

ResearchOnline@ND

The University of Notre Dame Australia
ResearchOnline@ND

Health Sciences Papers and Journal Articles

School of Health Sciences

2018

Patterns in participation: Factors influencing parent attendance at two, centre-based early childhood interventions

Steve Heath

Adam Wigley

The University of Notre Dame Australia, adam.wigley@nd.edu.au

John Hogben

Janet Fletcher

Peta Collins

See next page for additional authors

Follow this and additional works at: https://researchonline.nd.edu.au/health_article



Part of the [Medicine and Health Sciences Commons](#)

This article was originally published as:

Heath, S., Wigley, A., Hogben, J., Fletcher, J., Collins, P., Boyle, G., & Eustice, S. (2018). Patterns in participation: Factors influencing parent attendance at two, centre-based early childhood interventions. *Journal of Child and Family Studies*, 27 (1), 253-267.

<http://doi.org/10.1007/s10826-017-0878-2>

This article is posted on ResearchOnline@ND at
https://researchonline.nd.edu.au/health_article/226. For more
information, please contact researchonline@nd.edu.au.



Authors

Steve Heath, Adam Wigley, John Hogben, Janet Fletcher, Peta Collins, Gemma Boyle, and Stephanie Eustice

This is the peer reviewed version of the following article:

Heath, S., Wigley, A., Hogben, J., Fletcher, J., Collins, P., Boyle, G., & Eustice, S. (2018). Patterns in participation: Factors influencing parent attendance at two, centre-based early childhood interventions. *Journal of Child and Family Studies*, 27(1), 253-267. doi: 10.1007/s10826-017-0878-2

The final publication is available at Springer via

<http://dx.doi.org/10.1007/s10826-017-0878-2>

Running Head: FACTORS INFLUENCING PARENT ATTENDANCE AT INTERVENTIONS

TITLE: Patterns in participation: Factors influencing parent attendance at two, centre based early childhood interventions.

Authors: Steve M. Heath • Charles A. Wigley • John H. Hogben • Janet Fletcher **Affiliation:** School of Psychology, The University of Western Australia, Perth, Western Australia

Author: Charles A. Wigley. **Affiliation:** Institute for Health Research, The University of Notre Dame Australia, Fremantle, Western Australia

Authors: Peta Collins • Gemma L. Boyle. **Affiliation:** Dyslexia-SPELD foundation, South Perth, Western Australia

Author: Stephanie Eustice **Affiliation:** Novita Children's Services, Adelaide, South Australia

Corresponding Author: C.A. Wigley; **Affiliations:** Institute for Health Research, The University of Notre Dame, 32 Mouat St (PO Box 1225), Fremantle, Western Australia, Australia, 6959, email: adam.wigley@nd.edu.au, School of Psychology, The University of Western Australia (M304), 35 Stirling Hwy, Perth, Western Australia, Australia, 6009

Abstract

Interventions training parents of at-risk children have received considerable empirical support but their effectiveness is undermined by low attendance rates. This research sought to clarify why parents, even with the best of intentions, fail to follow through to full participation in workshop programs; and to provide insight into ways to improve parental engagement. We examined participation in *Parents as Partners*, a school-based, early childhood intervention. Demographic and ongoing educational, social, emotional and behavioural data for 136 parent-child dyads were gathered from parents, teachers and children. Mitigation of a wide range of factors previously identified as barriers to attendance was also attempted. A post-intervention survey was conducted to examine parents' insights into their attendance patterns. Overall, 91 parents attended and 44 failed to attend any workshops. Higher parent education and SEI, and better child language skills were good predictors of attendance (87%), but poor predictors of nonattendance (42%). Additionally, parent-child dyad profiles suggested that children of nonattending parents were more likely to benefit from workshop content than attenders' children. Survey data suggested that attenders organised their schedules to facilitate follow-through but nonattenders were unable to do so. Family characteristics and practical reasons were central, interacting factors affecting attendance. Parental self-organisation appeared to moderate follow-through and to stem from lifestyle constraints related to lower SEI and parent education. This produced high nonattendance rates in parents of children who most needed support. It is urgent to discover to what extent innovative delivery platforms currently being explored (e.g., internet/social media) can improve parental engagement.

Keywords: Parent/family interventions, program attendance, planned behaviour, social learning theory.

Introduction

Reflecting the maxim that ‘prevention is better than cure’, evidence strongly supports prophylactic and early interventions as effective and efficient ways to tackle issues in a wide range of problematic outcomes for at-risk populations (Barnett, 2011). Optimising children’s developmental outcomes by cultivating conditions which improve their physical or mental health, or their capacity to learn from their education, is widely accepted as important not only to individuals and their families but also to society (Vassallo & Sanson, 2013). In recent decades, research has shown that parents’ participation as partners in their children’s learning and development can have a positive effect (van Steensel, McElvany, Kurvers, & Herppich, 2011).

Parents have increasingly become the target of interventions designed to help their children. These interventions are largely based on Bandura’s (1977) social learning theory and seek to explicitly train parents in skills and strategies intended to develop their children’s resilience in specific areas such as social, emotional and behavioural self-management or language and literacy. The most extensively researched area in which the systematic training of parenting skills has been shown to be effective is in the treatment for and prevention of child behavioural and emotional difficulties. The development of parenting skills has been a core component in the prevention of children’s behavioural and emotional problems (Sanders, 1999). A review of 16 evidence-based therapies for children and adolescents recommended ‘based on the preponderance of evidence to date’ (p. 233) that clinicians consider parent training as the frontline approach to interventions for young children with problem behaviours (Eyberg, Nelson, and Boggs, 2008). The *Triple P-Positive Parenting Program* (Sanders, 1999) and the *Incredible Years Program* (Webster-Stratton, 1998) are examples of interventions that have accrued substantial evidence bases over many years and populations. A recent systematic review of the *Triple P* program examined 101 studies (16000+ families) spanning over 33 years (Sanders, Kirby, Tellegen, & Day, 2014). The review reported finding short-term improvements on measures of parenting satisfaction and efficacy ($d = 0.52$) as well as short- and long-term improvements for child social, emotional and behavioural outcomes ($d = 0.47$ and $d = 0.53$).

Research into language and literacy development has also provided evidence that training parents to increase appropriately-targeted, positive interactions with their children can benefit language or literacy skills. A meta-analysis of 16 studies reported that training parents *how* to listen to their children read or tutor their children in reading, were both more effective than only training parents to read to their children (Sénéchal and Young, 2008).

An examination of *family literacy* interventions across 30 studies confirmed that training parents to facilitate young

1
2
3
4 children's literacy development made a modest contribution to their emerging skills (van Steensel et al., 2011).
5
6 Finally, Reese, Sparks and Leyva (2010) reviewed 11 parent training interventions for preschool children conducted
7
8 over a 20 year period. They reported that *training* parents to engage with their children in specific language/literacy
9
10 activities using positive pedagogic techniques resulted in skill gains for children in related language or literacy areas
11
12 (e.g., shared dialogic reading improved receptive language and emergent literacy skills in five year old children;
13
14 Wing-Yin Chow & McBride-Chang, 2003).

15
16
17 Given the demonstrated effectiveness of parent training programs, it is of considerable concern that low
18
19 attendance is widely reported as a significant issue undermining the effectiveness of this training (Duppong-Hurley,
20
21 Hoffman, Barnes, & Oats, 2016; Gross et al., 2011). A range of logistical and family-related factors have been found
22
23 to affect parent participation. These include work demands, lack of childcare, training sessions conflicting with
24
25 family schedules, other competing family demands, and transportation difficulties (Breitenstein et al., 2014;
26
27 Duppong-Hurley et al., 2016). Methods of improving parent attendance include locating workshops in welcoming,
28
29 familiar and informal surroundings; keeping group size small; including regular group discussion and between-
30
31 session tasks; sending reminder notes before each workshop; and audio-taping sessions for those unable to attend
32
33 (Jay & Rohl, 2005). Parent-related variables that have been reported to impact on parent attendance and involvement
34
35 more broadly include parents' socio-economic status (Baker, Arnold, & Meagher, 2011), their education level and
36
37 perception of their child's behaviour in the training target area (Haggerty et al., 2002), and their perceived parental
38
39 self-efficacy (Giallo, Treyvaud, Cooklin, & Wade, 2013). However, there does not yet appear to be consistent
40
41 evidence for guidelines that could optimise attendance at parent training programs.

42
43 Thornton and Calam (2011), suggested we know little about what factors may influence parents who have
44
45 signaled the intention to attend a parent training program, to progress to actual attendance (i.e., follow-through).
46
47 Clearly, this is important because of missed training opportunities for those parents who have already indicated a
48
49 desire to improve their skills and unnecessary wastage of resources when parents who have enrolled in programs do
50
51 not in fact present to training. Thornton and Calam (2011) began the investigation of factors that predict whether
52
53 parents of children with behavioural difficulties who sign up for training will actually attend, by exploring belief-
54
55 based factors in parents that affected follow-through. They explored two social cognition models that examine
56
57 relationships between individuals' decisions to engage in particular health-protective behaviours and their health-
58
59 related beliefs and/or attitudes: The *Health Belief Model* (Spath & Redmond, 1995, 2000) suggests that the
60
61

1
2
3
4 likelihood of health protective behaviours is increased by an individual's belief that they are at risk of a health
5 problem they consider serious and that the benefits of undertaking the target behaviour are greater than the barriers
6 to doing so. The alternative *Theory of Planned Behaviour* (Ajzen, 1991) proposes that an individual's intention to
7 engage in any given behaviour is strengthened by the extent to which their attitude towards the behaviour is positive,
8 how positively their significant others view the behaviour, and how easily they believe they will be able to engage in
9 the behaviour.

10
11
12
13
14
15
16 Regrettably, Thornton and Calam (2011) were unable to directly compare parents who did and did not
17 follow through as their number of eventual "attenders" was small (i.e., N = 5). Despite this, their preliminary
18 analyses suggested that attenders had pre-existing positive attitudes towards the groups and perceived significant
19 others in their lives as having positive attitudes towards the groups. Attending parents also reported elevated levels
20 of problem behaviours in their children. Recent work has probed further the reasons for nonattendance and high
21 drop-out rates in child behaviour interventions designed to upskill parents. Duppong-Hurley et al. (2016) conducted
22 a qualitative study of parents who failed to attend, or dropped out very early from a community-based, group
23 parenting program (the *Common Sense Parenting Skills* intervention). Their findings, albeit from a relatively small
24 sample (N = 26), suggest organisational and logistical reasons as the primary source of difficulty in parents' follow-
25 through on their initial commitment. To our knowledge, follow-through has not yet been examined at all in relation
26 to factors influencing parent training designed to enhance children's language and/or literacy.

27
28
29
30
31
32
33
34
35
36
37
38
39 Other issues germane to this question also appear under-explored, such as when in the child's development
40 training workshops are offered (i.e., whether the child's year of schooling might make a difference to parents'
41 attendance) or how workshop attendance might compare to other forms of ongoing parental involvement in their
42 child's education (e.g., questionnaire completion, continuing support for additional assessments of their child).
43 Additionally, although research into attendance at intervention programmes targeting behaviour has examined
44 parents' perception of their child's need in that area, few if any studies have looked at this issue in the context of
45 language- and literacy-related training; and none appears to have directly compared follow-through to attendance in
46 two different program types (e.g., social/emotional/behavioural training vs. language/literacy programs). No studies
47 appear to have validated the parents' perception of their child's literacy levels by comparison with actual measured
48 performance levels in the literacy-related target areas. Even highly relevant factors such as familial risk for literacy
49 problems and parents' speech sound or phonological awareness (PA) remain unexplored, although both have been
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1
2
3
4 found to predict literacy outcomes (Heath et al., 2014). All these might potentially impact parents' comfort with
5
6 literacy activities and therefore influence follow-through to language/literacy workshop attendance.
7

8 Ensuring follow-through from intent to attend to actual workshop attendance was a critical component in
9
10 the *Parents as Partners* (PasP) project. This longitudinal study in Western Australia evaluated a parent training
11
12 program targeting skills for building children's early language and literacy (experimental group) by comparing it to
13
14 a companion program targeting social, emotional and behavioural skills (control group). Each program consisted of
15
16 four, two-hour group sessions with no more than 10 parents per group. Both the "Language and Literacy" (L&L)
17
18 and "School is Cool" (SiC) programs interactively delivered information on the development and importance of
19
20 skills in their respective focus areas (e.g., L&L, phonological awareness, letter knowledge; SiC, listening and
21
22 independence skills). A central focus of these programs was to encourage the development of these skills in their
23
24 children through play and shared activities. It was expected that the children would show differential skill
25
26 development depending on the specific program their parents attended (for a full description of the PasP project and
27
28 summary of key findings, see Heath, 2017).
29

30 The PasP team purposefully set out to mitigate the influence of logistic and family-related factors known to
31
32 reduce workshop attendance. Parents were asked for their preferred day(s) of the week and time slot(s) for training
33
34 sessions before program details were confirmed so that the workshops would not conflict with work demands,
35
36 family schedules or other competing requirements. Transport difficulties were minimised by workshops being
37
38 provided on site at the children's schools during the hours when their child was at school, and free child care for
39
40 siblings was provided in a nearby school building during the workshops. Parents were reminded about the
41
42 workshops by teachers prior to the commencement of the series, and before each session, with personal courtesy
43
44 reminders by telephone. For parents in full-time work or with commitments conflicting with any or all sessions, a
45
46 centrally-located parallel workshop series was offered for each program. All parents were also recompensed \$20 per
47
48 session for any out of pocket attendance costs. In addition, children's teachers and education assistants were
49
50 provided with teacher relief to allow them to attend and support parents in their learning; group sizes were kept
51
52 small; and sessions were built around enjoyable activities alternating with discussion at regular intervals. It was
53
54 hoped that all these measures would address the issues identified by Jay and Rohl (2005) as likely to promote parent
55
56 attendance. However, in spite of this very significant effort by the project team to address possible barriers to
57
58 workshop attendance, only approximately two thirds of parents attended; and because of this the PasP team followed
59
60
61
62
63
64
65

1
2
3
4 up parents with post training questionnaires to seek insights into parents' own perceptions of their reasons for having
5 followed through to attendance or not.
6
7

8 This rate of follow-through was at the higher end of the 30 to 60 percent attendance rates reported in the
9 literature (e.g., Duppong-Hurley et al., 2016). But in view of the considerable measures taken to minimise poor
10 attendance, it was important for the project team's future work to conduct a more thorough investigation of factors
11 that might account for such disappointing follow-through. In fact, the PasP project afforded an unusual opportunity
12 to examine potential factors suggested by the research that might specifically impact parents' intention to attend and
13 follow-through to actual attendance, in a large sample of families with control over a range of additional factors
14 already identified as impacting on attendance. Additionally, a sizable group of attendees could be compared with
15 nonattending parents; and because of the PasP between-group design, follow-through to attendance could also be
16 examined as a function of program type. Moreover, in order to examine the effectiveness of the two programs under
17 evaluation, PasP measured a range of parent/family and within-child predictor variables specific to the outcomes of
18 each program type. This meant that attender and nonattender parent-child dyads could be compared to determine: 1)
19 whether the child's actual performance or behaviour in the training target area may be a factor influencing the
20 conversion of intent to follow-through (i.e., in addition to their parents' perception); and 2) whether other within-
21 child information, easily obtainable in a school setting, might enhance the prediction of follow-through to attendance
22 at training.
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37

38 In addition, PasP examined three parent-related factors already identified by research as influencing
39 attendance, namely parents' education, socio-economic level and perceived self-efficacy in relation to the type of
40 training. In consenting for their family to be involved in PasP, all parents agreed ahead of time to attend the parent
41 training program that would be offered in their school, either during their child's Kindergarten (4 year old) or Pre-
42 primary (5 year old) year. Parents also consented for their own phonological awareness to be tested pre and post
43 training, to complete questionnaires about themselves and their children at intervals during the study, and for their
44 children to be tested throughout the four year evaluation (i.e., from Kindergarten to end of Grade 2). Therefore, such
45 research could also examine whether parents of four or five year olds were more likely to follow through from intent
46 to attendance and compare parents' conversion of intent into actual attendance with the three other forms of
47 participation described above.
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Hence, the present study set out to explore *post hoc* parents' conversion of intent to attend training into actual attendance. Because the nature of this investigation was post hoc, we were unable to formally examine factors influencing follow-through within the context of the two models explored by Calam et al. (2011) during their earlier investigation of follow-through. However, the PasP data were well suited to address this question about barriers to parental engagement in interventions, following the work of Duppong-Hurley et al. (2016). Accordingly, we examined the influence of three classes of barriers viz. family characteristics, program approach and practical reasons. We set out to discover firstly whether there were initial differences in the parents (nonattenders compared to the attenders) or their children that could explain attendance patterns. We also wanted to know which, if any, of the previously demonstrated parent-related factors (namely socio-economic level, parents' education, or perceived self-efficacy) would be significantly associated with follow-through. In tandem with this, it was important to discover how accurately we could predict parents who were more likely to follow through to attendance at training (i.e., using within-parent and/or parent-child dyad characteristics). Secondly, we examined attendance as a factor of workshop characteristics and participation demands, including whether parents were more likely to follow through to attendance if training workshops were offered when their child was in Kindergarten (i.e., 4 years old) or Pre-primary (5 years old); whether they would show different patterns of follow-through according to program type (i.e., workshops targeting language and literacy vs social, emotional and behavioural skills); and how follow-through for workshop attendance compared with persistence in the three other forms of parental participation in PasP (i.e., parents' post-intervention PA testing; completion of questionnaires; and continued support of their child's participation through to the end of Grade 2). Finally, we sought possible practical reasons that could explain workshop attendance over and above those already addressed by the PasP team by exploring parents' own perceptions of their reasons for follow-through to workshop training or otherwise.

Method

Participants

One hundred and sixty two families (parent-child dyads) were recruited from the Kindergarten and Pre-primary classes of six West Australian schools across the Perth metropolitan area. Fourteen families formally withdrew consent and had their data expunged, six provided no or minimal data and six failed to provide a significant portion of the demographic information required for this study. Of the remaining 136 parent-child dyads, two of which included non-identical twins, 69 children (M age = 51.33 mths, SD = 4.03; 23 female) were enrolled in

1
2
3
4 Kindergarten during the scheduled parent interventions and 67 were enrolled in Pre-primary (M age = 59.26 mths,
5
6 SD = 4.60; 46 female). The Australian Bureau of Statistics uses census data to geographically partition areas into
7
8 zones of relative economic advantage and disadvantage. The schools represented high (decile = 10; n = 46), middle
9
10 (decile = 5/6; n = 56) and low (decile = 2; n = 34) socio-economic zones, determined via the Western Australian
11
12 Department of Education Socioeconomic Index (WADoE SEI), which was calculated based on Australian Bureau of
13
14 Statistics data. Overall, 91 parents attended at least one assigned intervention workshop and 44 failed to attend any
15
16 workshop sessions.

17 18 **Procedure**

19
20 This study examined parental attendance/nonattendance patterns at the two centre-based, early childhood
21
22 interventions delivered by the PasP project (i.e., *Language and Literacy*; L&L; and *School is Cool*; SiC).
23
24 Participating schools were paired based on their WADoE SEI and randomly assigned to receive either the L&L or
25
26 SiC intervention. Parents were informed which workshop type would be offered at their school before agreeing to
27
28 participate. Within each school, participating parents were randomly allocated to the intervention scheduled for their
29
30 child's Kindergarten or Pre-primary year. Workshops were scheduled in Term 3 of each year for parents in both
31
32 streams. To ensure that program delivery was standardised across both L&L and SiC as far as possible, the two
33
34 programs were developed in parallel for the project, designed to be as similar as possible in format, facilitator and
35
36 parent manuals, and home support materials; and program facilitators were trained in and presented both workshop
37
38 types. Workshops were presented at fortnightly intervals. Parents were provided with intervention-specific
39
40 information about the relevance of the workshops to their child's development before they commenced. After the
41
42 final workshop session, the Factors Affecting Attendance Questionnaire was mailed with addressed, prepaid
43
44 envelopes to all participating parents to be returned anonymously and voluntarily. The questionnaire was returned
45
46 by 24 nonattenders and 37 attender parents (response rates 51% and 41%, respectively).

47
48 All testing and surveying was done by appropriately trained members of the research team. Parents and
49
50 children were tested prior to the workshops for their nominated year (i.e., Kindergarten or Pre-primary). Children
51
52 completed two testing sessions of approximately 20 minutes; and parents completed questionnaires in a quiet room
53
54 at their child's school in one session that lasted approximately 15 minutes. Results of children's early language and
55
56 literacy testing expressed as percentiles were mailed to parents after their scheduled workshop. In keeping with the
57
58 overall longitudinal design of the PasP project, parent and child participants were followed up immediately after the
59
60
61
62
63
64
65

1
2
3
4 workshops and towards the end of Grades 1 and 2 with extensive assessment examining their current literacy,
5
6 language and social, emotional and behavioural functioning. As it was not the aim of this paper to evaluate the
7
8 effectiveness or efficacy of the workshop interventions, these aspects of the follow-up data are not examined here.
9

10 **Measures**

11 **Parental measures.**

12
13
14 Parents' phonological awareness was assessed using the Nonword Segmentation and Phoneme Reversal
15
16 Subtests from the Comprehensive Test of Phonological Processing (CTOPP; Wagner, Torgesen, & Rashotte, 1999).
17
18 Cronbach's alpha for the Nonword Segmentation and Phoneme Reversal Subtests (adults) is 0.89 and $r = 0.90$
19
20 respectively and the criterion validities for these subtests compared to the TOWRE Total Word Efficiency
21
22 composite were $r = .43$ and $r = .57$. For the Nonword Segmentation Subtest, parents were required to segment each
23
24 nonword into its respective phoneme components, whereas for the Phoneme Reversal task, parents had to reverse
25
26 the order of phonemes in aurally presented nonwords.
27

28
29 In addition, parents were administered a questionnaire which measured their sense of self-efficacy in
30
31 supporting their child's literacy and social, emotional and behavioural development. Parents were asked to rate how
32
33 they felt about 11 statements on a five-point Likert scale. This questionnaire provided two subscales; Perceived
34
35 Language and Literacy Self-efficacy and Perceived social, emotional and behavioural Self-efficacy. Cronbach's
36
37 alpha for all eleven items on this scale was $r = .86$ and there was a significant correlation ($r = .27, p < .01$) between
38
39 the scale and concurrent parent ratings on total scores for the Strength and Difficulties Questionnaire (SDQ;
40
41 Goodman, 1997). Details about the development of this questionnaire can be found in Heath et al. (2014). The
42
43 WADoE SEI was used as a proxy measure for the participating family's socio-economic status. Parents also
44
45 completed a short survey which provided details about their level of education and familial rate of literacy
46
47 difficulties, with the latter yielding a dichotomous level of familial risk (i.e., targeted child having/not having a
48
49 parent or sibling with a history of literacy difficulty).
50

51 **Child literacy/language measures.**

52
53 Oral language ability was assessed with the Core Language Subtest of the Clinical Evaluation of Language
54
55 Fundamentals Preschool – 2nd Edition, Australian and New Zealand Standardised (CELF P2 - AU/NZ; Wiig, Semel,
56
57 & Secord, 2006). This subtest examines the receptive and expressive language abilities of children, such as how well
58
59 they can understand spoken concepts and follow directions, and whether they can formulate sentences. The CELF-
60
61
62
63
64
65

1
2
3
4 P2 –AU/NZ is population normed, has been extensively tested and is considered a gold standard test by clinical
5 practitioners. Sentence recall was measured using the Recalling Sentences Subtest, also from the CELF P2 –
6 AU/NZ, in which children were presented aurally with sentences increasing in number of words and complexity and
7 had to repeat the sentences verbatim. The manual reports various reliability and validity data for the CELF P2 –
8 AU/NZ as being middle ($r > .60$) to high ($r > .80$) across all subtests and composites, with most skewed toward the
9 higher end.

10
11
12
13
14
15
16 Children’s phonological awareness (PA) was initially measured using the SPAT-SE and again at the end of
17 Grade 1 by the SPAT-R. The SPAT-SE follows a developmental continuum starting from segmenting multisyllabic
18 words into individual syllables to identifying rhyming words and then identifying initial phonemes. Data from the
19 SPAT-SE Letter Name/Sound Knowledge Subtest and Name Writing Subtests were not used in this study. While
20 published reliability and validity statistics were not available for the version of SPAT-SE used in this study,
21 analyses of data from the larger PasP study indicated a test-retest (at six months) correlation of $r = .74$. In addition,
22 the correlations between the SPAT-SE scores and a follow-up measure of single word reading ability (WRMT-R
23 Word Identification Subtest, Woodcock, 1998) taken six months after the initial testing, and at the end of Grades 1
24 and 2 were $r = .41$, $r = .48$, and $r = .39$ respectively (all significant at $p < .001$), which suggested a reasonable level
25 of predictive validity. The SPAT-R is a more advanced version of the SPAT-SE designed for use from Pre-primary
26 to Year 3 and is Australian norm-referenced. It includes additional subtests for identifying final phonemes, blending
27 and segmenting CVC words, segmenting words with blends, deletion of initial, internal and final phonemes and
28 elementary non-word reading and spelling tasks. The SPAT-R reports a Cronbach’s alpha of $r > 0.95$ and concurrent
29 validity based on the Woodcock Reading Mastery Test–Revised (WRMT-R) Word Identification Subtest of $r =$
30 0.78. Letter knowledge was assessed using the Phonological Abilities Test (PAT; Hulme, Muter, & Snowling,
31 1997), Letter Knowledge Subtest. Children were presented with lower-case letters printed on plain white cards and
32 asked to provide either the letter name or sound. The manual reports that the test-retest reliability for this test is $r =$
33 0.86 (Cronbach’s alpha is not reported for this subtest) and the concurrent validity, compared to the British Abilities
34 Scales (BAS; Elliott, Murray & Pearson, 1983) test of Single Word Reading is $r = 0.51$.

54 **Child social/emotional/behavioural measures.**

55
56
57 Parents and teachers were asked to complete the SDQ (Goodman, 1997) which provided ratings of
58 children’s social, emotional, and behavioural development for both home and class environments. Two scores from
59
60
61
62
63
64
65

1
2
3
4 this measure were used in the analyses below; the Total Score with higher scores being more problematic, and the
5
6 Pro-social Behaviour Score, with lower scores representing the more problematic behaviours. The parent/teacher
7
8 form reliability (Cronbach's alpha) for the Total Score is reported as being $r = 0.77$, and $r = 0.81$ respectively; and
9
10 for the Pro-social Score, $r = 0.63$ and $r = 0.81$ respectively (Mieloo et al., 2012), with concurrent validity reported as
11
12 being acceptable ($r > 0.7$) when compared to the Total Scores on the Child Behaviours Check List (CBCL;
13
14 Achenbach & Rescorla, 2001).

16 **Factors Affecting Attendance Questionnaire.**

17
18 In order to obtain direct data from the parents in a timely manner about factors affecting their workshop
19
20 attendance, a brief, informal survey was undertaken by the PasP team. This measure, developed according to
21
22 principles advanced by Frazer and Lawley (2000), comprised a checklist of 11 items for parents who did not attend
23
24 and 14 items for attending parents, from which participants could select as many as applied (see Supplementary
25
26 Tables 2 and 3). The questionnaire concluded with two open-ended items: One item inviting parents to mention
27
28 factors not already listed, followed by the question "How could we make it easier for you to attend the workshops?"
29
30 Participant responses were elicited across three broad categories: *organisation* (e.g. not knowing or forgetting where
31
32 to go), *program characteristics* (e.g. location) or *competing commitments* (e.g. work).

34 **Data Analyses**

35
36 The analyses reported below were conducted using the IBM SPSS v. 21 statistical package with alpha
37
38 levels set to $< .01$ in the Chi Square and the Mann-Whitney U analyses for balanced control of Type 1 and 2 error
39
40 rates. Standard or scaled scores were used for the CELF-P2 AU-NZ and CTOPP subtests and composites. While the
41
42 CTOPP manual only provides norms to age 24 years 11 months, this level was deemed an adequate estimate for
43
44 early/mid adult performance, so parents 25 years or over were also scored on these norms.

45
46 Because the PasP program involved two workshop intervention streams (i.e., L&L and SiC), an initial
47
48 analysis was conducted to determine whether there were any systematic differences between parents scheduled to
49
50 participate in either stream on any variable of interest. Our subsequent analyses followed the sequence of the
51
52 questions set out at the end of the introduction. First, individual family characteristics were examined: Group
53
54 comparisons explored whether there were any pre-existing differences in the attending and nonattending parents that
55
56 may be related to follow-through; in addition, the associations between all the variables for attenders and
57
58 nonattenders were explored to reveal what relationships were important in each group; and finally, variables
59
60
61
62
63
64
65

1
2
3
4 revealed by these analyses were tested by hierarchical regression to provide the best predictive model for the
5
6 observed attendance patterns. Next, we examined factors related to the PasP program approach. This included
7
8 assessing attendance as a function of the child's grade when the workshop was delivered and program type. Related
9
10 to this, we analysed child abilities relevant to the type of workshop in which their parents were enrolled to assess the
11
12 possibility that an existing child difficulty or exceptional ability may be a motivator of attendance/nonattendance.
13
14 And we also compared workshop attendance with follow-through on the three other forms of participation parents
15
16 consented to in PasP. Finally, we explored reasons, practical or otherwise, that parents themselves perceived to be
17
18 most relevant to their attendance behaviour.
19

20 **Results**

21 **Family characteristics**

22
23 No significant differences between the streams were reported for the pre-workshop intervention data.
24
25 Therefore, other factors likely to have influenced attendance were examined. Figures 1 and 2 present the descriptive
26
27 parent/family data as a function of workshop attendance. A Chi Square analysis of the categorical data showed that a
28
29 significant difference existed between parent attenders and nonattenders for school SEI zone (Figure 1a: $\chi^2(2) =$
30
31 $13.12, p = .001, \phi_c = .35$). Further analysis indicted that parents in the High school SEI zone (10th decile) were 6.02
32
33 times more likely to attend than those from the low school zone (2nd decile); and parents in the middle zone (5/6th
34
35 deciles) were 2.25 times more likely to follow through than those from the low zone. Chi Square analysis failed to
36
37 reveal any between-group difference in attendance based on familial risk of literacy difficulties (Figure 1c: $\chi^2(1) =$
38
39 $1.14, ns$). However, an independent samples Mann-Whitney U test did show that significantly more parents with
40
41 higher levels of educational qualifications attended the workshops (Mean Rank attend = 77.14, Mean Rank non-
42
43 attend = 52.36; $U = 2819, p < .001, r = .30$). Fifty-two percent of attenders had tertiary degrees compared to only 26
44
45 percent of nonattenders, while only 11 percent of attenders failed to complete High School compared to 42 percent
46
47 of nonattenders (Figure 1d).
48
49

50
51 Place Figure 1 about here
52
53

54
55 No differences were found between attending and nonattending parents on measures of their own PA
56
57 (Figure 2a: $t(62.38)_{\text{unequal var}} = -0.93, ns$) or Perceived Self-efficacy (Figure 2b) in supporting the development of
58
59 their children in language and literacy ($t(131) = -0.03, ns$) or in their social, emotional and behavioural functioning
60
61 ($t(131) = 0.58, ns$).
62
63
64
65

1
2
3
4 Place Figure 2 about here
5

6 Figure 3 presents the continuous data of interest for child and parent-child dyads as a function of workshop
7 attendance. Exploring these data revealed significant differences between attending and nonattending parent-child
8 dyads on the child language measures (Figure 3a) for: CELF-PS2: Core Language Composite, (non-parametric
9 Mann-Whitney) $U = 2606.5, p < .001, r = .22$; and Recalling Sentences Subtest, $U = 2606.5, p < .001, r = .25$.
10 Children of parents who attended the workshops demonstrated higher scores on the Core Language Composite and
11 Recalling Sentences Subtest (Mean Ranks = 75.41 and 74.64 respectively), than children of nonattending parents
12 (Mean Ranks = 56.08 and 54.53 respectively). No differences were found between attending and nonattending
13 parents in their children's literacy-related abilities, their own PA, or ratings by the parents or teachers of children's
14 total difficulties or pro-social behaviours (from SDQ scores).
15
16
17
18
19
20
21
22
23

24 Place Figure 3 about here
25

26 Overall then, the group comparisons suggested that parents who attended workshops generally had children
27 with better language skills and enrolled their children in higher SEI schools than those of nonattenders. Moreover,
28 they themselves were more highly educated than those who did not follow through with their initial commitment to
29 attend workshops.
30
31
32
33

34 Bivariate correlations for the nonattending and attending groups were also examined and are detailed in
35 Supplementary Table 1 to allow the interested reader to further examine the relationships associated with
36 attendance. However, in sum, the children's CELF-PS2 core language composite was strongly related to teacher
37 SDQ Total Score ratings and both the target child literacy-associated measures (i.e., PA and letter knowledge) in
38 both groups. There were significant positive associations between the PA of parents from the nonattending group
39 and their child's PA and the two measures of children's language skills (Core Language and Recalling Sentences).
40 Interestingly, the PA of attending parents did not demonstrate similar relationships to their child's PA or language
41 skills; however, unlike the nonattending parents, their level of education was significantly related to their child's
42 language skills. In other words, in nonattenders there were significant relationships between Parents' PA and key
43 within-child predictors of literacy, whereas there was no such correspondence in attending parent-child dyads.
44
45
46
47
48
49
50
51
52
53

54 To better understand the interplay of parent and child factors related to parent follow-through, a forced
55 regression was performed with attendance entered as the criterion with School SEI zone, parent education level,
56 CELF-PS2 Core Language and Recalling Sentences (there was no evidence of multicollinearity), intervention year
57
58
59
60
61
62
63
64
65

1
2
3
4 ($p = 0.03$ non-significant ‘trend’), parent PA, parent SDQ Total Score, and parent SDQ Pro-social Score as predictor
5
6 variables. This analysis identified parent education level, child CELF-PS2 Recalling Sentences, intervention year
7
8 (Kindergarten or Pre-primary) and school SEI as the only significant predictors. These variables were then examined
9
10 using hierarchical regression with the most parsimonious model retaining parent education, the child’s CELF-PS2
11
12 Recalling Sentences and the year intervention took place (Table 1). This model explained significant variance, $\chi^2(3)$
13
14 = 25.86, $p < .001$, Nagelkerke $R^2 = .25$ ($R^2_{CS} = .17$, $R^2_L = .15$) and predicted 42.2% of nonattenders and 87.9% of
15
16 attenders, accounting for 72.8% of the data ($N = 136$). This model implicated the higher parent education levels,
17
18 better child verbal memory skills and year of enrolment (Kindergarten) as additional positive factors predicting
19
20 parent attendance (odds ratios of: 2, 1.41 and 1.21 respectively).
21

22
23 Place Table 1 about here

24 25 **Program approach**

26
27 As can be seen in Figure 1b (above), there was a trend towards stronger parent follow-through to
28
29 attendance at workshops offered when their children were in Kindergarten compared to Pre-primary, but
30
31 this difference did not reach significance ($\chi^2(1) = 4.52$, ns). Program type also failed to significantly
32
33 influence parents’ follow-through to workshop attendance ($N_{L\&L} = 89$, parents attending workshops = 56;
34
35 $N_{SiC} = 53$, parents attending workshops = 38; $\chi^2(1) = 1.14$, ns). While the above prediction model
36
37 provides some insight into what factors contributed to some parents’ *better* follow-through on their initial
38
39 commitment to attend workshops, it fails to shed light on why other parents did not attend. It seemed
40
41 possible that their decision to attend the workshops could have been influenced by their individual child’s
42
43 need for support (or their perceptions thereof). Given that the PasP project contrasted two interventions, if
44
45 parents of children scheduled to attend the L&L workshops perceived that their child was progressing
46
47 well in their early language and literacy skills they might have been less inclined to attend these
48
49 workshops even though they had initially indicated interest at the beginning of the study. Similarly,
50
51 parents of confident, well-adjusted and socially adept children might have seen less need to attend the
52
53 SiC workshops which focused on improving these skills.

54
55 While PasP did not directly assess parents’ perceptions of their child’s ability in either of the
56
57 areas of interest, they did directly measure their children’s actual abilities. We therefore decided to use
58
59 these scores as a proxy for possible parent concerns (parents were not given reports on their children’s
60
61
62
63
64
65

1
2
3
4 functioning until after the interventions). Hence, the probability of parent workshop
5
6 attendance/nonattendance was examined for children who had pre-intervention scores in the problematic
7
8 range on relevant variables: For the L&L workshops these were child PA in the bottom quartile of the
9
10 SPAT-SE, Total Language and Recalling Sentences scores on the CELF-PS2 *ISD* below the mean; and
11
12 for the SiC workshops, SDQ Total Score and Pro-social Behaviour Scores below the clinical cutoff.
13
14 Based on pre-intervention data, parents with children who displayed poorer phonological processing were
15
16 no more likely to attend the L&L workshops than parents with children who had stronger skills. In fact,
17
18 contrary to expectations, parents of children with verbal recall and/or language skills in the problematic
19
20 range were 6.2 and 3.5 times more likely **not** to attend these workshops (Recalling Sentences, $\chi^2(1) =$
21
22 11.54, $p = .001$; Core Language, $\chi^2(1) = 6.865$, $p < .01$). There were no significant relationships between
23
24 attendance at the SiC workshops and pre-intervention teacher SDQ scores.
25

26
27 As mentioned above, even though a significant number of parents failed to attend the workshop
28
29 sessions, many of these nonattenders continued to actively participate in subsequent data gathering
30
31 exercises, and still more allowed their children to continue contributing data. Table 2 presents the number
32
33 of attending and nonattending parents who provided data through direct testing and/or the completion of
34
35 questionnaires. But even so, Chi Square analyses did indicate that there were significant associations
36
37 between parent workshop attendance/nonattendance and their continuing *active* participation in the
38
39 project at the end of Pre-primary; $\chi^2(1) = 9.91$, $p < .002$, and the end of Grade 1; $\chi^2(1) = 7.17$, $p < .007$.
40

41
42 Place Table 2 about here

43
44 Parents who had attended a workshop were 4.4 times more likely to have their PA tested again
45
46 and complete relevant questionnaires at the end of Pre-primary, and 6.58 times more likely to complete
47
48 the questionnaires at the end of Grade 1 than nonattending parents. They were also 3.75 times more likely
49
50 to provide data at the end of Grade 1 if they had provided data at the end of Pre-primary $\chi^2(1) = 7.09$, $p <$
51
52 $.008$. Interestingly, there were no significant associations between parent's active participation (workshop
53
54 attendance or completing testing/questionnaires) and their allowing their children's continued
55
56 participation until the end of the project (i.e., end of Grade 2) - indeed, the children of nonattenders still
57
58 participated in testing at the end of the study at approximately the same rate as those of attending parents.

59 **Practical or other reasons for workshop attendance/nonattendance – parents' own perceptions**
60
61
62
63
64
65

1
2
3
4 As described in the Method section above, parents were also directly asked about the factors
5
6 influencing their decision to attend or not attend the scheduled workshops through questionnaires sent to
7
8 all parents after the completion of the workshops. The questionnaire and parent response rates are
9
10 presented in Supplementary Tables 2 (nonattenders) and 3 (attenders). For nonattenders, 16% recorded
11
12 responses suggesting that disorganization was a factor and 21% indicated that characteristics of the
13
14 program contributed to their nonattendance (i.e., “could not get there”; and workshops involved too much
15
16 time”). However, competing commitments was the most prominent reason for missing the workshops
17
18 with 83% reporting factors in this area. For attenders, 74% rated organization as an important factor in
19
20 their attendance, 53% rated overall program characteristics as an important factor and 50% rated lack of
21
22 other commitments as an important factor.
23

24 Discussion

25
26 Using the data from the PasP project and the barriers to parent participation suggested by Duppong-Hurley
27
28 et al. (2016), this study explored possible factors involved in converting intention to participate in an intervention
29
30 program into action (i.e., follow-through). We were particularly interested in the failure of approximately one third
31
32 of the PasP parents to follow through to workshop attendance.
33

34
35 We first explored the influence of family characteristics suggested by previous research to promote parent
36
37 engagement. In line with earlier results (e.g., Baker et al., 2011; Haggerty et al., 2002), parents of children at schools
38
39 in the middle and higher socio-economic zones (a proxy for family SEI) and those with higher educational
40
41 attainments were significantly more likely to attend the workshops. However, contrary to expectation, parents’
42
43 perceived self-efficacy failed to show any relationship to follow-through (Giallo et al., 2013). Additionally, neither
44
45 Parental PA nor family risk of learning difficulties was associated with attendance rates in the L&L workshops.
46
47 Overall, this suggests that the motivation to move from intention to action was not related to parents’ actual or
48
49 perceived strengths or weaknesses relevant to the content of either workshop type.
50

51
52 Statistical modelling of parent and child factors combined was somewhat more helpful in refining our
53
54 understanding of the variables most likely to contribute to transforming intent into workshop attendance. Higher
55
56 parent education, better child sentence memory and workshop delivery during the child’s Kindergarten year were
57
58 significant predictors, successfully identifying close to 90% of the attending parents. Disappointingly, the model did
59
60 poorly in predicting nonattending parents overall (just over 40% correctly identified). Ultimately, since many of the
61
62
63
64
65

1
2
3
4 usual logistical and family-related reasons for nonattendance seemed to have been controlled for in PasP, this
5
6 strongly suggested that lower parent education levels and poorer child language skills do not contribute substantially
7
8 to the likelihood of *nonattendance*. Sadly, however, the factors in this model would only be useful in identifying 4
9
10 out of 10 of the parents we would really wish to attract to workshops (i.e., in view of their combined parent-child
11
12 characteristics). Moreover, this low rate of follow-through would do little to forestall wastage of resources allocated
13
14 ahead of time to cater for parents who consent to attend but eventually do not participate.

15
16 We also examined the impact of program characteristics on parents' follow-through to attending the two
17
18 types of PasP workshops (i.e., SiC and L&L) but no systematic differences were found for intervention type. In this
19
20 context, we explored whether or not parent attendance was related to a perceived difficulty (real or imagined) their
21
22 children may have had in the areas targeted by each intervention type. Thornton & Calam (2011) explored the
23
24 *Health Belief Model* (Spath & Redmond, 1995, 2000) which posits that action (in this case, follow-through) is more
25
26 likely when the perceived need or threat is greater (i.e., if parents felt their child might already be having problems
27
28 in the focus area of their assigned workshop). But examination of the early educational, and social, emotional and
29
30 behavioural profiles of PasP children revealed that there was no evidence linking higher levels of risk in any of these
31
32 areas to higher rates of workshop attendance. In fact, it appears that contradictory evidence was found: Parents of
33
34 children who scored relatively more poorly on measures of language were around seven times less likely to attend
35
36 the L&L workshops. Alternatively, parents of children with significantly better language skills (e.g., sentence recall)
37
38 were more likely to attend workshops, regardless of specific workshop type. Moreover, neither children's
39
40 phonological processing, nor parent/teacher ratings of them on the Strength and Difficulties Questionnaire (SDQ)
41
42 was related to parental workshop attendance. However, it is important to note that unfortunately, due to the post hoc
43
44 nature of this study, we were unable to gauge parents' actual perception of the seriousness of their children's lower
45
46 skill levels. This could have been meaningful since previous work has shown that the interplay between parental
47
48 perceptions of problem-seriousness and their child's susceptibility to the problem is important: For example,
49
50 research examining parental engagement in family focused programs to prevent adolescent substance abuse showed
51
52 that parents' perception of their child's susceptibility to a problem positively influenced their perception of possible
53
54 program benefits. However, perception of child susceptibility was impacted by parents' perceived self-efficacy in
55
56 preventing child problems, and both parent gender and marital status affected all three aspects of parent perception
57
58 (Redmond, Spoth, Shin, & Hill, 2004).

1
2
3
4 The effect of when the workshops were delivered (i.e., in the child's Kindergarten or Pre-primary year) was
5 explored as a function of attendance and there was a trend that favoured follow-through for training offered in
6 Kindergarten, though this did not reach significance. The fact that timing of delivery did emerge as a co-predictor of
7 attendance suggests that the relatively stringent alpha level applied to control for Type 1 error in the between-group
8 analysis may have masked this effect to some extent. As far as we know, the influence of timing on attendance at
9 parent training in early childhood has not previously been explored. However, even if we think in simple human
10 terms, it seems possible that parents of children entering formal education are generally highly-motivated to give
11 their children the best possible chance in life, but that this initial motivation to help the child may fade somewhat as
12 children move into Pre-primary and their parents are reassured about their progress. Or it may be that parents simply
13 relax somewhat once their children are 'launched' in formal schooling. Moreover, in terms of the models examined
14 by Thornton and Calam (2011), it seems both might predict higher levels of follow-through in parents of four year
15 old children: Within the Health Belief Model, parents of four year olds who are just beginning their education may
16 be concerned that their child could encounter problems in areas which they regard as serious. For example, many
17 parents might see language and literacy skills, or those for listening, paying attention, and coping socially and
18 emotionally as important for doing well at school. But most parents with five year olds would have been able to
19 observe their child's initial progress and either no longer see their child as 'at risk' or not regard this risk as very
20 serious. It also seems that if parents of four year olds did the cost/benefit analysis of attending workshops such as
21 those offered by PasP, more Australian households with four year olds could have a parent who had not yet returned
22 to work, than those with five year olds. The Theory of Planned Behaviour might suggest that for parents of four year
23 olds, the novelty of their child's first year of schooling could cause them to feel very positive about any program that
24 could prevent their children from experiencing unnecessary difficulties in the future. Given that parents of young
25 children often form relationships with other parents who have children the same age, these parents might all share
26 very positive expectations and therefore might also weigh up the costs and benefits of follow-through to reach a pro-
27 action conclusion. Since there is wide agreement among both researchers and practitioners that early intervention is
28 optimal, our data do underline the need to discover whether parent training in families with children aged four is the
29 most time/cost effective window for intervention during the early school years.

30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57 As far as we know, the inference from our data that program type may not influence conversion of intent to
58 action in respect to training workshops is a novel finding. This result does not appear to be related to the highly
59
60
61
62
63
64
65

1
2
3
4 standardised delivery approach used across both the PasP program types because only one type ran in each
5
6 participating school, meaning that parents were not able to directly compare both programs. But it does suggest that
7
8 the factors driving attendance or otherwise may be generalised across intervention types at least in respect to
9
10 workshop content. Of course, our exploratory data do not preclude the potential for there being separate motivations
11
12 to attend different program types and further confirmation of this apparent null effect would be really useful.
13
14 However, these results do suggest quite strongly that low attendance rates in parent training specifically targeting
15
16 social, emotional and behavioural factors may not stem only from parents possibly feeling stigmatised as “bad
17
18 parents” in ways noted by Sanders (2012) for example. Additionally, when we examined follow-through to parent
19
20 training in comparison to other forms of engagement in PasP, it was apparent that low conversion rates of intent to
21
22 action were specific to workshop attendance since many nonattending parents followed through on other types of
23
24 project participation at much higher rates. Once again, as far as we know, specificity of follow-through to workshop
25
26 attendance compared to other forms of ongoing involvement is a further novel observation, which underlines a high
27
28 level of commitment in nonattending parents to their child’s wellbeing despite their not having attended their
29
30 training sessions.
31

32
33 Although the family and program characteristics data did provide significant new insights, our results were
34
35 also very perplexing because we still could not account for the nonattendance of parents whose children seemed
36
37 most in need. Fortunately, the PasP team asked participants about their own perceptions of why they did or did not
38
39 attend. As mentioned above, parent responses showed that attenders had a strong appreciation of the value of the
40
41 workshops. But attenders also indicated that being well organised and managing competing commitments were
42
43 primary factors in their attendance. More importantly, the primary reason provided by the nonattenders was also
44
45 organisational in nature: the intrusion of conflicting commitments mainly to work and child care. These observations
46
47 were not surprising in view of previous research highlighting the role of family-related, practical barriers to parental
48
49 participation (e.g., Duppong-Hurley, et al 2016). Nevertheless, they were disappointing given the determined efforts
50
51 of the PasP team to proactively counter these sorts of barriers. Consistent with Thornton and Calam (2011), these
52
53 findings seem to support the *Theory of Planned Behaviour* model since favourable beliefs concerning the relevance
54
55 of the workshops and the value of the process itself were reported by attending parents. However, it also appears that
56
57 organisation could be a moderating factor in converting intent to attend into action. This suggestion is consistent
58
59
60
61
62
63
64
65

1
2
3
4 with the high proportion of nonattending parents that followed through on other types of project participation which
5
6 were arguably less demanding of their organisational capacities.
7

8 Taken together, our results are profoundly unsatisfactory because they point to what amounts to
9
10 intergenerational “Mathew effects” such as those described by Stanovich (1986) for children’s literacy: That is,
11
12 parents whose children are most likely to benefit from their workshop participation are precisely the ones most
13
14 likely NOT to be able to get there. However, it is important not to misinterpret these results as nonattending parents’
15
16 lack of concern for the well-being of their children. Our parent questionnaire data suggest that the apparent
17
18 moderating effect of organisation may be due to lifestyle constraints stemming from two other significant family
19
20 characteristics of nonattenders: That is, less well-educated parents with lower socio-economic levels may have a
21
22 reduced capacity to manage the practical and logistical issues that got in the way of workshop attendance here. For
23
24 example, less predictable work demands, fewer transport options to access the centre-based child minding provided,
25
26 lower social support when the need to care sick children clashed with workshops, and poorer access to the
27
28 centralised ‘catch up’ workshops. This inference is supported by the attending parents’ reports that they did not have
29
30 to work and their children were looked after; and is also consistent with Dumas, Nissley-Tsiopinins and Moreland
31
32 (2007) who found that time was the most significant challenge to parental engagement in preventative parent
33
34 training groups over and above the influence of sociodemographic factors. Further research is needed to explore the
35
36 relationships between variables impacting on capacity for organisation and how these might link to follow-through.
37

38 **Limitations and directions for future research**

39
40 The primary limitation in this study is the use of a sample of convenience drawn from another study the
41
42 main purpose of which was not to investigate the issues explored in this paper - this placed constraints on the
43
44 measures available for analysis. The post hoc nature of the questionnaire as well as the overall analyses did increase
45
46 the possibility of biasing the results. Despite these concerns, the PasP data set offered several specific, desirable
47
48 features: First, it allowed the evaluation of workshop attendance as a function of program content and in comparison
49
50 to two other *active* but less intensive forms of participation viz. Pre-primary and Grade 1 follow-up testing and
51
52 questionnaires; second, the possible influence of parent-child dyad characteristics on follow-through could be
53
54 explored; and finally PasP allowed us to explore the influence of workshop timing (i.e., during the child’s
55
56 Kindergarten on Pre-primary year) on parental follow-through. Perhaps most importantly, the PasP team’s attempts
57
58 to neutralise previously identified barriers to parental participation allowed us to observe the moderating role of
59
60
61
62
63
64
65

1
2
3
4 parental capacity to free themselves of possible impediments to participation; and the key inference that this effect
5
6 of organisation is related to the different life-style imposed on nonattenders by their socio-economic and educational
7
8 levels.
9

10 Our results are consistent with a meta-analysis by Lundahl, Risser and Lovejoy (2006) of parent training
11 programs targeting disruptive child behaviours which found that for financially disadvantaged parents, individually
12 delivered training tailored to unique family situations was significantly more effective than training in group
13
14 formats. But further purpose-designed research is required to explore the strong suggestion here that dealing with
15
16 competing commitments is central to poor rates of follow-through for nonattenders. Our results underline the need
17
18 to develop and evaluate different intervention delivery methods so that parents with busy, ever-changing schedules
19
20 might be able to learn helpful skills at flexible times and locations. Specifically, our data point to research
21
22 comparing the effectiveness of the traditional centre-based, face-to-face parent training paradigm to innovative
23
24 methods of digital program delivery such as those described by Breitenstein et al. (2014) . Indeed, established,
25
26 successful parenting interventions are now being adapted for online delivery (e.g., *Triple P Online*; Enebrink, 2013)
27
28 and evidence is accruing in support of this style of intervention as an effective means of changing behaviours and
29
30 improving outcomes (Breitenstein et al., 2014). This emerging research suggests that changes in information
31
32 technology can offer effective ways to provide services for and engage with busy parents on their own terms. But
33
34 focused research is needed to discover whether an online program delivery platform, would facilitate follow-through
35
36 particularly in respect to organisation. Additionally, it does appear that online interventions are still far from
37
38 normative compared to face-to-face delivery, so more information is needed in the online context to evaluate the
39
40 impact on overall training effectiveness of follow-through to attendance. It will be particularly important to discover
41
42 whether the lifestyle issues identified in the nonattenders here continue to impede follow-through even with
43
44 increased flexibility of access. Few would argue that online interventions, although more accessible, typically
45
46 demand more rather than less effective organisational and self-regulation skills than on-site interventions do.
47
48 Therefore, real-time monitoring of engagement and retention patterns should be included as part of these
49
50 investigations, otherwise the same patterns found for centre/group-based intervention paradigms could emerge.
51
52

53 It is reassuring that more streamlined online formats that are now operating successfully such as Sanders
54
55 and colleagues' low-intensity interactive intervention, *Triple P Online Brief* have reported very strong retention
56
57 rates (e.g., 92.5 per cent at post-assessment) even in a sample that included 30 per cent of parents who saw
58
59
60
61
62
63
64
65

1
2
3
4 themselves as struggling financially (Baker, Sanders, Turner & Morawska, 2017). Unfortunately though, it appears
5
6 that there are few if any current attempts to develop interactive online formats for training parents to support their
7
8 children’s language and literacy development; to measure rates of parental engagement in such programs compared
9
10 to those for behaviour management training; or to examine factors specifically impacting on follow-through from
11
12 intent to sustained engagement with this type of program.
13

14 The patterns of parental participation identified in this study suggest that simple translation of existing
15
16 workshop materials into a digital delivery mode may be less effective than opportunities afforded by social media
17
18 platforms. The runaway success of Facebook™, Twitter™, Snapchat™ etc., demonstrates the power of these
19
20 platforms to engage the time and commitment of a very broad cross section of society. Indeed, with the ever
21
22 increasing affordability of smart technologies even the primary barrier of access is becoming less and less an issue.
23
24 Our findings suggest that to better capture the invisible population of clients who may initially seek help but not
25
26 follow through with action, researchers may need to think “outside the box” and formally explore the possibilities
27
28 that social media may provide for ‘intervention by stealth’. One such option would be to evaluate the effectiveness
29
30 of systematic use of online forums moderated by professionals who facilitate and guide rather than instruct. Reality
31
32 television is a further underexplored avenue for potentially increasing parental engagement with training.
33
34 Preliminary evidence that this could be effective is already available from the success of the Triple P-Positive
35
36 Parenting intervention shown on a regular television channel (Calam, Sanders, Miller & Carmont, 2008). This study
37
38 demonstrated that this format had the capacity to engage and retain families who had a high level of difficulties. It
39
40 also showed that merely watching a six-episode series on TV that followed five families with disruptive children
41
42 working on Triple P-Positive Parenting was related to improvements in child behaviour and parental adjustment
43
44 despite their relatively high noncompletion rates. Most importantly, in view of our findings, Calam et al. (2008)
45
46 reported that in most of their analyses, socio-economic status was NOT a predictor of sustained engagement with
47
48 this form of delivery. Once again though, scant if any attention seems to have been paid to developing and
49
50 evaluating parent interventions targeting language or literacy in this manner.
51

52
53 Although exploratory, this study offers important new insights for practitioners into what historically
54
55 appears to have been an intractable problem – that of ensuring parent attendance at evidence-based parent training
56
57 workshops. Our data were broadly consistent with the *Theory of Planned Behaviour*. They also suggested that two
58
59 of the Duppong-Hurley et al. (2016) barriers to participation, family characteristics and practical reasons, were
60
61
62
63
64
65

1
2
3
4 central and interacting factors affecting attendance, though program characteristics appeared considerably less
5
6 important. We further inferred that parents' capacity to proactively self-organise may be a critical moderating factor
7
8 of their intention to follow-through. We have profiled here parents whose good intentions to upskill themselves in
9
10 order to support their children's learning and development appear likely to be thwarted by organisational issues
11
12 related to their family circumstances (i.e., socio-economic and educational levels). We also found that these parents
13
14 appear to be from the parent-child dyads most likely to benefit from the workshop content. However, our data
15
16 strongly suggest that centre-based, face-to-face programs, or certainly those located in schools, do not engage these
17
18 parents even though they do follow through on other forms of participation that are arguably less organisationally
19
20 demanding. Instead, regardless of program type and timing during the first two school years, workshop programs
21
22 predominantly attract the parents who need them least. Moreover, we found little to suggest that this will change
23
24 within a traditional workshop format. Accordingly, we hope that our data will galvanise practitioners into action
25
26 towards the more innovative delivery methods that are already being explored electronically. These could allow
27
28 parents with a low likelihood of workshop attendance to successfully access online methods of participation.
29

30
31 Conflicts of Interest: This study was funded by an Australian Research Council Linkage Grant
32
33 (LP0882875) in partnership with the Department of Education and Training (Western Australia). Author numbers
34
35 one, six and seven are named as Chief Investigators on the grant. Author number two is employed in a research
36
37 position from the grant funding. No other conflicts of interest are recorded.

38
39 Ethical approval: All procedures performed in studies involving human participants were in accordance
40
41 with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki
42
43 declaration and its later amendments or comparable ethical standards.

44
45 Ethics statement: The University of Western Australia Human Ethics Research Committee (RA/4/1/1970)
46
47 approved the project. Individualised information packs were prepared for the school principals, teachers and parents
48
49 approached to participate in this study. Written consent was obtained at each level with the parents/guardians of
50
51 participating children also providing written consent for participation of their child. Those involved in the study
52
53 (principals, teachers, parents/guardians or children) were free to withdraw at any time from the project without
54
55 prejudice or the need to justify their decision. In the event of a withdrawal, all records related to their participation
56
57 were destroyed unless an explicit or very strong implicit reason was given to retain the data (e.g., moving state but
58
59 requesting to be informed about the study outcomes).
60
61
62
63
64
65

1
2
3
4 Informed consent: Informed consent was obtained from all individual participants included in the study or
5
6 in the case of young children, from their parents or legal guardians.

7
8 Author contributions: MH: devised and executed the Parents as Partners Project (PasP), designed this
9
10 study, and co-wrote the paper. CAW: Consolidated the PasP data set, collaborated on the design and analysed the
11
12 data for this study, and co-wrote the paper. PC: assisted with PasP data collection and the data analyses for this
13
14 study. SE: assisted with PasP data collection and the data analyses for this study. GB: directed PasP including
15
16 delivery of parent training, and designed the Factors Affecting Attendance Questionnaire. JH: collaborated on
17
18 design and execution of PasP and the design and writing of this study. JF: collaborated on design and execution of
19
20 PasP and the design and writing of this study.
21

22 23 24 **References**

- 25 Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for ASEBA school-age forms and profiles*. Burlington:
26
27 Research Center for Children, Youth, and Families, University of Vermont.
- 28
29
30 Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50,
31
32 179-211. doi:10.1016/0749-5978(91)90020-T
- 33
34
35 Baker, C. N., Arnold, D. H., & Meagher, S. (2011). Enrollment and attendance in a parent training prevention
36
37 program for conduct problems. *Prevention Science*, 12, 126-138. doi:10.1007/s11121-010-0187-0
- 38
39
40 Baker, S., Sanders, M. R., Turner, K. M. T., & Morawska, A. (2017). A randomized controlled trial evaluating a
41
42 low-intensity interactive online parenting intervention, Triple P Online Brief, with parents of children with
43
44 early onset conduct problems. *Behaviour Research and Therapy*, 91, 78-90.
45
46 doi:http://doi.org/10.1016/j.brat.2017.01.016
47
48
- 49 Bandura, A. (1977). *Social Learning Theory*. Oxford, England: Prentice-Hall.
- 50
51
52 Barnett, W. S. (2011). Effectiveness of early educational intervention. *Science*, 333, 975-978.
53
54 doi:10.1126/science.1204534
55
56
- 57 Breitenstein, S. M., Gross, D., & Christophersen, R. (2014). Digital delivery methods of parenting training
58
59 interventions: A systematic review. *Worldviews on Evidence-Based Nursing*, 11, 168-176.
60
61
62
63
64
65

- 1
2
3
4 Calam, R., Sanders, M. R., Miller, C., Sadhnani, V., & Carmont, S.-A. (2008). Can Technology and the Media Help
5
6 Reduce Dysfunctional Parenting and Increase Engagement With Preventative Parenting Interventions?
7
8 *Child Maltreatment, 13*, 347-361. doi:10.1177/1077559508321272
9
- 10
11 Dumas, J. E., Nissley-Tsiopinis, J., & Moreland, A. D. (2007). From Intent to Enrollment, Attendance, and
12
13 Participation in Preventive Parenting Groups. *Journal of Child and Family Studies, 16*, 1-26.
14
15 doi:10.1007/s10826-006-9042-0
16
17
- 18 Duppong-Hurley, K., Hoffman, S., Barnes, B., & Oats, R. (2016). Perspectives on engagement barriers and
19
20 alternative delivery formats from non-completers of a community-run parenting program. *Journal of Child*
21
22 *and Family Studies, 25*, 545-552. doi:10.1007/s10826-015-0253-0
23
24
- 25 Enebrink, P. (2013). Online program improves parenting skills and decreases early-childhood disruptive behavior.
26
27 *The Journal of Pediatrics, 162*, 651-652. doi:10.1016/j.jpeds.2012.12.061
28
29
- 30 Eyberg, S. M., Nelson, M. M., & Boggs, S. R. (2008). Evidence-based psychosocial treatments for children and
31
32 adolescents with disruptive behavior. *Journal of Clinical Child & Adolescent Psychology, 37*, 215-237.
33
34 doi:10.1080/15374410701820117
35
36
- 37 Frazer, L. & Lawley, M. (2000). *Questionnaire Design and Administration – A Practical Guide*. Brisbane: Wiley.
38
39
- 40 Giallo, R., Treyvaud, K., Cooklin, A., & Wade, C. (2013). Mothers' and fathers' involvement in home activities with
41
42 their children: Psychosocial factors and the role of parental self-efficacy. *Early Child Development and*
43
44 *Care, 183*, 343-359.
45
46
- 47 Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology*
48
49 *and Psychiatry, 38*, 581-586. doi:10.1111/j.1469-7610.1997.tb01545.x
50
51
- 52 Gross, D., Johnson, T., Ridge, A., Garvey, C., Julion, W., Treysman, A. B., . . . Fogg, L. (2011). Cost-effectiveness
53
54 of childcare discounts on parent participation in preventive parent training in low-income communities.
55
56 *Journal of Primary Prevention, 32*, 283-298.
57
58
59
60
61
62
63
64
65

- 1
2
3
4 Haggerty, K. P., Fleming, C. B., Lonczak, H. S., Oxford, M. L., Harachi, T. W., & Catalano, R. F. (2002). Predictors
5
6 of participation in parenting workshops. *Journal of Primary Prevention, 22*, 375-387.
7
8
- 9 Heath, S. M. (2017). *Report on ARC funded research (industry partner: Department of Education (WA)): Parents as*
10
11 *Partners: Getting children off to a healthy start in literacy*. Retrieved from Researchgate:
12
13 https://www.researchgate.net/profile/Stephanie_Heath3. doi: 10.13140/RG.2.2.26112.64004
14
15
- 16 Heath, S. M., Bishop, D. V. M., Bloor, K. E., Boyle, G. L., Fletcher, J., Hogben, J. H., . . . Yeong, S. H. M. (2014).
17
18 A spotlight on preschool: The influence of family factors on children's early literacy skills. *PLoS ONE, 9*,
19
20 e95255. doi:10.1371/journal.pone.0095255
21
22
- 23 Hulme, C., Muter, V., & Snowling, M. (1997). *Phonological Abilities Test*. London: Psychological Corporation.
24
25
- 26 Jay, J., & Rohl, M. (2005). Constructing a family literacy program: Challenges and successes. *International Journal*
27
28 *of Early Childhood, 37*, 57-78.
29
30
- 31 Lundahl, B., Risser, H. J., & Lovejoy, M. C. (2006). A meta-analysis of parent training: Moderators and follow-up
32
33 effects. *Clinical Psychology Review, 26*(1), 86-104. doi:10.1016/j.cpr.2005.07.004
34
35
- 36 Mieloo, C., Raat, H., van Oort, F., Bevaart, F., Vogel, I., Donker, M., & Jansen, W. (2012). Validity and reliability
37
38 of the Strengths and Difficulties Questionnaire in 5–6 year olds: Differences by gender or by parental
39
40 education? *PLoS ONE, 7*, e36805. doi:10.1371/journal.pone.0036805
41
42
- 43 Neilson, R. (2003). *Sutherland Phonological Awareness Test - Revised*. NSW Language, Speech and Literacy
44
45 Services.
46
47
- 48 Neilson, R. (Pre-publication draft). *Sutherland Phonological Awareness Test – School Entry*.
49
50
- 51 Redmond, C., Spoth, R., Shin, C., & Hill, G.J. (2004). Engaging rural parents in family-focused programs to prevent
52
53 youth substance abuse. *Journal of Primary Prevention, 24*, 223-242.
54
55
- 56 Reese, E., Sparks, A., & Leyva, D. (2010). A Review of parent interventions for preschool children's language and
57
58 emergent literacy. *Journal of Early Childhood Literacy, 10*, 97-117. doi:10.1177/1468798409356987
59
60
61
62
63
64
65

- 1
2
3
4 Sanders, M. R. (1999). Triple P-Positive Parenting Program: Towards an empirically validated multilevel parenting
5 and family support strategy for the prevention of behavior and emotional problems in children. *Clinical*
6
7
8 *Child and Family Psychology Review*, 2, 71-90. doi:10.1023/A:1021843613840
9
- 10
11 Sanders, M. R. (2012). Development, Evaluation, and Multinational Dissemination of the Triple P-Positive
12 Parenting Program. *Annual Review of Clinical Psychology*, 8, 345-379. doi:10.1146/annurev-clinpsy-
13
14 032511-143104
15
16
17
- 18 Sanders, M. R., Kirby, J. N., Tellegen, C. L., & Day, J. J. (2014). The Triple P-Positive Parenting Program: A
19 systematic review and meta-analysis of a multi-level system of parenting support. *Clinical Psychology*
20
21 *Review*, 34, 337-357. doi:10.1016/j.cpr.2014.04.003
22
23
24
- 25 Sénéchal, M., & Young, L. (2008). The effect of family literacy interventions on children's acquisition of reading
26 from kindergarten to Grade 3: A meta-analytic review. *Review of Educational Research*, 78, 880-907.
27
28 doi:10.2307/40071148
29
30
31
- 32 Spoth, R., & Redmond, C. (1995). Parent motivation to enroll in parenting skills programs: A model of family
33 context and health belief predictors. *Journal of Family Psychology*, 9, 294-310. doi:10.1037/0893-
34
35 3200.9.3.294
36
37
38
- 39 Spoth, R., & Redmond, C. (2000). Research on family engagement in preventive interventions: Toward improved
40 use of scientific findings in primary prevention practice. *Journal of Primary Prevention*, 21, 267-284.
41
42 doi:10.1023/a:1007039421026
43
44
45
- 46 Thornton, S., & Calam, R. (2011). Predicting intention to attend and actual attendance at a universal parent-training
47 programme: A comparison of social cognition models. *Clinical Child Psychology and Psychiatry*, 16, 365-
48
49 383. doi:10.1177/1359104510366278
50
51
52
- 53 van Steensel, R., McElvany, N., Kurvers, J., & Herppich, S. (2011). How effective are family literacy programs?
54 Results of a meta-analysis. *Review of Educational Research*, 81, 69-96. doi:10.3102/0034654310388819
55
56
57
- 58 Vassallo, S., & Sanson, A. E. (2013). *The Australian Temperament Project: The first 30 years*. Melbourne,
59
60 Australia: Australian Institute of Family Studies.
61
62
63
64
65

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Wagner, R. K., Torgesen, J. K., & Rashotte, C. A. (1999). *Comprehensive Test of Phonological Processing*. Austin, TX: PRO-ED.

Webster-Stratton, C. (1998). Preventing conduct problems in Head Start children: Strengthening parenting competencies. *Journal of Consulting and Clinical Psychology*, 66, 715-730.

Wiig, E. H., Semel, E. M., & Secord, W. (2006). *Clinical Evaluation of Language Fundamentals Preschool - Second Edition, Australian and New Zealand Standardised Edition*. Sydney, Australia: Pearson.

Wing-Yin Chow, B., & McBride-Chang, C. (2003). Promoting language and literacy development through parent-child reading in hong kong preschoolers. *Early Education and Development*, 14, 233-248.
doi:10.1207/s15566935eed1402_6

Woodcock, R. W. (1998). *Woodcock Reading Mastery Tests - Revised (Normative Update)*. Circle Pines, Minnesota: American Guidance Service.

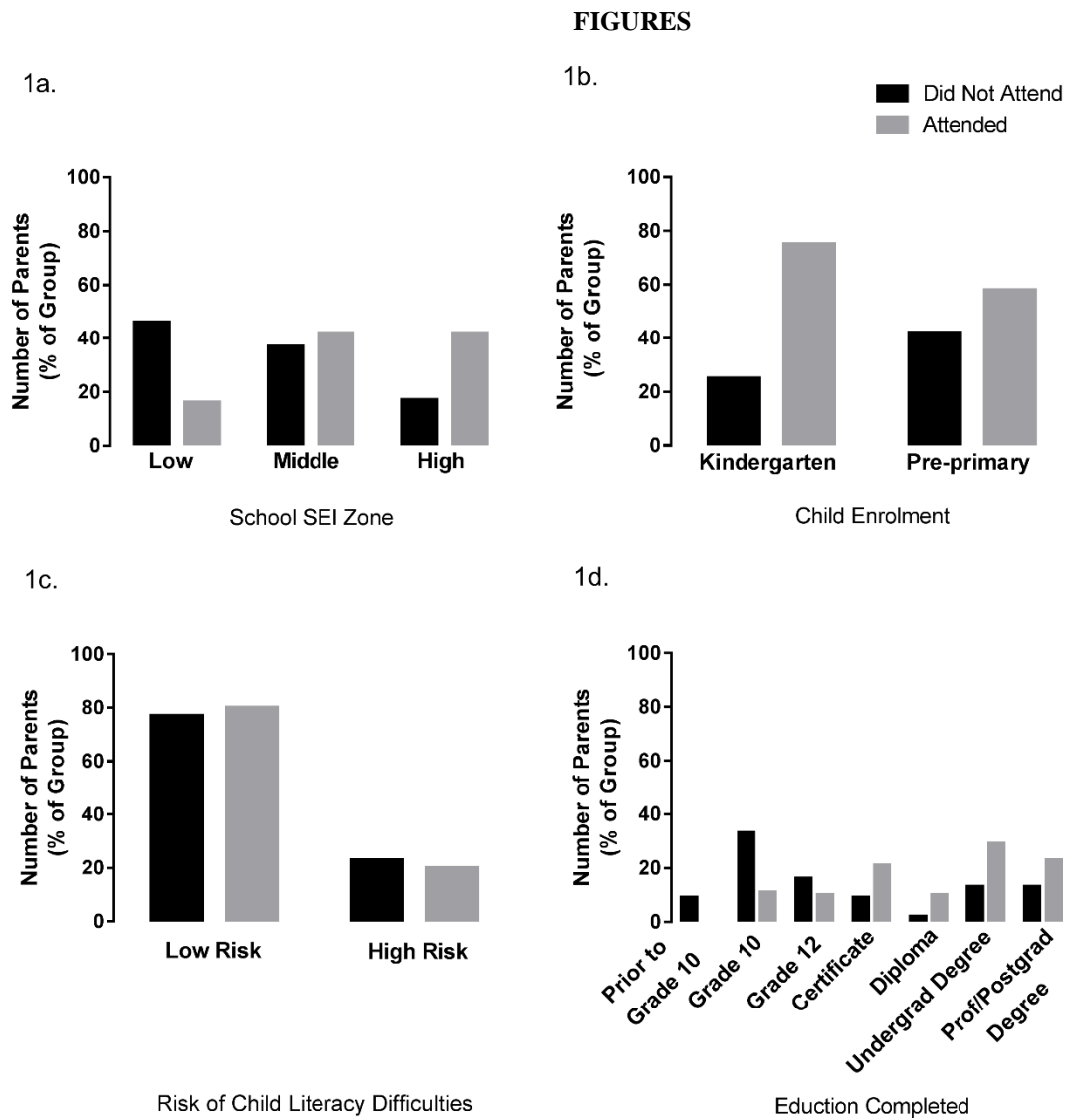


Figure 1. The relationship between the percentage of parents attending and not attending workshops and (1a) WADoE SEI school zone of the child's school, (1b) child's enrolment when the intervention workshops were scheduled, (1c) familial risk of the child developing literacy difficulties, (1d) highest level of education achieved by the parent.

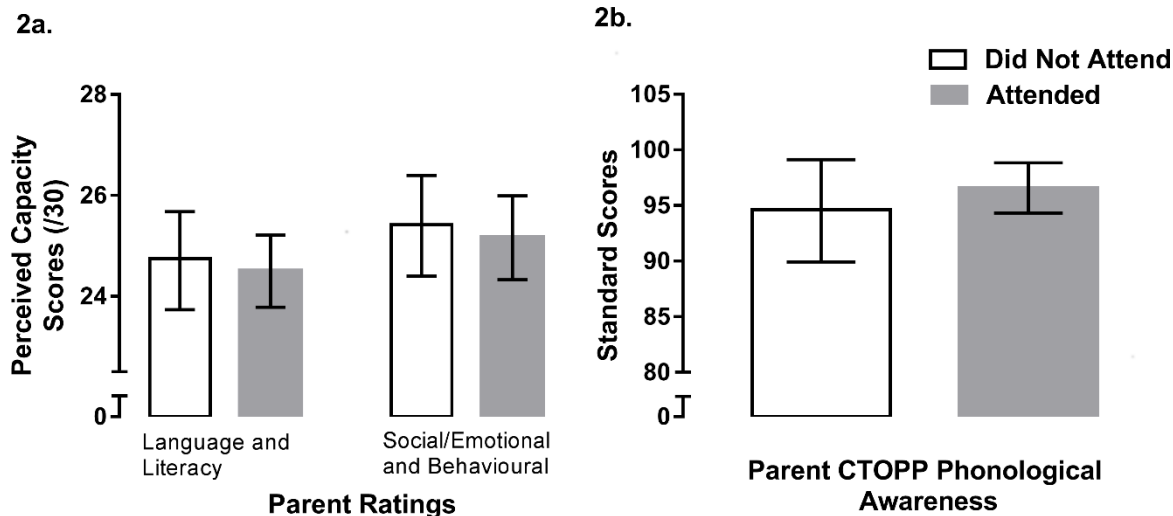


Figure 2. The relationship between parent attendance at workshops and (2a) parent perceived self-efficacy in matters associated with promoting their child’s language and literacy, and social, emotional and behavioural skills, (2b) parent CTOPP phonological awareness composite scores. Mean scores and 95% confidence intervals shown.

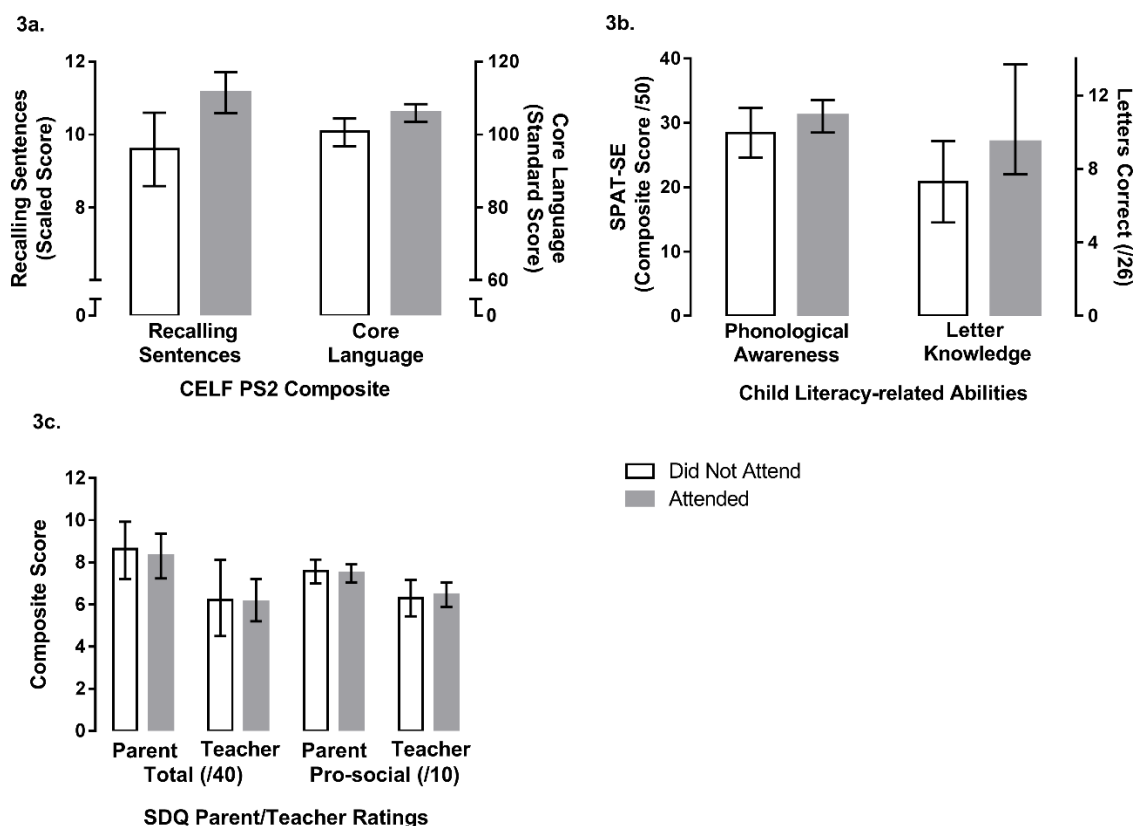


Figure 3. The relationship between parent attendance at workshops and (3a) child language ability and recall of sentences, (3b) child phonological awareness and letter knowledge and (3c) parent and teacher SDQ ratings for the children. Means scores and 95% confidence intervals shown.

TABLES

Table 1.

Hierarchical Regression Model with Attendance as the Dependent Variable.

Variable	B	S.E.	Wald	df	p	R
Parent education	0.34	.11	9.73	1	.002	21.16
CELF-PS2 recalling sentences	0.19	.08	6.16	1	.013	15.53
Group year	0.82	.41	3.98	1	.046	10.69
Constant	-3.49	.97	12.96	-	-	-

Table 2.

Non-Workshop Participation by Year and Workshop Attendance

N = 135	Type	Attendees N (retention rate %)	Nonattendees N (retention rate %)	Total (%) of starting pop	Ratio attendees /non- attendees
Pre-workshop (active)	direct testing, questionnaires	91	44	100%	2.06
Pre-Primary follow up (active)	direct testing, questionnaires	83 (91%)	32 (73%)	85%	2.59
Grade 1 follow up (active)	questionnaires	58 (64%)	17 (39%)	56%	3.41
Grade 2 Passive*	child data collection	70 (77%)	33 (76%)	76%	2.12

*Child data collection occurred at every data collection time point in the study.

Supplementary Tables

Supplementary Table 1.

Bivariate Correlations Between Variables of Interest for Non-attending Parents (Upper n = 42) and Attending Parents (Lower n = 86)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. P. Education															
2. At-Risk (No = 0, Yes = 1)	-.31**														
3. P. PA	.07	-.18													
4. P. Literacy SE	.16	-.01	.17												
5. P. Resiliency SE	.13	.04	.08	.74**											
6. School SEI (Low < High)	.35**	-.14	.05	-.13	-.18										
7. Child's Gender (F = 0, M = 1)	-.06	.16	.10	.21	.28**	.08									
8. P. SDQ	-.32**	.10	-.01	-.28**	-.36**	-.27*	-.09								
9. P. Pro-social SDQ	-.01	.14	-.23*	.18	.34**	-.21*	-.15	-.27*							
10. T. SDQ	-.2-	.23*	.11	-.14	-.09	-.02	.27*	.33**	-.27*						
11. T. Pro-social SDQ	.26*	-.19	.09	.12	.06	.23*	-.29**	-.40**	.08	-.68**					
12. Child PA	.19	-.04	.10	-.02	-.05	.12	-.04	-.21	-.04	-.24*	.24*				
13. LK	.19	-.24*	-.06	.08	.05	.10	-.06	-.14	.15	-.12	.12	.59**			
14. Core Lang	.23*	-.14	.02	-.15	-.09	.29**	-.16	-.19	-.09	-.27*	.20	.32**	.33**		
15. Recall Sent	.24*	-.17	.03	-.10	-.03	.30**	-.24*	-.14	-.07	-.22*	.26*	.25*	.18	.58**	

P = Parent, T = Teacher, At- risk = risk of literacy difficulties, PA = phonological awareness, SE = Self efficacy, SDQ = Strength and difficulties questionnaire, SEI = socio-economic index, LK = letter knowledge, Core lang = CELF Core Language Subset, Recall Sent = CELF Recall Sentences subtest, *NOTE:* Correlations on data calculated list-wise, Significant correlations bolded. * = $p < .05$, ** = $p < .01$.

Supplementary Tables

Supplementary Table 2.

Breakdown of Responses from Nonattending Participants (n = 24)

Reason	Number of Responses
<i>Non-attendance due to dysfunction/disorganisation (category total)</i>	
I forgot	3
I didn't realize how much I needed to be involved	1
I wasn't sure where to go	0
<i>Non-attendance due to program characteristics (category total)</i>	
I felt that the workshops weren't relevant...	0
I felt I knew enough about what would be covered	1
Workshops involved too much time	2
I couldn't get to the workshops	2
<i>Non-attendance due to competing commitments (category total)</i>	
I had to work	11
I had other children to look after	6
Someone in my family was sick	3
I had other things to do	0

Supplementary Tables

Supplementary Table 3.

Breakdown of Responses from Attending Parents (n = 37)

Reason	Number of Responses
<i>Attendance as the result of being organised (category total)</i>	
I reminded myself of the dates etc.	27
I was able to commit to the level of involvement	29
I knew when and where to go	26
<i>Attendance as the result of characteristics of the program (category total)</i>	
Workshops were a reasonable amount of time	24
I could get to the workshops	26
I felt I didn't know enough about what would be covered	7
I wanted the resources that were given out	23
I liked the morning/afternoon tea	8
The honorarium made it easier for me to go	8
I felt that the workshops were relevant	35
I liked talking with the other parents	28
<i>Attendance as the result of lack of competing commitments (category total)</i>	
My children were looked after or at school	23
I did not have to work	24
The workshops didn't clash with other things I needed to do	9