Original Paper

Using paid and free Facebook methods to recruit Australian parents to an online work-family survey: An evaluation

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Abstract

Background: The prevalence of social media makes it a viable alternative to ‘traditional’ offline methods of recruiting and engaging participants in health research. Despite burgeoning use and interest, few studies have rigorously evaluated its effectiveness and feasibility in terms of recruitment costs, retention rates, and sample representativeness.

Objective: This study aimed to determine the feasibility of using Facebook to recruit employed Australian parents to an online survey about managing work and family demands, specifically to examine: (i) the cost-effectiveness of Facebook recruitment; (ii) the retention rate and demographic characteristics of parents who returned to complete a follow-up survey 6 weeks later; and (iii) the representativeness of the sample, compared to a population-based cohort of parents.

Methods: Recruitment was conducted using 20 paid Facebook advertising campaigns, together with free advertising in the form of posts on relevant Facebook pages.

Results: Recruitment strategies together resulted in 6,653 ‘clicks’ on the survey, from which 5,378 parents consented to participate, with a full-survey completion rate of 86.7% (n = 4,665). Of those who completed the survey, 85.8% (n = 4,009) agreed to be re-contacted, with 57.8% (n = 2,317/4,009) completing the follow-up survey (i.e. 43.1% (n = 2,317/5,378) of parents who consented to the initial survey). Paid Facebook advertising recruited nearly 75% of the sample at AU$2.32 per completed survey (AU$7,969 spent, 3,440 surveys completed). Compared to a population-based sample, participants at baseline were more likely to be university educated (p<.001), experience greater work-family conflict (p<.001) and psychological distress (p<.001), and were less likely to be born outside Australia (p<.001) or live in a disadvantaged neighbourhood (p<.001).

Conclusions: Facebook provided a feasible, rapid method to recruit a large national sample of parents for health research. However, some sample biases were observed and should be considered when recruiting participants via Facebook. Retention of participants at 6-8 week follow-up was less than half the initial sample; this may reflect limited ongoing participant engagement for those recruited through social media, compared to face-to-face.

Keywords: parents; recruitment; retention; Facebook; social media; cost-effectiveness; representativeness; fathers; survey
‘Busyness’ and time pressure are linked to reduced research participation [1], particularly for parents balancing the demands of work and family simultaneously [2]. This presents barriers to participation in health research, which is often time-intensive or requires face-to-face engagement. Social media platforms such as Facebook have the potential to reach and engage parents who, as a cohort, are already strongly engaged in social media for parenting information, advice or peer support [3, 4]. Given that employed parents typically report being time-poor [5], online methodologies may allow more frequent and flexible opportunities for parents to engage in research. While the omnipresence of social media in modern society provides new opportunities for efficient and cost-effective participant recruitment, rigorous evaluation of Facebook as a recruitment method is scant and many unanswered questions remain. How feasible is this method for health research? Can it replace ‘traditional’ offline methods of participant recruitment? Are samples of parents recruited via Facebook comparable to those recruited via offline methods? What are the retention rates for a convenience sample of parents recruited through Facebook? This paper addresses these questions salient to many researchers in a variety of health- and family-related fields and reports on the methodology and feasibility of recruiting employed Australian parents via Facebook to an online survey, with brief follow-up.

Facebook is a free social networking website whereby users create profiles, share content and connect with other users (www.facebook.com). It remains the most popular social media platform globally, with over two billion active monthly users [6], including 15 million Australians, of whom 50% log in daily [4, 7]. Facebook is the main social media platform used by parents [8], attracting more parents than non-parents on a daily basis [9]. In recent years, parents’ use of social media has increased [10], providing new ways for parents to maintain social ties, connect with other parents, exchange personal experiences, seek social and emotional support, and obtain parenting information [9, 11]. Mothers typically use Facebook more frequently than fathers, and usage tends to increase during the transition to parenthood [3, 9].

Given such widespread use of social media (and the ubiquity of smartphones), it is unsurprising that researchers are beginning to harness Facebook as a mobile, flexible and potentially cost-effective research tool. Traditional offline methods such as mail outs and telephone interviews are becoming less feasible and less effective; this is evidenced by rising postage costs, increased refusal rates for household surveys, and reduced use of landline phones [12-14]. We conducted a literature review of the feasibility of Facebook recruitment for health-related survey research over the last five years. As shown in Table 1, recruitment rates and cost
Running head: Using Facebook to recruit Australian parents

89effectiveness are enormously varied. For example, Leach and colleagues [15] recently recruited 819 new
90mothers to a health and wellbeing survey using Facebook advertisements in just four days of active recruitment,
91at a cost of 55c per participant. Conversely, Kapp and colleagues [16] used Facebook advertisements to recruit
92women to a survey of mammogram use but failed to recruit any eligible respondents, despite offering monetary
93incentives. This variability is highlighted in a systematic review of studies using Facebook as a recruitment tool
94[17]. Across 54 studies, an average of 736 participants (range: 0 to 11,799) were recruited via Facebook, at a
95cost of US$1.36 to $110 per completing participant (per study average = $17.48, of the 21 studies that provided
96sufficient data). Facebook may be particularly effective for recruiting vulnerable and traditionally hard-to-reach
97populations, including young adults [18], HIV-positive participants [19], LBGTIQ populations [20], new
98mothers [15] and low-income populations [21].

99Table 1. Summary of Facebook recruitment rates and cost-effectiveness previously reported in the literature.

<table>
<thead>
<tr>
<th>Study</th>
<th>Target Sample</th>
<th>Topic</th>
<th>Duration</th>
<th>No. Campaigns</th>
<th>Sample</th>
<th>Cost (Total / Per Participant)</th>
<th>View rate (Reach to Click Rate)*</th>
<th>Response rate (Click to Completion Rate)#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leach, Butterworth [15]</td>
<td>Postpartum women in Australia</td>
<td>Psychological wellbeing postpartum</td>
<td>4 days</td>
<td>1</td>
<td>n = 819</td>
<td>AU$448.68 / AU$0.55</td>
<td>6.83%</td>
<td>30.94%</td>
</tr>
<tr>
<td>Dworkin, Hessel [22]</td>
<td>US parents of high school/college students</td>
<td>Parenting</td>
<td>6 weeks</td>
<td>2</td>
<td>n = 10</td>
<td>US$500 / US$50</td>
<td>0.89%</td>
<td>0.79%</td>
</tr>
<tr>
<td>Kayrouz, Dear [23]</td>
<td>Arabic, aged 18-70 years</td>
<td>Anxiety / depression</td>
<td>28 weeks</td>
<td>37</td>
<td>n = 70</td>
<td>US$37</td>
<td>Reach NR</td>
<td>Clicks NR</td>
</tr>
<tr>
<td>Subasinghe, Nguyen [24]</td>
<td>Young Australian women</td>
<td>HPV vaccine</td>
<td>45 months</td>
<td>10</td>
<td>n = 919</td>
<td>AU$22,079 / 24.02</td>
<td>2.41%</td>
<td>3.88%</td>
</tr>
<tr>
<td>Gunasekaran et al [25]</td>
<td>Young Australian women</td>
<td>HPV vaccine</td>
<td>19 weeks</td>
<td>NR</td>
<td>n = 278</td>
<td>US$5,560 / US$20</td>
<td>Reach NR</td>
<td>Clicks NR</td>
</tr>
<tr>
<td>Harris, Loxton [26]</td>
<td>Australian women aged 18-23</td>
<td>Contraceptive use and pregnancy</td>
<td>12 months</td>
<td>18</td>
<td>n = 3,795</td>
<td>AU$1,697 / AU$10.99</td>
<td>2.13% (newsfeed only)</td>
<td>Clicks NR</td>
</tr>
<tr>
<td>Arcia [27]</td>
<td>Pregnant women aged 18-44 in the US</td>
<td>Childbirth preferences</td>
<td>18 weeks</td>
<td>14</td>
<td>n = 344</td>
<td>US$3,821.81 / $11.11</td>
<td>0.08%</td>
<td>5.77%</td>
</tr>
<tr>
<td>Gilligan, Kypri [28]</td>
<td>Australian parents of 13-17 year olds</td>
<td>Adolescents’ alcohol use</td>
<td>4 weeks</td>
<td>1</td>
<td>n = 204</td>
<td>AU$1107 / AU$5.94</td>
<td>5.28%</td>
<td>24.29%</td>
</tr>
<tr>
<td>Ramos, Rodriguez [29]</td>
<td>Smokers in the US, aged 18-25</td>
<td>Smoking cessation</td>
<td>7 weeks</td>
<td>36</td>
<td>n = 79</td>
<td>US$2024 / $8.80</td>
<td>0.61%</td>
<td>1.34%</td>
</tr>
<tr>
<td>Kapp, Peters [16]</td>
<td>US women aged 35-49 years</td>
<td>Mammogram</td>
<td>11 days</td>
<td>3</td>
<td>n = 0</td>
<td>US $300 / n/a</td>
<td>0.08 %</td>
<td>0%</td>
</tr>
<tr>
<td>Lohse [21]</td>
<td>Low-income US residents aged 18-55</td>
<td>Eating behaviours</td>
<td>19 days</td>
<td>1</td>
<td>n = 52</td>
<td>US $96.71 / $11.49</td>
<td>1.38%</td>
<td>11.18%</td>
</tr>
</tbody>
</table>

100Clicks divided by Reach, multiplied by 100; the proportion of participants who click on the advertisement, from
101those who are exposed to the advertisement; *Participants divided by Clicks, multiplied by 100; the proportion
102of participants who consent to participate, from those who click on the advertisement; NR = Not reported.
Despite growing interest and use, few Facebook recruitment studies have reported on sample representativeness. In their systematic review, Thornton, Batterham [17] found that only 16 (14.5%) articles examined sample representativeness, but of these, 86% concluded that their Facebook sample was similar to samples recruited using traditional methods. Leach, Butterworth [15] found that, compared to a representative population sample of mothers, mothers recruited via Facebook were younger, and more likely to be in a de-facto relationship, highly educated, first-time mothers, and to speak only English at home. Importantly, these mothers also had poorer self-reported physical and mental health, suggesting potential bias in who self-selects into research participation about specific topics. Thornton et al [17] conclude that although the majority of Facebook samples have similar demographic characteristics to samples recruited via other methods, they are often not representative when compared with national population data. Evidence regarding the retention of samples recruited via Facebook is similarly limited. A one-month follow-up of young adult veteran drinkers reported nearly 80% retention, with highly educated participants less likely to drop out [30].

Despite its apparent advantages, rigorous evaluation of the feasibility and cost-effectiveness of Facebook recruitment is scant. Few studies report on Facebook’s effectiveness for recruitment and there is a lack of explicit detail about Facebook advertising settings and strategies, content of advertisements, or modifications to Facebook settings and advertising campaigns throughout recruitment (exceptions include [15, 27]). It is therefore difficult to draw accurate conclusions about the feasibility and effectiveness of Facebook as a research tool.

To address these gaps, we evaluated the feasibility, cost-effectiveness and representativeness of a parent sample recruited to an online survey via Facebook. We contribute to the growing literature assessing social media as a method of recruitment for health research, and are one of the first to provide rigorous evaluation of this method. The aim of the survey was to identify the employment conditions and workplace supports accessed by employed parents of children aged 0-18 years to manage work and family demands; and to identify which strategies were associated with better parent wellbeing. The content of the survey comprised validated and study-specific measures assessing parents’ formal and informal workplace supports (e.g. flexible working arrangements; supervisor support); parent wellbeing including job satisfaction, fatigue, stress, mental health and work-family conflict; and a range of family, demographic and employment characteristics. On completion of the
Online survey, parents were invited to be contacted for a 6-8 week follow-up survey. This paper reports on a methodological evaluation which aimed to assess the feasibility of recruiting a national sample of employed parents to an online survey via Facebook, with respect to:

1. Cost-effectiveness;
2. Representativeness of the Facebook sample, by comparing them to employed parents who participated in a national population-based cohort study (LSAC; Longitudinal Study of Australian Children);
3. Retention, including demographics of parents who returned to complete a follow-up survey.

**Methods**

**Study Design**

The study comprised an online survey with brief follow-up component at 6-8 weeks. The 15-minute baseline survey (T1) collected family and socio-demographic characteristics, workplace and job characteristics, support accessed and utilised (e.g. flexible work arrangements) and primary study outcomes (e.g. work-family conflict, psychological distress). T1 data were collected from August to November 2016 (including school-term and holiday periods in Australia). The 10-minute follow-up survey (T2) re-administered core demographics and primary outcome measures, from October 2016 to February 2017.

Eligible participants were required to: (i) be 18 years of age or older; (ii) reside in Australia; (iii) be in paid employment (including self-employment or employees currently on leave); and (iv) have at least one child aged 18 years or younger. Participants were invited to enter a draw to win one of ten AU$50 gift cards at the end of each survey; winners were randomly selected and sent a gift card via email. The survey was administered via Qualtrics, an online research platform [31]. Ethical approval was granted by La Trobe University College of Science Health and Engineering Human Ethics Sub-Committee (SHE-CHESC reference number: S16-112; 27/07/2016).

The sample size was determined based on our primary objective, which was to estimate the proportion of parents experiencing high work family conflict. Based on Cooklin, Dinh [32], we estimated that 30% of parents would have high work family conflict. Using precision-based sample size calculations [33], a sample size of 323 participants was required to estimate this proportion with 95% confidence intervals of width +/-0.05. To allow for analyses to be stratified by parent sex, marital status, dual vs single earner household, and child age category, we aimed to recruit at least 323 participants within each of these subgroups.

**Recruitment Protocol**
Participants were actively recruited in one of two ways: (i) paid Facebook advertising or (ii) free Facebook advertising. Both methods also included passive ‘snowball’ sampling, as users liked, shared or circulated the link to others. Study advertisements typically comprised: (i) a title (e.g. “When it comes to balancing work and family life, what works for you? What do you find tricky?”); (ii) an image (e.g. mother hugging child; father walking child to school); (iii) main text (e.g. “Researchers are looking for working parents of children aged 18 years or younger to complete a 15-minute survey. You can go into a draw to win a $50 gift card!”); and (iv) the survey link.

A study-specific Facebook Page was created prior to recruitment that included a study description and contact details of the research team. The Page featured the university logo to support the perceived legitimacy of the survey. Relevant content was regularly posted to the page, such as news articles about managing the demands of work and family life, and updates on the number of survey respondents.

### Paid Facebook Advertising

Paid advertising involved running 20 targeted Facebook advertising campaigns. A Facebook “campaign” has an overarching objective (e.g. increase clicks to a website), targets specific Facebook users (e.g. gender, age, location), and has a budget [see 34]. The study was also advertised for a small fee (AU$200) on a popular online single parent community; this involved an administrator promoting the survey link to community members across numerous single parent Facebook Pages and via email.

Paid advertisements were created using Facebook’s Ads Manager, through which we selected the intended audience, schedule, format and budget of each campaign. Facebook advertisements were displayed to users whose profiles indicated that they were located in Australia, aged 18-60 years, and who matched on specific demographics, interests or behaviours (e.g. “mother”, “father”, “work-life balance” “parents with toddlers”, “parents of teens”). Gender was selected for campaigns targeted at mothers or fathers only. A range of high resolution stock images were included in the advertisements. Campaigns were closely monitored throughout data collection; they were adapted each week to target a different sub-sample of our target population and to test the effectiveness of different photos and wording.

Features of the 20 campaigns are presented in Table 2. All advertisements were placed on Mobile News Feeds and Desktop News Feeds, given evidence that this placement is highly visible and generates the strongest engagement at the lowest cost [26, 29]. Paid advertising campaigns were monitored throughout data collection in terms of reach, clicks, survey completions, and participant demographics.
### Table 2. Characteristics of paid Facebook campaigns

<table>
<thead>
<tr>
<th>No.</th>
<th>Target</th>
<th>Image Description</th>
<th>Format*</th>
<th>Duration (days)</th>
<th>Prize Draw Advertised</th>
<th>Time Scheduling</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Parents (all)</td>
<td>Assorted (incl. family, tradespeople, florist at work)</td>
<td>C</td>
<td>7</td>
<td>No</td>
<td>Anytime</td>
</tr>
<tr>
<td>2</td>
<td>Blue collar workers</td>
<td>Assorted (incl. chefs, hairdresser, factory worker)</td>
<td>C</td>
<td>7</td>
<td>No</td>
<td>Anytime</td>
</tr>
<tr>
<td>3</td>
<td>Fathers</td>
<td>Assorted (incl. father doing laundry, tradesman at work)</td>
<td>C</td>
<td>7</td>
<td>No</td>
<td>Anytime</td>
</tr>
<tr>
<td>4</td>
<td>Parents (all)</td>
<td>Assorted (incl. mother/son, father/daughter, family)</td>
<td>C</td>
<td>7</td>
<td>No</td>
<td>Anytime</td>
</tr>
<tr>
<td>5</td>
<td>Parents (all)</td>
<td>Composite image of mother/daughter and father/son</td>
<td>C</td>
<td>7</td>
<td>Yes</td>
<td>12-2pm; 7-10pm</td>
</tr>
<tr>
<td>6</td>
<td>Parents (all)</td>
<td>Composite image of mother/daughter and father/son</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>12-2pm; 6-10pm</td>
</tr>
<tr>
<td>7</td>
<td>Fathers</td>
<td>Father and son playing soccer</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>12-2pm; 6-10pm</td>
</tr>
<tr>
<td>8</td>
<td>Parents (all)</td>
<td>Father carrying daughter on shoulders</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>12-2pm; 6-10pm</td>
</tr>
<tr>
<td>9</td>
<td>Fathers</td>
<td>Father helping children build a bird feeder</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>12-2pm; 6-10pm</td>
</tr>
<tr>
<td>10</td>
<td>Parents (all)</td>
<td>Father helping son ride his bike to school</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>12-2pm; 6-10pm</td>
</tr>
<tr>
<td>11</td>
<td>Fathers</td>
<td>Father and children walking dog beside river</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>Excluding 12-2pm; 6-10pm</td>
</tr>
<tr>
<td>12</td>
<td>Fathers</td>
<td>Father and children walking dog beside river</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>Excluding 12-2pm; 6-10pm</td>
</tr>
<tr>
<td>13</td>
<td>Parents (all)</td>
<td>Mother with her three children</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>12-2pm; 6-10pm</td>
</tr>
<tr>
<td>14</td>
<td>Parents (all)</td>
<td>Father and son after a bike ride</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>12-2pm; 6-10pm</td>
</tr>
<tr>
<td>15</td>
<td>Fathers</td>
<td>Father and son playing football</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>Excluding 12-2pm; 6-10pm</td>
</tr>
<tr>
<td>16</td>
<td>Parents (all)</td>
<td>Mother helping son with homework</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>Excluding 12-2pm; 6-10pm</td>
</tr>
<tr>
<td>17</td>
<td>Fathers</td>
<td>Father and daughter reading a book</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>Excluding 12-2pm; 6-10pm</td>
</tr>
<tr>
<td>18</td>
<td>Mothers of teens</td>
<td>Mother and teenage son</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>12-2pm; 6-10pm</td>
</tr>
<tr>
<td>19</td>
<td>Fathers of teens</td>
<td>Father and teenage son</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>12-2pm; 6-10pm</td>
</tr>
<tr>
<td>20</td>
<td>Regional/rural parents</td>
<td>Family on a cattle farm</td>
<td>S</td>
<td>7</td>
<td>Yes</td>
<td>Excluding 12-2pm; 6-10pm</td>
</tr>
</tbody>
</table>

Note: *Carousel (C) format comprised a set of five scrolling images; single format comprised a single-image (S)

Free Facebook Advertising

We undertook a ‘cross-promotion’ recruitment strategy on Facebook in an attempt to harness the site’s popularity and reach at no cost. This involved identifying Facebook Pages aimed at parents specifically and those used by the general adult population, by searching within Facebook or Google using keywords (e.g. “parenting”, “mothers group”, “union”). We contacted the administrators of relevant Facebook Pages to seek their support in promoting our survey link to their members or followers. In addition, the survey link was circulated using a ‘snowballing’ approach, through professional networks of the research team and through Facebook users who liked or shared the link.

Data Collection

Unique survey URLs were generated for each recruitment strategy and advertising campaign, which reflected the source of participant recruitment (e.g. “Campaign 14”). This allowed us to monitor responses to each recruitment method. Facebook users who clicked on the survey link were directed to the survey landing...
They were asked to provide electronic consent by selecting six statements to demonstrate that they had read and understood the participant information statement and agreed to participate in the survey. Participants who consented to be re-contacted were emailed a unique survey link 6-8 weeks later. Non-responders or participants who had partially completed the follow-up survey were sent up to two email reminders at weekly intervals.

218 Measures

219 Facebook Metrics

Facebook metrics were collected through the Facebook Ads Manager, including reach (i.e. the number of users who saw the adverts in their News Feed at least once), link clicks (i.e. the number of users who clicked on the advertisement); cost-per-click (i.e. campaign cost, divided by the number of link clicks); and relevance (a score out of 10 generated by Facebook which estimates how well the target audience is responding to the advertisement). Higher relevance scores indicate positive user engagement (e.g. link clicks) while lower scores indicate negative interactions (e.g. hiding or reporting an advertisement).

226 Response Rates

The following response rates were calculated for the targeted Facebook advertising [35]. View rate: the ratio of Facebook users who clicked on the advertisement and visited the survey landing page divided by users who saw the advertisement (click-to-reach ratio). Participation rate: the ratio of those who consented to participate divided by the number of visitors to the survey landing page (consent-to-click ratio). Completion rate: the ratio of the number of people who completed the survey divide by those who consented to participate (completion-to-consent ratio). Cost-per-consent and cost-per-completer for each campaign were also derived. It was not possible to calculate view rates or participant rates for our free recruitment strategies.

234 Comparing Sample Characteristics and Assessing Representativeness of Facebook Sample

Comparison data were drawn from the Longitudinal Study of Australian Children (LSAC), Kindergarten (K) cohort (child age 4-5 years at outset), recruited in 2004. Full sample details, design, and field methods are published elsewhere [e.g. 36]. Briefly, LSAC employed a two-stage cluster sampling design using Australian postcodes and Australia’s universal health insurance database (Medicare Australia). Of the contactable families selected and residing in the sampled postcodes, 4,983 took part in LSAC (59% response rate Wave 1). The LSAC sample is considered broadly representative of all Australian children and their parents. Data are collected biennially (since 2004) via face-to-face interview with parents and a parent-report
Data from employed parents from three waves - Wave 1 (child age 4-5 years); Wave 4 (child age 10-11 years); and Wave 6 (child age 14-15 years) - were compared with the present study sample on baseline demographic characteristics and primary outcome measures.

Demographic characteristics compared between the two samples were: marital status (married or de facto; single), country of birth (born outside Australia; born in Australia) and level of education attained (tertiary qualification or less than tertiary qualification), and neighbourhood disadvantage, assessed using the Socio-Economic Index of Areas (SEIFA) Disadvantage score [39]. Postcodes provided by participants were matched with the corresponding SEIFA score (Australian m = 1000). We also compared participants on work-family conflict and psychological distress, key constructs of interest for the main study. Work-family conflict was measured using four items administered on a 5-point scale, ranging from 1 = “strongly disagree” to 5 = “strongly agree”, adapted from Marshall and Barnett [40] and used widely in Australian research (e.g. [41, 42]). Scores across 4 items were averaged, with higher scores indicating greater work-family conflict (Cronbach’s α = .67).

Psychological distress was assessed using the K6 [43] on a 5-point scale ranging from 1 = “none of the time” to 5 = “all of the time”. Responses were summed (range 6-30) with higher scores indicating greater psychological distress (Cronbach’s α = .87).

To assess the cost-effectiveness of Facebook recruitment (Aim 1), survey data was exported from Qualtrics into StataSE 14 [44] and the number of consenting participants and completed surveys were summarised by recruitment source (identified by the unique survey URLs). Costs of each targeted campaign (AU$7,969.25 in total) were then summarised by the number of participants who provided consent (cost-per-consent) and the number who completed the survey (cost-per-completer).

To assess the representativeness of the Facebook sample (Aim 2), baseline (T1) sample characteristics were compared with LSAC Waves 1, 4 and 6. Only employed parents from the LSAC sample were used, to provide a meaningful comparison. Independent samples t-tests were used to compare continuous variables (i.e. work-family conflict, psychological distress, neighbourhood disadvantage) and chi-squared tests were used to compare categorical variables (i.e. educational attainment, marital status, country of birth).

To assess the retention rate and characteristics of parents who returned to complete the T2 survey (Aim 3), the number of participants who completed the follow-up survey were compared with those who consented to be re-contacted, and with those who consented to the initial study. Sample characteristics of T1 and T2
Participants were compared using independent samples t-tests and chi-squared tests, as appropriate. Values of \( p < .05 \) were considered statistically significant.

Results

Recruitment (T1)

After a 15-week recruitment period, a total of \( n = 5,378 \) eligible participants consented and entered the T1 survey. Respondents represented all Australian states and territories, with greater concentrations in or around the more populous cities of Melbourne, Sydney, Brisbane, Adelaide and Hobart (see Figure 2). Of these, \( n = 4,665 \) (86.7%) completed the survey (i.e. pressed “submit” at the end of the survey), a further \( n = 532 \) (9.9%) provided partial data (i.e. exited before pressing “submit”), while \( n = 181 \) (3.4%) provided consent but did not answer any questions. The proportion of consenting participants who provided complete, partial or no data did not differ by recruitment strategy. Of the 4,665 participants who provided complete data, \( n = 3,440 \) (73.7%) were recruited through the 20 paid Facebook advertising campaigns, \( n = 79 \) (1.7%) through other paid online advertising, \( n = 782 \) (16.8%) through free Facebook advertising, and \( n = 364 \) (7.8%) through snowballing and professional networks.

As shown in Figure 3, free advertising was most effective during the first five weeks of data collection, after which time our paid advertising campaigns had been fine-tuned and became the main recruitment method.
Circulation of the survey link to our personal and professional networks in Weeks 2 and 7 was also effective. A pivotal point in recruitment can be observed around Weeks 5 and 6, whereby changes to the paid advertising strategies (described below) were implemented. The majority of participants completed the survey on a mobile device (72.8%), with other parents opting for a tablet (12.1%), laptop (8.0%), or desktop computer (7.0%).

Figure 3. Paid versus unpaid recruitment across duration of the T1 Survey.

Paid Facebook Advertising

The paid targeted Facebook advertisements reached nearly half a million users, with a view rate (click-to-reach ratio) of 1.87%, a participation rate (consent-to-click ratio) of 47.80% and a completion rate (completion-to-consent ratio) of 86.04%. The total cost of the paid Facebook advertisements was AU$7,969.25, with an average cost of $1.99 per consenting participant and $2.32 per completed survey.

Table 3 summarises the results of the 20 paid advertising campaigns, including overall cost, reach, relevance, clicks, cost-per-click, cost-per-consenting participant and cost-per-completed survey. As per our methodology, campaigns were regularly monitored and adjusted accordingly. The cost-per-consent started at AU$31.79 and dropped to AU$7.52 by Campaign 5. This decrease marks a shift in our recruitment strategies; we mentioned our incentive (i.e. gift card prize draw), and changed to a single-image rather than multiple-image format. A further decrease in cost-per-consent is evident for Campaign 6 (AU$2.54), after we reduced the text on the survey landing page, and scheduled our advertisements to appear during specific timeslots. Although cost-per-consent fluctuated across subsequent campaigns, it remained relatively low, from $0.68 (Campaign 14)
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315to $4.86 (Campaign 7) per consenting participant. Adjustments made to campaigns throughout data collection did not markedly change the “cost per click” but did result in improved completion rates.

317Table 3. Effectiveness of paid Facebook advertising campaigns.

<table>
<thead>
<tr>
<th>No.</th>
<th>Campaign cost ($)</th>
<th>Reach</th>
<th>Relevance score(^{a})</th>
<th>Link clicks (view rate)</th>
<th>Cost-per-click ($)</th>
<th>Consented to participate (participation rate)</th>
<th>Cost-per-consent ($)</th>
<th>Completed survey (completion rate)</th>
<th>Cost-per-completer ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>349.67</td>
<td>14,832</td>
<td>6</td>
<td>428 (2.89%)</td>
<td>0.82</td>
<td>11 (2.57%)</td>
<td>31.79</td>
<td>9 (81.82)</td>
<td>38.85</td>
</tr>
<tr>
<td>2</td>
<td>339.01</td>
<td>10,448</td>
<td>8</td>
<td>459 (4.39%)</td>
<td>0.74</td>
<td>7 (1.53%)</td>
<td>48.43</td>
<td>4 (57.14)</td>
<td>84.75</td>
</tr>
<tr>
<td>3</td>
<td>336.32</td>
<td>16,058</td>
<td>6</td>
<td>371 (2.31%)</td>
<td>0.91</td>
<td>8 (2.16%)</td>
<td>42.04</td>
<td>7 (87.50)</td>
<td>48.05</td>
</tr>
<tr>
<td>4</td>
<td>336.64</td>
<td>17,599</td>
<td>6</td>
<td>383 (2.18%)</td>
<td>0.88</td>
<td>8 (2.09%)</td>
<td>42.08</td>
<td>6 (75.00)</td>
<td>56.11</td>
</tr>
<tr>
<td>5</td>
<td>188.11</td>
<td>10,488</td>
<td>4</td>
<td>134 (1.28%)</td>
<td>1.40</td>
<td>25 (18.66%)</td>
<td>7.52</td>
<td>24 (96.00)</td>
<td>7.84</td>
</tr>
<tr>
<td>6</td>
<td>350.00</td>
<td>17,408</td>
<td>6</td>
<td>271 (1.56%)</td>
<td>1.29</td>
<td>138 (50.92%)</td>
<td>2.54</td>
<td>122 (88.41)</td>
<td>2.87</td>
</tr>
<tr>
<td>7</td>
<td>350.00</td>
<td>19,995</td>
<td>4</td>
<td>184 (0.92%)</td>
<td>1.90</td>
<td>72 (38.59%)</td>
<td>4.86</td>
<td>62 (86.11)</td>
<td>5.65</td>
</tr>
<tr>
<td>8</td>
<td>350.00</td>
<td>26,152</td>
<td>6</td>
<td>605 (2.31%)</td>
<td>0.58</td>
<td>415 (59.11%)</td>
<td>0.84</td>
<td>353 (85.06)</td>
<td>0.99</td>
</tr>
<tr>
<td>9</td>
<td>700.00</td>
<td>35,087</td>
<td>2</td>
<td>348 (0.91%)</td>
<td>2.01</td>
<td>187 (51.72%)</td>
<td>3.74</td>
<td>162 (86.63)</td>
<td>4.32</td>
</tr>
<tr>
<td>10</td>
<td>350.00</td>
<td>21,648</td>
<td>6</td>
<td>347 (1.60%)</td>
<td>1.01</td>
<td>202 (58.50%)</td>
<td>1.73</td>
<td>180 (89.11)</td>
<td>1.94</td>
</tr>
<tr>
<td>11</td>
<td>700.00</td>
<td>45,272</td>
<td>7</td>
<td>976 (2.16%)</td>
<td>0.72</td>
<td>496 (50.82%)</td>
<td>1.41</td>
<td>421 (84.88)</td>
<td>1.66</td>
</tr>
<tr>
<td>12</td>
<td>700.00</td>
<td>38,121</td>
<td>7</td>
<td>707 (1.85%)</td>
<td>0.99</td>
<td>331 (46.68%)</td>
<td>2.11</td>
<td>265 (80.06)</td>
<td>2.64</td>
</tr>
<tr>
<td>13</td>
<td>350.00</td>
<td>24,249</td>
<td>6</td>
<td>499 (2.06%)</td>
<td>0.70</td>
<td>343 (68.94%)</td>
<td>1.02</td>
<td>298 (86.88)</td>
<td>1.17</td>
</tr>
<tr>
<td>14</td>
<td>350.00</td>
<td>26,080</td>
<td>8</td>
<td>702 (2.69%)</td>
<td>0.50</td>
<td>514 (73.65%)</td>
<td>0.68</td>
<td>460 (89.49)</td>
<td>0.76</td>
</tr>
<tr>
<td>15</td>
<td>399.06</td>
<td>18,576</td>
<td>6</td>
<td>328 (1.77%)</td>
<td>1.22</td>
<td>187 (57.62%)</td>
<td>2.13</td>
<td>157 (83.96)</td>
<td>2.54</td>
</tr>
<tr>
<td>16</td>
<td>316.37</td>
<td>18,768</td>
<td>8</td>
<td>375 (2.00%)</td>
<td>0.84</td>
<td>321 (62.93%)</td>
<td>0.99</td>
<td>285 (88.79)</td>
<td>1.11</td>
</tr>
<tr>
<td>17</td>
<td>604.40</td>
<td>30,750</td>
<td>4</td>
<td>375 (1.22%)</td>
<td>1.61</td>
<td>270 (48.27%)</td>
<td>2.24</td>
<td>235 (87.04)</td>
<td>2.57</td>
</tr>
<tr>
<td>18</td>
<td>300.00</td>
<td>19,920</td>
<td>8</td>
<td>460 (2.31%)</td>
<td>0.65</td>
<td>290 (64.57%)</td>
<td>1.03</td>
<td>247 (85.17)</td>
<td>1.21</td>
</tr>
<tr>
<td>19</td>
<td>300.00</td>
<td>16,788</td>
<td>4</td>
<td>166 (1.00%)</td>
<td>1.81</td>
<td>66 (42.17%)</td>
<td>4.55</td>
<td>55 (83.33)</td>
<td>5.45</td>
</tr>
<tr>
<td>20</td>
<td>299.67</td>
<td>18,548</td>
<td>6</td>
<td>246 (1.33%)</td>
<td>1.22</td>
<td>107 (48.90%)</td>
<td>2.80</td>
<td>88 (82.24)</td>
<td>3.41</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7,969.25</td>
<td>446,787</td>
<td></td>
<td>8,364 (1.87%)</td>
<td>3,998 (47.80%)</td>
<td>3,440 (86.04)</td>
<td>m = 6.2</td>
<td>m = 1.50</td>
<td>m = 1.99</td>
</tr>
</tbody>
</table>

Note: All costs are in Australian Dollars (AU). ^Relevance Score is out of 10, and estimates how well the target audience is responding to the advertisement. Higher scores indicate positive engagement.

321While the changes implemented at Campaigns 5 and 6 improved participation rates, we continued to monitor participant demographics and refine our advertising campaigns. For example, Campaign 6 targeted both mothers and fathers, reaching 17,408 users and attracting 271 link clicks. However, only 13% of views and 4% of clicks were from male users. Subsequently, six father-specific campaigns were run alongside the parent campaigns (scheduled to run at different times of the day to avoid advertisements competing with one another). These campaigns effectively boosted participation from fathers; overall, the paid advertising campaigns recruited 1,540 fathers (44.8% of the total sample recruited through the paid campaigns). Parents in regional Australia and parents of teenage children were also under-represented, prompting three new campaigns targeting regional parents, mothers of teens, and fathers of teens.

The most successful advertising campaign is depicted in Figure 1 which recruited 514 participants at a cost of 68c per consented participant (i.e. 76c each for 460 completed surveys). This campaign coincided with

332cost of 68c per consented participant (i.e. 76c each for 460 completed surveys). This campaign coincided with
“back to school” week, in which Victorian children return to school after the holidays. The image was selected to maximise salience for parents during this period.

![Image of a family with children]

**Figure 1.** Most successful Facebook campaign (#14) which generated 514 survey consents at 68c each (76c per completed survey) and a relevance score of 9 out of 10.

**Free Facebook Advertising**

We contacted the administrators of 85 Facebook Pages, from which 22 responded, 13 agreed to endorse and cross-promote the study on their Facebook Page, six invited us to post directly on their Page as a visitor, and three declined as they did not promote surveys on their Page. We did not receive a response to 73% of requests.

Of the six Facebook Pages that provided permission to post as a visitor, one post led to the completion of six surveys, while five posts generated none. In comparison, eight Facebook administrators endorsed our survey on their Page, resulting in the completion of 492 surveys. The success of each endorsed post generally reflected its number of “followers”. For example, a prominent parenting Facebook Page with almost 200,000 followers led to the completion of 355 surveys, while a parenting Page with 3,000 followers generated 11 surveys. Four administrators shared our survey link to their members via email (generating 70 surveys) and one posted about the study on their website forum (generating 138 surveys). An additional 76 parents completed the survey via the link displayed on our study-specific Facebook Page.
Retention (T2)

Of the 4,665 participants who completed the T1 survey, 85.9% (n = 4,009) agreed to be contacted for the follow-up survey. Of these, n = 2,463 (61.4%) participants consented to the T2 survey: 35.7% (n = 1,433/4,009) responded to the initial email invitation; 15.7% (n = 630/4,009) responded to the first email reminder; and 10.0% (n = 400/4,009) to the second. One third of participants (33.0%; n = 1,322/4,009) did not respond to the email invitation or either reminder, a further 4.8% (n = 193/4,009) did not provide an email address in the T1 survey despite agreeing to be re-contacted, and n = 31 provided an invalid email addresses. A small number of participants who consented at T2 provided no data (0.6%; n = 16/2,463) or provided partial data (5.3%; n = 130/2,463). Of the 4,009 participants who agreed to be contacted for follow-up, 57.8% (n = 2,317) completed the T2 survey. As a proportion of those who consented to the T1 survey, this represents a retention rate of 43.1% (n = 2,317/5,378).

Sample characteristics of participants who completed the T1 and T2 surveys were compared. There were similar proportions of single parents (14% vs 15%, p = .55) and parents born outside Australia (18% vs 19%, p = .57) across both surveys. Parent age was also similar (m = 40.3 vs m = 40.4, p = .53), as was neighbourhood disadvantage (SEIFA score m = 1019 vs m = 1020, p = .26). T1 participants who returned to complete T2 were less likely to be male (32% vs 27%, p < .001), experienced less work-family conflict (m = 3.4 vs m = 3.3, p < .001), and reported fewer symptoms of psychological distress (m = 11.5 vs m = 11.2, p < .01).

Sample Representativeness

Demographic characteristics for T1 were compared to a representative sample of employed Australian parents participating in the Longitudinal Study of Australian Children (LSAC). To compare across child age ranges, we repeated the comparisons with LSAC Waves 1, 4 and 6. Similar findings were observed across each wave, therefore only Wave 1 comparisons are reported here (full results available on request). Compared to LSAC, the current sample consisted of more single parents (15% vs 14%, p < .001) and parents with tertiary education (65% vs 44%, p < .001), and fewer parents born outside Australia (18% vs 23%, p < .001). Parents in our sample also lived in less disadvantaged neighbourhoods (SEIFA scores m = 1018.7 vs m = 1011.1, p < .001), reported greater psychological distress (m = 11.5 vs m = 10.1, p < .001) and greater work-family conflict (m = 3.4 vs m = 2.6, p < .001).
Discussion

This paper describes the evaluation of targeted social media recruitment strategies to engage employed Australian parents in a survey about managing work and family life, their health and wellbeing. This is one of very few studies to systematically evaluate participant recruitment using social media for health research purposes in Australia [see also 15, 26]. We report on the feasibility of Facebook recruitment, including cost-effectiveness, retention and sample representativeness. Our findings have implications for other researchers considering recruitment of participants using new technologies and social media; but also contribute to the emerging evidence about the nature of samples recruited using these methods.

Overall, the combination of paid and free Facebook advertising proved to be an effective strategy for recruiting a large sample of employed parents (4,665 parents completed the survey over a 15-week period). After initially poor engagement with the paid Facebook advertisements and high per-participant costs, a series of adjustments to our recruitment strategies resulted in significantly improved recruitment rates (e.g. advertising a prize draw incentive, reducing the amount of text on the survey landing page, using a single-image advertisement). Strong improvements in the effectiveness of the paid advertising campaigns reduced the need to focus our efforts on free methods. Fathers were particularly slow to engage in the survey initially, requiring specific, targeted campaigns with explicit calls to action. This may reflect fewer fathers engaging in Facebook, around parenting-related topics, but also reflects findings in other studies [e.g. 45]. It should also be noted that a relatively large proportion of participants (13.3%) indicated their consent but provided no data or partial data. It has been reported elsewhere that participants recruited via social media may be less ‘conscientious’ than those recruited using more traditional methods [18]. As such, we suggest that iterative methods and careful monitoring during Facebook recruitment is required, however further research needed to confirm this.

We provide further support for the use of targeted Facebook recruitment as a cost-effective means of recruiting parents [15, 26, 28]. Facebook may be a particularly versatile tool in today’s tight monetary climate, in which researchers are under increasing pressure to obtain competitive funding and to conduct low-cost research [46]. Facebook has the potential to be more cost-effective than traditional recruitment methods, given its ability to target very specific populations of interest (e.g. fathers of nine year old children). Our average cost-per-survey was substantially lower than most of those conducted to date (paid campaigns only: AU$2.32 per survey; overall: AU$1.75 per survey), with the exception of Leach, Butterworth [15], who achieved AU$0.55 for a survey targeting women postpartum.
Engagement with our paid Facebook advertising campaigns compares favourably to previous studies. Nearly 2% of Facebook users exposed to our advertisements clicked on the link, and of those who did, nearly half (47.80%) consented to participate. The average click-through rate (1.87%) was also higher than reported elsewhere [e.g. 21, 22, 27]. However, as illustrated in Table 3, the number of Facebook users an advertisement reaches or the number of ‘likes’, ‘shares’ and ‘clicks’ it generates does not necessarily translate to survey completion.

Our sample of working Australian parents was found to be broadly representative, compared to a large population-based sample. Consistent with Leach, Butterworth [15] we recruited parents experiencing more of the constructs being examined (i.e. work-family conflict, psychological distress). It is likely that parents who viewed our advertisement about “juggling work and family life” were more likely to respond if they perceived this to be a salient issue. Other demographic characteristics, although statistically significant due to the large sample size, were not meaningfully different (i.e. proportions of single parents, neighbourhood disadvantage). Our sample however did underrepresent parents with lower educational attainment and parents born outside Australia, which is consistent with findings reported elsewhere [15, 47]. Less than half of those initially recruited returned to complete the follow-up survey, which is lower than those reported elsewhere (e.g. [30]). Further research is required to examine the factors affecting retention rates for participants recruited through Facebook.

Facebook allows for a flexible and dynamic approach to recruitment, whereby strategies can be continually monitored, adjusted and evaluated for effectiveness. It can also be harnessed to support snowball recruitment using existing networks and contacts to share the survey link, and encourage ‘likes’, ‘shares’ and ‘tagging’. Indeed, a small proportion of participants engaged in the survey through their Facebook friends, email, or via Twitter. A particular strength of our approach was the use of unique survey URLs for each separate advertising campaign [31]. This enabled us to identify the specific location of the link accessed by each participant. Facebook also provides a multitude of metrics through its Adverts Manager for users to track the effectiveness of advertising campaigns and engagement with posted content. We used a flexible approach to develop targeted campaigns on order to reach specific sub-samples, such as parents of teenagers, blue collar workers, and those living in rural or remote areas.

We encountered a number of challenges in recruiting parents using Facebook. The process was surprisingly time intensive, requiring regular monitoring of response rates (daily in the first few weeks, reducing to weekly by the end of the recruitment period), designing new campaigns, contacting other Page administrators,
Using Facebook to recruit Australian parents

A particular challenge was the functionality of Facebook, such as advertising algorithms and metrics, which can change without notice [23]. This can pose problems for researchers seeking to replicate previously published Facebook recruitment protocols. For example, Facebook allows page administrators to block posts but not comments. Our decision to set the ‘profanity filter’ to strong and to use a large selection of ‘moderation words’ was effective; only a small number of offensive or negative comments were posted and were automatically hidden, keeping administrative requirements to a minimum.

During the early phase of recruitment, our private messages to Facebook Page administrators about promoting our survey were labelled as ‘spam’. Our account was blocked from posting or messaging for one month, requiring a new account to be created in order to continue with active recruitment. Facebook does not provide any direct support service, therefore we needed to rely on Facebook forums or the expertise of peers.

We found engaging fathers to be more challenging than engaging mothers, which is consistent with evidence that fathers are typically underrepresented in research [48]. Interestingly, advertisements targeted to “parents” engaged very few fathers and it became apparent that fathers required specific calls to action if they were to take part. This may be due in part to fathers engaging with less parent-related Facebook content than mothers. It may also be a product of Facebook functionality, whereby the campaign is presented to users who are similar to those who have already engaged with it (i.e. mothers). This necessitates the use of different recruitment strategies for mothers and fathers. It is also possible that the term “parents” was perceived as a reference to mothers rather than fathers. Another challenge was the low response rate from administrators of other Facebook pages regarding requests to support our research by posting the survey link. A pre-existing connection with the page generally led to a greater likelihood of a response.

The gradual adjustment of advertising strategies across the duration of recruitment allowed us to identify the most effective means of engaging our target population. We found that a single-image advertisement was more successful than the multiple-image “carousel” format – even though Facebook reports that “carousel link ads drive 30-50% lower cost-per-conversion and 20-30% lower cost-per-click than single-image link ads” [49]. It is possible that a single relevant image was most salient to our population of working parents, or that carousel format is more effective for campaigns which aim to promote a range of goods or products. We also acknowledge that this change in format coincided with the decision to specifically mention our prize draw in the advertisement, rather than just on the survey landing page. It is therefore difficult to disentangle the relative contributions of these strategies to overall advertising effectiveness.
Limitations

We acknowledge that there are several limitations of this study. Firstly, although the large majority of Australians use Facebook, some do not. It is possible that this group differs from those who do use Facebook; they may be less comfortable using technology (particularly social media), or live remotely without internet access. In general, participants were more highly educated than parents in the general community. Further, we made several changes to our recruitment strategy for Campaign 5, which resulted in a substantial improvement in participant recruitment and cost-effectiveness. The simultaneous adjustment of several strategies prevented our ability to identify the relative contribution of each change to our recruitment rates.

A number of factors likely contribute to the observed variability in costs, participation rates, efficiency and representativeness of samples recruited via Facebook advertising. These include the salience of the research topic, the time commitment required, the research activity (e.g., online survey, phone interview), the target population, the mention of an incentive (e.g., gift voucher or prize draw), the advertising content (e.g., image, wording) and strategy (e.g., budget, advertising schedule), and other potential competing campaigns or news events that detract focus from the study campaign. Comparing the effectiveness of Facebook recruitment across studies remains problematic, given the lack of consistency with which existing studies sufficiently report on key parameters such as cost, efficiency, participation rates and representativeness. There is also substantial variability in the extent to which Facebook metrics are reported in the literature (i.e., studies may report total cost, cost-per-click, cost-per-participant or cost-per-completer). The constant evolution of the Facebook platform, such as changes to advertising features and settings, also make comparisons over time difficult.

Further Research and Recommendations

Further research may seek to harness qualitative methodologies to understand the reasons participants choose to engage or not engage in research advertised on Facebook, including the features of advertising campaigns and survey interfaces which may be most appealing for specific target groups. This would be particularly helpful for fathers, who were more difficult than mothers to recruit and retain. It is also recommended that recruitment strategies are amended sequentially, rather than simultaneously, to identify the effectiveness of specific strategies with greater precision. Although we found Facebook to be an effective tool for the recruitment of working Australian parents, further research is needed to determine its feasibility for non-parent or unemployed populations.
We recommend that careful consideration is given to engaging participants at each step of the way from viewing the advertisement through to survey completion. An advertisement must be relevant and interesting, the survey landing page must be clear and concise, and the survey itself must be straightforward and not unnecessarily lengthy. As documented elsewhere [50] regular communication with institutional human research ethics committee is essential, from the study design phase and throughout the recruitment phase. However, the online space is a ‘moving feast’ with platforms and functionality rapidly changing. This requires researchers to stay on the cutting edge of what tools are ‘popular’ and how they function. Researchers may benefit from the expertise of an information technology / social media specialist during project design and implementation.

Conclusions

Findings suggest that Facebook has the potential to be a cost-effective means of recruiting working Australian parents; an important consideration given the competitive funding environment in which researchers work. A significant barrier is the ever-changing nature and functionality of social media; researchers may benefit from the support of social media professionals. Although we focus on the recruitment of parents, our methodology is applicable to the recruitment of other populations, providing access to real time feedback and allowing recruitment ‘gaps’ to be addressed using targeted campaigns. Our experience suggests that immediate success is unlikely; rather, sufficient lead-in time is required to build interest and momentum, and to monitor and adjust recruitment strategies accordingly. Fathers were unlikely to respond to calls for “parents” but required specific invitations to “dads” using gender-specific campaigns. Our sample reported greater work-family conflict and psychological distress than the general parent population, and were more likely to be tertiary educated. Retention to follow-up was less likely for males, or for participants experiencing high work-family conflict and psychological distress.

Acknowledgements

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Conflicts of Interest

None declared.

Abbreviations

LSAC: Longitudinal Study of Australian Children

T1: Timepoint 1 (i.e. baseline survey)

T2: Timepoint 2 (i.e. follow-up survey)
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