Tuning in to Kids: An Effectiveness Trial of a Parenting Program Targeting Emotion Socialization of Preschoolers

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This article reports on an effectiveness trial of the Tuning in to Kids (TIK) parenting program. TIK aims to improve emotion socialization practices in parents of preschool children; it is a universal prevention program that teaches parents the skills of emotion coaching and also targets parents' own emotion awareness and regulation. The present study followed a 2×2 (Treatment Condition $\times$ Time) design. One hundred twenty-eight parents of children ages 4.0–5.11 years were recruited from preschools and randomized into intervention and waitlist conditions. Parents in the intervention condition ($n = 62$) attended a six-session group parenting program delivered by community practitioners who followed intervention fidelity protocols. Parents and preschool teachers completed questionnaires twice during the preschool year: at preintervention and at follow-up (approximately 7 months later). Parents reported on their emotion socialization beliefs and practices, other parenting practices, and on child behavior. Teachers reported on child behavior (Social Competence and Anger-Aggression). Data were analyzed using multilevel modeling. At follow-up, compared to the control group, intervention parents were significantly less emotionally dismissive in their beliefs, less dismissive and more coaching in their practices in response to children's negative emotions, and more positively involved. Although there were improvements in both conditions over time for parent-reported child behavior and teacher-reported social competence, compared to the waitlist group, intervention parents reported a significantly greater reduction in number of behavior problems. This trial demonstrates the potential for community agencies and practitioners in real-world settings to deliver a new parenting program that targets emotional communication in parent–child relationships.

Keywords: behavior problems, emotion coaching, emotion socialization, Tuning in to Kids parenting program, universal prevention

The purpose of this study was to evaluate, in a real-world context (i.e., when delivered by practitioners working in community settings), a new parenting program designed to build preschool children's emotional competence and to improve parent–child emotional connection. Efforts to promote child well-being and to prevent negative outcomes during this critical early stage of development make an important contribution to child and family well-being; and such preventive approaches are increasingly being recognized as both efficacious and cost-effective.

Emotional competence, if developed early, acts protectively and preventatively. It includes ways of expressing emotion, knowledge about emotion, regulation of emotion, and goal-directed use of emotions in interpersonal and intrapersonal situations (Denham, 1998; Eisenberg, Cumberland, & Spinrad, 1998). These skills are central to healthy child development and they emerge rapidly during the preschool years as language, cognition, and experience intertwine. Emotional competence is associated with improvements in prosocial behavior and attentional skills (Eisenberg, Cumberland, et al., 2001; Gottman, Katz, & Hooven, 1997) and reduces the risk of behavior problems and difficulties in the transition to school (Raver, 2002); such difficulties are precursors for later mental health problems (Cicchetti & Cohen, 1995; Eisenberg, Cumberland, et al., 2001; Greenberg, Kusche, & Speltz, 1991), antisocial behavior, and problems with substance abuse and other risk-taking behaviors during adolescence (Cicchetti & Cohen, 1995; Greenberg, Kusche, & Speltz, 1991; Silk, Steinberg, & Morris, 2003; Yap, Allen, & Sheeber, 2007).

Increasing recognition of the importance of children's emotional competence has informed several preschool and school social–emotional learning programs (e.g., I Can Problem Solve (Shure & DiGeronimo, 1994), Promoting Alternative Thinking Strategies (Greenberg, Kusche, Cook, & Quamma, 1995), and an Emotions Course for Head Start children (Izard, Trentacosta, King, &

Mostow, 2004). Such programs teach emotion competencies directly to children, aiming to enhance development and to act protectively to prevent or ameliorate behavioral difficulties. Social−emotional learning programs are mainly offered to children aged 5 years and older in the school setting, thus missing the key developmental window of the early years when parents have the greatest influence on children's emotional learning, and when emotional competencies are becoming well established or problems begin to emerge. The parent–child relationship provides the major early context within which children's emotion development occurs, with parents acting as teachers, role models, and attachment figures. For young children's emotional learning, therefore, it is important to target parenting.

Parents play a central role in helping children to understand, regulate, and appropriately express emotions. They do this in the way they model emotional expression, how they react to their child's emotions, and how they directly assist (or not) their child to learn about emotional responses (Eisenberg, Cumberland, & Spinrad, 1998). When parents are appropriately encouraging and supportive of their child's learning in this domain, children acquire increasingly sophisticated emotional literacy and emotion regulation skills. An "emotion coaching" approach (i.e., responding supportively, verbally labeling emotions, using empathy, and teaching children to understand and regulate their emotions) has been found to be closely related to optimal emotional competence in children (Eisenberg, Losoya, et al., 2001; Gottman, Katz, & Hooven, 1996; Thompson, 2000). This developmental research provides support for prevention programs that target parenting with the specific intention of promoting children's emotional competence in the first five years of life to reduce the risk of emotional and behavioral problems.

Until recently, however, prevention programs typically delivered to parents have not focused on social−emotional learning, but rather on changing parenting practices to better manage children's behavior and reduce aggression. Behavioral programs with a strong evidence-base demonstrating positive behavioral outcomes in some populations include Parent Management Training (Pearl, 2009), The Incredible Years (Webster-Stratton, Reid, & Stoolmiller, 2008), and Triple P (Sanders, Markie-Dadds, Tully, & Bor, 2000). These interventions are based on theories about the influence of reinforcement (positive and negative) on children's behavior, and are less likely to teach parents about responding to children's emotional needs in ways that teach about emotions or assist the child to develop emotional competence. Parenting services that provide prevention and early intervention largely use behavioral programs because they are evidence-based (generally a requirement for funding) and have standardized means of delivery (training, manuals, supervision). However, community service providers have sometimes been reluctant to adopt programs that focus on controlling children's behavior (Taylor & Biglan, 1998) rather than addressing parents' emotional responsiveness (i.e., parenting warmth, sensitivity, empathy), when they need to provide assistance to parents who find it hard to connect at an emotional level with their child. An evidence-based and standardized program that targets children's emotional competence, assists parents to emotionally connect with their children, and fosters a positive parent−child relationship would thus provide an important alternative, or complement, to behavioral parenting programs.

With that in mind, Havighurst and Harley (2007) developed the Tuning in to Kids: Emotionally Intelligent Parenting program (TIK). The TIK program is a universally delivered prevention program for parents of preschool children. TIK teaches parents the skills of emotion coaching that help children learn about and regulate their emotions, with the added aim of enhancing or improving the parent–child relationship, and thereby preventing or ameliorating child behavior problems. It is theoretically based on research examining parent emotion socialization and its role in children's emotional competencies, behavior, social skills, and other developmental outcomes (Gottman, Katz, & Hooven, 1997), and thus has a different theoretical framework from those underpinning behavioral parenting programs. TIK does not view misbehavior as requiring a reduction in reinforcement or use of appropriate punishment; instead, misbehavior is viewed as a signal to the parent to notice what emotions the child is experiencing and to help the child explore what is being felt (while still maintaining boundaries around acceptable behavior). Therefore, strategies such as planned ignoring and time out (central in behavioral programs) are not taught. TIK does integrate some elements also commonly found in behavioral programs, such as the use of descriptive praise, playing and having fun activities with children, and the importance of consistency in routines and limits. Which specific elements of these different theoretical and practical approaches to teaching effective parenting are essential components to include in programs is an empirical question yet to be tested.

TIK program efficacy has been established in a randomized controlled trial with a community sample of parents of Australian preschoolers with varying degrees of developmental risk. Outcomes were improvements to parenting around children's emotions, parent emotion regulation, and child behavior postintervention (Havighurst, Wilson, Harley, & Prior, 2009) and at follow-up six months later, when there were also increases in observed parent emotion socialization and child emotion knowledge (Havighurst, Wilson, Harley, Prior, & Kehoe, 2010). These changes were found across contexts (home and preschool) and measures (parent- and teacher-report, direct observation), providing evidence of program efficacy under optimal delivery (by the program developers). However, any program considered efficacious also needs to establish that it is effective under real-world conditions before decisions about dissemination should be made (Flay et al., 2005).

Study Aim

This study aimed to evaluate the effectiveness of the Tuning in to Kids program under real-world conditions, that is, when delivered by practitioners in community organizations as part of their day-to-day practice. Community practitioners were trained in TIK delivery and undertook supervision to ensure implementation fidelity, a critical element in program effectiveness (Dumas, Lynch, Laughlin, Phillips Smith, & Prinz, 2001). The key question addressed was: When delivered by community practitioners, does participation in TIK lead to improved parenting practices and improved child outcomes? Given previous TIK findings (Havighurst et al., 2010), we predicted that parents in the current study would similarly report increased emotion coaching and less emotion dismissing, and that both parents and teachers would report fewer externalizing behaviors. To further explore program outcomes, we also examined some general

parenting practices that are typically assessed in behavioral programs, anticipating that these practices would also improve as a result of program participation.

Description of the Intervention: Tuning in to Kids Parenting Program

The TIK parenting program, described in detail in the program manual (Havighurst & Harley, 2007), is structured as a six-session, 2-hr weekly group parenting program, with two follow-up "booster" sessions recommended to consolidate skills learned. Optimally, two trained cofacilitators conduct the program together; however, it can be successfully conducted by a sole trained facilitator. Parents are taught five steps of emotion coaching (Gottman & DeClaire, 1997): (a) become aware of the child's emotion, especially if it is at a lower intensity; (b) view the child's emotion as an opportunity for intimacy and teaching; (c) communicate understanding and acceptance of the emotion; (d) help the child to use words to describe how they feel; and (e) if necessary, assist them with problem-solving (while setting limits). Different exercises sequentially target each of these five steps, with content or exercises specified as core, optional, or home activities. Activities include psychoeducation, watching DVD examples of emotion coaching and dismissing, reading handout materials, practice exercises, role plays, and group discussion.

Method

Design

Participants were parents of children attending a preschool program during the 2009 year. In Australia, the Victorian state government provides one year of funded, noncompulsory preschool (minimum 10 hr per week) to 4-year-old children in the year before school; approximately 95% of eligible children attend. Thus this was considered a normative population for delivery of a universal parenting program. The programs, frequently managed at the level of local government area (LGA), are conducted by qualified early childhood teachers. For the purposes of this project, the research team collaborated with an outer eastern metropolitan LGA, the City of Knox. Knox is predominantly residential, with households ranging from low to high socioeconomic status across 11 localities. All 28 LGA managed preschools in Knox agreed to distribute information and letters of invitation to parents of enrolled children ages 4.0–5.11 years at the beginning of 2009. Parent participation was voluntary. Inclusion criteria were English-language proficiency and return of a preintervention questionnaire booklet before the specified cutoff date. There were no exclusion criteria in relation to child diagnosis.

The study followed a 2 × 2 (Treatment Condition: Intervention or Waitlist × Time: Preintervention and Follow-Up) design. Resource limitations allowed for only two data collection points. Changes are commonly found immediately after interventions, whereas maintenance of change at follow-up is perhaps a better indicator of an effective program because immediate effects may fade over time (Reedtz, Handegard, & Mørch, 2011); hence, questionnaire data were collected from parents and preschool teachers at baseline (Time 1) and at follow-up approximately seven months later (Time 2), prior to the end of the preschool year.

All programs were delivered at local community venues, with parents in the intervention condition offered an immediate start program, and waitlisted parents offered a delayed start program (held subsequent to Time 2 data collection). The research protocol was approved by the Human Research Ethics Committee of The University of Melbourne.

Participants

A total of 1212 letters of invitation were distributed; 170 parents returned interest slips and 128 (10.6%) parents returned completed consent forms and questionnaires in time to enroll in the study. Participants were parents (M age = 36.3 years, SD = 4.3) of an eligible target child (M age = 4.19 years, SD = .41; boys = 52%). Four children had a pervasive development disorder, one child was awaiting a similar suspected diagnosis, one child had diagnosed selective mutism, and 27 children (21%) were above the clinical cutoff on the parent-reported Eyberg Child Behavior Inventory (ECBI) Intensity scale. Compared with mothers in the nationally representative 4-year-old cohort of the Longitudinal Study of Australian Children (LSAC) (Australian Institute of Family Studies, 2011), more parents (118 mothers, 10 fathers) were born in Australia (83% cf. LSAC, 74%); the remainder were born in the United Kingdom (6%), Europe (5%), North America (3%), or Asia (3%); and 123 families primarily spoke English at home. Most (91%) were married or cohabiting; 11 participants (9%) were sole parents (LSAC, 14.4%). Number of children in families ranged from 1–5; most families had two children (60.9%). Parent education levels were diverse: 22.7% did not complete high school (LSAC, 26.5%); 8.6% graduated only from high school (LSAC, 12.4%); 28.9% held a nondegree certificate or diploma or other (LSAC, 38.7%); and 39.8% had a university degree (LSAC, 24.3%). The latest available figures for median household income in Victoria are AUD$66,820 (ABS, 2009); study participants' gross family incomes (in AUD) ranged from low (<$59,999 = 25.2%), through middle ($60,000–99,999 = 43%), to upper middle-income (≥$100,000 = 25.0%); 7.8% were unreported.

Of the 128 parents in the study at Time 1, research retention was 97.7% at Time 2; complete data at Times 1 and 2 were received from teachers for 126 children (98.4%).

Measures: Parenting

Davidov and Grusec (2006) highlighted the importance of separating parents' beliefs from parenting practices when investigating parenting effects on child outcomes. Thus, measures of reported emotion socialization included beliefs and practices.

Emotion socialization beliefs. The Maternal Emotional Style Questionnaire (MESQ; Lagacé-Séguin & Coplan, 2005) was used to assess parents' beliefs about coping with children's emotions of sadness and anger. The MESQ comprises two 7-item scales (Emotion Coaching and Emotion Dismissing). An item endorsing coaching (Emotion Coaching) is: "When my child is sad, it's time to get close"; for dismissing (Emotion Dismissing): "Childhood is a happy-go-lucky time, not a time for feeling sad or angry". In the present study, Cronbach's alpha for Emotion Coaching was .63 at Time 1 and .64 at Time 2; and for Emotion Dismissing, .70 at Time 1 and .68 at Time 2.

Emotion socialization practices. Emotion socialization practices were assessed with the Coping with Children's Negative Emotions Scale (CCNES; Fabes, Eisenberg, & Bernzweig, 1990). The CCNES contains 12 scenarios of child negative emotion and parents rate how likely they are to respond in each of six possible ways, using a 7-point response set (continuum from *very unlikely* to *very likely*). Only four subscales were included here: Expressive Encouragement, Problem-Focused Reactions, Minimization Reactions, and Punitive Reactions. Scenarios are situations such as the child losing a prized possession and reacting with tears, with parental response options such as: helping the child to think of places he or she hasn't looked yet (Problem-Focused Reactions); telling the child crying when they're unhappy is OK (Expressive Encouragement) or overreacting (Minimization Reactions); and telling the child this happens when they're not careful (Punitive Reactions). Based on theoretical distinction and previous empirical findings (Eisenberg & Fabes, 1994; McElwain, Halberstadt, & Volling, 2007); the first two subscales (Problem-Focused Reactions and Expressive Encouragement; correlated at $r = .69$) were summed into one total "emotion coaching practices" scale; and the latter two subscales (Minimization Reactions and Punitive Reactions; correlated at $r = .71$) were summed into one total "emotion dismissing practices" scale. Cronbach alphas for the combined scales for emotion coaching (.92, .91) and emotion dismissing practices (.87, .88), respectively, indicated high reliability at both time points.

General parenting practices. The Alabama Parenting Questionnaire (APQ) (Shelton, Frick, & Wootton, 1996) has 42 items presented with a 5-point endorsement scale, ranging from *never* to *always*; 24 items deemed appropriate for preschool children and relevant to TIK program content were used. APQ scales include: Involvement (e.g., talking to the child about their friends; one age-inappropriate item about homework was excluded) and Positive Parenting (e.g., praising the child for doing something well). Both of these scales measure aspects of positive parenting and were highly correlated ($r = .58$) in the current study. They were summed to create one scale that we called positive involvement (Cronbach's alpha at Time 1 and 2 = .84). Other APQ scales are Inconsistent Discipline (e.g., punishment given depending on parent's mood) and Corporal Punishment (e.g., spanking). Cronbach's alphas at Times 1 and 2, respectively, were .78 and .78 for Inconsistent Discipline and .50 and .55 for Corporal Punishment. Due to near floor scores and low reliability, Corporal Punishment was not included in analyses.

Measures: Child Outcomes

Parent-reported. The ECBI (Eyberg & Pincus, 1999) is a 36-item parent-report scale of problem behaviors. Each item on this measure is rated on a 7-point Likert scale from 1 (*never*) to 7 (*always*). An Intensity scale is calculated as the sum of all item scores. Parents also answer yes or no to indicate whether each behavior is a problem for them, providing a Problem scale score (possible range = 0–36). Cronbach's alpha coefficients for the Intensity scale were .92 at Time 1 and .94 at Time 2.

The Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999) is designed for children aged 2–5 years and includes scales assessing children's positive behaviors and social−emotional problems. The 27-items Total Protective Factors scale was used to assess children's initiative, self-control, and attachment. Items ask about behaviors such as the child choosing challenging tasks, showing patience, and asking adults to play or read to her or him. Parents use a 5-point scale to rate the frequency of behaviors, ranging from *never* to *very frequently*. The Cronbach's alpha coefficient was .92 at both time points.

Teacher-reported. The SCBE-30 (LaFreniere & Dumas, 1996) is a short form of the teacher-report Social Competence and Behavior Evaluation (LaFreniere & Dumas, 1995) measuring social competence, affective expression, and adjustment in children aged 2.5–6 years. The SCBE-30 comprises three 10-item subscales; we included only Social Competence and Anger-Aggression scales. Teachers rate the frequency of various behaviors (e.g., working well in groups, screaming or yelling) on a scale from 1 (*never*) to 6 (*always*). Cronbach's alpha coefficients across both time points ranged from .88 to .92.

Procedure

Randomization. Three LGA preschools plus one privately operated preschool in Knox provided a source of parents for practice programs (see below) and did not participate in data collection; the remainder were randomized into intervention (15 preschools) and waitlist (10 preschools) conditions using a computerized random-number generator. Parents (intervention group = 62) were assigned to the program condition allocated to their child's preschool.

TIK facilitator training. Prior to the study, no participating practitioner had conducted a TIK program. For the current research, 20 professionals from Knox Council and other local community service organizations attended an accredited two-day TIK facilitator training workshop. Training focused on the program's theoretical principles and practice of emotion coaching skills. Activities included reading material, watching the TIK DVD, practice exercises, role plays, and group discussion. Participants were also given information about the project's research design and protocols for maintaining study integrity. Eight attendees who consented to participate in the trial were selected as primary facilitators and completed training by cofacilitating a "practice" group program. Subsequently, two of the five intervention condition programs were conducted by a pair of practiced facilitators (optimal); other intervention programs were delivered by a "primary" (practice group conducted) facilitator alone (one program) or assisted by a "secondary" (workshop training only) facilitator (two programs). Secondary facilitators and facilitators for waitlist programs were recruited from a second training workshop later in the year.

Facilitator characteristics. Not all practitioners who delivered intervention programs had a relevant graduate degree or experience in group facilitation and/or parenting education. Of the six practiced/primary facilitators, four had university degrees; fields of study were: early childhood and special education ($n = 1$), child and family psychology ($n =$), mental health nursing ($n = 1$), and social work ($n = 1$). Of the two nonuniversity educated practitioners, one had a welfare diploma and the other had a certificate in workplace training. Prior experience in conducting parenting groups ranged from 0–4 groups (3 practitioners) to 10 or more (3 practitioners). This range in professional qualifications

and experience reflects the diversity in professionals who deliver parenting programs.

Intervention fidelity. To maintain intervention fidelity, facilitators were provided with the TIK program manual, participated in weekly individual telephone supervision with one of the program developers for program duration, and attended a group supervision meeting with the researchers once per program. Supervision focused on process issues in delivery, maintaining the integrity of program content and theory, and ways to manage adherence to research protocols in real-world contexts. Further telephone and email support were available throughout the study. Primary facilitators also completed content fidelity checklists after each session. Checklists indicated that, across the five intervention programs, content delivered ranged from 90–100% for core content; 42–83% for optional topics; and 73–100% for home activities. In a postprogram self-evaluation questionnaire, practitioners recorded high levels of process fidelity on 5-point scales, ranging from 1 (*not at all/none*) to 5 (*excellent*) rating their ability to use the core TIK parenting practices ($M = 4.2$; range 4–5), group process strategies ($M = 4.2$; range 4–5), and training strategies ($M = 4.2$; range 4–5), as well as their understanding of the program's theory ($M = 4.4$; range 4–5). However, practitioner workloads ultimately precluded booster sessions; this omission reflects real-world constraints and was a point of difference in program delivery compared with the program's efficacy trial.

Results

Program Completion

Intervention groups averaged 12 parents (range 11–14). More than half of the 62 parents in the intervention condition attended all six sessions (35 parents; 56.5%), with 60 participants (97%) completing at least four sessions.

Analytic Strategy

At both time points, there were two cases without teacher reports on child outcomes; otherwise, across all measures, no case

had more than 1% missing data. Parents failing to return questionnaires at Time 2 ($n = 4$) did not significantly differ from the rest of the sample on any of the measures; and there was no significant difference in questionnaire return rate between the intervention ($n = 59$) and waitlist groups ($n = 65$), $\chi^2(1, N = 128) = .33$, $p = .57$, $\phi = .10$. All available data were used in analyses. We used t-tests and chi-square analyses to examine Time 1 differences on demographic and outcome variables between the two group conditions. No significant between-groups differences were found on any variable, indicating that randomization was effective in creating balanced groups and precluding the need to include covariates in the analyses (Pocock, Assmann, Enos, & Kasten, 2002). Pearson correlations between the parenting scales and child outcomes at Time 1 are presented in Table 1.

Due to the multistage sampling strategy, intraclass correlations (ICC) were computed to assess any variance in outcome measures between preschools at Time 1. For parent-reported variables, ICC ranged between .00 and .08, suggesting that preschool membership explained between 0 and 8% of variance in parent-reported variables. For teacher-reported variables, however, ICC values of .18 (17.97%) and .30 (29.54%) suggested that a significant amount of variance in child outcomes (Social Competence and Anger-Aggression) can be explained by preschool. Therefore, multilevel analyses (linear mixed models, SPSS, Version 18.00) were conducted to assess the impact of condition (intervention, waitlist) across Times 1 and 2 on parent and child outcome variables, taking into account variation explained by preschool. Mixed effects models allow estimating effects of treatment in the presence of the correlated errors that arise from a data hierarchy (Peugh & Enders, 2005). Results, including effect sizes, are presented in Tables 2 (parenting outcomes) and 3 (child outcomes). Best model fit was achieved using variance components covariance structure and intercept as a random effect to estimate linear effects (Heck, Thomas, & Tabata, 2010).

Parenting

As shown in Table 2, significant interactions between condition and time were found for several parenting measures, indicating

Table 1
Pearson Correlations Between Time 1 Parenting Scales and Child Outcomes

	1	2	3	4	5	6	7	8	9	10
1. MESQ-EC	—									
2. MESQ-ED	.22*	—								
3. CCNES-ECP	.40***	.03	—							
4. CCNES-EDP	−.17*	.20*	−.31***	—						
5. APQ PI	.37***	.07	.54***	−.20*	—					
6. APQ ID	−.01	.14	−.18*	.22*	−.12	—				
7. ECBI	−.04	.05	−.05	.19*	−.07	.41***	—			
8. ECBI P	−.02	.16	.02	.13	−.05	.29**	.76***	—		
9. DECA TPF	.32***	−.10	.31***	−.15	.47***	−.20*	−.33***	−.37***	—	
10. SCBE AA	.02	−.03	.07	.01	.16	−.03	.26**	.20*	−.12	—
11. SCBE SC	.02	−.00	.08	.13	−.03	.03	−.03	.05	.19*	−.56***

Note. MESQ-EC = Maternal Emotion Style Questionnaire Emotion Coaching; MESQ-ED = Maternal Emotion Style Questionnaire Emotion Dismissing; CCNES-ECP = Coping with Children's Negative Emotions emotion coaching practices; CCNES-EDP = Coping with Children's Negative Emotions emotion dismissing practices; APQ = Alabama Parenting Questionnaire; PI = Positive Involvement; ID = Inconsistent Discipline; ECBI = Eyberg Child Behavior Inventory Total Intensity score; P = Problem Scale; DECA TPF = Devereux Early Childhood Assessment Total Protective Factors; SCBE = Social Competence and Behavior Evaluation Short Form; AA = Anger-Aggression; SC = Social Competence.
* $p < .0$. ** $p < .01$. *** $p < .001$.

Table 2
Multilevel Mixed Effects Modeling: Parenting

	Adjusted mean[a]								
	Baseline		Follow-up		Test of interaction				
Measures	M	SE	M	SE	df	F	p	95% CI	Cohen's d
MESQ									
Coaching beliefs									
Intervention	26.81	0.51	26.65	0.52	1, 124.26	0.12	.733	[−1.06, 0.74]	.04
Control	26.72	0.53	26.34	0.54				[−1.24, 0.48]	.09
Dismissing beliefs									
Intervention	24.03	0.49	21.21	0.50	1, 122.97	17.58	.000	[−3.68, −1.96]	.74
Control	24.15	0.49	23.83	0.49				[−1.13, 0.51]	.08
CNNES									
Coaching practices									
Intervention	5.28	0.11	5.61	0.11	1, 121.99	8.57	.004	[−0.14, 0.16]	.39
Control	5.38	0.11	5.39	0.11				[0.17, 0.49]	.01
Dismissing practices									
Intervention	2.15	0.09	1.86	0.09	1, 122.67	5.36	.022	[−0.42, −0.17]	.42
Control	2.30	0.09	2.21	0.09				[−0.21, 0.03]	.12
APQ									
Positive Involvement									
Intervention	61.56	0.83	63.48	0.84	1, 123.73	4.50	.036	[0.81, 3.03]	.30
Control	62.73	0.83	63.00	0.83				[−0.79, 1.33]	.04
Inconsistent Discipline									
Intervention	14.23	0.43	13.44	0.43	1, 122.94	2.33	.129	[−1.42, −0.15]	.24
Control	14.24	0.42	14.13	0.42				[−0.72, 0.50]	.03

Note. MESQ = Maternal Emotion Style Questionnaire; CCNES = Coping with Children's Negative Emotions; APQ = Alabama Parenting Questionnaire.
[a] Controlling for preschool.

improvements for parents in the intervention group. Intervention effects were detected with respect to emotion dismissing beliefs (large effect), emotion dismissing practices (small–medium effect), emotion coaching practices (small–medium effect), and positive involvement (small effect).The evidence showed that, after participation in the program, the intervention group scored lower on emotion dismissing beliefs and practices, and higher on emotion coaching practices and positive involvement with their child. No changes were detected in emotion coaching beliefs, and for Inconsistent Discipline, only the main effect of time, $F(1, 122.9) = 4.08$, $p = .046$, was significant, indicating that parents from both groups reported being less inconsistent at Time 2.

Child Outcomes

Table 3 shows the multilevel modeling results for child outcomes. There were no significant intervention effects detected in measures of child behavior. Significant main effects were found for time on the variables of behavior problems intensity, $F(1, 122.5) = 15.51, p = .000$, and problem score, $F(1, 123.8) = 13.63$, $p = .000$, indicating improved child behavior across the sample. However, compared to the waitlist group, intervention parents reported a significantly greater reduction in number of problems, as indicated by a significant main effect for condition, $F(1, 123.8) = 4.99, p = .027$. The interaction between time and condition approached significance, showing a trend for stronger reductions in intervention parent-reported behavior problems intensity, $p = .097$ (small–medium effect) and number, $p = .104$ (small–medium effect). Scores reported by teachers on the Anger-

Aggression scale were near floor at Time 1, and showed no significant change. With respect to protective factors, significant main effects indicated scores increased for all children over time, $F(1, 123.53) = 13.52, p = .000$; and there were also significant main effects for time in teacher-reported social competence, $F(1, 119.80) = 43.72, p = .000$.

Discussion

The goal of this study was to evaluate Tuning in to Kids program outcomes when delivered under real-world conditions. A previous efficacy trial established that the TIK program resulted in improvements in parent emotion socialization practices and improved child emotion knowledge and behavior. The current study investigated parenting and child outcomes when community practitioners, rather than the program developers, delivered TIK in a real-world context in which it may be more difficult to achieve desired outcomes.

As predicted, when assessed at follow-up, intervention parents reported several significant changes in their emotion socialization beliefs and practices. Consistent with the findings of Havighurst et al. (2010), parents who had attended the TIK program had reduced levels of emotion dismissing beliefs. They were also, in their parenting practices, less dismissing of child negative emotion and more emotion coaching in their responses to children's emotions. These predicted improvements were consistent with the style of parenting taught in the TIK program, indicating that the program was changing certain emotion socialization practices that have been found central to positive child development.

Table 3
Multilevel Mixed Effects Modeling: Child Outcomes

	Adjusted mean[a]				Test of interaction				
	Baseline		Follow-up						
Measures	M	SE	M	SE	df	F	p	95% CI	Cohen's d
					Parent-reported				
ECBI									
Behavior intensity									
Intervention	114.70	3.30	105.35	3.33	1, 122.46	2.80	.097	[−14.13, −4.56]	.37
Control	117.51	3.19	113.74	3.20				[−8.31, 0.77]	.15
Problem score									
Intervention	9.73	0.95	6.52	.96	1, 123.78	2.68	.104	[−4.95, −1.49]	.44
Control	11.38	0.92	10.14	0.92				[−2.89, 0.41]	.17
DECA									
Total Protective Factors									
Intervention	73.03	1.52	76.03	1.54	1, 123.24	0.15	.70	[0.89, 5.10]	.26
Control	70.68	1.48	73.10	1.48				[0.41, 4.43]	.20
					Teacher-reported				
SCBE									
Anger-Aggression									
Intervention	17.60	1.25	17.33	1.25	1, 117.87	0.04	.843	[−1.63, 1.08]	.03
Control	17.64	1.32	17.18	1.32				[−1.74, 0.82]	.04
Social Competence									
Intervention	33.21	1.15	38.61	1.53	1, 119.80	1.20	.276	[3.40, 7.39]	.53
Control	37.59	1.62	41.45	1.63				[1.94, 5.79]	.30

Note. ECBI = Eyberg Child Behavior Inventory; DECA = Devereux Early Childhood Assessment; SCBE = Social Competence and Behavior Evaluation Short Form.
[a] Controlling for preschool.

Along with these desired reductions in emotion dismissing and increases in emotion coaching practices, there was one surprising result: parents did not report a change in their beliefs about emotion coaching. It is not clear why this was so. Anecdotally, according to practitioners facilitating the programs, parents made noticeable shifts in attitudes toward emotion coaching over the course of the program, improvements that were not reflected in the emotion coaching beliefs scale. This is in contrast to findings reported in the previous efficacy trial (Havighurst et al., 2010). In that study, additional items relating to worry were added to the MESQ and the expanded measure demonstrated good reliability (Cronbach alphas .82−.86 across three time points), whereas in the current study using just the original items, the reliabilities were lower (.63 and .64), and this may have contributed to the nonsignificant finding. Another possible explanation is that the measure was not an exact theoretical fit with the TIK program in that some of the items in the original coaching scale favor problem-solving when children are emotional. In the TIK conceptualization of emotion coaching, problem-solving is considered emotion dismissive *if* the child's emotions are not responded to first, and so in the program it is taught as the final, and not always necessary, step when emotion coaching a child. This means that determining at what stage of the parent's response to the child's negative emotions problem-solving occurs is crucial in understanding whether a parent is being dismissive or accepting of the child's emotion, and the MESQ does not assess this. Thus, parents may have endorsed an item similarly pre- and postprogram but with a different understanding of the item's meaning. Alternatively, the rather general,

nonconcrete nature of the items may not have captured more fine-grained shifts in beliefs about children's emotions.

In addition to limitations of currently available measures of emotion coaching, parental self-report is limited by the possibility of expectancy bias. Studies that have included both parent-reported emotion socialization beliefs or practices and observed emotion coaching have not found them to be highly correlated (Baker, Fenning, & Crnic, 2011), affirming the value of using direct measures wherever possible. Nevertheless, how to best measure parent's responses to children's emotions remains unclear, because actual behaviors in situ may differ from a directed laboratory task. Further research on optimal methods for accurately assessing parents' behavior with children, while conforming to all ethical requirements, would be welcome. In the present study, concerns about respondent burden in a community sample, combined with real-world resource limitations, precluded the possibility of any observational assessments. To improve the accuracy of parent reporting and better capture changes in parenting, measures of both parental beliefs (MESQ) and practices (CCNES) in response to children's negative emotions were used; however, findings of self-reported improvements, while encouraging, must be interpreted cautiously.

Although the primary focus of the TIK program and this evaluation is emotion socialization, we also wanted to ascertain whether the program resulted in more general effects on parenting. This information might be useful to services in their decision-making when selecting which evidence-based program would be most appropriate for their particular client group. Thus, we in-

cluded the APQ, a measure often used in other parenting program trials. At follow-up, intervention parents reported a significant increase in positive involvement, an important outcome that indicates there were general improvements in parenting. It is conceivable that improved parent–child communication about emotion may lead to more positive involvement because time spent with children becomes calmer and more enjoyable. Parental feedback, however, suggested that more sensitive measures of change are needed to capture other gains made. According to their evaluation forms, parents perceived that the program had resulted in improvements in the quality of parent–child relationships and family atmosphere at home; yet validated child behavior measures may not be sensitive to these aspects of family functioning (Stewart-Brown et al., 2004). A future challenge is to find feasible and reliable methods for assessing changes to the parent–child relationship that result from a program such as TIK.

In its design as a universal prevention program to enhance the parent–child relationship, TIK also aims to help prevent or ameliorate child behavior problems. Any community population of preschool children will vary widely in child behaviors, with some children already experiencing problems; thus, it was predicted that, even in this nonclinic population of children, improvements in behavioral outcomes would be seen. At follow-up, although intervention parents reported fewer behaviors as problematic, child behavior across the whole sample had improved. In contrast to Havighurst et al. (2010) who found a significant intervention effect (large reductions in behavior problems for children of parents who had attended the TIK program), here the intervention effect only approached significance. The former study, while also using a community rather than a clinical sample, intentionally targeted high-risk children by requesting that preschool directors encourage participation by parents of children showing behavioral difficulties. Almost one third (32%) of that child sample scored in the clinical range of the ECBI, suggesting that, if future providers of the program want to target families at risk, preschool teachers can identify and encourage their participation. Mean scores for the intervention group in that study dropped from 119.90 to 108.93, compared with a mean reduction from 114.70 to 105.35 in the current sample. Thus, children in the current sample were, overall, better functioning. Nevertheless, 21% were above clinical cutoff for behavior problems at baseline, suggesting that although children had not been referred for behavior problems, and teachers had not specifically encouraged at-risk families to participate, this volunteer sample may have overrepresented parents who were concerned about their child's behavior. Such participants may have benefited from a program more deliberately targeted to treatment of difficulties rather than a prevention program; however, it is also feasible that gains may have been greater if booster sessions, which were provided in the previous study where findings were stronger, had been available. Booster sessions consolidate learning, enable trouble shooting of problems, and reduce fading of skills taught (Tolan, Gorman-Smith, Henry, & Schoeny, 2009). The failure to provide booster sessions, contrary to program design, was due to practitioner workloads, and was not anticipated when the study began. Evaluation forms filled out by parents at the completion of the sixth TIK session indicated that parents wanted additional or booster sessions; this has increased practitioners' awareness of the importance of including these sessions when planning program delivery.

Another point of difference between the present and the previous study is the scales used for teacher reporting of child outcomes. At the time of study commencement, the Victorian government had just introduced new and rigorous compulsory reporting systems for preschool teachers to complete for each child and family at their center in addition to their existing workload. We were advised that teachers would not participate voluntarily in any research unless assessment measures were extremely brief. This precluded using the same teacher reporting scales as previously used, and so findings here cannot be directly compared with those of Havighurst et al. (2010), in which teachers reported significantly improved scores of child behavior on the Sutter-Eyberg Student Behavior Inventory. In the present study, there was no difference between the intervention and control groups in child behaviors at preschool. In contrast to parent reports of negative child behaviors, teacher-rated aggression was very low, with scores on the SCBE-30 initially almost at floor level, so that significant changes were unlikely to be detected. Lack of agreement between parent and teacher reporting is not uncommon; the differing contexts of preschool and home environments may elicit different behaviors from children, and teachers and parents may have different expectations about acceptable behaviors in those contexts.

Children's socioemotional skills improved for both intervention and waitlist groups across home and preschool, with increases in parent-reported protective factors and teacher-reported social competence. The consistency of these changes suggests that these improvements reflect normative changes in child maturity and social skill development across the preschool year, regardless of parent participation in TIK.

Study Limitations

This study had several limitations. First, self-report is subject to expectancy bias and some measures used were not ideal. The study could have been strengthened by including observational assessment of parent–child interactions and child outcomes to better assess the impact of the intervention, as well as using questionnaire measures with greater sensitivity and range to avoid floor effects. Second, outcomes were not assessed immediately postintervention, so it is not clear whether outcomes at follow-up had faded over time, remained constant, or strengthened over the course of the study. Conducting assessment immediately postintervention as well as at follow-up, with perhaps an additional later follow-up, would address that issue, and clarify the value of booster sessions. Third, validating the findings with a larger sample of families would strengthen study conclusions. Fourth, findings may not be generalizable to low socioeconomic status or more culturally diverse populations, or to nonvolunteer samples where parents' motivation to learn new parenting skills may be lower. Finally, although reported changes in parenting practices is an encouraging indicator that community practitioners trained in TIK can successfully deliver the program, such findings do not tell us how likely it is that the agencies involved will continue to provide the program to their clientele. A program dissemination trial would best answer this question.

Conclusion

Service providers increasingly want to deliver evidence-based prevention programs to parents of young children. Tuning in to Kids offers an alternative preventive program to the parenting field. Its focus on parents' emotion socialization practices and the emotions experienced by parent and child takes a novel approach that differentiates it from behavioral parenting programs. This trial is the first step in evaluating whether TIK could be successfully delivered by community-based practitioners. Findings were sufficiently promising to warrant further investigation of program outcomes in other, varied community settings where improving parents' emotion socialization practices may benefit their children.

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