Tuning in to Kids[®]: A Randomized Controlled Trial of an Emotion Coaching Parenting Program for Chinese Parents in Hong Kong

Rachel Fung-Ying Chan

Chen Qiu

Kathy Kar-man Shum

Chan, Qiu, and Shum are all affiliated with the Department of Psychology, The

University of Hong Kong.

Correspondence concerning this article should be addressed to Kathy Kar-man Shum, Department of Psychology, The University of Hong Kong, Pokfulam Road, Hong Kong, China. Email: <u>kkmshum@hku.hk</u> Acknowledgements. We are grateful for the assistance offered by the staff of the Lutheran Church - Hong Kong Synod, especially Zenobia Ng and her colleagues who helped in liaising with the preschools, and the certified TIK facilitators, Ryan Chiu, Noel Law and Roman Tung who delivered the training. Thanks are also due to the staff and interns at the authors' research laboratory for their help with data entry. We would also like to express our deepest gratitude to the parents who participated in this research, without whom the study would not be feasible.

Funding. This work was supported by the seed fund for basic research awarded by the University Research Committee at the University of Hong Kong.

Disclosure statement. No potential competing interest was reported by the authors.

Data availability statement. The data that support the findings of this study are available on request from the corresponding author, K. K.-M. Shum.

This study was not preregistered.

Tuning in to Kids[®]: A Randomized Controlled Trial of an Emotion Coaching Parenting Program for Chinese Parents in Hong Kong

Abstract

Tuning in to Kids[®] (TIK) is a parenting program that focuses on emotion coaching and is evidenced to be effective in Western populations. This study used a randomized controlled trial to examine the intervention effects of TIK on Chinese parents of low to middle socioeconomic status in Hong Kong. 104 parents (99 mothers and 5 fathers; M age in years = 37.92) of preschoolers aged 3-6 years were randomly assigned to the experimental (n = 54) or waitlist control group (n = 50). Parent and child outcomes were assessed at baseline (Time 1), immediately after the 6-week intervention (Time 2), and 6 weeks post-intervention (Time 3), using the Alabama Parenting Questionnaire, Coping with Children's Negative Emotions Scale, Parenting Stress Index-Short Form, and Emotion Regulation Checklist. The experimental group reported significant reductions in punitive parenting and parenting stress at Time 2, and these effects were maintained at Time 3. Delayed improvements in parents' use of expressive encouragement and children's emotion lability/negativity were observed at Time 3 in the experimental group. The immediate intervention effects were replicated in the waitlist control group at Time 3 after they attended the training. This study represented one of the few randomized controlled trials of TIK conducted in a non-Western sample. Our results corroborated the findings of prior studies of TIK and provided preliminary support for its effectiveness across different cultural contexts.

Keywords: *Tuning in to Kids*[®]; emotion coaching; parenting; intervention; preschoolers

Tuning in to Kids[®]: A Randomized Controlled Trial of an Emotion Coaching Parenting Program for Chinese Parents in Hong Kong

Introduction

Children's emotional development is strongly influenced by the family environment (Denham et al., 2000; Meyer et al., 2014; Morris et al., 2007, 2017; Stack et al., 2010). Parents can affect children's emotion socialization—i.e., how children learn to understand, express, and self-regulate emotions—through parents' own emotion display and regulation, their emotion-related parenting practices, and the emotional climate of the family reflected in the quality of familial relationship (Eisenberg et al., 1998; Morris et al., 2007, 2017).

Emotion-related parenting practices refer to parenting behaviors specifically related to emotion and emotion management, which include parents' reactions to their children's emotions and parents' discussion and coaching of children's emotional responses (Morris et al., 2007). Despite ample research evidence showing the positive linkages between emotion-related parenting practices and children's developmental outcomes (England-Mason & Gonzalez, 2020; Johnston et al., 2018), few parenting programs apply these theories. *Tuning in to Kids*[®] (TIK; Havighurst et al., 2009) is one of the few that focuses on emotion-related parenting skills. Several studies have supported the effectiveness of the TIK program in enhancing the emotion coaching skills of parents and the emotional competence in children (Havighurst et al., 2010, 2013; Lauw et al., 2014; Wilson et al., 2012). Nonetheless, most prior studies on TIK were conducted in Australia, and the validity of the results in other countries and cultural contexts awaits further investigation. The current study examined the intervention effectiveness of TIK for Chinese parents and their preschoolers in Hong Kong.

Cultural Differences in Emotion Socialization

Culture influences how emotional competence is defined, and the orientation adopted by parents in emotion socialization (Friedlmeier et al., 2011; Raval & Walker, 2019). In many Asian societies, social harmony and group interests are prioritized in the cultural norms (Trommsdorff et al., 2012). The expression of "ego-focused" emotions (e.g., anger, pride, and disgust) in these cultures is considered as disruptive to interpersonal relations and not readily tolerated (Raval et al., 2014, 2016; Wang, 2003). Parents in these cultures often emphasize the importance of interpersonal sensitivity in their emotion socialization practices, teach children emotion display rules, and try to cultivate in their children the expression of "other-focused" emotions such as sympathy and shame (Chan et al., 2009). This type of emotional competence that promotes interpersonal harmony is termed relational emotional competence (Friedlmeier et al., 2011). By contrast, individualistic emotional competence encourages open expression of "ego-focused" emotions, as this is perceived to be an assertion of self in Western cultures where children's autonomy and independence are valued (Greenfield et al., 2003; Parker et al., 2012). Hence, dismissing children's emotions by ignoring, minimizing, criticizing, or punishing negative emotion expressions is viewed as impeding emotional competence based on the Western standards (Gottman et al., 1997).

Chan et al. (2009) showed that Hong Kong Chinese mothers of 6- to 8-year-olds regarded relational emotional competence as a more important parental goal than individualistic emotional competence. Their results indicated that mothers who endorsed individualistic emotional competence as parental goals adopted an emotionencouraging approach in their parenting practices, while those who endorsed relational emotional competence goals responded to children's emotion expression in a dismissing way (Chan et al., 2009). The latter focused on demanding their children to display the "proper" emotions instead of helping their children to acknowledge and regulate their own emotions (Chan et al., 2009).

Studies in both Western and non-Western cultures have shown that parental control over children's negative emotions along with power assertion, intrusiveness, and a lack of scaffolding increase the risk of externalizing and internalizing problems in children (Friedlmeier et al., 2011). Punitive responses to children's negative emotions in Chinese (Tao et al., 2010), Indian (Raval et al., 2014), and Turkish mothers (Corapci et al., 2010) were related to poor social outcomes in children. These findings are consistent with studies in the United States (e.g., Eisenberg et al., 1999), and suggest cross-cultural similarities in the relation between early emotion socialization practices and children's later developmental outcomes.

This highlights the importance of emotion-related parenting across cultures despite different construals of emotional competence. Asian parents may need explicit teaching on emotion-related parenting skills that may facilitate better emotional development in young children. As such, it is important to explore whether emotion coaching parenting program such as TIK is applicable and effective in non-Western communities.

Emotion-Related Parenting Interventions

Studies on emotion coaching as a parenting approach have emerged in recent decades (Gottman et al., 1997; Eisenberg et al., 1998; Morris et al., 2020). Parental emotion coaching is the process in which parents engage with children's emotions, handle them effectively, and teach children the ways to understand, express, and regulate emotions (Gottman et al., 1997). Gottman et al. (1997) proposed five steps for effective parental emotion coaching: 1) to be aware of children's emotions; 2) to see children's display of emotions as a moment for teaching and intimacy; 3) to assist children in labeling their emotions verbally; 4) to validate or empathize with children's emotions; and 5) to aid children in solving problems, including limit-setting when necessary.

Parental emotion coaching has been demonstrated to be effective in promoting children's emotion regulation and social skills, as well as reducing behavioral problems (Denham et al., 2000; Lagacé-Séguin & Coplan, 2005; Ramsden & Hubbard, 2002). In contrast to emotion coaching, other emotion-related parenting approaches such as emotion dismissing (i.e., to avoid or minimize children's emotions), emotion disapproving (i.e., to criticize children's emotion expression), and laissez-faire (i.e., to accept children's emotions without teaching them how to regulate emotions or solve problems) are all shown to be less optimal and associated with poorer child outcomes (Gottman & DeClaire, 1997; Gottman et al., 1997).

While the positive effects of emotion coaching are noted in a wide array of research studies, there is scant documentation of evidence-based emotion coaching parenting programs. *Tuning in to Kids* [®] (Havighurst et al., 2009) is one of the few parenting programs that has a main focus on emotion coaching. It embraces the five steps of effective emotion coaching (Gottman et al., 1997) and aims to enhance parents' emotional competence and well-being, improve their emotional responsiveness and coaching skills, as well as decrease children's behavioral problems (Havighurst et al., 2010, 2013, 2015; Wilson et al., 2012).

Studies have shown significant intervention effects of TIK among Australian parents, including those of preschoolers with developmental risks (Havighurst et al., 2009, 2010, 2013, 2019; Wilson et al., 2012, 2016). Very few published studies so far have reported intervention effectiveness of TIK in other populations beyond Australia (Edrissi et al., 2019; Otterpohl et al., 2020). Otterpohl et al. (2020) replicated the efficacy findings of Havighurst et al. (2010) in German families with preschool children, showing that the German-translated version of TIK was effective in reducing parents' non-supportive reactions towards children's emotions and increasing their emotion-encouraging behaviors. Edrissi et al. (2019) showed that the TIK program was effective in reducing anxiety in preschoolers in Iran. These studies provided preliminary evidence to support the effectiveness of TIK in different cultural contexts.

By contrast, a plethora of studies have examined the effectiveness of parenting interventions that involve parent management training. Parent management trainings typically focus on teaching parents about effective behavioral management strategies to induce changes in children's behaviors. Some examples of these interventions are Triple P (Sanders et al., 2000) and The Incredible Years (Webster-Stratton et al., 2008). These interventions have a strong evidence base and are widely adopted in many countries across the globe (Dretzke et al., 2009). Nevertheless, parent management trainings do not have a strong focus on the emotion components in parenting. In other words, parental emotional responses and children's emotional competence may not be adequately addressed in those trainings.

There is indeed evidence indicating that intervention effects are larger in parent trainings with emotion-related parenting components than those without. In a metaanalytic review of 77 published evaluations of parent training programs, Kaminski et al. (2008) showed that emotional communication—i.e., using relationship-building communication skills and helping children to identify and express emotions—had the largest effect size on parenting behaviors and skills among all other program components (e.g., positive reinforcement, time out, disciplinary communication, consistent responding, child development knowledge etc.), and this effect size was significantly larger than that of programs without emotional communication. Parenting interventions adopted by practitioners in Hong Kong are mostly based on parent management trainings (Au et al., 2014; Crisante & Ng, 2003; Kong & Au, 2018; Leung et al., 2003, 2006, 2013). Although the TIK parenting program was brought into Hong Kong by Havighurst (2016), no studies have been published so far examining its effectiveness among Hong Kong Chinese parents. Despite the absence of empirical support for its validity in the Chinese population, TIK has been regularly conducted by certified TIK facilitators in local organizations who have attended trainings offered by the developer of the program. As such, the validity of implementing TIK in the local context remains to be explored.

Effects of TIK on Parental Factors and Children's Emotion Regulation

The effects of parenting intervention on children are presumably mediated by the effects on the parents. While several studies on TIK have observed improvement in children's emotion regulation and alleviation of their behavioral problems after intervention, the possible mechanisms underlying these effects are not fully elucidated. Specifically, what are the parental constructs that may induce positive changes in children's emotion regulation?

According to Morris et al.'s (2007) tripartite model of familial influence, children's emotion regulation is affected by the family context through children's observation of parents' emotion regulation, emotion-related parenting practices, and the emotional climate of the family via parenting style and familial relationship. These three constructs are in turn affected by parental characteristics such as parents' own attachment styles and family history, their beliefs about emotions and emotional expression, and their levels of stress and social support (Morris et al., 2007; Saarni et al., 2007). Prior studies on TIK have consistently reported positive intervention effects on parents' emotion socialization skills (Havighurst et al., 2004, 2009, 2010, 2013, 2015, 2019; Wilson et al., 2012, 2016). By contrast, very few of them have examined training effects on other parental characteristics, such as parenting style, parental emotion regulation, and parental stress (Wilson et al., 2012). We posited that the effects of TIK on children's emotion regulation might plausibly be facilitated via 1) enhanced emotion-related parenting practices as well as general parenting behaviors, 2) more adaptive parental emotion regulation, and 3) reduced parental stress.

Firstly, we hypothesized that TIK should improve parenting practices in a more general context beyond dealing with children's negative emotions, likely by enhancing parent-child communication and relationship. Secondly, we argued that the emotion coaching skills should also increase parents' acceptance of their own emotions and enable them to regulate their own emotions more adaptively, possibly by changing their beliefs about emotions and emotional expression. According to Gross and John (2003), to regulate one's emotions by reframing an event so that it is no longer perceived negatively (i.e., cognitive reappraisal) is more adaptive than suppressing one's negative emotions (i.e., expressive suppression). Parents who attended TIK might show changes in their tendencies to adopt these two approaches in emotion regulation. We postulated that the intervention might enhance cognitive reappraisal and lower expressive suppression. Thirdly, we posited that TIK would reduce parental stress as parents might find parent-child interactions more enjoyable and less stressful due to better communication.

The Present Study

This study used a randomized controlled trial to examine the intervention effects of the TIK parenting program on Chinese parents of preschoolers in Hong Kong. We

10

recruited parents mainly from the low- to middle-income families in Hong Kong. Low socioeconomic status (SES) can be a risk factor that predicts problem behaviors in children (Arikan et al., 2019), the reason for which is partially attributed to SES-related differences in parent-child interaction (Hoff et la., 2002). For instance, low-SES mothers have consistently been found to be more controlling and disapproving than high-SES mothers (Hoff et al., 2002), and high parental control over children's emotional expression may in turn lead to more externalizing and internalizing problems in children (Friedlmeier et al., 2011). This study therefore investigated whether an emotion coaching parenting program could benefit parent-child interaction within families that might have heightened risk for parenting issues. Specifically, we examined 1) whether the TIK training could enhance parents' emotion-related parenting practices and general parenting behaviors, facilitate adaptive changes in parental emotion regulation, and lessen parenting stress; and 2) whether TIK could improve children's emotion regulation.

We used parent questionnaire to measure parents' perceptions of their own parenting and their children's behavior. We believed that changes in parents' perceptions towards their own emotion coaching skills might drive further behavioral changes in their parenting practices, and thus represented an important indicator of intervention effectiveness. This study would contribute to the existing literature on emotion coaching parenting interventions among non-Western parents.

Method

Participants and Procedures

Ethics approval for the study was obtained from the Human Research Ethics Committee at the University of Hong Kong (project title: "Evaluation of Caregivers' Emotion Coaching Parenting Intervention: Implications for the 'Tuning in to Kids' Program in Chinese Culture"; reference number: EA1809021). This study was not preregistered. 104 parents of preschool children (50 boys, 54 girls) aged 3 to 6 years (M= 4.13, SD = 1.00) were recruited from 5 preschools located in districts of low to middle class socioeconomic status in Hong Kong. Invitation letters, consent forms, and demographic questionnaires were delivered to the principals of the preschools and distributed to all parents. Interested parents returned their consent forms and demographic questionnaires in sealed envelopes to school staff. The 104 parents who consented to participate were primary caregivers (99 mothers, 5 fathers; M age in years = 37.92, SD = 6.24) and proficient in Cantonese Chinese. They reported on their own education level as well as that of their spouse. Less than half of the parents (45% of the fathers and 47% of the mothers) in the participating families had education beyond the secondary school level. About 75% of the families reported a monthly household income at or below the median household income in Hong Kong (Census and Statistics Department, 2020). Demographic information was presented in Table 1.

[INSERT TABLE 1 HERE]

Participating parents in each preschool were randomly assigned to either the experimental group (EX; n = 54) or the waitlist control group (WL; n = 50). Independent samples t tests and chi-squared tests of independence showed no significant differences in the demographic profile between the experimental and control groups (Table 1). Interventions were conducted by certified TIK trainers in the preschools or community centers located nearby to the participants during March to July 2019. Parents in the experimental group attended the 6-week intervention first, while the waitlist control group waited during the 6-week period. After the experimental group has completed the program, the waitlist control group attended the same 6-week

intervention. Throughout the process, 80.8% of participants (EX: n = 40; WL: n = 44) attended at least five out of the six training sessions.

Self-report questionnaires were administered to parents in the experimental group at baseline (Time 1), immediately after the 6-week intervention (Time 2), and 6 weeks post-intervention (Time 3). For the waitlist control group, questionnaires were administered at baseline (Time 1), after 6 weeks of waiting (Time 2), and immediately after the 6-week intervention (Time 3). The questionnaire return rate was 85.6% at Time 2 (EX: n = 42, WL: n = 47) and 81.7% at Time 3 (EX: n = 43, WL: n = 42). See Figure 1 for participant flow.

[INSERT FIGURE 1 HERE]

Intervention: Tuning in to Kids[®] Parenting Program

The TIK training was delivered in groups of 5 to 12 parents by certified TIK facilitators, two hours per week for 6 weeks. A total of three certified facilitators were involved and they were each assigned to deliver one to three groups of training in this study. All facilitators were counsellors or social workers with over 5 years of experience working with families. They obtained their TIK certification in 2017 and had been leading parent groups since then. They taught in Cantonese Chinese based on the Chinese manual originally translated by the research team of the developer of TIK (Havighurst & Harley, 2007, 2010).

The program encouraged parents to re-examine their own parenting beliefs and to develop supportive and emotionally responsive parenting skills. In Session 1, parents were introduced to the idea of emotion coaching and encouraged to explore ways to connect with their children around emotion. Sessions 2 and 3 focused on enhancing parents' awareness of and their capacity to empathize with their children's emotions, through labeling and tuning in to emotions. Experiential and role-play activities were used to help parents distinguish between emotion dismissing and emotion coaching responses and to apply skills to reflect on others' emotions. The importance of psychological self-care was introduced in Session 4, and parents reflected on the importance of tuning in to their own emotions and regulating them. They were led to reflect on how the experience in their family of origin affected their emotion-related beliefs and responses. They also learnt how to guide children in problem-solving and provide coaching when children displayed fear and worry. The last two sessions attended to the coaching of more intense emotions (e.g., anger) and emotion regulation strategies (e.g., safe anger expression, relaxation, slow breathing, and self-control using PATHS' turtle technique¹; Greenberg et al., 1995), as well as the need for limit-setting.

Hence, the five steps of emotion coaching (Gottman & DeClaire, 1997) were covered in the course. Didactic lessons, role-play activities, behavioral rehearsals, and group discussions were included in all sessions. Home activities such as practicing emotion coaching skills at home and using emotion diary to record coaching experience etc., were assigned at the end of each session, and reviewed at the beginning of the next session. In addition, guided relaxation exercises (e.g., breathing and muscle relaxation) were introduced as warm-up activities starting from the third session, to help parents build up emotional self-care skills.

Several adaptations were made to the original curriculum plan and course materials based on the facilitators' past experience in delivering the program in the local community. Firstly, the concept of meta-emotion was not introduced in the current

¹ PATHS' turtle technique is a 4-step technique for children to calm down in times of intense emotions. The 4 steps are: (1) Recognize the emotions, (2) Think "Stop", (3) Go into the "turtle shell" in the mind, take deep breaths and do calming self-talks, e.g. "I can calm down,"; and (4) Come out of the shell when calm and contemplate solutions to the problem.

implementation as this was deemed to be rather difficult for parents to grasp. Secondly, topics on handling conflict with children and providing emotion coaching during sibling fight were added to the curriculum by popular demand from previous attendees of the training. Lastly, some examples and wordings in the course materials that were not culturally familiar to Hong Kong parents were modified or replaced. Apart from these changes, the overall structure and components of each training session were maintained. Facilitators met weekly before each session to go through the course materials to ensure consistency among trainers and fidelity to the training content. At the end of each session, parents completed a fidelity checklist to indicate whether the prescribed contents and topics were covered in the session. Parents rated how much they agreed that the specific contents were delivered using a 4-point Likert scale (1-4). On average, 96% of the participants rated 3 or above for all items on the fidelity checklist across the training sessions (ranged from 91-100%), indicating high fidelity of the delivered training to the curriculum plan.

Measures

Parent Measures

Alabama Parenting Questionnaire-Preschool Revision (APQ-Pr; Clerkin et al., 2007). The APQ-Pr measured parents' general parenting practices. It comprised 24 items in 3 subscales: 1) *Positive Parenting* referred to parental involvement with and parental warmth displayed to the child (e.g. "You hug or kiss your child when he/she does something well"); 2) *Negative/Inconsistent Parenting* referred to the unpredictable change of parenting standards or behaviors (e.g. "The punishment you give your child depends on your mood"); 3) *Punitive Parenting* referred to the use of punishment (e.g. "You yell or scream at your child when he/she has done something wrong"). Parents rated how often they carried out the behaviors described in the items using a 5-point scale. Higher scores on the Positive Parenting subscale and lower scores on the Negative/Inconsistent Parenting and Punitive Parenting subscales indicated more adaptive parenting practices. Adequate internal and test-retest reliabilities were reported in prior studies (Clerkin et al., 2007; de la Osa et al., 2014). The Chinese version of APQ-Pr was adopted from Qiu and Shum (2021), who reported Cronbach's alphas ranging from .67 to .83 for the subscales based on a sample of Chinese mothers in Chengdu. In this study, the Cronbach's alpha coefficients obtained for the Positive Parenting, Negative/Inconsistent Parenting, and Punitive Parenting subscales were .87, .67, and .72 at Time 1; .89, .60, and .76 at Time 2; and .88, .66, and .69 at Time 3 respectively.

Coping with Children's Negative Emotions Scale (CCNES; Fabes et al., 1990, 2002). There were 12 hypothetical scenarios describing a child's expression of negative emotions. For each scenario, parents rated how likely they were to respond to the situation with each of the six prescribed reactions using a 7-point scale. The six options corresponded to the six subscales in the CCNES that assessed parents' reactions to their children's negative emotions: 1) *Expressive Encouragement* (i.e., parents encouraged their children to express their negative emotions; e.g., "I would tell him/her to make him/her feel better"); 3) *Problem-Focused Reactions* (i.e., parents helped their children to solve the distress-arousing problem; e.g., "I would help my child that he/she is being a baby about it"); 5) *Distress Reactions* (i.e., parents became distressed by their children's negative emotions; e.g., "I would

become angry and irritated with my child"); and 6) *Punitive Reactions* (i.e., parents punished their children to control their expression of negative emotions; e.g., "I would tell my child to calm down immediately or there will be consequences"). Higher scores on a subscale denoted stronger endorsement of that type of reactions to children's negative emotions. The scale was internally reliable with good test-retest reliability and construct validity (Fabes et al., 2002). Cronbach's alphas for the subscales at Times 1 to 3 showed acceptable to excellent internal reliability of the subscales for the current sample (Distress Reactions: .70, .70, .63; Punitive Reactions: .84, .85, .84; Expressive Encouragement: .90, .91, .92; Emotion-Focused Reactions: .84, .85, .89; Problem-Focused Reactions: .83, .83, .87; and Minimization Reactions: .80, .83, .85). These levels were comparable to those reported in other studies on Chinese populations (Han et al., 2015; Qiu & Shum, 2021).

Emotion Regulation Questionnaire (ERQ; Gross & John, 2003). This was a 10-item scale for measuring parents' two distinct emotion regulation strategies: 1) *Cognitive Reappraisal* (e.g., "When I want to feel more positive emotion, I change what I'm thinking about"); and 2) *Expressive Suppression* (e.g., "I keep my emotions to myself"). Parents rated on a 7-point scale the degree to which the item descriptions were applicable to themselves. Good construct validity was indicated by Gross and John (2003). The Chinese version of the ERQ was reported to have good criterion validity and acceptable to good internal reliability (.73 to .82) in Chinese adults (Wang et al., 2020). The Cronbach's alphas for the two subscales at Times 1 to 3 in this study showed acceptable to good internal consistency (Cognitive Reappraisal: .79, .70, .74; Expressive Suppression: .79, .85, .82).

Parenting Stress Index–Short Form (PSI–SF; Abidin, 1990; Lam, 1999). The PSI-SF assessed parents' perception of distress in taking care of their children. It was a

17

36-item questionnaire with three subscales: 1) *Parental Distress* (PD) measured how distressed the parents felt in the role of a parent (e.g., "I feel trapped by my responsibilities as a parent"); 2) *Parent-Child Dysfunctional Interaction* (PCDI) measured parents' dissatisfaction about the interactions with their children (e.g., "Sometimes I feel that my child doesn't like me and doesn't want to be close to me"); 3) *Difficult Child* (DC) measured parents' perception of their children as being easy or difficult to take care of (e.g., "My child seems to cry or fuss more often than most children"). Parents rated how much the item descriptions applied to their children and themselves using a 5-point scale. A higher score indicated higher level of parental stress. Good internal consistency and validity were reported in a prior study among Hong Kong parents (Lam, 1999). The internal consistencies for the subscales were good to excellent in this study at Times 1 to 3 (PD: .86, .86, .84; PCDI: .88, .84, .84; DC: .90, .89, .90).

Child Measure

Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997). The ERC evaluated preschoolers' abilities in managing emotional experience. There were 24 items on two subscales: 1) *Adaptive Emotion Regulation* referred to children's ability to transition well from one activity to another without becoming anxious, angry, distressed or overly excited (e.g., "The child can recover quickly from episodes of upset or distress [for example, does not pout or remain sullen, anxious or sad after distressing events]"); 2) *Lability/Negativity* referred to children's wide mood swings and unpredictable emotional states (e.g., "The child is prone to angry outbursts or tantrums easily"). Parents rated their children's emotion reactions and tendencies on a 4-point scale. Higher scores on Adaptive Emotion Regulation and lower scores on Lability/Negativity denoted better emotional competence in children. Previous studies using the Chinese translation of the ERC (Shields & Cicchetti, 1997) have shown acceptable to excellent internal reliabilities (.69 to .94; Han et al., 2015; Xu & Zhang, 2008). In this study, Cronbach's alphas for Adaptive Emotion Regulation and Lability/Negativity were .70 and .85 at Time 1, .67 and .85 at Time 2, and .74 and .83 at Time 3 respectively.

Statistical Analyses

Sample size was determined based on a priori power analysis using G*Power 3.1.9.4 for repeated measures analysis of variance (ANOVA) with two groups to detect small effects. Assuming an effect size of $\eta_p^2 = .02$ and a correlation of .50 between repeated measures, a total sample size of 82 with 41 participants per condition was required to achieve power of .80 at type I error of .05. Based on an anticipatory attrition rate of around 20%, we therefore recruited 104 participants to join this study.

Statistical analyses were completed using the IBM SPSS Statistics Version 23. The intention-to-treat approach was adopted to include all participants in the statistical analyses. Missing data were handled using the multiple imputation method (Royston, 2004). Twenty imputed datasets were generated based on the automatic imputation method on SPSS. Analyses run on each dataset were pooled according to Rubin's rules (2004). Demographic data and baseline variables of the experimental and waitlist control groups were compared using independent samples *t* tests and chi-squared tests of independence. Immediate intervention effects at Time 2 were examined using 2X2 ANOVAs, with time and experimental condition entered as the within- and betweensubject factors respectively. Repeated-measures ANOVAs were performed separately on the experimental and control groups to investigate the effects of time across Time 1 to Time 3. Statistical significance was defined as p < .05. To correct for multiple comparisons, the false discovery rate approach (FDR) was employed (Benjamini & Hochberg, 1995), and the adjusted *p*-values were calculated based on the following formula: adjusted $p_i = p_i N/i$ where p_i was the *i*th smallest *p*-value out of N total *p*-values included. Hence the adjusted *p*-value represented the expected number of false positives based on the *p*-value, divided by the number of positives accepted at that same *p*-value. While a *p*-value of .05 implied that 5% of all tests would result in false positives, an FDR adjusted *p*-value of .05 suggested that 5% of the significant tests would result in false positives. Post hoc power analysis was conducted using G*Power 3.1.9.4, and the post hoc power for repeated measures ANOVA based on the current sample size, a small effect size of $\eta_p^2 = .02$, and $\alpha = .05$ was calculated to be .90.

Results

Baseline Comparisons

Baseline comparisons of outcome variables at Time 1 showed no significant differences between the experimental and control groups in all measures, except for the PCDI subscale on the PSI-SF (Table 2). The experimental group scored higher than the controls on the PCDI subscale at Time 1.

[INSERT TABLE 2 HERE]

Immediate Intervention Effects

All outcome variables were analyzed using 2X2 ANOVAs. In each analysis, time (Time 1 vs Time 2) was entered as the within-subject factor and training condition (experimental vs control) was the between-subject factor (Table 2). Interaction effects between time and training condition were significant for the Punitive Parenting subscale of the APQ-Pr (F[1,102] = 8.49, p = .004, adjusted p = .06, $y_p^2 = .08$) and the Difficult Child subscale of the PSI-SF (F[1,102] = 3.38, p = .05, adjusted p = .40, $y_p^2 = .03$) with small to medium effect sizes (i.e., $y_p^2 > .06$ for medium effects; Cohen, 2013). However, these effects were no longer significant at the adjusted p-value of .05 after controlling for multiple comparisons using the FDR approach. No significant interaction effects were observed for the parent measures on coping with children's negative emotions, parents' emotion regulation strategies, and child's emotion regulation between the two groups at Time 1 and Time 2 (Table 2). Post hoc pairwise comparisons of the measures at Time 1 and Time 2 indicated that parents in the TIK group reported significantly reduced use of punitive parenting and lower parenting stress related to their perception of their children as being difficult immediately after training at Time 2; but these changes were not significant for the waitlist control group (Table 3).

[INSERT TABLE 3 HERE]

Maintenance Effects and Delayed Intervention Effects in the Experimental Group

Repeated-measures ANOVAs were performed on the experimental group to examine maintenance effects and delayed intervention effects across Time 1 to Time 3. Time was entered as the within-subject variable (Times 1 to 3). The main effects of time and post hoc pairwise comparisons of the mean scores at Times 1 to 3 (i.e., Time 1 vs Time 2; Time 2 vs Time 3; Time 1 vs Time 3) were presented in Table 4. Bonferroni correction was applied to the pairwise comparisons by multiplying the *p*-values by 3. Increases over time were indicated by positive mean differences between time points.

Main effects of time were observed for punitive parenting, expressive encouragement, parenting stress due to difficult child, and children's emotion lability/negativity, albeit only the former two remained significant after FDR adjustment. Post hoc pairwise comparisons showed that punitive parenting and parenting stress due to difficult child were significantly lower at Time 3 than at Time 1, and no significant differences were noted between the scores at Time 2 and Time 3. The results suggested that reduction in punitive parenting and parenting stress observed in the experimental group at immediate posttest were maintained for at least 6 weeks post intervention.

Delayed effects were identified in expressive encouragement on the CCNES, as well as children's lability/negativity on the ERC at the 6-week post-intervention followup. The Time 3 scores of these measures were significantly improved when compared to their Time 1 and Time 2 scores, although no significant differences were noted between their scores at Time 1 and Time 2. In other words, significant improvement on these outcomes was observed at the 6-week follow-up but not immediately after the intervention.

[INSERT TABLE 4 HERE]

Replication of the Intervention Effects in the Waitlist Control Group

Analogous repeated-measures ANOVAs were conducted on the waitlist control group to examine the main effects of time across Times 1 to 3 (Table 5). Mean differences between Time 1 and Time 2 (i.e., the beginning and end of the waiting period) were not significant for any of the measures. Comparable to the training effects observed in the experimental group, both punitive parenting and parenting stress due to difficult child were found to decrease significantly in the waitlist control group immediately after intervention at Time 3. In addition, parents' use of expressive encouragement was also significantly increased at Time 3 relative to Time 2. Hence, the immediate intervention effects of TIK in the experimental group were replicated in the waitlist control group.

[INSERT TABLE 5 HERE]

Discussion

This study explored the intervention effects of the *Tuning in to Kids*[®] parenting program in a sample of Hong Kong Chinese parents. The TIK program focused on

emotion coaching and was thus distinctly different from the parent management trainings typically adopted by practitioners in Hong Kong, which placed a strong emphasis on teaching parents about behavioral modification techniques. By contrast, TIK aimed at enhancing parents' emotional responsiveness towards their children. The current study was one of the very few randomized controlled trials of the TIK program conducted in a non-Western population sample. It was also probably one of the earliest research studies that provided evidence for the effectiveness of an emotion coaching parenting program among parents in a Chinese cultural context.

Prior studies on TIK have mostly reported training benefits on parents' emotion socialization skills, but seldom examined the effects of TIK on general parenting practices and parenting stress. Our results provided preliminary evidence to support the efficacy of the TIK intervention in reducing negative parenting among Hong Kong Chinese parents. In particular, the use of punitive parenting practices was significantly reduced in both the experimental and waitlist control groups immediately after the TIK training, and the effect was maintained for at least one and a half months after completion of the intervention in the experimental group. These results were comparable with the findings of Wilson et al. (2012)-the only study on TIK that included general parenting practices as outcome measures—who reported improvement in positive parental involvement in Australian parents 7 months after training. Our findings also provided evidence for the program's more general effects on parenting. However, unlike Wilson et al. (2012), we did not observe improvement in positive parenting immediately after training or at the 6-week follow-up. Our results suggested that heightening parents' awareness of the importance of emotional responsiveness in parenting might have produced a more immediate effect on reducing their use of punishment in their interactions with their children. On one hand, the lack of significant changes in positive parental involvement might imply that more time would be needed for such changes to take place. On the other hand, it was also plausible that six sessions of emotion coaching parenting might not be sufficient to promote higher parental warmth and positive involvement among Chinese parents from low- to middle-SES families in Hong Kong.

Interestingly, parents' emotion coaching skills were reported to be significantly improved only at the follow-up assessment six weeks after the training, but not indicated immediately at the completion of the intervention for the experimental group. Our results were dissimilar to the earlier findings of TIK conducted in Australia, which typically showed enhanced emotion coaching in parents at immediate post-intervention (Havighurst et al., 2009, 2010, 2013). Instead, we found significant delayed increments in parents' use of expressive encouragement in response to their children's negative emotions. Our findings suggested that it might take longer time—6 weeks post intervention in the current study—than what was previously observed in prior studies for the intervention effects to be realized in Chinese parents' coping of children's negative emotions.

For one thing, the concepts of emotion coaching could be rather novel to Chinese parents who might be more familiar with the behavioral management approach in parenting (Kong & Au, 2018). Chinese parents, as well as other Asian parents (e.g., Korean, Japanese, and Singaporean) usually place a strong emphasis on cultivating their children's cognitive and academic development (Huang, & Gove, 2015; Shek & Chan, 1999). The development of emotional competence in children is typically ranked lower in priority compared with cognitive development among the parenting goals of Asian parents (Chan, 2012; Shek & Chan, 1999). In addition, traditional Chinese parenting is often characterized by high parental control, sometimes achieved through the use of emotionally abusive means, such as love withdrawal, shaming, inducing guilt and anxiety, displaying disappointment, and interfering with children's psychological selfexpression etc. (Barber, 1996; Barber & Harmon, 2002; Chan et al., 2009; Fung, 1999; Shek, 2006; Wu et al., 2002). Taken together, emotion coaching is a relatively unfamiliar concept to a lot of Chinese parents.

Indeed, Chan et al. (2009) found that when Chinese mothers in Hong Kong were introduced to the concept of emotional competence, they accented on teaching their children the rules about emotion display rather than on helping their children to develop emotion understanding. They also revealed a low tendency to embrace emotion coaching in their parenting, which was associated with their strong endorsement of relational emotional competence as a parental goal in emotion socialization (Chan et al., 2009). Leung et al. (2020) also failed to observe any improvements in emotion socialization skills among Chinese parents in Macau after they received an intervention involving emotion coaching. These results suggested that Chinese parents in general might not be as ready to embrace emotion coaching in their parenting as their counterparts in other Western cultures. We speculated that this readiness to adopt emotion-supportive strategies might be even lower among less educated parents from low-SES families, who were shown to be more controlling and disapproving than parents of high-SES (Hoff et al., 2002).

As such, it was possible that the Chinese parents in this study needed more time to understand and assimilate the concepts of emotion coaching in their own parenting practices. Havighurst and colleagues (2009) postulated that the internal changes in emotional competence and the generalization of emotion-related parenting skills would take time to occur. As a matter of fact, parental feedback on the program indicated that local Chinese parents typically found the training useful in enhancing their awareness

25

and acceptance of their children's emotions and their own, while many suggested that the number of sessions as well as the time dedicated to discussing practical examples should be increased. Hence, one major adaptation of the TIK intervention for Chinese parents, and probably for Asian parents as well, may perhaps be increasing the number of intervention sessions to include more illustrations and practices of emotion coaching. Alternatively, booster sessions may be added after the 6-week training to fortify the newly acquired skills (Havighurst et al., 2010). These adaptations may likely improve the effectiveness of the TIK program in enhancing emotion-related parenting skills among parents in Asian cultures.

Besides emotion-related parenting practices and general parenting behaviors, we also examined the effects of TIK on parental emotion regulation and parenting stress. We posited that the training might facilitate adaptive changes in parental emotion regulation and lessen parenting stress. These hypotheses were partially supported. For parental emotion regulation, we did not observe significant intervention effects in either the experimental or the waitlist control group. By contrast, there was evidence to support treatment effectiveness for parenting stress. Our results showed that parents in both the experimental and control groups perceived their child to be less difficult after the 6-week training, as indicated by the significantly lowered scores on the Difficult Child subscale of the Parenting Stress Index.

We hypothesized that the alleviation of stress might perhaps be associated with the psychological self-care components incorporated in the TIK program. Starting from the third training session onwards, parents were guided to practise relaxation activities in class, including breathing and muscle relaxation exercises. They were also taught to be aware of their own physiological and psychological conditions and to be kind and compassionate towards themselves. Studies have shown the promising effects of

26

psychological self-care in reducing parenting stress (Bögels et al., 2014; Gouveia et al., 2016). Hence, this might be a plausible explanation for the sustained reduction in parenting stress observed upon completion of the training and at the follow-up. Furthermore, the fact that parents showed less tendency to apply punitive parenting at posttest could also reflect less tension in the parent-child relationship, probably due to enhanced acceptance of children's negative emotions. These factors might likely contribute to a decrease in parenting stress.

Lastly, we also explored whether changes occurred in the children's emotional competence following parents' participation in TIK. A significant effect on children's emotion regulation was not observed immediately after training. Nonetheless, a delayed but significant decrease in children's lability/negativity was indicated at the 6-week follow-up. This delayed effect on the preschoolers was conceivable in view of the delayed changes in emotion-related parenting skills after intervention. Theories of emotion socialization posit that parents influence children's emotional competence through modelling, coaching, and responding appropriately to children's emotions (Denham et al., 1997; Eisenberg et al., 1998; Gottman & DeClaire, 1997; Morris et al., 2007). Since the Chinese parents in this study required additional time beyond the intervention period to adopt the newly acquired emotion-related parenting skills, it was not surprising that the corresponding changes in their children's emotional competence were observable only at a later time point.

Limitations and Implications

One of the major limitations of this study pertained to the fact that all data were derived from parents' report. Although it could offer information on the parents' own internal processes, such as their cognitions in response to children's negative emotions, self-report was subject to expectancy bias. The validity of the results could be strengthened by including third parties as informants, e.g., the other parent who was not participating in the training, or teachers of the child. This way, results on children's emotional functioning and parents' employment of parenting practices could be validated across informants. For instance, past studies have shown significant improvement in children's social competence (Wilson et al., 2012) and reduction in child behavioral problems based on both teacher- and parent-reports (Havighurst et al., 2010). Moreover, direct observational assessment (e.g., observation based on the Parent-Child Interaction System [PARCHISY]; Deater-Deckard et al., 1997; Deater-Deckard, 2000), could be incorporated to examine parents' application of emotion coaching skills in daily naturalistic parent-child interactions. By observing a structured parent-child story-telling task, Havighurst et al. (2010) found increased use of emotion labels by the parents and more engagement in emotion exploration between the parents and their children at the 6-month follow-up. This supplemented the parents' report in the evaluation of intervention impact. That said, we believed that measuring parents' perceptions of their own parenting and their children's behavior were still informative, as they provided initial evidence for the impact of the program. Changes in parents' perceptions towards their own emotion coaching skills might drive further behavioral changes in their parenting practices.

We were mindful that the two groups of parents in the random assignment were not equivalent in their parenting stress at baseline. Specifically, the participants in the experimental group reported higher stress due to dysfunctional parent-child interaction than the control group prior to the intervention. There were uncertainties regarding whether baseline differences in parenting stress might have affected the results of the study. For one thing, the attrition rate was apparently higher in the experimental group (20%) when compared to the control group (16%). As such, the findings here should be interpreted with caution even though the results of the intervention effects found in the two groups were largely consistent.

It should also be noted that while the unadjusted *p*-values for the interaction effects between training condition and time were significant for punitive parenting and parenting stress, these effects were no longer revealed to be significant after controlling for multiple comparisons using the FDR approach. The calculation of the adjusted *p*values based on FDR was dependent on the total number of *p*-values included. Limiting the number of treatment outcomes to be measured might likely result in different adjusted *p*-values obtained. Future studies may perhaps focus on fewer parent and child outcomes that have stronger empirical support from prior research. Nevertheless, our results showed some evidence to support the effectiveness of TIK among Chinese parents, but also suggested that the data were not as strong as those obtained in previous studies of TIK in other cultures (Havighurst et al., 2009, 2010, 2013, 2019; Otterpohl et al., 2020; Wilson et al., 2012, 2016).

In this study, the delivery of training was based on the original Chinese manual translated in Australia by the developer of TIK (Havighurst & Harley, 2007, 2010). Several adaptations were made to this version of the manual, including changing some of the terminologies and examples which were deemed to be somewhat foreign to Hong Kong parents. Apart from these minor modifications, the structure and content of the intervention mostly followed the original Chinese translated manual. Future studies may consider making more cultural adaptations to the TIK program to further augment its effectiveness among parents in different cultural contexts. For instance, more role-play activities and practice opportunities can be incorporated in the training for Chinese parents who are less adept at emotion coaching to facilitate skill development.

29

Lastly, it should be noted that some studies on TIK have included longer followup periods than the current study (e.g., 3-month follow-up in Havighurst et al., 2004; 6month follow-up in Havighurst et al., 2013). It remained unresolved whether the less prominent intervention effects obtained here relative to prior research were related to a paucity of intervention robustness for this population sample, or a lack of sufficient waiting time for behavioral and cognitive changes to occur. Future research may consider increasing the dosage of treatment by adding more training sessions or incorporating booster sessions, and lengthening the follow-up periods to allow more time for Chinese parents to internalize the emotion coaching concepts and parenting skills.

Conclusion

The current study added to the scant repertoire of research on emotion coaching parenting interventions among non-Western parents, and represented probably one of the few randomized controlled trials of the *Tuning in to Kids*[®] program conducted in Asian countries. This study demonstrated the efficacy of TIK in promoting more adaptive parental coping of children's emotions, reducing punitive parenting practices, and alleviating parenting stress among Hong Kong Chinese parents. Based on Morris et al.'s (2007) tripartite model of familial influence, these parental factors might affect children's emotion regulation both directly and indirectly. Indeed, we also observed a delayed significant decrease in children's emotional lability and negativity. These results corroborated the findings of prior studies of TIK and provided preliminary support for its effectiveness across different cultural contexts. Nonetheless, cultural adaptations of TIK might be needed and these should warrant further investigation in future studies.

References

Abidin, R. R. (1990). Parenting stress index-short form. Pediatric Psychology Press.

- Arikan, G., Kumru, A., Korkut, B., & Ilhan, A. O. (2019). Examining toddlers' problem behaviors: The role of SES, parenting stress, perceived support and negative intentionality. *Journal of Child and Family Studies*, 28(12), 3467-3478. https://doi.org/10.1007/s10826-019-01529-y
- Au, A., Lau, K. M., Wong, A. H. C., Lam, C., Leung, C., Lau, J., & Lee, Y. K. (2014). The efficacy of a Group Triple P (Positive Parenting Program) for Chinese parents with a child diagnosed with ADHD in Hong Kong: A pilot randomized controlled study. *Australian Psychologist*, 49(3), 151-162. https://doi.org/10.1111/ap.12053
- Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, 67(6), 3296-3319. https://doi.org/10.1111/j.1467-8624.1996.tb01915.x
- Barber, B. K., & Harmon, E. L. (2002). Violating the self: Parental psychological control of children and adolescents. In B. K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents* (pp. 15–52). American Psychological Association.

https://psycnet.apa.org/doi/10.1037/10422-002

- Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society. Series B (Methodological)*, 289–300. https://doi.org/10.1111/j.2517-6161.1995.tb02031.x
- Bögels, S. M., Hellemans, J., van Deursen, S., Römer, M., & van der Meulen, R. (2014). Mindful parenting in mental health care: effects on parental and child psychopathology, parental stress, parenting, coparenting, and marital

functioning. *Mindfulness*, 5(5), 536-551. https://doi.org/10.1007/s12671-013-0209-7

Census and Statistics Department. (2020). *Table E034: Median monthly domestic household income of economically active households by household size*. Census and Statistics Department, The Government of the Hong Kong Special Administrative Region.

https://www.censtatd.gov.hk/hkstat/sub/sp150.jsp?productCode=D5250038

- Chan, S. M. (2012). Links between Chinese mothers' parental beliefs and responses to children's expression of negative emotions. *Early Child Development and Care*, 182(6), 723-739. https://doi.org/10.1080/03004430.2011.578742
- Chan, S. M., Bowes, J., & Wyver, S. (2009). Parenting style as a context for emotion socialization. *Early Education and Development*, 20(4), 631-656. https://doi.org/10.1080/10409280802541973
- Clerkin, S. M., Halperin, J. M., Marks, D. J., & Policaro, K. L. (2007). Psychometric properties of the Alabama Parenting Questionnaire - Preschool Revision. *Journal of Clinical Child and Adolescent Psychology*, 36(1), 19-28. https://doi.org/10.1080/15374410709336565
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Academic Press.
- Corapci, F., Yagmurlu, B., & Aksan, N. (2010, April). Emotion Socialization Patterns of Turkish Mothers [Conference session]. The 16th National Psychology Congress, Mersin, Turkey.
- Crisante, L., & Ng, S. (2003). Implementation and process issues in using Group Triple P with Chinese parents: Preliminary findings. *Australian e-Journal for the*

Advancement of Mental Health, 2(3), 226-235.

https://doi.org/10.5172/jamh.2.3.226

- de la Osa, N., Granero, R., Penelo, E., Domènech, J. M., & Ezpeleta, L. (2014).
 Psychometric properties of the Alabama Parenting Questionnaire Preschool
 Revision (APQ-Pr) in 3-year-old Spanish preschoolers. *Journal of Child and Family Studies, 23*(5), 776-784. https://doi.org/10.1007/s10826-013-9730-5
- Deater-Deckard, K., Pylas, M. V., & Petrill, S. A. (1997). *The parent-child interaction system (PARCHISY)*. Institute of Psychiatry.
- Deater-Deckard, K. (2000). Parenting and child behavioral adjustment in early childhood: A quantitative genetic approach to studying family processes. *Child Development*, *71*(2), 468-484. https://doi.org/10.1111/1467-8624.00158
- Denham, S. A., Mitchell-Copeland, J., Strandberg, K., Auerbach, S., & Blair, K. (1997).
 Parental contributions to preschoolers' emotional competence: Direct and indirect effects. *Motivation and Emotion, 21*(1), 65-86.
 https://doi.org/10.1023/A:1024426431247
- Denham, S. A., Workman, E., Cole, P. M., Weissbrod, C., Kendziora, K. T., & Zahn–Waxler, C. (2000). Prediction of externalizing behavior problems from early to middle childhood: The role of parental socialization and emotion expression. *Development and Psychopathology, 12*(1), 23-45. https://doi.org/10.1017/s0954579400001024
- Dretzke, J., Davenport, C., Frew, E., Barlow, J., Stewart-Brown, S., Bayliss, S., Taylor,
 R. S., Sandercock, J. & Hyde, C. (2009). The clinical effectiveness of different parenting programmes for children with conduct problems: a systematic review of randomised controlled trials. *Child and Adolescent Psychiatry and Mental Health*, *3*(1), 7. https://doi.org/10.1186/1753-2000-3-7

- Edrissi, F., Havighurst, S. S., Aghebati, A., Habibi, M., & Arani, A. M. (2019). A pilot study of the Tuning in to Kids parenting program in Iran for reducing preschool children's anxiety. *Journal of Child and Family Studies, 28*(6), 1695-1702. https://doi.org/10.1007/s10826-019-01400-0
- Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry*, 9(4), 241-273. https://doi.org/10.1207/s15327965pli0904 1
- Eisenberg, N., Fabes, R. A., Shepard, S. A., Guthrie, I. K., Murphy, B. C., & Reiser, M. (1999). Parental reactions to children's negative emotions: Longitudinal relations to quality of children's social functioning. *Child Development*, 70(2), 513-534. https://doi.org/10.1111/1467-8624.00037
- England-Mason, G., & Gonzalez, A. (2020). Intervening to shape children's emotion regulation: A review of emotion socialization parenting programs for young children. *Emotion*, 20(1), 98–104. https://doi.org/10.1037/emo0000638
- Fabes, R. A., Eisenberg, N., & Bernzweig, J. (1990). Coping with Children's Negative Emotions Scale (CCNES): Description and scoring. Arizona State University.
- Fabes, R. A., Poulin, R. E., Eisenberg, N., & Madden-Derdich, D. A. (2002). The Coping with Children's Negative Emotions Scale (CCNES): Psychometric properties and relations with children's emotional competence. *Marriage & Family Review*, 34(3-4), 285–310.

https://psycnet.apa.org/doi/10.1300/J002v34n03_05

Friedlmeier, W., Corapci, F., & Cole, P. M. (2011). Emotion socialization in cross cultural perspective. *Social and Personality Psychology Compass*, 5(7), 410-427. https://psycnet.apa.org/doi/10.1111/j.1751-9004.2011.00362.x Fung, H. (1999). Becoming a moral child: The socialization of shame among young Chinese children. *Ethos*, 27(2), 180-209. https://doi.org/10.1525/eth.1999.27.2.180

- Gottman, J. M., & DeClaire, J. (1997). *The heart of parenting: How to raise an emotionally intelligent child.* Simon & Schuster.
- Gottman, J. M., Katz, L. F., & Hooven, C. (1997). *Meta-emotion: How families communicate emotionally*. Lawrence Erlbaum Associates, Inc.
- Gouveia, M., Carona, C., Canavarro, M., & Moreira, H. (2016). Self-compassion and dispositional mindfulness are associated with parenting styles and parenting stress: The mediating role of mindful parenting. *Mindfulness*, 7(3), 700-712. https://doi.org/10.1007/s12671-016-0507-y
- Greenberg, M. T., Kusche, C. A., Cook, E. T., & Quamma, J. P. (1995). Promoting emotional competence in school-aged children: The effects of the PATHS curriculum. *Development and Psychopathology*, 7(1), 117-136. https://doi.org/10.1017/S0954579400006374
- Greenfield, P. M., Keller, H., Fuligni, A., & Maynard, A. (2003). Cultural pathways through universal development. *Annual Review of Psychology*, 54(1), 461-490. https://www.annualreviews.org/doi/abs/10.1146/annurev.psych.54.101601.1452
 21
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, *85*(2), 348-362.
 https://psycnet.apa.org/doi/10.1037/0022-3514.85.2.348
- Han, Z. R., Qian, J., Gao, M., & Dong, J. (2015). Emotion socialization mechanisms linking Chinese fathers', mothers', and children's emotion regulation: A

35

moderated mediation model. *Journal of Child and family Studies*, 24(12), 3570-3579. https://doi.org/10.1007/s10826-015-0158-y

- Havighurst, S. S. (2016, October). *Tuning in to Kids: An emotion coaching parenting program.* Paper presented at the Parenting in the 21st Century, Hong Kong.
- Havighurst, S. S., & Harley, A. E. (2007; 2010). *Tuning in to Kids: Emotionally intelligent parenting program manual*. The University of Melbourne.
- Havighurst, S. S., Harley, A. E., & Prior, M. R. (2004). Building preschool children's emotional competence: A parenting program. *Early Education & Development*, 15(4), 423-448. https://doi.org/10.1207/s15566935eed1504_5
- Havighurst, S. S., Kehoe, C. E., Harley, A. E., & Wilson, K. R. (2015). Tuning in to Kids: An emotion-focused parenting intervention for children with disruptive behaviour problems. In *Child and Adolescent Mental Health*. Association for Child and Adolescent Mental Health.
- Havighurst, S. S., Wilson, K. R., Harley, A. E., & Kehoe, C. E. (2019). Dads Tuning in to Kids: A randomized controlled trial of an emotion socialization parenting program for fathers. *Social Development, 28*(4), 979-997.
 https://doi.org/10.1111/sode.12375
- Havighurst, S. S., Wilson, K. R., Harley, A. E., Kehoe, C. E., Efron, D., & Prior, M. R.
 (2013). "Tuning into Kids": Reducing young children's behavior problems using an emotion coaching parenting program. *Child Psychiatry & Human Development, 44*(2), 247-264. https://doi.org/10.1007/s10578-012-0322-1
- Havighurst, S. S., Wilson, K. R., Harley, A. E., & Prior, M. R. (2009). Tuning in to kids:
 An emotion-focused parenting program initial findings from a community trial. *Journal of Community Psychology*, 37(8), 1008-1023.
 https://doi.org/10.1002/jcop.20345

Havighurst, S. S., Wilson, K. R., Harley, A. E., Prior, M. R., & Kehoe, C. E. (2010).
Tuning in to kids: Improving emotion socialization practices in parents of preschool children–findings from a community trial. *Journal of Child Psychology and Psychiatry*, *51*(12), 1342-1350. https://doi.org/10.1111/j.1469-7610.2010.02303.x

Hoff, E., Laursen, B., Tardif, T., & Bornstein, M. (2002). Socioeconomic status and parenting. *Handbook of parenting Volume 2: Biology and ecology of parenting*, 8(2), 231-52.

- Huang, G. H. C., & Gove, M. (2015). Asian parenting styles and academic achievement:
 Views from eastern and western perspectives. *Education*, *135*(3), 389-397.
 https://www.ingentaconnect.com/content/prin/ed/2015/00000135/00000003/art0
 0016
- Johnston, C., Park, J. L., & Miller, N. V. (2018). Parental Cognitions: Relations to Parenting and Child Behavior. In M. R. Sanders & A. Morawska (Eds.), *Handbook of Parenting and Child Development Across the Lifespan* (pp. 395-414). Springer International Publishing. https://doi.org/10.1007/978-3-319-94598-9_17
- Kaminski, J. W., Valle, L. A., Filene, J. H., & Boyle, C. L. (2008). A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology*, 36(4), 567-589. https://doi.org/10.1007/s10802-007-9201-9
- Kong, M. M.-y., & Au, T. K.-f. (2018). The Incredible Years parent program for Chinese preschoolers with developmental disabilities. *Early Education and Development*, 29(4), 494-514. https://doi.org/10.1080/10409289.2018.1461987

- Lagacé-Séguin, D. G., & Coplan, R. J. (2005). Maternal emotional styles and child social adjustment: Assessment, correlates, outcomes and goodness of fit in early childhood. *Social Development*, 14(4), 613-636. https://doi.org/10.1111/j.1467-9507.2005.00320.x
- Lam, D. O. B. (1999). Parenting stress and anger: The Hong Kong experience. *Child & Family Social Work*, 4(4), 337-346.
- Lauw, M. S., Havighurst, S. S., Wilson, K. R., Harley, A. E., & Northam, E. A. (2014).
 Improving parenting of toddlers' emotions using an emotion coaching parenting program: a pilot study of Tuning in to Toddlers. *Journal of Community Psychology*, 42(2), 169-175. https://doi.org/10.1002/jcop.21602
- Leung, C., Chan, S., Ip, H., Szeto, H., Lee, M., Chan, K., & Chan, M. (2020).
 Effectiveness of parenting program for Macau shift work parents: Randomized controlled trial. *Research on Social Work Practice*, *30*(6), 612-622.
 https://doi.org/10.1177%2F1049731520903429
- Leung, C., Fan, A., & Sanders, M. R. (2013). The effectiveness of a Group Triple P with Chinese parents who have a child with developmental disabilities: A randomized controlled trial. *Research in Developmental Disabilities*, 34(3), 976-984. https://doi.org/10.1016/j.ridd.2012.11.023
- Leung, C., Sanders, M., Ip, F., & Lau, J. (2006). Implementation of Triple P Positive Parenting Program in Hong Kong: Predictors of programme completion and clinical outcomes. *Journal of Children's Services*, 1(2), 4-17. https://doi.org/10.1108/17466660200600010
- Leung, C., Sanders, M. R., Leung, S., Mak, R., & Lau, J. (2003). An outcome evaluation of the implementation of the Triple P-Positive Parenting Program in

Hong Kong. *Family Process*, *42*(4), 531-544. https://doi.org/10.1111/j.1545-5300.2003.00531.x

- Meyer, S., Raikes, H. A., Virmani, E. A., Waters, S., & Thompson, R. A. (2014). Parent emotion representations and the socialization of emotion regulation in the family. *International Journal of Behavioral Development*, 38(2), 164-173. https://doi.org/10.1177%2F0165025413519014
- Morris, A. S., Criss, M. M., Silk, J. S., & Houltberg, B. J. (2017). The impact of parenting on emotion regulation during childhood and adolescence. *Child Development Perspectives*, 11(4), 233-238. https://doi.org/10.1111/cdep.12238
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development*, 16(2), 361-388. https://doi.org/10.1111/j.1467-9507.2007.00389.x
- Morris, A. S., Jespersen, J., Cosgrove, K. T., Ratliff, E. L., & Kerr, K. L. (2020). Parent education: What we know and moving forward for greatest impact. *Family Relations*, 69(3), 520-542. https://doi.org/10.1111/fare.12442
- Otterpohl, N., Buchenau, K., Havighurst, S., Stiensmeier-Pelster, J., & Kehoe, C. (2020). Tuning in to Kids: Ein Elterntraining zur Förderung der Emotionssozialisation im Vorschulalter. *Kindheit und Entwicklung, 29*(1), 52-60. https://doi.org/10.1026/0942-5403/a000300
- Parker, A. E., Halberstadt, A. G., Dunsmore, J. C., Townley, G., Bryant, A, Jr, Thompson, J. A., & Beale, K. S. (2012). "Emotions are a window into one's heart": A qualitative analysis of parental beliefs about children's emotions across three ethnic groups. *Monographs of the Society for Research in Child Development*, 77(3), 1–136. https://doi.org/10.1111/j.1540-5834.2012.00676.x

- Qiu, C., & Shum, K. K. M. (2021). Emotion coaching intervention for Chinese mothers of preschoolers: A randomized controlled trial. *Child Psychiatry & Human Development*. https://doi.org/10.1007/s10578-020-01101-6
- Ramsden, S. R., & Hubbard, J. A. (2002). Family expressiveness and parental emotion coaching: Their role in children's emotion regulation and aggression. *Journal of Abnormal Child Psychology*, 30(6), 657-667. https://doi.org/10.1023/A:1020819915881
- Raval, V. V., Daga, S. S., Raval, P. H., & Panchal, I. N. (2016). Asian Indian mothers' emotion socialization and child emotion expression as a function of situational context. *Journal of Child and Family Studies*, 25(9), 2853-2861. https://doi.org/10.1007/s10826-016-0451-4
- Raval, V. V., Raval, P. H., & Deo, N. (2014). Mothers' socialization goals, mothers' emotion socialization behaviors, child emotion regulation, and child socioemotional functioning in urban India. *The Journal of Early Adolescence*, 34(2), 229-250. https://doi.org/10.1177%2F0272431613485821
- Raval, V. V., & Walker, B. L. (2019). Unpacking 'culture': Caregiver socialization of emotion and child functioning in diverse families. *Developmental Review*, 51, 146-174. https://doi.org/10.1016/j.dr.2018.11.001
- Royston, P. (2004). Multiple imputation of missing values. *The Stata Journal*, 4(3), 227-241. https://doi.org/10.1177%2F1536867X0400400301
- Rubin, D. B. (2004). Multiple imputation for nonresponse in surveys (Vol. 81). JohnWiley & Sons.
- Saarni, C., Campos, J. J., Camras, L. A., & Witherington, D. (2007). Emotional development: Action, communication, and understanding. *Handbook of Child Psychology*, 3. https://doi.org/10.1002/9780470147658.chpsy0305

- Sanders, M. R., Markie-Dadds, C., Tully, L. A., & Bor, W. (2000). The Triple P-Positive Parenting Program: A comparison of enhanced, standard, and self-directed behavioral family intervention for parents of children with early onset conduct problems. *Journal of Consulting and Clinical Psychology*, 68(4), 624-640. https://psycnet.apa.org/buy/2000-05084-011
- Shek, D. T. (2006). Assessment of perceived parental psychological control in Chinese adolescents in Hong Kong. *Research on Social Work Practice*, 16(4), 382-391. https://doi.org/10.1177%2F1049731506286231
- Shek, D. T., & Chan, L. K. (1999). Hong Kong Chinese parents' perceptions of the ideal child. *The Journal of Psychology*, 133(3), 291-302. https://doi.org/10.1080/00223989909599742
- Shields, A., & Cicchetti, D. (1997). Emotion regulation among school-age children: The development and validation of a new criterion Q-sort scale. *Developmental Psychology*, 33(6), 906-916. https://psycnet.apa.org/doi/10.1037/0012-1649.33.6.906
- Stack, D. M., Serbin, L. A., Enns, L. N., Ruttle, P. L., & Barrieau, L. (2010). Parental effects on children's emotional development over time and across generations. *Infants & Young Children*, 23(1), 52-69. https://psycnet.apa.org/doi/10.1097/IYC.0b013e3181c97606
- Tao, A., Zhou, Q., & Wang, Y. (2010). Parental reactions to children's negative emotions: Prospective relations to Chinese children's psychological adjustment. *Journal of Family Psychology*, 24(2), 135-144.
 https://psycnet.apa.org/doi/10.1037/a0018974
- Trommsdorff, G., Cole, P. M., & Heikamp, T. (2012). Cultural variations in mothers' intuitive theories: a preliminary report on interviewing mothers from five

nations about their socialization of children's emotions. *Global Studies of Childhood*, 2(2), 158-169. https://doi.org/10.2304%2Fgsch.2012.2.2.158

- Wang, Q. (2003). Emotion situation knowledge in American and Chinese preschool children and adults. *Cognition and Emotion*, 17(5), 725–746. https://psycnet.apa.org/doi/10.1080/02699930302285
- Wang, D., Yuan, B., Han, H., & Wang, C. (2020). Validity and reliability of emotion regulation questionnaire (ERQ) in Chinese rural-to-urban migrant adolescents and young adults. *Current Psychology*, 1-8. https://doi.org/10.1007/s12144-020-00754-9
- Webster-Stratton, C., Jamila Reid, M., & Stoolmiller, M. (2008). Preventing conduct problems and improving school readiness: evaluation of the Incredible Years teacher and child training programs in high-risk schools. *Journal of Child Psychology and Psychiatry*, 49(5), 471-488. https://doi.org/10.1111/j.1469-7610.2007.01861.x
- Wilson, K. R., Havighurst, S. S., & Harley, A. E. (2012). Tuning in to Kids: An effectiveness trial of a parenting program targeting emotion socialization of preschoolers. *Journal of Family Psychology*, *26*(1), 56-65. https://psycnet.apa.org/doi/10.1037/a0026480
- Wilson, K. R., Havighurst, S. S., Kehoe, C., & Harley, A. E. (2016). Dads Tuning in to Kids: Preliminary evaluation of a fathers' parenting program. *Family Relations*, 65(4), 535-549. https://doi.org/10.1111/fare.12216
- Wu, P., Robinson, C. C., Yang, C., Hart, C. H., Olsen, S. F., Porter, C. L., Jin, S., Wo, J.,
 & Wu, X. (2002). Similarities and differences in mothers' parenting of preschoolers in China and the United States. *International Journal of Behavioral Development, 26*(6), 481-491. https://doi.org/10.1080/01650250143000436

 Xu, M., & Zhang, Z. (2008). Distinguishing proactive and reactive aggression in Chinese children. Journal of Abnormal Child Psychology, 36, 539–552. https://doi.org/10.1007/s10802-007-9198-0

Variable	Experim (<i>n</i> =		Waitlist (<i>n</i> =	p^{a}	
	Mean	SD	Mean	SD	
Parents					
Age (years)	35.52	5.50	36.70	5.01	.28
Sex (% male)	3.70		6.00		.74
Mother's education level					.37
% middle school or below	13.16		7.14		
% high school	42.11		42.86		
% non-degree tertiary education	10.53		23.81		
% bachelor's degree or higher	34.21		26.19		
Father's education level					.12
% middle school or below	7.89		7.14		
% high school	55.26		40.47		
% non-degree tertiary education	18.42		9.52		
% bachelor's degree or higher	18.42		42.86		
Preschoolers					
Age (years)	4.20	1.00	4.02	1.10	.37
Sex (% male)	50.00		46.00		.68
Family					
Structure (% intact)	88.70		97.87		.07
Monthly income ^b					.42
% less than HK\$25,000	45.84		34.78		
% HK\$25,000-40,000	39.58		30.45		
% HK\$40,000-70,000	10.42		26.08		
% more than \$70,000	4.16		8.69		

Table 1. Demographic variables for the experimental and waitlist control groups.

^a Significance of the mean difference between the two conditions ^b The Hong Kong median monthly household income in 2019 was HK\$35,500 (Census and Statistics Department, 2020).

Table 2. Baseline comparisons and interaction effects between training condition and time at Time 1 and Time 2 based on the results of repeated measures ANOVA.

Variable	Expe	rimental	group (n =	54)	Waitl	ist contro	l group (n	= 50)	Baseline	Interaction Effects				
	Time 1		Tim	le 2	Time 1		Time 2		<i>p</i>	F	р	Adjusted p	η_p^2	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD				Г		
Parent Measures														
APQ-Pr														
Positive Parenting	47.86	6.21	48.49	5.84	48.84	6.47	48.94	6.43	.44	.33	.57	.92	.00	
Negative/ Inconsistent Parenting	16.90	3.69	16.19	3.15	16.26	3.54	15.87	3.25	.37	.31	.58	.92	.00	
Punitive Parenting	10.39	2.91	8.70	3.32	9.78	2.46	9.74	2.67	.25	8.49^{**}	.004	.06	.08	
CCNES														
Expressive Encouragement	5.05	.90	5.33	.75	5.16	.95	5.24	.93	.52	2.24	.14	.56	.02	
Emotion-Focused Reactions	5.45	.70	5.29	.64	5.54	.70	5.49	.72	.48	.88	.35	.80	.01	
Problem-Focused Reactions	5.46	.65	5.47	.66	5.61	.74	5.62	.60	.26	.00	.98	.99	.00	
Minimization Reactions	3.44	.88	3.42	.87	3.42	.79	3.36	.79	.90	.13	.72	.92	.00	
Distress Reactions	3.12	.67	3.21	.63	3.01	.76	2.88	.69	.42	2.85	.09	.48	.03	
Punitive Reactions	2.72	.91	2.76	1.09	2.65	.89	2.68	.88	.66	.00	.99	.99	.00	
ERQ														
Cognitive Reappraisal	28.45	5.40	28.91	5.32	29.92	5.30	30.10	6.24	.16	.06	.81	.92	.00	
Expressive Suppression	13.20	4.93	12.84	4.25	12.34	4.37	11.54	3.94	.35	.27	.60	.92	.00	
PSI-SF														
Parental Distress	35.01	7.53	34.48	7.44	32.69	8.52	33.57	8.23	.14	1.40	.24	.64	.01	
Parent-Child	26.89	7.07	26.69	5.82	23.78	7.07	24.67	6.55	.03	1.46	.23	.64	.01	
Dysfunctional Interaction	20.07	1.07	20.07	5.02	23.70	1.07	21.07	0.00	.05	1.10	.25	.01	.01	
Difficult Child	32.32	9.18	30.88	8.49	30.18	8.54	30.65	7.65	.22	3.38^{*}	.05	.40	.03	
Child Measure														
ERC														
Adaptive Emotion Regulation	23.04	3.49	23.28	3.54	23.43	3.30	23.54	2.60	.56	.06	.80	.92	.00	
Lability/Negativity	33.62	8.64	33.73	7.07	31.49	6.17	31.29	6.55	.15	.09	.77	.92	.00	

APQ-Pr Alabama Parenting Questionnaire-Preschool Revision, CCNES Coping with Children's Negative Emotions Scale, ERQ Emotion Regulation Questionnaire, PSI-SF Parenting Stress Index–Short Form, ERC Emotion Regulation Checklist;

Adjusted *p* values controlled for multiple testing based on the false discovery rate approach;

Effect size in η_p^2 , with .02, .06, .14 corresponding to small, medium, and large effect size respectively;

p < .05; **p < .01; ***p < .001.

Variable	Ех	xperiment	al ($n = 54$)		Waitlist control ($n = 50$)						
	Mean Difference (T2-T1)	SE	р	${\eta_p}^2$	Mean Difference (T2-T1)	SE	р	${\eta_p}^2$			
APQ-Pr	· · ·										
Punitive Parenting	-1.69***	.39	<.001	.15	04	.41	.93	.00			
PSI-SF											
Difficult Child	-1.44*	.72	.05	.04	.48	.75	.53	.00			

Table 3. Post hoc pairwise comparisons of treatment outcomes at Time 1 and Time 2.

 $\overline{APQ-Pr}$ Alabama Parenting Questionnaire-Preschool Revision, *PSI-SF* Parenting Stress Index–Short Form; *p < .05; **p < .01; ***p < .001.

	М	ain effect	ts of time		Tim	e 2 – Tii	me 1	Time	3 - Tin	ne 2	Time	e 3 – Ti	me 1
	F	р	Adjusted p	${\eta_p}^2$	Mean Diff	SE	р	Mean Diff	SE	р	Mean Diff	SE	р
Parent Measures													
APQ-Pr													
Positive Parenting	.32	.68	.77	.01	.63	.72	1.00	27	.64	1.00	.36	.99	1.00
Negative/ Inconsistent Parenting	2.41	.10	.32	.04	71	.46	.38	18	.37	1.00	90	.46	.17
Punitive Parenting	9.73***	<.001	.00	.16	-1.69**	.46	.002	.50	.39	.60	-1.18**	.32	.002
CCNES													
Expressive Encouragement	8.66^{***}	<.001	.00	.14	.08	.08	.98	.29*	.10	.02	.37**	.10	.001
Emotion-Focused Reactions	1.96	.15	.40	.04	16	.08	.16	.09	.07	.60	07	.09	1.00
Problem-Focused Reactions	.08	.92	.92	.00	.01	.08	1.00	.02	.08	1.00	.03	.09	1.00
Minimization Reactions	.95	.39	.56	.02	02	.10	1.00	11	.10	.91	13	.09	.54
Distress Reactions	1.31	.28	.49	.02	.09	.09	.99	14	.08	.21	06	.10	1.00
Punitive Reactions	.44	.65	.77	.01	.04	.15	1.00	13	.15	1.00	09	.12	1.00
ERQ													
Cognitive Reappraisal	1.72	.19	.43	.03	.46	.84	1.00	1.04	.85	.68	1.50	.79	.19
Expressive Suppression	.19	.83	.88	.00	35	.65	1.00	.30	.53	1.00	06	.66	1.00
PSI-SF													
Parental Distress	1.18	.31	.49	.02	53	.88	1.00	88	.92	1.00	-1.41	.96	.44
Parent-Child	1.44	.24	.48	.03	19	.71	1.00	81	.47	.28	-1.00	.67	.42
Dysfunctional Interaction		.24	.40	.05			1.00			.20			
Difficult Child	2.25^{*}	.05	.20	.04	-1.44*	.77	.05	02	.83	1.00	-1.45*	.75	.04
Child Measure													
ERC													
Adaptive Emotion Regulation	.57	.49	.65	.01	.24	.35	1.00	59	.54	.83	35	.73	1.00
Lability/Negativity	2.64^{*}	.05	.20	.08	.10	.75	1.00	-1.43*	.57	.05	-1.33*	.75	.05

Table 4. Maintenance effects and delayed intervention effects in the experimental group (n=54): main effects of time based on repeated measures ANOVAs and post hoc analyses of the mean differences between Times 1, 2, and 3.

APQ-Pr Alabama Parenting Questionnaire-Preschool Revision, CCNES Coping with Children's Negative Emotions Scale, ERQ Emotion Regulation Questionnaire, PSI-SF Parenting Stress Index–Short Form, ERC Emotion Regulation Checklist;

Adjusted p values controlled for multiple testing based on the false discovery rate approach;

p* < .05; *p* < .01; ****p* < .001.

Table 5. Intervention effects in the waitlist control group (n=50): main effects of time based on repeated measures ANOVAs and post hoc analyses of the mean differences between Times 1, 2, and 3.

	М	ts of time		Tin	ne 2 – Tin	me 1	Time	3 - Tin	ne 2	Time 3 – Time 1			
	F	р	Adjusted p	${\eta_p}^2$	Mean Diff	SE	р	Mean Diff	SE	р	Mean Diff	SE	р
Parent Measures													
APQ-Pr													
Positive Parenting	.07	.93	.97	.00	.10	.52	1.00	.15	.66	1.00	.25	.78	1.00
Negative/ Inconsistent Parenting	.59	.56	.81	.01	39	.35	.83	.07	.39	1.00	32	.40	1.00
Punitive Parenting	3.39*	.05	.20	.07	04	.32	1.00	20*	.32	.05	23*	.58	.01
CCNES													
Expressive Encouragement	6.15**	.004	.06	.11	.08	.10	1.00	$.28^{*}$.10	.02	.36*	.12	.02
Emotion-Focused Reactions	.62	.52	.81	.01	05	.08	1.00	05	.10	1.00	11	.11	.98
Problem-Focused Reactions	.11	.89	.97	.00	.01	.08	1.00	04	.08	1.00	03	.09	1.00
Minimization Reactions	3.83*	.03	.20	.07	06	.08	1.00	17	.10	.23	23*	.09	.04
Distress Reactions	.83	.44	.81	.02	12	.09	.50	.08	.10	1.00	05	.10	1.00
Punitive Reactions	.07	.93	.97	.00	.04	.09	1.00	03	.10	1.00	.01	.11	1.00
ERQ													
Cognitive Reappraisal	.66	.52	.81	.01	.18	.81	1.00	.64	.68	1.00	.82	.77	.87
Expressive Suppression	2.78	.07	.22	.05	80	.54	.45	1.47	.65	.09	.67	.67	.96
PSI-SF													
Parental Distress	1.47	.23	.52	.03	.88	.78	.80	52	.77	1.00	.36	.91	.39
Parent-Child Dysfunctional Interaction	2.65	.09	.24	.05	.89	.54	.30	97	.89	.85	.08	.94	.16
Difficult Child	3.31*	.05	.20	.05	.48	.69	.55	83*	.86	.04	35	.86	.50
Child Measure													
ERC													
Adaptive Emotion Regulation	.03	.97	.97	.00	.11	.40	1.00	03	.53	1.00	.08	.48	1.00
Lability/Negativity	.08	.89	.97	.00	19	.63	1.00	07	.56	1.00	26	.82	1.00

APQ-Pr Alabama Parenting Questionnaire-Preschool Revision, CCNES Coping with Children's Negative Emotions Scale, ERQ Emotion Regulation Questionnaire, PSI-SF Parenting Stress Index–Short Form, ERC Emotion Regulation Checklist;

Adjusted p values controlled for multiple testing based on the false discovery rate approach;

p* < .05; *p* < .01; ****p* < .001.

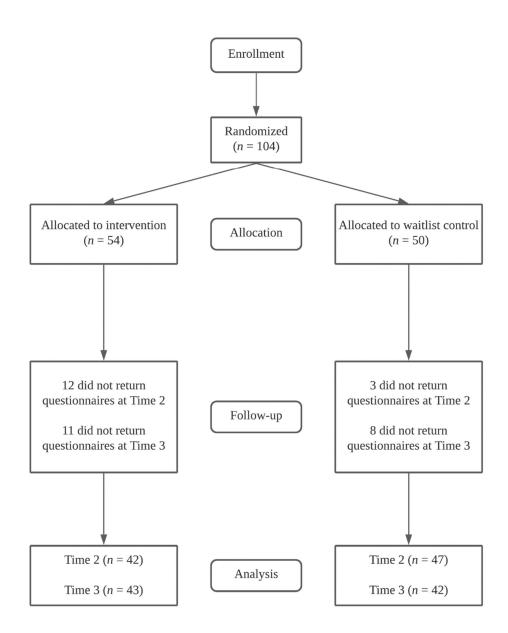


Figure 1. Participant flow.