

## Evaluation of ‘The Father Effect’ Media Campaign to Increase Awareness of, and Participation in, an Online Father-Inclusive Parenting Program

Lucy A. Tully<sup>a</sup>, Patrycja J. Piotrowska<sup>a</sup>, Daniel A. J. Collins<sup>a</sup>, Paul J. Frick<sup>e</sup>, Vicki Anderson<sup>d</sup>, Caroline Moul<sup>a</sup>, Rhoshel K. Lenroot<sup>c</sup>, Eva R. Kimonis<sup>b</sup>, David Hawes <sup>a</sup>, and Mark R. Dadds<sup>a</sup>

<sup>a</sup>School of Psychology, University of Sydney; <sup>b</sup>School of Psychology, University of New South Wales; <sup>c</sup>School of Psychiatry, Faculty of Medicine, University of New South Wales; <sup>d</sup>Royal Children’s Hospital, Murdoch Children’s Research Institute, & Departments of Psychology & Paediatrics, University of Melbourne; <sup>e</sup>Learning Sciences Institute of Australia, Australian Catholic University & Department of Psychology, Louisiana State University

### ABSTRACT

There is substantial evidence that parenting programs are effective in improving parenting and child mental health outcomes. While there is increasing focus on delivering parenting interventions online to increase their reach and dissemination, fathers are underrepresented in all formats of parenting programs. However, research suggests that father participation is important for intervention effectiveness. This study evaluated the effectiveness of a media campaign for increasing awareness of, and participation in, an online father-inclusive parenting program called ‘ParentWorks’. An 8-week campaign was conducted in Australia via social media channels, digital display advertising, digital television, and radio. To assess the impact of the campaign, data were obtained from caregivers registering for ParentWorks during the campaign period ( $n = 848$ ) and an 8-week comparison period that occurred 3 months later ( $n = 254$ ). Additionally, a nationally representative sample of 2021 caregivers of children aged 2–16 years completed an online survey. Survey questions asked about exposure to the campaign, registration for participation in ParentWorks, and knowledge of the importance of father participation in parenting programs. Three times as many caregivers registered during the 8-week media campaign compared to the comparison period, and a significantly greater proportion of male caregivers registered in the campaign versus the comparison period. The online survey found that 11% of caregivers reported exposure to the campaign, and significantly more fathers than mothers reported exposure. Results showed that those who were exposed to the campaign were significantly more likely to endorse the importance of father participation in parenting programs, than those not exposed to the campaign. The findings indicate that media campaigns appear to be an effective method of increasing awareness of online parenting programs and enhancing rates of father involvement.

Many adult mental health problems have their origins in childhood, and evidence suggests that early childhood interventions can have immediate and long-term positive effects on cognitive, behavioral, health, and education outcomes (Nores & Barnett, 2010). There is substantial evidence that parenting programs, which focus on enhancing the quality and consistency of parenting practices, produce reliable improvements in childhood mental health problems, potentially reducing lifetime burden in at-risk children (Kaminski & Claussen, 2017). Most parenting programs are conducted face-to-face, with individual parents/families or groups, but there has been growing research evaluating online delivery as a way to increase program reach, reduce stigma, and also reduce the practical demands of participation for families. The Internet is the resource of choice for many parents to obtain information and advice about parenting (Nieuwboer, Fukink, & Hermanns, 2013), and both mothers and fathers report that they prefer online delivery to face-to-face sessions (Metzler, Sanders, Rusby, & Crowley, 2012; Tully et al., 2017a). Online delivery also provides an opportunity to upscale parenting programs and disseminate them widely, which has the

potential to impact on population rates of childhood mental health problems (Jones et al., 2013). Research shows that the effects of online parenting interventions are promising. Specifically, two meta-analytic reviews have found medium intervention effects for parent and child outcomes (Baumel, Pawar, Kane, & Correll, 2016; Nieuwboer et al., 2013), which are comparable to effect sizes reported for face-to-face delivery. However, the findings of these reviews are predominantly based on data from mothers, as most studies either included only mothers or did not report the sex breakdown of parents.

While parenting programs generally aim to change the parenting skills of both mothers and fathers, levels of father participation are often very low or not reported at all (Panter-Brick et al., 2014). Importantly, there is substantial evidence that including fathers in face-to-face parenting programs along with mothers leads to improved outcomes from the intervention, specifically improved child externalizing behavior and parenting (Lundahl, Tollefson, Risser, & Lovejoy, 2008). There has been very little research to date about fathers’ perceptions regarding barriers and facilitators to participation in parenting programs. However, recent surveys

have found that in addition to practical barriers (i.e., cost of the service, lack of time and work commitments), fathers often report low levels of awareness about parenting programs (Frank, Keown, Dittman, & Sanders, 2015; Tully et al., 2017a). Thus, there is a clear need to enhance father awareness of parenting programs and emphasize the importance of their participation. One strategy for potentially enhancing awareness, and thus father participation rates, is the utilization of media campaigns specifically targeted to fathers (Tully et al., 2017a).

Media campaigns – which may include print, television, radio, social media, and other digital/online platforms – are frequently used for improving public health problems, and often aim to increase knowledge regarding health issues or behaviors, increase positive health behaviors, and reduce health-risk behaviors (Poole, Seal, & Taylor, 2014). In relation to parents, there has been extensive research on the effectiveness of media campaigns targeting child health behaviors, such as promoting physical activity in children (Price, Huhman, & Potter, 2008), and enhancing parent–adolescent communication about alcohol (Surkan, Dejong, Herr-Zaya, Rodriguez-Howard, & Fay, 2003), with positive findings. However, there is a paucity of research examining media campaigns designed to enhance positive parenting or participation in parenting programs in order to improve child mental health and well-being (Morawska, Tometzki, & Sanders, 2014). This is despite media promotion (via print media or radio) being an integral part of recruitment for many parenting programs. Media campaigns have the potential to normalize and destigmatize help-seeking for parenting, child behavior, and mental health, and enhance rates of participation in parenting programs. To our knowledge, there has been no research to evaluate the effectiveness of a media campaign that aims to increase awareness of, and participation in, online parenting programs. Nor has there been any research on media campaigns that specifically target the engagement of fathers in online parenting programs for child mental wellbeing. Thus, this is the focus of the present research study.

This study examined the effectiveness of a media campaign called ‘The Father Effect’ that promoted the importance of father participation in parenting programs, and directed parents to participate in an online parenting program, ParentWorks, which aimed to improve child behavior, parenting skills and family functioning (Tully et al., 2017b). ParentWorks was specifically developed to meet the needs and preferences of fathers (as well as mothers), and by targeting fathers and including content of interest to fathers, it was expected to enhance both father participation and program effectiveness. The media campaign design adopted several principles that have been identified by Noar (2006) to maximize campaign success. First, formative research including focus groups and a large-scale survey with fathers were conducted to determine the message content (e.g., what fathers wanted to know about parenting programs). Second, the campaign design involved message targeting such that the materials (e.g., videos depicting fathers) were targeted to fathers. Third, campaign materials were delivered via channels that were identified as having the greatest potential reach to the target audience (i.e., fathers). This included social media channels, digital display advertising (i.e., animated display banners), short video clips on digital television, and brief messages read during peak hour on radio channels with a majority male

audience. Fourth, as campaign reach and exposure rates are critical determinants of campaign media success (Hornik, 1997), we evaluated the effect of the campaign on awareness of ParentWorks.

While exposure rates are a good measure of campaign reach, this study also evaluated the impact of the campaign on beliefs and behavioral outcomes. McGuire (1984) described a hierarchical model of behavioral change, which includes exposure, awareness, knowledge, attention, intention, and behavioral change. Thus, the present study examined whether exposure to the campaign was associated with knowledge about the importance of father participation in parenting programs, as well as rates of actual registration to participate in ParentWorks. Given the campaign primarily targeted fathers, the evaluation investigated sex effects in awareness and program registration. It additionally explored whether parent and child variables were associated with awareness and registration, since previous research has found internet usage for obtaining parenting information may be related to characteristics such as parent age, socioeconomic status, and child age (see Baker, Sanders, & Morawska, 2017). Finally, the evaluation considered whether campaign exposure differed for parents with and without concerns about their children’s mental health, as it has been proposed that media campaigns may be more effective among motivated subgroups (Surkan et al., 2003). Given the focus of ParentWorks is on improving child behavior and mental health, parents with concerns about their children’s mental health may be more attracted to the program and therefore more likely to participate.

This study aimed to answer the following research questions: (1) What are the rates of awareness of ParentWorks (i.e., proportion of respondents who had heard of ParentWorks) following the 8-week media campaign? How many caregivers registered during the campaign and during a comparison period, in which no media campaign was implemented? (2) Do awareness rates and registration rates differ based on sex of parent and other child and family characteristics? (3) Do parents exposed to the media campaign differ from those not exposed regarding their knowledge about the importance of father participation in parenting programs? (4) Does campaign exposure and knowledge regarding the importance of father participation differ on the basis of whether or not parents perceive their child to have mental health problems? (5) What are parental attitudes regarding the relevance of media campaigns to destigmatizing help-seeking?

## Method

### ParentWorks

ParentWorks is a free online intervention that can be completed by caregivers at home, in their own time, and is accessed via the internet using a computer, tablet, or mobile phone. It is an entirely self-directed program with no assistance from a practitioner. The program comprises video presentations of eight interactive sequenced ‘modules’, five of which are compulsory, and three optional. While ParentWorks has been designed to appeal specifically to fathers (e.g., emphasizing the importance of

fathers, prominently displaying images of fathers), the program is open to both mothers and fathers. Parents can participate alone or with their partner, although the program encourages both parents to participate. For further information about ParentWorks content, measures, and procedures, see the study protocol (Tully et al., 2017b).

### **'The Father Effect' media campaign**

'The Father Effect' media campaign was conducted online through social media channels, digital display advertising and digital television, as well as through radio. The online campaign was delivered over an 8-week period; however, the radio reads were only broadcast over a 2-week period (at the start of the eight week campaign). For the online campaign, a series of six videos were developed, depicting four "everyday" fathers and two "celebrity" fathers. Diverse fathers were included in the campaign (in terms of age, cultural background and family composition) to maximize their relevance to the target audience. The two celebrity fathers were a sportsman and a television personality, who were well known to the Australian population. Along with the videos, animated display banners were also used in the digital campaign. The radio reads consisted of brief pre-recorded messages about ParentWorks. These were delivered by well-known radio hosts at peak times on two commercial radio stations (with two-thirds male listeners), across four major Australian cities. The media campaign and ParentWorks program were launched at the same time.

The videos in the media campaign included brief messages about what was involved in participation in ParentWorks (i.e., free online program, proven strategies, only 20–30 min per week), the importance of father participation, and common child-rearing (e.g., noncompliance, sibling fighting) and parenting issues (e.g., use of alternative strategies to physical discipline, importance of working as a team with a co-parent) that can be addressed by ParentWorks, along with information about how ParentWorks could assist with these challenges (e.g., through evidence-based strategies). Similarly, the live radio reads also focused on common child-rearing issues. The messages in the campaign were developed based on social cognitive theory (Bandura, 1986), and aimed to enhance parents' help-seeking self-efficacy and knowledge about the importance of father participation. Message content was also informed by: (1) nine focus groups conducted with fathers ( $N = 41$ ) to identify the types of messages that would be of interest and/or persuasive to them (e.g., videos depicting real fathers and real parenting challenges they have experienced) and; (2) the findings of a survey conducted with 1000 Australian fathers about factors that may influence their decision to participate in parenting programs (e.g., factors rated as most important were understanding what is involved in the program and knowing the program has been tested and is effective) (Tully et al., 2017a). While fathers were the primary target for the media campaign, mothers were the secondary target, in order to encourage their partners to participate, and also for their own participation. The media campaign directed interested respondents to the ParentWorks website.

## **Participants and procedure**

### **ParentWorks sample**

Eligible participants were Australian parents or caregivers over 18 years old with children aged 2–16 years, who were currently living in Australia. During the 8-week media campaign, a total of 631 families registered for ParentWorks. Across single-parent and two-parent families, the total number of individual caregivers was 848, of which 43.0% ( $n = 370$ ) were male. In order to compare numbers of caregivers registering during the media campaign period with a comparison period of similar duration, a second 8-week period was selected, beginning 3 months after the completion of the media campaign. There was no media promotion for ParentWorks during the comparison period. During this period, 196 families registered, including 254 individual caregivers, of whom 92 (36.7%) were male.

During the registration process, caregivers complete several questionnaires about their child, their own parenting and related aspects of family functioning (See Tully et al., 2017b, for a full list of measures). Data reported for this evaluation include participants' sex, and responses to three questions concerning exposure to the media campaign. The first question asked all participating parents: how they heard about ParentWorks, with response options including *my partner, a professional, a friend/family member or someone else, radio, TV, print (newspaper or magazine), social media, website (not social media)*, and *other*. Second, they were asked whether they had seen the ParentWorks promotional videos, with a *yes/no* response. Finally, those participants who reported that they had seen the videos were asked to rate the content of the videos on a five-point scale from *Poor* (1) through to *Excellent* (5), to check adequacy of acceptability ratings.

### **Online survey sample**

To examine awareness of the media campaign, an online survey sample was recruited via a research recruitment agency. The research panel consisted of a population of 500,000 Australian people, and participants were recruited from this panel using online recruitment methods such as online messaging and email. Prior to completing the survey, potential participants were asked several screening questions to assess their eligibility (aged over 18 years, parent or caregiver of a child aged 2–16 years). Only after they had completed the screening questions and were deemed eligible for the study were they given the information about the survey. If they did not meet the eligibility criteria for the survey, they were told that they did not meet the requirements but were not given the reason why they were ineligible. These steps minimized the risk of ineligible participants subsequently participating in the survey. Digital fingerprinting technology, which improves data quality by accurately identifying potentially fraudulent responses, was used to track the respondent's IP address and ensure that the same respondent did not complete the survey more than once from the same device. A range of other strategies (e.g., excluding respondents who completed the survey too quickly) were used to ensure the validity of responses.

The online survey was available for completion during a 1-week period in October 2016. The survey commenced 5 days after the completion of the media campaign. During the

**Table 1.** Sample characteristics for overall online survey sample, and for those exposed and not exposed to the media campaign.

Variable	Total sample	Exposed ( <i>n</i> = 222) <i>n</i> (%)	Non-exposed ( <i>n</i> = 1799) <i>n</i> (%)	$\chi^2$ value
Parent sex male	906 (44.8)	133 (59.9)	773 (43.0)	22.93***
Parent education				
University	852 (42.2)	118 (53.2)	734 (40.8)	18.48***
Secondary school	871 (43.1)	66 (29.7)	805 (44.8)	
Grade 10 or less	297 (14.7)	38 (17.1)	259 (14.4)	
Parent age				
18–24	27 (1.3)	7 (3.2)	20 (1.1)	32.36***
25–34	409 (20.3)	71 (32.1)	338 (18.8)	
35–44	921 (45.6)	90 (40.7)	831 (46.2)	
45–54	570 (28.2)	42 (19.0)	528 (29.4)	
55 and older	92 (4.6)	11 (5.0)	81 (4.5)	
Child age <sup>a</sup>				
2–3	494 (24.5)	74 (33.3)	420 (23.3)	10.67**
4–5	532 (26.3)	66 (29.7)	466 (25.9)	1.49
6–9	786 (38.9)	94 (42.3)	692 (38.5)	1.25
10–12	640 (31.7)	62 (27.9)	578 (32.1)	1.61
13–16	732 (36.2)	53 (23.9)	679 (37.7)	16.46***
Child difficulties <sup>b</sup>				
No difficulties	833 (41.2)	57 (25.7)	776 (43.1)	27.37***
Minor difficulties	760 (37.6)	106 (47.7)	654 (36.4)	
Definite difficulties	340 (16.8)	51 (23.0)	289 (16.1)	
Severe difficulties	88 (4.4)	8 (3.6)	80 (4.4)	

Note. \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ .

<sup>a</sup>Child age percentages do not add up to 100% as parents could have more than one child in different age groups so separate chi-square tests were conducted across different age categories.

<sup>b</sup>Question from Strengths and Difficulties Questionnaire impact supplement.

recruitment period, a total of 3550 respondents accessed the survey link. Of those, 1505 (42.3%) were not eligible after completing the screening questions. Of those not eligible, the reasons included: that they did not have any children ( $n = 260$ , 17.3%) or they did not have at least one child in the 2–16 age range ( $n = 1245$ , 82.7%). A further 24 participants discontinued the survey before completion. Upon completion, participants were provided a small reimbursement to compensate them for their time. This incentive was integral to the online research panel and was in the form of online points which could be redeemed for a gift card chosen from a website once a certain point threshold was reached.

The final sample consisted of 2021 participants (see Table 1 for detailed sociodemographic breakdown). Of the sample, 44.8% of respondents were male. Overall, 42.2% of respondents had completed university level education, with a similar proportion having completed secondary school or equivalent, and the remainder having completed Year 10 or lower. Almost one-half of parents were aged 35–44 years, with over one-quarter aged 45–55 and one-fifth aged 25–34. Only a small minority were aged 18–24 or 55 or older. In terms of child age, around one-quarter of respondents indicated that they had at least one child aged 2–3 years or 4–5 years, with around one-third reporting at least one child age 6–9, 10–12, or 13–16 years. It should be noted that these proportions sum to a total of over 100%, as respondents could have more than one child in each age group.

Participants took an average of 5 min to complete the survey and their responses were anonymous. They were asked a number of questions regarding their exposure to ParentWorks, knowledge about the importance of father participation in parenting programs, child behavioral, and emotional problems, and their attitudes about the importance of media campaigns to destigmatize help-seeking. Exposure to ParentWorks was assessed by the following *yes/no* question: *Have you heard of ParentWorks, an online parenting program?*

*You may have heard about it on radio, online, social media, or through friends and family.* Respondents were also shown visual images from the media campaign including the ParentWorks logo and the visual image for ‘The Father Effect’. For those who endorsed exposure to the campaign, three *yes/no* follow-up questions asked whether respondents had seen any ParentWorks promotional videos (with stills from the videos to prompt respondents), whether they had visited the ParentWorks website in the last 2 months, and whether they had registered for participation in ParentWorks. Participants who reported visiting the ParentWorks website, but had not registered to participate were asked to provide a text response detailing the reason they did not register.

To assess knowledge about importance of father participation in parenting programs, respondents were asked: *To what extent do you agree or disagree with the following statement: It is important for fathers to participate in parenting programs.* The response options were: *Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, and Strongly Disagree.* For subsequent statistical analyses, responses to this question were collapsed into two categories: the ‘Agree’ category including *Strongly Agree* and *Agree* responses, and the ‘Neutral/Disagree’ category included the remaining three responses. The rationale for collapsing these categories was to differentiate positive responses from all other responses (neutral and negative).

To determine whether parents had a child with behavioral or emotional problems, one item from the Strengths and Difficulties Questionnaire (Goodman, 1997) impact supplement was used. This question asked: *Overall, do you think that any of your children have difficulties in one or more of the following areas: emotions, concentration, behavior or being able to get on with other people?* The response options were: *No difficulties, Yes – minor difficulties, Yes – definite difficulties, and Yes – severe difficulties.* While this single question is not a valid or reliable measure of child mental health problems, it has been

used in previous research as a brief measure of parental concerns about child emotions and behavior (Frank et al., 2015).

To assess attitudes about the importance of media campaigns for destigmatizing help-seeking, respondents were asked: *To what extent do you agree or disagree with the following statement: Seeing or hearing more in the media about parenting program helps parents feel okay about seeking assistance for managing child behavior.* The response options were: *Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, and Strongly Disagree.*

Research ethics approval for all components of this study was obtained from the University of Sydney Human Research Ethics Committee.

### Statistical analyses

For the ParentWorks sample, all variables were examined using descriptive statistics. To examine sex of parent enrolment during the media campaign period in contrast to the comparison period, a chi-square test was used. Data from ParentWorks were not adjusted for any sampling weights.

Data from the online survey sample were weighted using post-stratification sampling weights to adjust for potential sampling biases and ensure the sample was representative of the Australian population. Weights adjusted the data for under- and over-sampling based on respondent age, sex, and geographic region, against Australian Census data for parents of children aged 2–16 years (ABS, 2016). All data analyses conducted and reported for the online survey sample were adjusted for these sampling weights.

Initially all variables were examined using descriptive statistics. To compare responses from those exposed to the media campaign and those not exposed, chi-square tests and *t*-test were used. To further interpret chi-square analyses with cell sizes of greater than two, adjusted residuals were interpreted to determine the significant differences, using *z* scores greater than 1.96 and significance levels of  $p < 0.05$ . Chi-square tests were also conducted to examine sex differences in exposure to the campaign and registration for ParentWorks.

To examine whether exposure to the media campaign was associated with knowledge of the importance of father participation in parenting programs, a hierarchical logistic regression was conducted. The following independent variables were entered in Block 1 as covariates: parent sex, parent education, parent age, child age, and child difficulties. In Block 2, exposure to media campaign was entered. The dependent variable was Agree or Neutral/Disagree to the importance of father participation in parenting programs.

## Results

### ParentWorks sample

A significantly greater proportion of male caregivers registered during the campaign period ( $n = 370, 44.0\%$ ), when compared to the comparison period ( $n = 92, 36.7\%$ ),  $\chi^2(1, N = 1092) = 4.27, p < .05$ .

Caregivers registering for the program during the campaign period indicated how they heard about ParentWorks,

which included: their partner ( $n = 214, 25.3\%$ ), social media ( $n = 170, 20.1\%$ ), radio ( $n = 132, 15.6\%$ ), television ( $n = 90, 10.6\%$ ), friend or family member ( $n = 83, 9.8\%$ ), a website ( $n = 83, 9.7\%$ ), professionals such as a psychologist, teacher or social worker ( $n = 57, 6.7\%$ ), print media ( $n = 10, 1.2\%$ ), and other ( $n = 40, 4.7\%$ ). There were sex differences in hearing about the program through their partner, family/friends, radio, and social media. Significantly more fathers than mothers reported hearing about the program through their partner (63.5% vs. 36.5%),  $\chi^2(1, N = 840) = 43.85, p < .001$ , and via the radio (63.1% vs. 36.9%),  $\chi^2(1, N = 840) = 22.90, p < .001$ . Significantly less fathers than mothers reported hearing about the program through a friend/family member (30.9% vs. 69.1%),  $\chi^2(1, N = 840) = 6.21, p < .05$  and social media (27.6% vs. 72.4%),  $\chi^2(1, N = 840) = 22.94, p < .001$ . No significant sex differences emerged for hearing about the program from a professional, print media, television or website.

Of those registering for ParentWorks, 133 participants (15.6%) indicated that they had seen the videos in the media campaign. In terms of the video content, parents rated the videos highly, giving an average rating of 4.13 out of 5 ( $SD = 0.69$ ), where 5 represents 'excellent'. There were no significant differences in video ratings for male or female caregivers,  $t(120) = 1.51, p = .13$ .

Analytics for the ParentWorks digital campaign revealed a total of 11,542,350 impressions (i.e., number of times an advert was displayed), 5760 clicks (i.e., number of times an advert was clicked to find out more information) and 31 total conversions (i.e., number of complete registrations for ParentWorks after reaching the website via an advert) during the campaign period. However, conversions were not tracked for the first week of the campaign, so the total number of conversions is likely to be an underestimate. There were 716,975 views of the videos on YouTube during the campaign.

### Online survey sample

#### Exposure to media campaign

The characteristics of the overall online survey sample, as well as the exposed and nonexposed groups are displayed in Table 1. Of the total online survey sample, 222 respondents (11.0%) reported exposure to the media campaign. Chi-square tests examined whether exposure differed on the basis of sociodemographic and child characteristics. Significantly more fathers than mothers reported exposure to the campaign (60% vs. 40%). There were also significant differences in exposure based on parent education, with those exposed to the campaign being more likely to be university educated, and those not exposed being more likely to have secondary school level of education, but no differences for those who completed less than secondary school. Exposure differed based on parent age, with younger parents more likely to be exposed than older parents (adjusted residuals significant for 18–24 years, 25–34 years, 45–54 years, but no differences for 55 years and older). Exposure also differed based on age of child, with parents of children aged 2–3 significantly more likely to report exposure, and parents of children aged 13–16 significantly less likely to report exposure. Finally, exposure differed on the basis of parent reports of child

mental health difficulties, with those exposed more likely to report minor and definite difficulties in their child's behavior compared to those not exposed, and those not exposed more likely to report no child difficulties than those exposed. There were no significant differences for those reporting severe difficulties.

Of the 222 respondents who reported exposure to the media campaign, 51.8% ( $n = 115$ ) reported that they had seen the videos of parents, and 40.5% ( $n = 90$ ) reported visiting the program website in the last 2 months. Of those who visited the website, just over half ( $n = 50$ , 55.8%) reported that they had registered for participation in ParentWorks. Thus, for the overall sample of 2021, 5.7% reported viewing the videos, 4.5% visited the website, and 2.5% reported program registration. There were no significant differences between proportions of male and female caregivers who reported visiting the website,  $\chi^2(1, N = 222) = 0.66, p = .42$ , viewing the videos,  $\chi^2(1, N = 222) = 1.38, p = .27$ , and registering for ParentWorks,  $\chi^2(1, N = 222) = 0.02, p = 1.00$ .

Of the respondents who indicated that they had visited the website but not registered, the main reasons included time constraints (46.3%), no interest in participation or not planning to register (26.8%), that they needed more information or were undecided about participation (17.1%), or that they were planning to register in future (9.8%).

### Knowledge about importance of father participation

Overall, almost two-thirds of respondents ( $n = 1298$ , 64.2%) indicated that they agreed or strongly agreed with the statement that it is important for fathers to participate in parenting programs ( $n = 513$  [25.4%] neither agreed nor disagreed and  $n = 210$  [10.4%] indicated that they disagreed or strongly disagreed). A hierarchical logistic regression was conducted to examine factors associated with knowledge about importance of father participation in parenting programs (see Table 2). Variables entered in Block 1 included the following covariates: parent sex, age of parent (less than 35 vs. 35 or older), education of parent (high school or lower vs. university), child difficulty (none or mild vs. definite or severe), and child age (only those with at least one child aged 2–3 or 13–16 years, as these age groups differed for exposure to ParentWorks). The variable entered in Block 2 was reported exposure to ParentWorks. The model for the overall sample was significant,  $\chi^2(7, N = 2021) = 31.71, p < .001$ , with four significant predictors (see Table 2). Compared to those who were neutral or disagreed about the importance of father

involvement in parenting programs, those who agreed were 0.8 times less likely to be male, 1.4 times more likely to be university educated, 1.4 times more likely to indicate that their child had definite or severe mental health difficulties, and 1.5 times more likely to be exposed to ParentWorks.

### Importance of media for destigmatizing help-seeking for child behavior

For the entire sample, three-quarters agreed/strongly agreed ( $n = 1517$ , 75.1%) with the statement that messages in the media help parents feel okay about seeking assistance for child behavior. About one-fifth neither agreed nor disagreed ( $n = 392$ , 19.4%), and the minority disagreed/strongly disagreed ( $n = 112$ , 5.5%) with this statement. There were sex differences in responses,  $\chi^2(4, N = 2021) = 50.12, p < .001$ , with female respondents more likely to strongly agree with this statement than male respondents (25.5% vs. 15.4%), but less likely to be neutral than male respondents (15.5% vs. 24.3%), and less likely to disagree than male respondents (2.2% vs. 4.2%). There were no significant differences between female and male respondents across agree responses (54.2% vs. 53.9%) and strongly disagree responses (2.7% vs. 2.3%).

## Discussion

This study examined the impact of a media campaign on the awareness of, and participation in, an online father-inclusive parenting program called ParentWorks. It also examined whether exposure to the campaign was associated with knowledge about the importance of father participation in parenting programs, and rates of father participation in the program.

### Awareness of ParentWorks

In relation to the first research question regarding program awareness, just over 1 in 10 parents reported that they had been exposed to the media campaign, which is encouraging given the short 8-week duration of the campaign. These exposure rates are similar to those obtained from other media campaigns of similar duration (e.g., Livingston, Tugwell, Korf-Uzan, Cianfrone, & Coniglio, 2013) and suggest that a relatively brief campaign can have a significant reach. Extrapolating this to the population of Australian families with children 0–17 years (ABS, 2016), an 11% exposure rate translates into more than half a million parents. The success of the campaign can also be judged against the number of participants registering for ParentWorks

**Table 2.** Logistic regression model predicting knowledge about the importance of father involvement in parenting programs.

	<i>B</i>	<i>S.E.</i>	Odds ratio	95% CI for odds ratio	
				Lower	Upper
Parent gender (male)	−0.21	0.09	0.81*	0.67	0.98
Parent age (35 or older)	−0.03	0.13	0.97	0.76	1.24
Parent education (University)	0.35	0.10	1.42**	1.17	1.71
Child difficulty (definite/severe)	0.29	0.12	1.35*	1.06	1.69
Child age 2–3 years <sup>a</sup>	0.06	0.12	1.06	0.84	1.35
Child age 13–16 years <sup>a</sup>	−0.04	0.11	0.96	0.78	1.17
Media campaign exposure	0.37	0.16	1.45*	1.06	1.98

Note. Dependent variable is responses of 'Strongly Agree/Agree' vs. 'Neutral/Disagree/Strongly Disagree';  $N = 2021, *p < .05, **p < .001$ ; all data and analyses adjusted for sampling weights.

<sup>a</sup>Child age groups were not mutually exclusive as caregivers indicated whether they had at least one child in each age group. Only the 2–3 and 13–16 age groups are included as there were significant differences in exposure to the media campaign for caregivers with children in these age groups.

during the media campaign versus the comparison period. Overall, there were three times as many parents registering during the campaign period than the comparison period. Finally, the number of videos views on YouTube and number of clicks on the program website were very high considering the brevity of the campaign.

Research question 2 explored sex differences in rates of awareness of ParentWorks and registration for participation in the program. As fathers were the primary target population for the media campaign, it was encouraging, but not surprising to find that significantly more fathers than mothers reported exposure to the campaign. The data from parents registering for ParentWorks during the campaign period showed that 44% of all caregivers registering were male. These rates are difficult to compare to previous online parenting programs given most studies do not report on rates of father enrolment or participation. However, in a meta-analysis of face-to-face parenting programs, fathers constituted 20% of all enrolled parents (Fletcher, Freeman, & Matthey, 2011). Thus, the proportion of fathers registering for participation in ParentWorks is more than double previously reported rates, at least for face-to-face programs. The present study also found that a significantly greater proportion of fathers registered for ParentWorks during the campaign period versus the comparison period. Taken together, these findings suggest that the media campaign was successful in message targeting to fathers, resulting in higher rates of father awareness of the program relative to mothers, program registration rates for fathers that were similar to mothers, and high father registration rates during the campaign versus the comparison period.

The examination of sex effects also explored whether there were differences between mothers and fathers in how they reported hearing about ParentWorks. Almost two-thirds of male caregivers reported hearing about ParentWorks through their partners, which was significantly higher than for female caregivers. This suggests that media campaigns targeting fathers' participation in parenting programs should also target mothers, as they seem likely to pass information on to fathers. Fathers were also more likely than mothers to report hearing about ParentWorks through the radio, suggesting that radio may be a particularly good medium for reaching fathers directly.

Exposure to the media campaign also differed on the basis of a range of sociodemographics and child factors. Most notably, younger parents were more likely to report exposure than older parents, as were parents with a university education. A previous survey with caregivers regarding their methods for gaining parenting information similarly found younger parental age and higher level of education to be associated with greater use of digital resources (Radey & Randolph, 2009). Parenting programs often target younger parents as they may be more at risk of experiencing child behavior problems, so it appears that the use of a predominantly digital media campaign may be successful in reaching those parents. Caregivers of children aged 2–3 were more likely to report campaign exposure, and those of children 13–16 were less likely to report exposure. These age effects are not surprising given that parenting programs predominantly target parents of children under 12 years (Lundahl, Risser, & Lovejoy, 2006). Additionally, the greater campaign exposure for those with higher education levels in the present study is possibly indicative of a “digital divide”, whereby more

educated caregivers are more likely to obtain information from the Internet (Radey & Randolph, 2009). This may be especially pertinent given the nature of ParentWorks, which is a self-directed online parenting program. Younger, more educated caregivers who are more likely to obtain information from the Internet are perhaps also more likely to be interested in participating in self-directed programs such as ParentWorks, resulting in potential selection bias. Moreover, given this potential digital divide, as well as the finding that fathers were less likely than mothers to have heard about ParentWorks through social media, it may be worthwhile in future media campaigns to explore other more direct mediums such as mobile text-messaging, which have been shown to be effective in the delivery of parenting information (e.g., Fletcher et al., 2017).

### Knowledge about the importance of father participation

The findings also indicate that there were differences in knowledge about the importance of father participation based on exposure to the campaign, which was the focus of Research Question 3. Compared to those not exposed, those reporting exposure in the online survey were 1.5 times more likely to say that they agree with the statement regarding the importance of father participation in parenting programs. While this suggests that exposure to the campaign may increase knowledge about the importance of father participation, it is not possible to draw conclusions about the direction of these findings, and it may be that those with more positive attitudes to father participation in parenting programs were more likely to pay attention to the campaign.

### Perceptions of child behavior

Ratings of child behavior were the focus of Research Question 4. Parents who rated at least one of their children as having definite or severe difficulties were more likely to report exposure to the campaign than those who rated minor or no difficulties. As research indicates that parents are more likely to participate in parenting programs if they have concerns about their child's behavior (Heinrichs, Bertram, Kuschel, & Hahlweg, 2005), it is perhaps not surprising that parents with these concerns may also be more likely to pay attention to media messages about parenting, and thus recall exposure. Similarly, those who perceived that their child had definite or severe difficulties were 1.4 times more likely to agree with the statement about the importance of father involvement in parenting programs, so knowledge regarding the importance of father involvement appears to be higher for parents of children with difficulties. Although once again we cannot draw firm conclusions about the direction of these results, it appears that the present media campaign was effective in increasing awareness of the parenting program and the importance of father involvement, especially among parents with concerns about their child's behavior and mental health, who are also the families most likely to benefit from parenting programs (Shelleby & Shaw, 2014). To build on this finding, future interventions could utilize message tailoring to provide personalized content for parents with concerns about their child's behavior, which has been shown to be more effective in impacting

behavioral outcomes than generic messages (Noar, Harrington, & Aldrich, 2009). With the advancement of technology such as social media and digital advertising, computer algorithms can easily identify these parents and, for example, display a tailored video (e.g., depicting a father with child mental health concerns) to motivate them to participate in a parenting program.

### **Importance of media for destigmatizing help-seeking for child behavior**

Regarding Research Question 5, three-quarters of the sample reported that they agreed/strongly agreed with the importance of media campaigns for destigmatizing help-seeking for child behavior problems. This finding suggests that media campaigns may be critical for reducing stigma and normalizing parenting program participation. Notably, there were sex differences in response to this question, with a greater proportion of mothers than fathers strongly agreeing with this question. It is not possible to know whether these sex differences represent differences regarding perceived stigma around help-seeking for child behavior, as there is a paucity of research regarding fathers' perceptions of stigma especially in relation to participation in parenting programs (Lanier, Frey, Smith, & Lambert, 2017), and this could be the focus of future research.

### **Limitations and implications**

There were a number of strengths to this study, including the media campaign design that incorporated effective principles identified by Noar (2006) such as formative research, message targeting, use of selective channels with optimal reach, and evaluation of exposure and outcomes. Additionally, the evaluation involved a large sample of nationally representative Australian parents, and the use of data from an online survey as well as data from caregivers registering for ParentWorks. Despite these strengths, there are also three key limitations to this research study. First, it is not possible to rule out false reporting, such as 'faking good' to the question about whether respondents had heard of the ParentWorks campaign. Other surveys have used dummy questions (e.g., fictitious campaign names) to control for faking good (Jorm, Chirstensen & Griffiths, 2005), which would be a useful strategy to employ in future research. However, motivation for socially desirable responding was minimized in the current study by ensuring that the survey was anonymous. Second, as previously highlighted, no conclusions can be made about the direction of the findings and future research should endeavor to use more rigorous designs to evaluate the effectiveness of campaigns. While rigorous evaluations of media campaigns are challenging, some researchers have utilized control groups of people not exposed to the media campaign based on geographic location (Jorm et al., 2005), which is one example of a more robust research design. As media campaigns can be costly, future evaluations should take into account the cost of the campaign (as well as program costs) and examine the cost-effectiveness of program implementation. Finally, as the survey was

conducted immediately post-campaign, we could not examine longer-term changes in knowledge about father participation in parenting programs. Overall, the field of research on media campaigns is in its infancy and significantly more research is needed.

Notwithstanding the need for further research, the findings of this study have three main implications regarding delivery of media campaigns. First, as there was greater awareness of ParentWorks for fathers relative to mothers, and greater participation of fathers during the campaign period, media campaigns appear to be an effective strategy for both increasing father awareness of parenting programs and increasing rates of father involvement. In fact, research has also found that mothers (as well as fathers) have low rates of awareness of parenting programs (Reardon et al., 2017), and since three times as many caregivers participated in ParentWorks in the campaign period versus the comparison period, media campaigns are likely to be a useful strategy for enhancing the participation of all parents, regardless of sex. Second, the findings from this study are not only relevant to delivery of parenting programs, but may have broader implications for involving fathers in a range of interventions for child well-being. For example, a recent review highlighted that fathers make up only 6% of participants in interventions for prevention and treatment of child obesity (Morgan et al., 2017), therefore media campaigns could be implemented to increase father involvement in programs for a range of child health outcomes. Finally, given that fathers were significantly more likely to hear about the program through their partners than were mothers, it is important that media messages targeting fathers are also aimed at mothers, as this appears to be an effective way of indirectly targeting fathers.

### **Conclusions**

In summary, this study found that a brief media campaign that aimed to increase awareness of an online, father-inclusive parenting program was effective in increasing father participation rates and resulted in higher rates of awareness for fathers relative to mothers. Fathers are significantly under-represented in all forms of parenting programs, and this study provided initial evidence that media campaigns may be an effective strategy for increasing father awareness and participation. There were also significant differences in knowledge regarding the importance of father participation for those exposed to the campaign compared to those not exposed, so it is possible that the media campaigns may enhance public knowledge about the importance of father participation, although further research is needed in order to establish the direction of these findings. There is a paucity of research examining the effectiveness of media campaigns in enhancing awareness and participation in parenting programs for all parents, regardless of sex, so further research on this topic is urgently needed. As low levels of father participation continue to plague parenting programs, media campaigns may represent a key strategy to increase father engagement and thus enhance the effectiveness of parenting programs at a public health level.



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## ORCID

David Hawes  <http://orcid.org/0000-0003-3260-1225>

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