical activity program. The program was perceived to have positively
577 influenced participants’ physical activity levels by providing children with additional
578 resources and enjoyable programming. Participants also highlighted program structure
579 and implementation, spatial accessibility of programming, and social supports and
580 constraints as factors that positively and/or negatively influenced program participation.
581 To increase accessibility and involvement in the G5AP, participants suggested offering
582 a greater assortment of options (i.e., locations, times, and activities), providing a form of
583 transportation or more local physical activity opportunities, and improving program
584 promotions and resources.

585 One key finding that appeared throughout the discussions was the importance of
586 peers and family for program participation. Previous studies have found a positive
587 association between physical activity participation and children's perceived social
588 connection (Ullrich-French, Mcdonough, and Smith 2012), indicating that children may
589 not partake in sufficient amounts of physical activity when they are alone (Beets et al.
590 2006). Support from family and peers is linked to higher physical activity levels (Wilk
591 et al. 2018a, 2018b), and continued participation in physical activity programs (Ullrich-
592 French and Smith 2009). Specific examples of parental support include providing
593 transportation to recreational venues (Welk, Wood, and Morss 2003), praising their
594 child for being active (Beets, Cardinal, and Alderman 2010), modelling active lifestyles
595 (Edwardson and Gorely 2010), and performing activities with their children (Beets,
596 Cardinal, and Alderman 2010). Additionally, previous literature has shown that peer
597 support can encourage children to engage in physical activity behaviours (Beets et al.
598 2006; Wilk et al. 2018b). Peers can positively influence children's physical activity
599 levels through invitations to participate in activities, and encouragement from friends to
600 overcome perceived barriers to recreational programming (Fitzgerald, Fitzgerald, and
601 Aherne 2012). Consequently, programs should offer group-based activities, such as
602 family nights, to help create an environment that supports children's physical activity.

603 Participants also deemed the lack of informative resources and reminders as an
604 opportunity to improve the G5AP. Accordingly, participants recommended the use of
605 promotions and advertisements as a strategy to alleviate this issue. Reminders and
606 promotions, including newsletters, phone calls, and printed materials, have been
607 associated with increased physical activity (Burke et al. 2003). For instance, Huhman et
608 al. (2007) evaluated the VERB™ campaign, a multi-media campaign promoting
609 physical activity to children ages 9 to 13 years, and found that children who had seen

610 VERB™ promotions reported greater participation in physical activity outside of school
611 in comparison to children who were unaware of the campaign. Participants in our study
612 also described in-class presentations as an ideal platform for information dissemination.
613 This recommendation corresponds with previous findings that demonstrated in-class
614 presentations with children resulted in higher program uptake and participation
615 compared to promoting directly to parents via handouts (Clark et al. 2018, 2019).
616 Accordingly, active forms of recruitment like presentations can be a valuable method of
617 program promotion for children.

618 Our analysis pointed to some important gendered patterns in how children
619 experienced the program. For example, girls participating in the G5AP emphasized the
620 importance of expanding their physical activity-related skills and introducing new
621 activity options, while boys more often described using the program to supplement their
622 regular activities as they were already enrolled in sports leagues and programs.
623 Providing the opportunity to learn new activities can help develop children's activity-
624 related skills and activity competence, which can encourage greater involvement in
625 physical activity programs (Barnett et al. 2011; Harvey et al. 2018). As girls are
626 consistently reported in the literature as having lower physical activity levels compared
627 to boys (Barnes et al. 2016; Colley et al. 2017; Roberts et al. 2017), providing girls with
628 the skills and the confidence to engage in physical activity can help increase their
629 current physical activity levels, as well as create lasting positive health behaviours
630 (Smith et al. 2020).

631 There was also a slight nuance between boys' and girls' perceptions of the social
632 environment at recreational facilities. Girls more often discussed the social environment
633 from a more negative perspective, conveying that they were unable to fully participate
634 in activities without a friend and were concerned about being viewed as alone or

635 friendless. Alternatively, boys often used a more positive tone. They described that the
636 G5AP provided them with the opportunity to play with friends, experiencing a sense of
637 comfort when they had a friend attend activities with them. This finding, in part, may be
638 attributed to the gendered interactions between boys and girls in physical activity
639 spaces. For instance, Vu et al. (2006) found that encouragement from boys, such as
640 inviting girls to join games and celebrating their successes, prompted girls ages 11 to 15
641 years to engage in activities. The findings also indicated that teasing from boys when an
642 activity is performed incorrectly or questioning girls' proficiency in a sport could
643 motivate girls to join activities as they wanted to prove that they are strong and capable.
644 Conversely, in a study by Oliver and Hamzeh (2010), fifth-grade girls explained that
645 they tended to not engage in activities during recess time because the boys labelled
646 them as not good enough or athletic enough to play and did not allow them to
647 participate in games. It is possible that encouragement or exclusion experienced during
648 physical activities may have a greater influence on girls' physical activity engagement
649 compared to boys, which may explain some slight differences in responses in our study.
650 The gendered nature of physical activities and physical activity environments may have
651 also affected boys' and girls' responses. For instance, the masculine stereotype towards
652 physical activity participation may have influenced boys' responses, as disclosing
653 negative feelings towards being lonely or not having friends during activities may be at
654 odds with certain dominant masculine norms (MacArthur and Shields 2015). Girls'
655 negative perception may be attributed to the importance of engaging in activities with
656 peers on physical activity engagement and the greater number of perceived social
657 barriers they encounter when accessing physical activity opportunities (Coen et al.
658 2019; Patnode et al. 2010). It would be important for a future evaluation of the G5AP to
659 probe these micro-gendered dynamics in more detail by, for example, employing single-

660 gender rather than mixed focus groups. This format might also allow for further
661 exploration of how wider gendered norms and expectations (e.g., masculine risk-taking,
662 or girls as caregivers) intersect with children's physical activity uptake and engagement
663 in this context.

664 In terms of income, there were differences between income groups when
665 children referred to the physical accessibility of the G5AP programming. Participants
666 who attended schools in low-income areas of the city reported spatial accessibility as a
667 barrier to recreational spaces due to the distance between their homes and the
668 recreational facilities, as well as the cost of transportation. Compared to different
669 subgroups within the population, previous research indicates that lower-socioeconomic
670 groups are particularly vulnerable to environmental factors, such as the transportation
671 infrastructure and the location of recreational spaces (Yen and Kaplan 1998), as lower-
672 income families are more likely to have nonstandard work schedules and lack of vehicle
673 ownership in comparison to higher-income families (Kumanyika and Grier 2006).
674 Therefore, children who reside in low-income neighbourhoods are more dependent on
675 local physical activity opportunities (Humbert et al. 2006). Participants who attended
676 schools in higher-income neighbourhoods did report spatial accessibility as a barrier;
677 however, their challenges were due to activity and service provider preferences, as well
678 as their parents' availability to drive to G5AP programming. To encourage participation
679 in programming, program coordinators need to improve access to recreational
680 opportunities, such as organizing forms of transportation (Sallis, Prochaska, and Taylor
681 2000). Also, providing popular activities in various areas of the city can help improve
682 participation in G5AP programming. Alternative solutions offered by participants
683 included hosting outdoor unstructured activities in public parks, such as water balloon
684 fights or tobogganing, in neighbourhoods that lack specific recreational facilities.

685 Outdoor environments, such as playgrounds, trails, and green spaces, provide children
686 with the opportunity to develop their self-efficacy, cultivate their creativity, and develop
687 their problem-solving and social skills (Tremblay et al. 2015), as well as positively
688 contribute to their emotional well-being (Tillmann et al., 2018). Providing children
689 outdoor spaces for play in close proximity to their homes offers them an accessible
690 physical activity opportunity that has been associated with greater amounts of daily
691 MVPA among children ages 9 to 14 (Coen et al. 2019; Mitchell, Clark and Gilliland
692 2016).

693 Participants highlighted the importance of free recreational programming for
694 low-income households. While participants enjoyed that the G5AP increased activity
695 options during their leisure time, these child participants recognized that free
696 programming provided the greatest opportunity to children in low-income households.
697 Lower socioeconomic status is associated with lower physical activity levels, and one
698 determinant that differs between high-income and low-income neighbourhoods is the
699 availability of affordable programming (Brodersen et al. 2007). Previous studies have
700 found that low-, medium- and high-income neighbourhoods contained a similar number
701 of pay-to-use recreational opportunities; however, low-income neighbourhoods have
702 been identified as lacking free programming needed by residents (Estabrooks, Lee, and
703 Gyurcsik 2003; Mckenzie et al. 2013). Due to a lack of free programming in areas
704 where financial support is required, programs like the G5AP are beneficial as they offer
705 affordable programming that may be lacking in low-income neighbourhoods.

706

707 *Limitations and future directions*

708 There are several limitations to this study that warrant consideration. First,
709 schools were selected as the setting for the G5AP focus groups to provide a familiar

710 space for the participants. However, adding moderators from the research team into the
711 school environment may have influenced participants' behaviour and/or their
712 interactions with their peers, as participants could have viewed the adult moderators as
713 authority figures; this could shape the focus group dialogue in terms of how open
714 children felt they could be as they may be focused on providing 'correct' responses and
715 might not be comfortable describing their genuine experiences. Additionally,
716 participants were classified as G5AP users or non-users based on a survey completed by
717 their parent or guardian; however, a few participants stated they belonged to a different
718 program user group. As a result, if participants were classified into the wrong user
719 status, they would not have had the experiences necessary to answer certain questions.
720 Moreover, the choices for gender on the survey were limited to binary gender options,
721 and did not include a field to indicate gender-diverse identities (e.g., trans, non-
722 binary)—a limitation which will be addressed in future evaluations. As a result, this
723 study does not capture the experiences of LGBTQ+ and non-binary children at
724 recreational facilities. Also, the use of mixed-gender focus groups may have influenced
725 the responses received from the participants, and the gendered experiences described in
726 this study may have differed if gender-specific focus groups were conducted. Finally,
727 this study did not consider how ethnicity, recent immigration, or other family
728 characteristics influenced children's perceptions of the G5AP, although previous
729 evaluations have associated some sociodemographic characteristics with varying levels
730 of G5AP participation (Clark et al. 2019; Smith et al. 2020).

731 Although the current study provides insight into perceptions of one specific
732 community-based physical activity initiative, additional research is needed to fill
733 existing gaps in the literature. For instance, future studies should evaluate the
734 experiences of other sociodemographic groups associated with lower physical activity

735 levels, such as immigrant status (Tremblay et al. 2006), Indigenous status (Norman et
736 al. 2018), and disability status (Barg et al. 2010), to help recognize the unique
737 experiences of sub-populations within the community. Finding strategies that can
738 engage these groups in local physical activity opportunities can help reverse the
739 declining physical activity levels reported in the literature. Future research should also
740 evaluate the impact of the key recommendations provided by participants on program
741 participation and physical activity levels, such as improving the accessibility of program
742 information, using technological platforms to encourage participation, providing
743 outdoor recreational opportunities, and/or offering free transportation to venues. Social
744 interactions appeared to be a strong influence on physical activity participation;
745 therefore, further qualitative research into the social determinants that influence
746 participation in physical activity and community-based programs will provide a greater
747 understanding of how and why interactions with others impact physical activity
748 behaviours. Future research should also investigate the experiences of LGBTQ+ and
749 gender-diverse children.

750

751 **Conclusion**

752 In sum, children's descriptions of the G5AP indicated that community-based
753 physical activity programs can improve children's overall quality of life through
754 engagement in physical activity. The five themes identified in the current study provide
755 context into the aspects of community-based programs that may encourage program
756 participation and increase children's physical activity levels. Public health officials,
757 program co-ordinators and policymakers should consider the following factors when
758 implementing community-based programs: (1) provide a variety of programming
759 options to fit a diversity of children's interests and families' schedules; (2) offer free,

760 local programming and informative resources in multiple neighbourhoods to improve
761 children's accessibility to physical activity opportunities; and (3) encourage children to
762 engage in activities with family and friends to support their participation in recreational
763 programming. With most Canadian children not achieving the recommended level of
764 daily physical activity, it is critical that we continually evaluate and improve available
765 programs to encourage and support children to engage in opportunities that can improve
766 their overall health and quality of life.

767

768 **Acknowledgements**

769 We would like to thank London's Child & Youth Network and the local school boards (Thames
770 Valley District School Board, London District Catholic School Board, Conseil Scolaire
771 Viamonde, Conseil Scolaire Catholique Providence, and private schools) for their participation
772 in this research. We also thank the G5AP service providers (the Boys & Girls Club, the YMCA
773 of Western Ontario, the City of London Recreation, London Children's Museum, Palasad
774 Bowling, Junction Climbing Centre, and SARI Therapeutic Riding) for their generosity and for
775 offering free programming to G5AP participants. Finally, we would like to thank the various
776 graduate and undergraduate researchers of the Human Environments Analysis Lab at Western
777 University that assisted in data collection and administration of the program.

778

779 **Funding Details**

780 This work was supported by the Canadian Cancer Society Research Institute under Grant
781 703083; and the Children's Health Research Institute and Children's Health Foundation,
782 Government of Canada, Canadian Institutes of Health Research, Institute of Population and
783 Public Health under Grants 322703 and 327369. The Ontario Sport and Recreation
784 Communities Fund provided funding to the CYN to help implement the program.

785

786 **Declaration of interest**

787 The authors do not have any competing interests to declare.

788

789 **References**

790 Baker, Elizabeth A., and Carol A. Brownson. 1998. "Defining Characteristics of
791 Community-Based Health Promotion Programs." *Journal of Public Health
792 Management and Practice* 4 (2): 1–9. <https://doi.org/10.1097/00124784->

- 793 199803000-00003.
- 794 Barg, Carolyn J., Brittany D. Armstrong, Samuel P. Hetz, and Amy E. Latimer. 2010.
795 "Physical disability, stigma, and physical activity in children." *International*
796 *Journal of Disability, Development and Education* 57 (4): 371-382.
797 <https://doi.org/10.1080/1034912X.2010.524417>
- 798 Barnes, Joel D., Christine Cameron, Valerie Carson, Jean Philippe Chaput, Guy E.J.
799 Faulkner, Katherine Janson, Ian Janssen, et al. 2016. "Results from Canada's 2016
800 Participaction Report Card on Physical Activity for Children and Youth." *Journal*
801 *of Physical Activity and Health* 13 (11): S110-116.
802 <https://doi.org/10.1123/jpah.2016-0300>.
- 803 Barnett, Lisa M., Philip J. Morgan, Eric Van Beurden, Kylie Ball, and David R. Lubans.
804 2011. "A Reverse Pathway? Actual and Perceived Skill Proficiency and Physical
805 Activity." *Medicine and Science in Sports and Exercise* 43 (5): 898-904.
806 <https://doi.org/10.1249/MSS.0b013e3181fdfadd>.
- 807 Beets, Michael W., Aaron Beighle, Heather E. Erwin, and Jennifer L. Huberty. 2009.
808 "After-School Program Impact on Physical Activity and Fitness. A Meta-
809 Analysis." *American Journal of Preventive Medicine* 36 (6): 527-37.
810 <https://doi.org/10.1016/j.amepre.2009.01.033>.
- 811 Beets, Michael W. 2012. "Enhancing the Translation of Physical Activity Interventions
812 in Afterschool Programs." *American Journal of Lifestyle Medicine* 6 (4): 328-341.
813 <https://doi.org/10.1177/1559827611433547>.
- 814 Beets, Michael W., Bradley J. Cardinal, and Brandon L. Alderman. 2010. "Parental
815 Social Support and the Physical Activity-Related Behaviors of Youth: A Review."
816 *Health Education and Behavior*. 37 (5): 621-644.
817 <https://doi.org/10.1177/1090198110363884>.
- 818 Beets, Michael W., Randy Vogel, Loretta Forlaw, Kenneth H. Pitetti, and Bradley J.
819 Cardinal. 2006. "Social Support and Youth Physical Activity: The Role of Provider
820 and Type." *American Journal of Health Behavior* 30 (3): 278-89.
821 <https://doi.org/10.5993/AJHB.30.3.6>.
- 822 Biddle, Stuart J. H., Simone Ciaccioni, George Thomas, and Ineke Vergeer. 2019.
823 "Physical Activity and Mental Health in Children and Adolescents: An Updated
824 Review of Reviews and an Analysis of Causality." *Psychology of Sport and*
825 *Exercise* 42: 146-155. <https://doi.org/10.1016/j.psychsport.2018.08.011>.
- 826 Brodersen, Naomi Henning, Andrew Steptoe, David R. Boniface, and Jane Wardle.

- 827 2007. "Trends in Physical Activity and Sedentary Behaviour in Adolescence:
828 Ethnic and Socioeconomic Differences." *British Journal of Sports Medicine* 41 (3):
829 140–144. <https://doi.org/10.1136/bjism.2006.031138>.
- 830 Burke, Valerie, Nella Giangiulio, Helen F. Gillam, Lawrie J. Beilin, and Stephen
831 Houghton. 2003. "Physical Activity and Nutrition Programs for Couples: A
832 Randomized Controlled Trial." *Journal of Clinical Epidemiology* 56 (5): 421–432.
833 [https://doi.org/10.1016/S0895-4356\(02\)00610-8](https://doi.org/10.1016/S0895-4356(02)00610-8).
- 834 Campbell, John L., Charles Quincy, Jordan Osserman, and Ove K. Pedersen. 2013.
835 "Coding In-Depth Semistructured Interviews: Problems of Unitization and
836 Intercoder Reliability and Agreement." *Sociological Methods & Research* 42 (3):
837 294–320. <https://doi.org/10.1177/0049124113500475>.
- 838 Carter, Nancy, Denise Bryant-Lukosius, Alba Dicenso, Jennifer Blythe, and Alan J.
839 Neville. 2014. "The Use of Triangulation in Qualitative Research." *Oncology
840 Nursing Forum*. 41 (5): 545. <https://doi.org/10.1188/14.ONF.545-547>.
- 841 Castelli, Darla M, Charles H. Hillman, Sarah M. Buck, and Heather E. Erwin. 2007.
842 "Physical Fitness and Academic Achievement in Third- and Fifth-Grade Students."
843 *Journal of Sport and Exercise Psychology* 29 (2): 239–252.
844 <https://doi.org/10.1123/jsep.29.2.239>.
- 845 Caudwell, Jayne. 2020. "Transgender and non-binary swimming in the UK: indoor
846 public pool spaces and un/safety." *Frontiers in Sociology* 5: 64.
847 <https://doi.org/10.3389/fsoc.2020.00064>.
- 848 Christensen, Julie H., Lærke Mygind, and Peter Bentsen. 2015. "Conceptions of place:
849 approaching space, children and physical activity." *Children's Geographies* 13 (5):
850 589–603. <https://doi.org/10.1080/14733285.2014.927052>
- 851 Clark, Andrew F., Joannah Campbell, Patricia Tucker, Piotr Wilk, and Jason A.
852 Gilliland. 2019. "If You Make It Free, Will They Come? Using a Physical Activity
853 Accessibility Model to Understand the Use of a Free Children's Recreation Pass."
854 *Journal of Physical Activity and Health* 16 (7): 493–503.
855 <https://doi.org/10.1123/jpah.2018-0364>.
- 856 Clark, Andrew F., Piotr Wilk, and Jason A. Gilliland. 2019. "Comparing Physical
857 Activity Behavior of Children During School Between Balanced and Traditional
858 School Day Schedules." *Journal of School Health* 89 (2): 129-135.
859 <https://doi.org/10.1111/josh.12722>
- 860 Clark, Andrew F., Piotr Wilk, Christine Mitchell, Christine Smith, Josh Archer, and

- 861 Jason A. Gilliland. 2018. "Examining How Neighborhood Socioeconomic Status,
862 Geographic Accessibility, and Informational Accessibility Influence the Uptake of
863 a Free Population-Level Physical Activity Intervention for Children." *American*
864 *Journal of Health Promotion* 32 (2): 315–24.
865 <https://doi.org/10.1177/0890117117718433>.
- 866 Coen, Stephanie E., Christine A. Mitchell, Suzanne Tillmann, and Jason A. Gilliland.
867 2019. "‘I like the ‘Outernet’ Stuff:’ Girls’ Perspectives on Physical Activity and
868 Their Environments." *Qualitative Research in Sport, Exercise and Health* 11 (5):
869 599–617. <https://doi.org/10.1080/2159676X.2018.1561500>.
- 870 Colley, Rachel C., Valerie Carson, Didier Garriguet, Ian Janssen, Karen C. Roberts, and
871 Mark S. Tremblay. 2017. "Physical Activity of Canadian Children and Youth,
872 2007 to 2015." *Health Reports* 28 (10): 8–16.
- 873 Colorafi, Karen J., and Bronwynne Evans. 2016. "Qualitative Descriptive Methods in
874 Health Science Research." *Health Environments Research & Design Journal* 9 (4):
875 16–25. <https://doi.org/10.1177/1937586715614171>.
- 876 Edwardson, Charlotte L., and Trish Gorely. 2010. "Parental Influences on Different
877 Types and Intensities of Physical Activity in Youth: A Systematic Review."
878 *Psychology of Sport and Exercise* 11 (6): 522–535.
879 <https://doi.org/10.1016/j.psychsport.2010.05.001>.
- 880 Elliott, R., and Ladislav Timulak. 2005. "Descriptive and Interpretive Approaches to
881 Qualitative Research." *A Handbook of Research Methods for Clinical and Health*
882 *Psychology* 1 (7): 147–159.
- 883 Estabrooks, Paul A., Rebecca E. Lee, and Nancy C. Gyurcsik. 2003. "Resources for
884 Physical Activity Participation: Does Availability and Accessibility Differ by
885 Neighborhood Socioeconomic Status?" *Annals of Behavioral Medicine* 25 (2):
886 100–104. https://doi.org/10.1207/S15324796ABM2502_05.
- 887 Fitzgerald, Amanda, Noelle Fitzgerald, and Cian Aherne. 2012. "Do Peers Matter? A
888 Review of Peer and/or Friends’ Influence on Physical Activity among American
889 Adolescents." *Journal of Adolescence* 35 (4): 941–958.
890 <https://doi.org/10.1016/j.adolescence.2012.01.002>.
- 891 Gibson, Faith. 2007. "Conducting focus groups with children and young people:
892 Strategies for success." *Journal of Research in Nursing* 12 (5): 473–483.
893 <https://doi.org/10.1177/1744987107079791>
- 894 Gilliland, Jason A., Andrew F. Clark, Patricia Tucker, Harry Prapavessis, William

- 895 Avison, and Piotr Wilk. 2015. "The ACT-i-Pass Study Protocol: How Does Free
896 Access to Recreation Opportunities Impact Children's Physical Activity Levels?
897 Energy Balance-Related Behaviours." *BMC Public Health* 15 (1): 1286.
898 <https://doi.org/10.1186/s12889-015-2637-x>.
- 899 Guldán, Georgia S. 1996. "Obstacles to Community Health Promotion." *Social Science
900 and Medicine* 43: 689–695. [https://doi.org/10.1016/0277-9536\(96\)00114-1](https://doi.org/10.1016/0277-9536(96)00114-1).
- 901 Harvey, Jacqueline, E. S. Pearson, P. Sanzo, and A. E. Lennon. 2018. "Exploring the
902 Perspectives of 10-, 11-, and 12-Year-Old Primary School Students on Physical
903 Activity Engagement—"Cause You Can't Just Be Sitting at a Desk All the
904 Time!" *Child: Care, Health and Development* 44 (3): 433–442.
905 <https://doi.org/10.1111/cch.12555>.
- 906 Hsieh, Hsiu F., and Sarah E. Shannon. 2005. *Three Approaches to Qualitative Content
907 Analysis. Qualitative Health Research*. 15 (9): 1277–1288.
908 <https://doi.org/10.1177/1049732305276687>.
- 909 Huhman, Marian E., Lance D. Potter, Jennifer C. Duke, David R. Judkins, Carrie D.
910 Heitzler, and Faye L. Wong. 2007. "Evaluation of a National Physical Activity
911 Intervention for Children. VERB™ Campaign, 2002-2004." *American Journal of
912 Preventive Medicine* 32 (1): 38–43. <https://doi.org/10.1016/j.amepre.2006.08.030>.
- 913 Humbert, M. Louise, Karen E. Chad, Kevin S. Spink, Nazeem Muhajarine, Kristal D.
914 Anderson, Mark W. Bruner, Tammy M. Girolami, Patrick Odnokon, and Catherine
915 R. Gryba. 2006. "Factors That Influence Physical Activity Participation among
916 High- and Low-SES Youth." *Qualitative Health Research* 16 (4): 467–483.
917 <https://doi.org/10.1177/1049732305286051>.
- 918 Janssen, Ian, and Allana G. LeBlanc. 2010. "Systematic Review of the Health Benefits
919 of Physical Activity and Fitness in School-Aged Children and Youth."
920 *International Journal of Behavioral Nutrition and Physical Activity*. 7 (1): 1-16.
921 <https://doi.org/10.1186/1479-5868-7-40>.
- 922 Kezar, Adrianna. 2002. "Reconstructing static images of leadership: An application of
923 positionality theory." *Journal of Leadership Studies* 8 (3): 94-109.
- 924 Kumanyika, Shiriki K., and Sonya Grier. 2006. "Targeting Interventions for Ethnic
925 Minority and Low-Income Populations." *The Future of Children* 16 (1): 187–207.
926 <https://doi.org/10.1353/foc.2006.0005>.
- 927 Lincoln, Yvonna S., and Egon G. Guba. 1985. *Naturalistic Inquiry*. Sage Publications.
928 <https://stars.library.ucf.edu/cirs/690/>.

- 929 Lodewyk, Ken, Chunlei Lu, and Jeanne Kentel. 2009. "Enacting the Spiritual
930 Dimension in Physical Education." *Physical Educator* 66 (4): 170–179.
- 931 MacArthur, Heather J., and Stephanie A. Shields. 2015. "There's no crying in baseball,
932 or is there? Male athletes, tears, and masculinity in North America." *Emotion*
933 *Review* 7 (1): 39-46.
- 934 Mason-Bish, Hannah. 2019. "The Elite Delusion: Reflexivity, Identity and Positionality
935 in Qualitative Research." *Qualitative Research* 19 (3): 263–276.
936 <https://doi.org/10.1177/1468794118770078>.
- 937 Mauthner, Natasha S, and Andrea Doucet. 2003. "Reflexive Accounts and Accounts of
938 Reflexivity in Qualitative Data Analysis." *Sociology*. 37 (3): 413–431.
939 <https://doi.org/10.1177/00380385030373002>.
- 940 Mckenzie, Thomas L, Jamie S Moody, Jordan A Carlson, Nanette V Lopez, and John P
941 Elder. 2013. "Neighborhood Income Matters: Disparities in Community
942 Recreation Facilities, Amenities, and Programs." *Journal of park and recreation*
943 *administration* 31 (4): 12-22.
- 944 McLeroy, Kenneth R, Barbara L Norton, Michelle C Kegler, James N Burdine, and
945 Ciro V. Sumaya. 2003. "Community-based interventions." *American journal of*
946 *public health* 93 (4): 529-533.
- 947 Mitchell, Christine A, Andrew F Clark, and Jason A Gilliland. 2016. "Built
948 environment influences of children's physical activity: Examining differences by
949 neighbourhood size and sex." *International Journal of Environmental Research*
950 *and Public Health* 13 (1): 130.
- 951 Morgan, Myfanwy, Sara Gibbs, Krista Maxwell, and Nicky Britten. 2002. "Hearing
952 Children's Voices: Methodological Issues in Conducting Focus Groups with
953 Children Aged 7-11 Years." *Qualitative Research* 2 (1): 5–20.
954 <https://doi.org/10.1177/1468794102002001636>.
- 955 Murphy, J. W. 2014. "Community-based interventions: Philosophy and action." In S.
956 Chen & J. L. Powell (Eds.), *International Perspectives on Social Policy,*
957 *Administration, and Practice*. Springer. <https://doi.org/10.1007/978-1-4899-8020-5>
- 958 Nilsen, P. 2006. "The Theory of Community Based Health and Safety Programs: A
959 Critical Examination." *Injury Prevention*. 12 (3): 140–145.
960 <https://doi.org/10.1136/ip.2005.011239>.
- 961 Norman, Moss E., LeAnne Petherick, Eric Garcia, Gordon Giesbrecht, and Todd
962 Duhamel. 2018. "Governing indigenous recreation at a distance: a critical analysis

- 963 of an after school active health intervention." *Sport, Education and Society* 23 (2):
 964 135-148.
- 965 Oliver, Kimberly L., and Manal Hamzeh. 2010. "The boys won't let us play" Fifth-
 966 grade mestizas challenge physical activity discourse at school." *Research*
 967 *Quarterly for Exercise and Sport* 81 (1): 38-51.
 968 <https://doi.org/10.1080/02701367.2010.10599626>
- 969 ParticipACTION. 2022. "ParticipACTION Report Card on Physical Activity for
 970 Children and Youth." [https://www.participaction.com/wp-](https://www.participaction.com/wp-content/uploads/2022/10/2022-Children-and-Youth-Report-Card.pdf)
 971 [content/uploads/2022/10/2022-Children-and-Youth-Report-Card.pdf](https://www.participaction.com/wp-content/uploads/2022/10/2022-Children-and-Youth-Report-Card.pdf)
 972 [5634c41a0170_2020_Report_Card_Children_and_Youth_Full_Report.pdf](https://www.participaction.com/wp-content/uploads/2022/10/2022-Children-and-Youth-Report-Card.pdf).
- 973 Pate, Russell R., Ruth P. Saunders, Dianne S. Ward, Gwen Felton, Stewart G. Trost,
 974 and Marsha Dowda. 2003. "Evaluation of a Community-Based Intervention to
 975 Promote Physical Activity in Youth: Lessons from Active Winners." *American*
 976 *Journal of Health Promotion* 17 (3): 171–82. [https://doi.org/10.4278/0890-1171-](https://doi.org/10.4278/0890-1171-17.3.171)
 977 [17.3.171](https://doi.org/10.4278/0890-1171-17.3.171).
- 978 Patnode, Carrie D., Leslie A. Lytle, Darin J. Erickson, John R. Sirard, Daheia Barr-
 979 Anderson, and Mary Story. 2010. "The relative influence of demographic,
 980 individual, social, and environmental factors on physical activity among boys and
 981 girls." *International Journal of Behavioral Nutrition and Physical Activity* 7 (1): 1-
 982 10. <https://doi.org/10.1186/1479-5868-7-79>.
- 983 Poitras, Veronica Joan, Casey Ellen Gray, Michael M. Borghese, Valerie Carson, Jean
 984 Philippe Chaput, Ian Janssen, Peter T. Katzmarzyk, et al. 2016. "Systematic
 985 Review of the Relationships between Objectively Measured Physical Activity and
 986 Health Indicators in School-Aged Children and Youth." *Applied Physiology,*
 987 *Nutrition and Metabolism* 41 (6): S197-S239. [https://doi.org/10.1139/apnm-2015-](https://doi.org/10.1139/apnm-2015-0663)
 988 [0663](https://doi.org/10.1139/apnm-2015-0663).
- 989 Ravensbergen, L., Buliung, R., Wilson, K., & Faulkner, G. 2016. "Socioeconomic
 990 discrepancies in children's access to physical activity facilities: Activity space
 991 analysis." *Transportation Research Record*, 2598 (1), 11–18.
 992 <https://doi.org/10.3141/2598-02>
- 993 Rettke, Horst, Manuela Pretto, Elisabeth Spichiger, Irena A. Frei, and Rebecca Spirig.
 994 2018. "Using Reflexive Thinking to Establish Rigor in Qualitative Research."
 995 *Nursing Research* 67 (6): 490–497.
 996 <https://doi.org/10.1097/NNR.0000000000000307>.

- 997 Roberts, Karen C, Xiaoquan Yao, Valerie Carson, Jean P. Chaput, Ian Janssen, and
 998 Mark S. Tremblay. 2017. "Meeting the Canadian 24-Hour Movement Guidelines
 999 for Children and Youth." *Health Reports* 28 (10): 3–7.
- 1000 Sallis, James F., Judith J. Prochaska, and Wendell C. Taylor. 2000. "A Review of
 1001 Correlates of Physical Activity of Children and Adolescents." *Medicine and
 1002 Science in Sports and Exercise* 32 (5): 963–975. [https://doi.org/10.1097/00005768-
 1003 200005000-00014](https://doi.org/10.1097/00005768-200005000-00014).
- 1004 Sandelowski, Margarete. 2000. "Focus on Research Methods: Whatever Happened to
 1005 Qualitative Description?" *Research in Nursing and Health* 23 (4): 334–340.
 1006 [https://doi.org/10.1002/1098-240x\(200008\)23:4<334::aid-nur9>3.0.co;2-g](https://doi.org/10.1002/1098-240x(200008)23:4<334::aid-nur9>3.0.co;2-g).
- 1007 Shaw, Rachel. 2010. "Embedding Reflexivity within Experiential Qualitative
 1008 Psychology." *Qualitative Research in Psychology* 7 (3): 233–243.
 1009 <https://doi.org/10.1080/14780880802699092>.
- 1010 Smith, Brett, and Kerry R. McGannon. 2018. "Developing Rigor in Qualitative
 1011 Research: Problems and Opportunities within Sport and Exercise Psychology."
 1012 *International Review of Sport and Exercise Psychology* 11 (1): 101–121.
 1013 <https://doi.org/10.1080/1750984X.2017.1317357>.
- 1014 Smith, Christine, Andrew F. Clark, Piotr Wilk, Patricia Tucker, and Jason A. Gilliland.
 1015 2020. "Assessing the Effectiveness of a Naturally Occurring Population-Level
 1016 Physical Activity Intervention for Children." *Public Health* 178: 62–71.
 1017 <https://doi.org/10.1016/j.puhe.2019.08.022>.
- 1018 Tillmann, Suzanne, Danielle Tobin, William Avison, and Jason Gilliland. 2018.
 1019 "Mental health benefits of interactions with nature in children and teenagers: A
 1020 systematic review." *Journal of Epidemiology & Community Health* 72 (10): 958-
 1021 966. <https://doi.org/10.1136/jech-2018-210436>.
- 1022 Tomporowski, Phillip D., Catherine L. Davis, Patricia H. Miller, and Jack A. Naglieri.
 1023 2008. "Exercise and Children's Intelligence, Cognition, and Academic
 1024 Achievement." *Educational Psychology Review* 20 (2): 111–131.
 1025 <https://doi.org/10.1007/s10648-007-9057-0>.
- 1026 Tremblay, Mark S., Casey Gray, Shawna Babcock, Joel Barnes, Christa Costas
 1027 Bradstreet, Dawn Carr, Guylaine Chabot et al. 2015. "Position statement on active
 1028 outdoor play." *International Journal of Environmental Research and Public Health*
 1029 12 (6): 6475-6505.
- 1030 Tremblay, Mark S., Shirley N. Bryan, Claudio E. Pérez, Chris I. Ardern, and Peter T.

- 1031 Katzmarzyk. 2006. "Physical activity and immigrant status: evidence from the
1032 Canadian Community Health Survey." *Canadian Journal of Public Health* 97 (4):
1033 277-82. <https://doi.org/10.1007/BF03405603>
- 1034 Ullrich-French, Sarah, Meghan H. Mcdonough, and Alan L. Smith. 2012. "Social
1035 Connection and Psychological Outcomes in a Physical Activity-Based Youth
1036 Development Setting." *Research Quarterly for Exercise and Sport* 83 (3): 431–
1037 441. <https://doi.org/10.1080/02701367.2012.10599878>.
- 1038 Ullrich-French, Sarah, and Alan L. Smith. 2009. "Social and Motivational Predictors of
1039 Continued Youth Sport Participation." *Psychology of Sport and Exercise* 10 (1):
1040 87–95. <https://doi.org/10.1016/j.psychsport.2008.06.007>.
- 1041 Vu, Maihan B., Dale Murrie, Vivian Gonzalez, and Jared B. Jobe. 2006. "Listening to
1042 girls and boys talk about girls' physical activity behaviors." *Health Education &*
1043 *Behavior* 33 (1): 81-96.
- 1044 Welk, Gregory J., Kherrin Wood, and Gina Morss. 2003. "Parental Influences on
1045 Physical Activity in Children: An Exploration of Potential Mechanisms." *Pediatric*
1046 *Exercise Science* 15 (1): 19–33. <https://doi.org/10.1123/pes.15.1.19>.
- 1047 West, Stephanie T., and Kindal A. Shores. 2008. "A Comparison of Four Recreation
1048 Facilitation Styles and Physical Activity Outcomes in Elementary School
1049 Children." *Journal of Park and Recreation Administration* 26 (2): 115–133.
1050 <https://www.researchgate.net/publication/234063311>.
- 1051 Wilk, Piotr, Andrew F. Clark, Alana Maltby, Christine Smith, Patricia Tucker, and
1052 Jason A. Gilliland. 2018. "Examining Individual, Interpersonal, and Environmental
1053 Influences on Children's Physical Activity Levels." *SSM - Population Health* 4:
1054 76–85. <https://doi.org/10.1016/j.ssmph.2017.11.004>.
- 1055 Wilk, Piotr, Andrew F Clark, Alana Maltby, Patricia Tucker, and Jason A Gilliland.
1056 2018. "Exploring the Effect of Parental Influence on Children's Physical Activity:
1057 The Mediating Role of Children's Perceptions of Parental Support." *Preventive*
1058 *Medicine* 106: 79–85. <https://doi.org/10.1016/j.ypmed.2017.10.018>.
- 1059 Yen, Irene H., and George A. Kaplan. 1998. "Poverty Area Residence and Changes in
1060 Physical Activity Level: Evidence from the Alameda County Study." *American*
1061 *Journal of Public Health* 88 (11): 1709–12. <https://doi.org/10.2105/AJPH.88.1>

Figure 1. Code map from the conventional content analysis of G5AP focus groups.



