

Running Title: Evaluating the 'Think Again' Campaign

Evaluating the ParticipACTION 'Think Again' Campaign

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Abstract

ParticipACTION's 2011 'Think Again' campaign aimed to draw parents', and specifically mothers', attention to the amount of physical activity (PA) their children do relative to the national guidelines (PAG). PURPOSE: To evaluate ParticipACTION's 'Think Again' campaign in the context of the hierarchy of effects model (HOEM). METHODS: Data were drawn from 'Think Again' campaign evaluations conducted among two cohorts of parents with children ages 5-11 yrs (3-months post-campaign launch (T1), n=702; 15-months post launch (T2), n=670). RESULTS: At T2, campaign awareness was weakly associated with parents agreeing that their children were not active enough ($p=.01$, $d=.18$). Parents aware of the campaign showed greater knowledge of PAG ($ps<.01$, $\phi s>.14$), had higher outcome expectations about their children engaging in PA ($p<.01$, $d=.16$), had stronger intentions to help their child meet the guidelines ($p <.01$, $d=.18$), and engaged in more parental support behaviours ($p<.001$, $d=.31$) as compared to parents who were not aware. At T1, parents aware of the campaign had greater perceived behavioural control (PBC) to influence their child's PA participation ($p<.01$, $d=.22$) whereas parents not aware of the campaign had greater PBC to find practical ways to help their child be active ($p<.01$, $d=.26$). Parental awareness of the campaign was not associated with children meeting the PAG at either time point ($ps>.05$). CONCLUSIONS: The campaign appeared marginally effective for increasing parental knowledge of PAG and for creating realistic awareness of children's PA levels. Additional intervention strategies are needed to produce larger effects and to change parental behaviour.

Keywords: Mass media, Physical Activity, Hierarchy of Effects, ParticipACTION

Introduction

Evidence-based physical activity (PA) guidelines are an important component of a national policy and action plan (Global Advocacy Council for Physical Activity, 2010). Accordingly, the Canadian Physical Activity Guidelines (PAG) for Children and Youth recommend that children and youth aged 5 to 17 years accumulate 60 minutes of moderate-to-vigorous PA each day (see www.csep.ca/guidelines). While the guidelines are a first step to promote PA, systematic efforts are needed to disseminate PAG (Brawley & Latimer, 2007).

Mass media campaigns are a means of promoting awareness of PAG and of emphasizing behaviour change (Bauman et al., 2008; Grier & Bryant, 2005; McGuire, 1984). It is recommended that mass media campaigns be included as one component of a broader community-wide approach to behaviour change (Brown et al., 2012). While the effectiveness of stand-alone mass media PA campaigns have been questioned due to modest and inconsistent findings (Abioye, Hajifathalian, & Danaei, 2013; Brown et al., 2012), meaningful population level changes can be created with a small effect in a large group of individuals (Rose, 1995). Accordingly, mass media campaigns that have been implemented concurrently with appropriate resources have shown positive effects. For instance, the Center for Disease Control's VERB campaign positively influenced American children's perceptions of PA and behaviour (Huhman et al., 2007).

Though parents are an important target group for mass media campaigns that aim to promote child PA (Sallis, Prochaska, & Taylor, 2000; Trost et al., 2003; Welk, 1999), only a few campaigns have targeted them directly. The VERB campaign targeted parents with print and radio messages. Awareness of the campaign predicted parents' positive attitudes and beliefs towards children's PA and the number of days parents were active with their child (Price, Huhman, & Potter, 2008). ParticipACTION, a national not-for-profit organization dedicated to increasing PA in the Canadian

population (Latimer-Cheung, Murumets, & Faulkner, 2014), has also launched a series of campaigns targeting parents (Craig, Bauman, Gauvin, Robertson, & Murumets, 2009). The basic issue is that while only 7% of Canadian children meet the PAG (Colley et al., 2011), 88% of parents believe their children are sufficiently active (Active Healthy Kids Canada, 2009).

In 2011, ParticipACTION attempted to address this disconnect between parents' perceptions and the PAG recommendations by developing the 'Think Again' campaign. The campaign aimed to motivate parents, and in particular mothers, to get their children active by increasing parents' awareness that their children may not be active enough to meet the guidelines. This aim is consistent with several models of health behaviour which emphasize that if people do not believe a problem exists, they are unlikely to change their behaviour (Bauman et al., 2008; Michie, West, Campbell, Brown, & Gainforth, 2014).

ParticipACTION's evaluation of the 'Think Again' campaign was guided by the Hierarchy of Effects Model (HOEM; Bauman et al., 2008; McGuire, 1984), which has been used to design and evaluate previous mass media PA campaigns (Cameron, Craig, Bull, & Bauman, 2007; Craig, Bauman, & Reger-Nash, 2010; Huhman, Heitzler, & Wong, 2004; Spence et al., 2009). The Hierarchy of Effects Model conceptualizes the impact of a mass media campaign as a chain of links between proximal factors and distal outcomes. Most proximal is initial awareness of a campaign; followed by changes in beliefs about the behaviour (e.g., outcome expectancies, self-efficacy); intentions to engage in the behaviour; and at the most distal point, behaviour change. The model recognizes that campaign success becomes increasingly difficult as the process moves from proximal outcomes to distal outcomes. However, evaluations of mass media PA campaigns have demonstrated associations with both proximal and distal outcomes of the Hierarchy of Effects Model (Craig et al., 2009; Price et al., 2008; Spence et al., 2009).

The current study aimed to evaluate ParticipACTION's 'Think Again' campaign in the context of the Hierarchy of Effects Model. Although the campaign was targeted towards mothers, the key message was relevant to fathers and the campaign effects were expected to carry over and have some influence on fathers as well. Thus, it was hypothesized that parents who were aware of the campaign would be more likely to agree that their children were *not* active enough. It also was hypothesized that parents who were aware of the campaign would have higher scores for both proximal and potentially distal outcomes within the model. Consistent with previous evaluations of mass media campaigns using the Hierarchy of Effects Model (Craig et al., 2009; Price et al., 2008; Spence et al., 2009) in the context of PA interventions (Conn, Hafdahl, & Mehr, 2011; Foster, Hillsdon, Thorogood, Kaur, & Wedatilake, 2012), we hypothesized that the effects observed would be small, but significant.

Method

The evaluation and data collection were completed by a company independent of ParticipACTION. Due to financial constraints wherein a repeated assessment of the same cohort exceeded budget allowances, the study employed a cross-sectional design with two independent cohorts of participants being surveyed at two time points throughout the campaign. Therefore, comparison of data over time is limited as the same participants were not used in each evaluation.

Procedure and Participants

National **web-based** surveys were conducted by Angus Reid Public Opinion, a hired vendor, at two time points; March 2011 (T1) and March 2012 (T2). Two independent cohorts of participants were recruited from an existing **online** panel of approximately 120,000 consumers. Parents with at least one child, aged 5-11 years, were eligible. The age range requested relates to the audience targeted by the 'Think Again' campaign. Participants **completed the measures**

described below. To evaluate the ‘Think Again’ campaign advertisements and the ParticipACTION brand, participants were also randomly assigned to view one of the ‘Think Again’ advertisements. Results related to the advertisements and brand evaluations are published elsewhere (Berry et al., 2014; Jarvis et al., 2014). The study was approved by the <<<Removed for blind review>>> General Research Ethics Board.

‘Think Again’ Campaign

The campaign launched in January 2011 and concluded in March 2012. The campaign included television and print advertisements targeting mothers with children between the ages of 5 and 11 years¹. For example, one television advertisement featured a mother standing in front of a plain backdrop stating, “My Jaymi plays soccer twice a week. That’s plenty of activity.” She then gets hit in the head by a soccer ball and the words ‘Think Again’ appear on the screen. The ad then emphasizes the PAG by stating, “Fact is, kids need at least 60 minutes of PA per day. Every day”. To view the ads, see http://www.youtube.com/watch?v=vX_Hyqp-3ac&list=SPn9ck0OZhkYVlk_itMNGnDdS5pqmcTOX.

Measures

The measures developed to assess the Hierarchy of Effects Model outcomes and the goals of the campaign have been previously described (Rhodes et al., 2013) and are briefly outlined below.

Demographics. Parents self-reported their province of residence, gender, age, employment status, household income, role as a caregiver, number of children in their house, and education.

¹ The majority of television advertisements were aired during primetime (29-49%) or during the day (43-53%). The advertisements were aired in January – March 2011 (9 weeks; Gross Rating Points = 1557); July – August 2011 (9 weeks; Gross Rating Points = 1190); November – December 2011 (5 weeks; Gross Rating Points = 881); January – March 2012 (13 weeks; Gross Rating Points = 972).

Campaign awareness. One yes-or-no item was used to assess parents' awareness of the 'Think Again' campaign. Participants were asked, "Have you seen any recent advertisements about the specific amount of physical activity that is appropriate for children?"

Knowledge of guidelines. To assess the campaign's goal to raise parents' awareness that their children were *not* active enough to meet the PAG for children and youth, two yes-or-no items were used to assess parents' knowledge of PAG. Participants were asked (1) "Have you heard of any physical activity guidelines for children and youth?" and (2) "Have you heard of the Canadian Physical Activity Guidelines for Children and Youth?".

Perceptions of child PA. One item rated on a scale from 1 (strongly disagree) to 4 (strongly agree) was used to assess parents' perceptions of their child/children's PA at T2. Participants responded to the statement "My child already gets enough PA every day".

Outcome expectations. Three items, rated on a scale from 1 (strongly disagree) to 4 (strongly agree), were used to assess parents' outcome expectations towards child PA. An example item is "Participating in physical activity helps my child to be healthy". Similar items have been validated previously in the literature (Huhman et al., 2007). Cronbach alphas were .66 and .74 for T1 and T2 respectively. Responses to each item were summed to create a composite outcome expectation score.

Intentions. Two items, rated on a scale from 1 (strongly disagree) to 4 (strongly agree), were used to assess parents' intentions towards providing parental support for their child/children's PA. An example item is "Over the next six months, I intend to help my child be more physically active". Both items have been validated previously (Rhodes, Blanchard, & Matheson, 2006). Cronbach's

alphas were .71 and .69 at T1 and T2 respectively. Responses to each item were summed to create a composite intentions score.

Perceived behavioural control (PBC). Two measures were used to assess parents' PBC towards providing parental support for child PA. The first measure used three items, rated on a 4-point scale (1-not at all confident to 4-very confident), to assess parents' confidence in their ability to influence their child to participate in more PA. Items began with the stem, "If you really wanted to, how confident are you that you can influence your child to participate in more physical activity...?". End points included: 1) "no matter how busy your day is?", 2) "on a day when you don't really feel like doing it?", and 3) "and still spend the time you want with your family?". Cronbach alphas were .80 at both T1 and T2. Responses to each item were summed to create a composite score representing parents' PBC to influence child PA.

The second measure used five items (1-not at all confident to 4-very confident) to assess parents' confidence in their ability to help their child find ways to be active when faced with barriers often reported by parents engaging in PA (Bellows-Riecken & Rhodes, 2008). Items began with the stem, "If you really wanted to, how confident are you that you can find ways to help your child be active...?". End points included 1) "...on a day when he/she doesn't really feel like doing it?", 2) "and still spend time doing things he/she wants to do?", 3) "and still spend time doing things with the family?", 4) "when you have other chores and time responsibilities?", and 5) "on days when you are fatigued from work/chores?". Cronbach alphas were .87 and .84 for T1 and T2 respectively. Responses to each item were summed to create a composite score representing parents' PBC to find ways for their children to be active.

Parental support. Eight yes-or-no items were used to assess parental support behaviour. The items began with the stem, "As a result of seeing these ads on television have you done any of the

following? Please check all that apply...”. Endpoints are listed in Table 2 and reflect types of parental support activities identified in the literature and the behavioural outcome goals of the campaign (Gustafson & Rhodes, 2006; Trost et al., 2003). The number of parental behaviours engaged in was summed to create a continuous measure of parental support.

Child PA Behaviour. One item was used to assess whether or not parents’ children were meeting the PAG. The item stated, “Over the past seven days, on how many days was your child physically active for a total of at least 60 minutes per day?”. Responses were made using a drop down menu ranging from 0 to 7 days. Parents were instructed to think about their child between the ages of 5 to 11 yrs. If parents had more than one child in the age range, they were instructed to answer for the child whose birthday occurs next. Parents who indicated their child was active for 7 days were recoded as yes for child meeting the guidelines. All other values were recoded as no.

Analysis

To identify potential covariates, we conducted 2 (Time) x 2 (Awareness) analyses of variance (ANOVAs) on continuous demographic variables and chi square tests of independence on categorical demographic variables. To test our hypotheses, 2 (Time) x 2 (Awareness) analysis of covariance (ANCOVAs) were conducted on continuous variables and chi square tests of independence were conducted on categorical variables. In all cases, test statistics with $p < .05$ were deemed statistically significant and only highest order effects are reported. Significant two-way interactions were decomposed by time point. For ANCOVAs, Cohen’s d was calculated to determine effect sizes with values of .20, .50 and .80 considered small, medium and large effects respectively. For chi square tests of independence, Phi (ϕ) was calculated with values of .10, .30 and .50 being considered small, medium and large effects respectively.

Results

Participants

Of the parents recruited for T1 (n=712) and T2 (n=694), 1.4% (n=10) and 3.5% (n=24) were respectively excluded due to technical difficulties (i.e., being unable to see/hear one or both of the ads), leaving samples of 702 (T1) and 670 (T2) for the analyses. Demographic information is presented in Table 1. Across both time points, 42% of the sample indicated they *were* aware of the campaign. At T1, 41% of the sample indicated they were aware of the ‘Think Again’ campaign and at T2, 42% of the sample indicated they were aware of the campaign. The proportion of parents aware of the campaign was not different at T1 as compared to T2, $\chi^2(1, 1372) = .12, p = .74$ (see Table 1).

Covariates

Chi square tests of independence revealed that a lower proportion of fathers were aware of the campaign than mothers at T2, $\chi^2(1, N = 670) = 7.30, p < .01, \phi_c = .10$. No differences between mothers and fathers were observed at T1. In terms of awareness, no group differences were found in the number of children in the household, parent age, employment status, household income, education or the province in which the parent resided ($ps > .05$). Therefore, only parental gender was used as a covariate in the analysis.

Knowledge

Results of chi square tests of independence revealed that more parents who were aware of the campaign had knowledge of any PA guideline for children at both T1, $\chi^2(1, N = 702) = 112.45, p < .001, \phi = .40$, and T2, $\chi^2(1, N = 670) = 26.85, p < .001, \phi = .20$. Likewise, more parents who were aware of the campaign had knowledge of the Canadian PAG for Children and Youth at both T1, $\chi^2(1, N = 702) = 24.83, p < .001, \phi = .19$, and T2, $\chi^2(1, N = 670) = 12.87, p < .01, \phi = .14$ (see Table 2).

Perception of Child's PA

An ANCOVA revealed a main effect for campaign awareness, $F(1, 667) = 6.15, p = .01, d = .18$. When compared to parents not aware of the campaign, parents who were aware of the campaign were more likely to agree that their children were *not* active enough (see Table 3).

Outcome Expectations

A 2 (Time) x 2 (Awareness) ANCOVA revealed a main effect for awareness in that parents who were aware of the campaign had greater outcome expectations towards their child engaging in PA compared to parents not aware of the campaign, $F(1, 1349) = 8.02, p < .01, d = .16$. (See Table 3).

Perceived Behavioural Control

A 2 (Time) x 2 (Awareness) ANCOVA revealed a two-way interaction for parents' confidence in their ability to influence their child to participate in PA, $F(1, 1340) = 4.68, p = .03$. When the interaction was decomposed by time point, separate ANCOVAs revealed a main effect for awareness at T1 only, $F(1, 687) = 8.05, p < .01, d = .22$, indicating that parents who were aware of the campaign had greater PBC to influence their child to participate in PA compared to parents not aware of the campaign (see Table 3).

A 2 (Time) x 2 (Awareness) ANCOVA revealed a two-way interaction for parents' confidence in their ability to find ways to help their child be active, $F(1, 1367) = 8.43, p < .01$. When the interaction was decomposed by time point, separate ANCOVAs revealed a main effect for awareness at T1 only, $F(1, 699) = 11.61, p < .01, d = .26$, indicating that parents who were *not* aware of the campaign had greater PBC to find ways to help their child be active compared to parents who were aware of the campaign (see Table 3).

Intentions

A 2 (Time) x 2 (Awareness) ANCOVA revealed a significant main effect for awareness, $F(1, 1331) = 8.87, p < .01, d = .18$. Parents who were aware of the campaign had greater intentions to support their child's PA compared to parents not aware of the campaign (see Table 3).

Parental Support

On average, parents engaged in two parental support behaviours. The proportion of parents who engaged in each parental support behaviour is presented in Table 2. A 2 (Time) x 2 (Awareness) ANCOVA revealed a significant main effect for campaign awareness on parental support, $F(1, 699) = 14.35, p < .001, d = .31$. Parents who were aware of the campaign engaged in more parental support behaviours compared to parents who were not aware of the campaign.

Child PA Behaviour: Meeting Guidelines

Chi Square tests did not reveal an association between parents' awareness of the campaign and their children meeting the guidelines at T1, $\chi^2(1, N = 702) = .07, p = .80, \phi = .01$, or T2, $\chi^2(1, N = 670) = 2.74, p = .10, \phi = .06$.

Discussion

Among parents surveyed, 42% were aware of the ParticipACTION 'Think Again' campaign. Associations between parents' awareness of the campaign and campaign outcomes were observed. Though these associations were weak, they remain promising. Consistent with the campaign's primary aim of addressing the disconnect between parents' perception of their children's PA behaviour and reality, awareness of the campaign was associated with parents agreeing that their children were not active enough. Campaign awareness was also associated with both proximal and distal outcomes within the Hierarchy of Effects Model. Parents who were aware of the campaign showed greater knowledge of PAG, outcome expectations about their children engaging in PA, intentions to help their child meet the guidelines, and engaged in more parental support behaviours.

Findings regarding parents' PBC were mixed. Consistent with hypothesis, at T1, parents who were aware of the campaign had greater PBC to influence their child's PA participation compared to parents not aware of the campaign. Yet contrary to hypothesis, at T1, parents who were not aware of the campaign had greater PBC to find practical ways to help their child be active compared to parents aware of the campaign.. Moreover, parental awareness of the campaign was not associated with children meeting the PAG.

Our findings are generally consistent with previous evaluations of mass media PA campaigns that have demonstrated associations with both proximal and distal outcomes of the Hierarchy of Effects Model (Craig et al., 2009; Price et al., 2008; Spence et al., 2009). Proximally, campaign awareness was related to parents encouraging PA among their children. Distally, awareness of the campaign was associated with parental support behaviours. This finding is particularly encouraging as achieving success in public health mass media campaigns becomes increasingly difficult as Hierarchy of Effects Model outcomes become more distal (McGuire, 1984). However, the small effect sizes reinforce the argument that future mass media campaigns need to be implemented concurrently with programs, policies, environmental changes and appropriate resources to foster positive outcomes (Bauman et al., 2008; Brown et al., 2012).

Findings indicating that awareness of the campaign was not associated with children meeting the PAG or improving and maintaining parents' PBC were surprising and we can only speculate as to their meaning. Among parents who were aware of the campaign at T1, the campaign may have been associated with decreases in their PBC to help their child find ways to be active because the campaign highlighted that parents' current strategies were ineffective. Accordingly, awareness of the disconnect between their perception and reality may have led to initial increases in parents' PBC to further influence their children to become physically active. The positive relationship

between the campaign and parents' PBC at T1 may not have been observed at T2 due to parents' failed attempts to help their children meet the PAG. This finding highlights the need for future studies investigating how to maintain or improve PBC through campaign messages over time (Rhodes et al., 2013).

The present evaluation is not without limitations. The parent support measure only accounted for parental support behaviours that were adopted 'as a result of seeing the ads on television'. This measure does not account for instances in which parents were unaffected by the ads and may have been already engaging in the behaviours. Likewise, the campaign awareness measure was not specific to the 'Think Again' Campaign and all physical activity measures were self-reported. Given the cross-sectional design, we cannot determine causality or changes over time. Thus we could not be sure whether parents who had greater awareness were more receptive to PA messages as they, or their children, are perhaps more active themselves. Future evaluations of campaigns should be developed to allow for baseline measures to be taken prior to the campaign launch and a stronger, longitudinal, repeated measures design.

Conclusion

Overall, awareness of the 'Think Again' Campaign was associated with both proximal and distal outcomes within the Hierarchy of Effects Model. Further efforts and research are needed to ensure that small positive effects achieved by PA mass media campaigns are incorporated with broader strategies to foster sustained behaviour change.

Table 1. Demographic Characteristics

<i>% (n)</i>	Time 1 (T1)			Time 2 (T2)		
	Total	Aware	Not Aware	Total	Aware	Not Aware
	51(702)	41.0(288)	60.0(414)	49(670)	41.9(281)	58.1(389)
<i>Gender, % (n)</i>						
Female	92.9 (652)	38.3 (269)	54.6 (383)	90.7 (608)	39.6 (265)	51.2 (343)
Male	7.1 (50)	2.7 (19)	4.4 (31)	9.3 (62)	2.4 (16)	6.9 (46)
<i>Age, Mean Years (SD)</i>	43.4 (±12.2)	40.09(±6.63)	39.32 (±6.63)	44.6 (±13.3)	38.80 (±6.70)	39.40 (±6.81)
<i>Household Child Size, %(n)</i>						
1 child	22.6 (159)	8.7 (61)	14.0 (98)	40.6 (272)	11.3 (76)	29.3(196)
2 children	48.4 (340)	20.1 (141)	28.3 (199)	46.0 (308)	19.7 (132)	26.3 (176)
3 children	16.4 (115)	6.8 (48)	9.5 (67)	17.6 (118)	7.2 (48)	10.4 (70)
4 children	8.0 (56)	3.1 (22)	4.8 (34)	5.2 (35)	1.9 (13)	3.3 (22)
<i>Province, %(n)</i>						
Alberta	10.5 (74)	4.3 (30)	6.3 (44)	9.6 (64)	3.7 (25)	5.8 (39)
British Columbia	15.0 (105)	4.8 (34)	10.1 (71)	13.6 (91)	5.8 (39)	7.8 (52)
Manitoba	3.6 (25)	1.9 (13)	1.7 (12)	3.4 (23)	1.6 (11)	1.8 (12)
New Brunswick	2.8 (20)	1.4 (10)	1.4 (10)	2.7 (18)	1.5 (10)	1.2 (8)
Newfoundland & Labrador	2.1 (15)	.6 (4)	1.6 (11)	1.2 (8)	.7 (5)	.5 (3)
Nova Scotia	4.0 (28)	1.4 (10)	2.6 (18)	3.4 (23)	1.0 (7)	2.4 (16)
Ontario	42.9 (301)	18.4 (129)	24.5 (172)	38.8 (260)	16.1 (108)	22.7 (152)
Prince Edward Island	1.3 (9)	.7 (5)	.6 (4)	.15 (1)	.15 (1)	0

Quebec	14.7 (103)	5.8 (41)	8.8 (62)	24.8 (166)	10.0 (67)	14.8 (99)
Saskatchewan	3.1 (22)	1.7 (12)	1.4 (10)	2.4 (16)	1.2 (8)	1.2 (8)
<i>Employment, %(n)</i>						
Full time	42.3 (297)	18.4 (129)	23.9 (168)	48.4 (324)	19.6 (131)	28.8 (193)
Part time	17.4 (122)	8.1 (57)	9.3 (65)	14.0 (94)	5.7 (38)	8.4 (56)
Student	3.0 (21)	.9 (6)	2.1 (15)	1.9 (13)	.9 (6)	1.0 (7)
Looking for work	3.0 (21)	1.4 (10)	1.6 (11)	3.3 (22)	1.0 (7)	2.2 (15)
Homemaker	29.1 (204)	10.3 (72)	18.9 (132)	27. (182)	12.5 (84)	14.6 (98)
Retired	1.0 (7)	.3 (2)	.7 (5)	.9 (6)	.4 (3)	.4 (3)
Other	4.1 (29)	1.7 (12)	2.4 (17)	4.3 (29)	1.8 (12)	2.5 (17)
<i>Education, %(n)</i>						
Some high school or grade school	2.8 (20)	2.8 (8)	2.9 (12)	5.5 (37)	4.6 (13)	6.2 (24)
High school graduate	30.6 (215)	26.7 (77)	33.3 (138)	28.1 (188)	31.0 (87)	26.0 (101)
College degree	26.0 (182)	27.4 (79)	24.9 (103)	27.0 (181)	26.7 (75)	27.2 (106)
University degree (or higher)	40.6 (285)	43.1 (124)	38.9 (161)	39.4 (264)	37.7 (106)	40.6 (158)
<i>Household Income, %(n)</i>						
< \$25 000	5.4 (38)	4.2 (12)	6.3 (26)	6.7 (45)	6.4 (18)	6.9 (27)
\$25,000 to less than \$50,000	20.1 (141)	19.4 (56)	20.5 (85)	17.5 (117)	16.7 (47)	18.0 (70)
\$50,000 to less than \$75,000	17.5 (123)	18.4 (53)	16.9 (70)	21.3 (143)	21.7 (61)	21.1 (82)
\$75,000 to less than \$100,000	18.4 (129)	19.4 (56)	17.6 (73)	15.6 (104)	13.5 (38)	17.0 (66)
\$100,000 or more	22.4 (157)	22.9 (66)	22.0 (91)	24.9 (167)	25.3 (71)	24.7 (96)
Don't Know / Refused	16.2 (114)	15.6 (45)	16.7 (69)	14.0 (94)	16.4 (46)	12.3 (48)

Table 2. Knowledge of the campaign and guidelines, parental support behaviours and child’s physical activity behaviour among parents who were aware versus not aware of the campaign

	Time 1 (T1), %(n) yes		Time 2 (T2), %(n) yes	
	Aware	Not Aware	Aware	Not Aware
<i>Knowledge</i>				
Any Guideline for children and youth	20.7 (145)	8.4 (59)	19.9 (133)	16.3 (109)
Canadian Physical Activity Guidelines for Children and Youth	8.5 (60)	5.6 (39)	10.3 (69)	8.4 (56)
<i>Parent Support*</i>				
Set goals	4.4 (31)	.9 (6)	4.9 (33)	2.5 (17)
Planned a time	4.8 (34)	2.0 (14)	8.1 (54)	3.6 (24)
Enrolled my child/children	5.3 (37)	2.0 (14)	9.4 (63)	3.4 (23)
Made stricter rules – sedentary	6.8 (48)	2.8 (20)	10.0 (67)	3.6 (24)
Talked to my child/children	8.4 (59)	2.8 (20)	11.3 (76)	5.8 (39)
Looked for opportunities	10.1(71)	4.7 (33)	15.5 (104)	7.6 (51)
Talked to my spouse/partner	5.0 (35)	1.3 (9)	9.3 (62)	5.4 (36)
Visited the ParticipACTION website	.9 (6)	.1 (1)	1.0 (7)	.7 (5)
Looked for information	3.7 (26)	1.0 (7)	4.2 (28)	2.1 (14)
Started doing more PA	7.3 (51)	3.3 (23)	12.7 (85)	5.4 (36)
<i>Child Behaviour</i>				
Child meets guidelines	6.8 (48)	9.4 (66)	9.3 (62)	9.9 (66)

Table 3. Associations between Parents' Awareness of the Campaign and Continuous Outcome Measures.

	Range (<i>Min</i> – <i>Max</i>)	Both Time Points			Time 1 (T1) , Mean (SD)			Time 2 (T2), Mean (SD)		
		<i>Aware</i>	<i>Not Aware</i>	<i>d</i>	<i>Aware</i>	<i>Not Aware</i>	<i>d</i>	<i>Aware</i>	<i>Not Aware</i>	<i>d</i>
Child 'gets enough' PA	1 - 4	--	--	--	--	--	--	2.37±.97	2.19±.99	.18*
Outcome Expectations	3 - 12	11.38±.97	11.20±1.20	.16*	11.33±.97	11.20±1.13	.06	11.42±.97	11.20±1.27	.19*
Perceived Behavioural Control – Influence	3 - 12	9.13±1.88	8.94±1.98	.10	9.28±1.87	8.85±1.99	.22*	8.99±1.88	9.03±1.93	.02
Perceived Behavioural Control – Find ways	5 - 20	9.96±2.82	10.32±3.11	.12*	9.73±2.91	10.55±3.25	.26*	10.20±2.71	10.08±2.93	.04
Intentions	2 -8	7.12±1.40	6.90±1.34	.18*	7.19±1.12	6.89±1.32	.25*	7.04±1.16	6.90±1.34	.11
Parental Support	0-8	2.21±2.20	1.59±1.86	.31*	2.03±1.98	1.56±1.93	.24*	2.35±2.35	1.60±1.82	.36

Note. * denotes a significance level of $p < .05$ for ANCOVA tests comparing outcomes among parents who were aware vs. not aware of the campaign.

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