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Pilot study of the Korean Parent Training Program using a partial group randomized experimental study

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Abstract

Problems—Korean American (KA) children experience mental health problems due to difficulties in parenting dysfunction complicated by living in two cultures.

Methods—Korean Parent Training Program (KPTP) was pilot tested with 48 KA mothers of children (ages 3–8) using partial group randomized controlled experimental study design. Self-report survey and observation data were gathered.

Findings—Analyses using generalized estimating equation indicated the intervention group mothers increased effective parenting and their children decreased behavior problems and reported less acculturation conflict with mothers.

Conclusions—The KPTP is a promising way to promote effective parenting and increase positive child mental health in KA families.

Keywords

Korean American; parent training; randomized controlled experimental study; culturally and linguistically appropriate intervention

Korean American (KA) immigrant parents encounter two cultural parenting norms which make them feel incompetent in their parenting; firsthand experience with Korean parenting practices and an unfamiliarity with desired parenting practices in the U.S. (Kim & Hong, 2007). Living in two conflicting cultures can also create conflict between parents, who practice Korean style parenting, and children, who quickly adopt U.S. cultural practices. Parenting dysfunction and the complications that arise when immigrant families must bridge two cultures are related to mental health problems among KA children and adolescents. KA children and teens report more emotional and behavioral problems than European American children or other Asian American subgroups (Choi, Stafford, Meininger, Roberts, & Smith, 2002; Kim & Cain, 2008; Nahm, 2006; Yeh, 2003; Yeh & Inose, 2002).

Parent training is one of the most widely studied, cost-effective interventions known for reducing or preventing child mental health disparities through the promotion of effective parenting strategies (Brestan & Eyberg, 1998; Webster-Stratton & Taylor, 2001). However, the Incredible Years Parenting Program, a standardized parent training program developed for European American parents, did not generalize well to KA parents due to cultural and linguistic differences (Kim, Cain, & Webster-Stratton, 2008; Kim, Choe, & Webster-Stratton, 2010). In response, researchers developed the Korean Parent Training Program (KPTP). This program addresses parenting factors related to child mental health problems and can be delivered in the context of Korean culture and faith. Faith-based, health promotion program can be effective for KAs because 70 to 85% of them regularly attend KA churches (Kim, Han, & McCubbin, 2007; Kwon, 2004). The purpose of this study was to pilot-test the preliminary efficacy of the KPTP.

Protective and Risk Factors Related to Korean American Child Mental Health

KAs are a hard to reach population, making them medically underserved and understudied by researchers. Existing data clearly indicate child mental health disparities exist and there is an urgent need for early intervention in this population. Studies found 41% of KA children had behavior problems while 35% of U.S. children experienced similar problems (Kim, Guo, Koh, & Cain, 2010; Webster-Stratton & Hammond, 1998). KA children also scored significantly higher on depressive symptomatology than European American children (Nahm, 2006). Recent studies found 60% of KA adolescents had depression symptoms compared to 24% of European American adolescents (Duggal, Carlson, Sroufe, & Egeland, 2001; Nam, 2013).

The most important protective and risk factors related to KA child mental health were parenting practices. Protective parenting factors relating to fewer behavior problems and more social competence among children were parental warmth, reasoning, expressions of affection through hugging/kissing and saying “I love you,” and correcting misbehaviors (Kim, Guo, et al., 2010; Kim, et al., 2007). In contrast, risk parenting factors included parental rejection, physical punishment, intergenerational acculturation conflicts, and parental depression (Kim, 2005, 2008a, 2008b, 2011, 2012; Kim, Cain, & McCubbin, 2006; Kim & Cain, 2008; Kim, Guo, et al., 2010; Kim, et al., 2007). Parental rejection was related to children’s behavior problems and social competence, and adolescents’ psychological adjustment and depression (Kim, 2008b, 2012; Kim & Cain, 2008; Kim, Guo, et al., 2010; Kim, et al., 2007), while physical punishment was linked to behavior problems (Kim, Guo, et al., 2010).

For KAs, parental cultural adaptation to the U.S. (i.e., acculturation) moderated the relationship between parenting and child mental health. Acculturation is cultural and psychological adaptation into the mainstream culture (Berry, 2006). When mothers adopted fewer U.S. cultural practices, maternal rejection was negatively related to children’s social competence. In comparison, when mothers adopted more U.S. cultural practices it was found to be unrelated to children’s social competence (Kim, et al., 2007). Similar results

were also found among adolescents; those adolescents whose mothers adopted more U.S. culture had better psychological adjustment than those whose mothers adopted less (Kim, et al., 2006). In addition, mothers who used strict parental control and maintained their Korean culture while adapting to U.S. culture had adolescents who were better adjusted psychologically than adolescents whose mothers maintained less Korean culture while adapting to U.S. culture.

These findings indicate effective and positive parenting practices can help to decrease KA child mental health problems and intergenerational acculturation conflict. It also indicates that adapting to U.S. culture functions as a protective sociocultural factor. Likewise, maintaining Korean culture while adapting to U.S. culture also functions as a protective factor.

Standardized Parent Training Programs

Parent training is a focused, short-term intervention aimed at improving effective parenting practices and decreasing child mental health problems (Barlow, Smailagic, Ferriter, Bennett, & Jones, 2010; Dretzke et al., 2009). According to the American Academy of Pediatrics (AAP, 1998), effective parenting practices include: (1) positive discipline to build intimacy (e.g., hug/kiss); (2) appropriate discipline to promote desirable behaviors (e.g., sticker charts) and reduce undesirable behaviors (e.g., timeouts); and (3) the avoidance of harsh discipline (e.g., verbal and physical punishment). A meta-analysis of 57 randomized controlled trials in the Cochrane Review supports the use of parent training, with a Hedges's *g* standardized mean difference between -0.62 to -0.67 , indicating that parent training leads to more decreases behavior problems of children than control group (Dretzke, et al., 2009). In another meta-analysis of 63 randomized controlled trials, Cohen's *d* effect size was 0.42 for improving child problem behaviors and 0.47 for improving effective parenting practices (Lundahl, Risser, & Lovejoy, 2005).

However, most standardized parent trainings have been developed for U.S.-born parents familiar with U.S.-based parenting practices. They may not reflect the concerns or backgrounds of ethnic minority parents and may require significant adaptation. When adaptations were made, such as reducing the length of intervention period or eliminating critical core content, retention rates increase but effect size decreases (Gorman & Balter, 1997; Kumpfer, Alvarado, Smith, & Bellamy, 2002). Recently, a few culturally tailored parent training programs were developed and tested using more rigorous research methods targeting Chinese Americans (Lau, Fung, Ho, & Liu, 2011), African Americans (Coard, Wallace, Stevenson Jr, & Brotman, 2004), and Mexican Americans (Martinez & Eddy, 2005), and impacts were found to be positive and quite promising (Coard, et al., 2004; Gross et al., 2009; Lau, et al., 2011; Martinez & Eddy, 2005).

The lead author pilot tested the Incredible Years Parent Training with a KA audience. She used the program without adaptations to keep the fidelity to the curriculum. The Incredible Years program, an exemplar version of parent training, uses recommendations from the American Academy of Pediatrics to teach effective parenting practices. Program outcomes have been examined repeatedly in a variety of rigorous trials (Brestan & Eyberg, 1998).

Results from the lead author's pilot study showed intervention group mothers increased positive discipline in comparison to control group mothers but intervention group children did not decrease behavior problems (Kim, et al., 2008). Within the intervention group, mothers with less acculturation to the U.S. decreased harsh discipline whereas mothers with high acculturation increased appropriate discipline (Kim, et al., 2008). Parents noticed cultural differences in the skills taught and reported negative feelings about watching program videotapes that featured mostly English speaking European Americans characters. Parents advocated for a KA adaptation of parent training that reflected their culture, language, and parenting norms (Kim, Choe, et al., 2010). This led to the development of the Korean Parent Training Program (KPTP).

Korean Parent Training Program

As shown in Table 1, the KPTP uses multiple theories to bring together traditional Korean cultural elements (e.g., Confucianism, Korean parenting virtues), more recent cultural elements (e.g., Christianity), and effective parenting practices. First, the KPTP helps KA parents understand how living in two cultures impacts both their parenting and their child's mental health. Then, it reviews Christian parenting principles, such as unconditional parental love, and traditional Confucianism and Korean parenting virtues, such as role-modeling behavior that is respectful, warm, patient, and generous, as well as having high standards on children. Second, within the context of the parental acceptance-rejection theory, it shows parents how to use positive discipline strategies to build intimacy with their children. Third, the KPTP supports the use of effective discipline strategies, including how to help children with emotion regulation. Another useful parenting strategy taught in the KPTP is helping parents learn how to use operant conditioning procedures involving the application of consequences following a child's behavior to influence future behavior (Gimel & Holland, 2003). The strategies are adapted from the Bright Futures in Practice: Mental Health, a nationwide mental health promotion program (Jellinek, Patel, & Froehle, 2002). For example, parents role-play a common physical punishment method among Koreans—raising their arms up in the air while kneeling for five minutes (Kim & Hong, 2007). After this role-play, some parents have the insight that the method may not be as effective as they thought because it tends to make children angry rather than helping them reflect on their misbehaviors. It also emphasize a biblical parenting principle that says, 'do not provoke your children, lest they become discouraged (Colossians 3:21).' This realization can motivate parents to find an alternative, non-punitive method, such as a brief timeout (Kim, Choe, et al., 2010). The KPTP manual is available in both Korean and English.

Hypothesis

It is hypothesized that: 1) upon completing the KPTP, intervention group (IG) mothers would demonstrate an increase in effective discipline strategies, parental warmth, and parent self-efficacy, as compared to waiting-control group (WCG) mothers; and 2) upon completing the KPTP, IG children would demonstrate a decrease in emotional and behavioral problems and intergenerational acculturation conflict in comparison to WCG children.

Methods

Study Design

This study used a partial group randomized controlled experimental study design to test the effectiveness of the KPTP.

Sample

The study sample included 48 KA mothers, their children, and their children's Sunday School teachers. All participants were recruited from six, partnered KA churches in the Pacific Northwest. Criteria for inclusion of mothers were: (1) having a child between three to eight years of age; (2) being a first generation KA originally born in Korea; (3) being willing to take the initial twelve-week KPTP class followed by three, monthly booster sessions as a member of the intervention group (IG) or the waiting-control group (WCG); and (4) being willing to complete pre- (T1), post- (T2), and 3-month follow-up (T3) assessments following the KPTP intervention. Children between three and eight who were born to the participating mothers and teachers who interacted with participating children each week during Sunday School were also included.

Instruments

Discipline—The Korean Parent Discipline Interview (KPDI) (Kim, Guo, et al., 2010) was adapted from the Oregon Social Learning Center's Discipline Questionnaire to assess discipline strategies that the KPTP attempted to increase or decrease among participants. The KPDI is a 65-item, 7-point, Likert-type scale instrument with four subscales that measure harsh discipline (e.g., yelling, spanking), positive discipline (i.e., hug, praise), and appropriate discipline (e.g., timeouts, consequences). This instrument is available in English and Korean. Higher mean scores indicates higher tendency of using each discipline technique. Webster-Stratton and colleagues established predictive validity of the instrument by finding the instrument to be sensitive to the intervention (Webster-Stratton, 1998; Webster-Stratton, Reid, & Hammonde, 2001). Cronbach's alpha for the current KA sample was .68 for harsh discipline, 0.72 for positive discipline, and 0.60 for appropriate discipline.

Emotion coaching—The Emotion Coaching Parenting Style (Gottman, Declaire, & Goleman, 1998) is an instrument that has 81 yes/no items with four subscales that measure four parenting styles in emotion coaching including dismissing (e.g., 'Children really have very little to be sad about'), disapproving (e.g., 'A children's anger deserves time-out'), laissez-faire (e.g., 'You should express the anger you feel'), and emotion coaching (e.g., 'Anger is an emotion worth exploring'). The scale was translated forward and backward using Brislin's method (Brislin, 1970). One positive emotion coaching style score was computed by calculating score of emotion coaching score minus mean score of dismissing, disapproving, and laissez-faire Cronbach's alpha for the current KA sample was 0.74 for dismissing, 0.78 for disapproving, 0.55 for laissez-faire, and 0.60 for emotion coaching.

Parental warmth-rejection—The Parental Acceptance-Rejection Questionnaire (PARQ) is a 24-item, 4-point, Likert-type scale instrument that includes eight questions measuring warmth and sixteen measuring rejection (Rohner, 1991). Warmth subscale scores range from

8 to 32 with higher scores indicating higher parental warmth. Rejection subscale scores range from 16 to 64 with higher scores indicating higher parental rejection. Rohner (1991) reported evidence for convergent, discriminant, and construct validity. This instrument is available in English and Korean. Cronbach's alpha was 0.81 for warmth, 0.58 for rejection, and 0.85 for total scale.

Parenting self-efficacy—The Parenting Self-Efficacy Scale (Choe & Chung, 2010) is a 37 item, 5-point, Likert-type scale instrument that assesses self-efficacy and parental ability to communicate with, discipline, and raise healthy children. Scores range from 37 to 185 with a higher score indicating a higher parenting self-efficacy. It was developed in Korean and was translated into English using the forward and backward method (Brislin, 1970). Choe and Chung reported construct validity and Cronbach's alpha of 0.95 for Korean mothers in Korea. Cronbach's alpha for current sample was 0.96.

Child emotional and behavioral problems—The Pediatric Symptoms Checklist (Jellinek & Murphy, 1990) is a 35-item, 3-point, Likert-type scale instrument that assesses cognitive, emotional, and behavioral problems in children ages four to sixteen. Scores range from 0 to 105 with a higher score indicating a higher level of emotional and behavioral problems. It has 66% sensitivity and 95% specificity (Jellinek & Murphy, 1990). Jellinek and Murphy (1990) reported evidence for convergent and construct validity. The scale was translated forward and backward using Brislin's method (Brislin, 1970). The Cronbach's alpha for the Korean version in the current study was 0.73.

Intergenerational acculturation conflicts—The Child Intergenerational Acculturation Conflict Scale was adapted from the Asian American Family Conflict Scale (AAFCS) (Lee, Choe, Kim, & Ngo, 2000). It is a 10-item, a 5-point, Likert-type scale instrument that measures the frequency of Asian American parent-child acculturation conflicts over values and practices. Scores range from 10 to 50, with higher scores indicating a higher frequency of parent-adolescent conflict. The validity was demonstrated by statistically significant correlations between the AAFCS scores and the Social, Attitudinal, Familial, and Environmental Acculturation Stress Scale scores (Gamst, Liang, & Der-Karabetian, 2011). Cronbach's alpha for the current study sample was 0.89.

Observational data—Videotapes (see Procedure for details) were analyzed using Dyadic parent-child interaction coding system (Eyberg & Robinson, 2000). Positive interactions included a parent validating a child's emotion, helping with problem solving, reflecting the child's statements, making descriptive comments of the child's behaviors, following the child's lead, or giving the child options. Researchers also tracked the number of times a parent praised a child for a specific action within a 15-minute period. The coder was not blinded to the group assignment or assessment interval.

Intervention group mothers' satisfaction with the program—The Parent Satisfaction Questionnaire was developed specifically for this program. This 65-item, 5-point Likert-type scale instrument consists of five subscales to measure intervention group mothers' general satisfaction with the KPTP program, the trainer, the usefulness of the program delivery method, and the usefulness/applicability of the parenting techniques taught

in the program. Cronbach's alphas ranged from 0.72 to 0.88 for the current KA study sample.

Procedure

Participants were recruited from six participating Korean ethnic churches from August to September 2011. During that time, a total of 58 women agreed to be part of the study. After completion of pre-intervention assessments for all participants, churches were assigned to intervention group (IG) and waiting-control group (WCG) using partial group randomization. The second author suggested pairing the churches based on the number of volunteers from each. Two churches, each with large numbers of participants were paired; however one church ultimately asked to take the class in spring (i.e., be in a waiting-control group) due to their church schedule. The third church has a large number of participating mothers who spoke English more fluently than Korean; as a result, this church was assigned to the intervention group. The rest three small churches were paired and randomized. Mothers could chose a KPTP intervention provided in Korean or in English. By the end of the study, five groups had received KPTP in Korean and one group had received it in English.

There were four IG composed of a total of 31 mothers and two WCG composed of 27 mothers. Each group had five to twelve mothers. Once the groups were formed, the KPTP was delivered in a small group setting to the IG participants from September 2011 to March 2012. Data were collected from IG and WCG at pre-intervention (T1), post-intervention (T2), and 3-month follow up (T3). After T3 data collection the KPTP was offered to the WCG. No additional data were collected after KPTP was offered to the WCG. The institutional review board approved the study and the researchers obtained informed consent from all mothers and targeted Sunday School teachers. They also obtained assent from all children whose mothers had agreed to be in the study.

Among the 31 mothers in the IG, three mothers withdrew (reasons: class ended too late in the evening, health problem, returned to Korea) and three did not complete the survey. Among the 27 mothers in the WCG, four withdrew (reasons: pregnancy, two had care for a sick family member, one had to visit Korea). The data, therefore, represent responses from 48 total mothers (IG n = 25, WCG n = 23) for the T1 and T2 comparison. At T3, two mothers in IG and two in WCG dropped out (reasons: families did not want to fill out the questionnaires). Thus, for the T1 and T3 comparison, the data represent responses from 44 total mothers (IG n = 23, WCG n = 21). Using ANOVA, no significant differences on the demographic variables were found between mothers who dropped out (n = 11) and those who remained in the study (n = 48). Each mother received a \$10 gift certificate upon completion of each T1, T2, and T3 assessment.

Sunday School teachers (IG n = 8, WCG n = 8) completed self-report surveys on child emotional and behavioral problems observed in church. Teachers were blinded to whether parents of children were in the experimental or waiting-control group and to the assessment interval. Teachers received a \$5 gift certificate upon completion of each T1, T2, and T3 assessment. Children (IG n = 16, WCG n = 9) who could read and write filled out surveys on perceived acculturation conflicts that occurred between them and their mothers. The

research team read the questionnaires to the non-literate children (ages 5 and older) and recorded their answers. Children received a \$10 gift certificate upon completion of each T1, T2, and T3 assessment.

Observational data were gathered in the form of videotapes filmed at T1, T2, and T3 assessment. The tapes showed participating mothers and children interacting using a Tinkertoy construction set or a Jenga game. Parents were instructed to play with their child as they would normally play and to ask their child to clean up the toys once fifteen minutes had passed.

Intervention delivery—Two bilingual and bicultural interventionists (i.e., the lead author and one interventionist) delivered the KPTP separately in small group sessions. The KPTP was delivered over a twelve-week period using weekly, 3-hour classes followed by single booster sessions (also 3-hours in length) held monthly for a total of three months.

Intervention integrity and dosage—To assure integrity and consistency of each class, the lead author trained the interventionist by reviewing the PowerPoint of the program protocol including parenting principles, role-plays, and homework at weekly supervision meetings. The lead author also observed several sessions delivered by the interventionist. IG mothers attended the program an average of 9.71 classes (81%, range 5–12 classes) and completed 80% of the assigned weekly homework.

Data Analysis

Baseline characteristics were compared using descriptive statistics, ANOVA, and Chi square tests. The primary aim of the study was to test for IG versus WCG differences in the primary outcome variables. Analyses used a generalized estimating equation (GEE) model in SPSS 17 to test for treatment group differences at follow up times while controlling for the baseline value of the outcome variable. GEE estimates the parameters of a linear model with a possible correlation between subjects within clusters (Diggle, Heagerty, Liang, & Zeger, 2001). For the purposes of this study, clusters are the class groups. The GEE uses robust standard error estimates based on the ‘sandwich estimator’ to take into account within-subjects correlations of the study variable scores during the follow up period. P values were 2-sided with a significance level of 0.05, and confidence intervals were at the 95% level. In this study, there are twelve outcome variables that were measured at two outcome time points (post-intervention and 3 months). Each outcome variable was analyzed separately at each time point. No formal adjustment was made for multiple comparisons in this pilot study, thus results should be interpreted with this in mind.

Results

Demographic Characteristics

As shown in Table 2, no significant difference on all demographic variables was found between mothers, children, and Sunday School teachers between IG and WCG at T1, T2, and T3, except U.S. residency for T1 and T2. Overall, IG mothers lived in the U.S. significantly longer than WCG mothers, which can be attributed to the inclusion of the

English-speaking group in the IG. This group consisted primarily of women who had come to the U.S. at a young age. However, when data were analyzed with and without controlling the length of stay in the U.S., the results were basically the same. The data presented in Table 3 did not control for the length of stay in the U.S. There were no significant differences on the demographic variables between children or Sunday School teachers in the IG or the WCG.

Pre-Intervention Group Equivalence and Descriptive Data

Means and standard deviations for all study variables by group and for T1, T2, and T3 are reported in Table 3. Oneway ANOVA indicated no significant differences on any of the study variables between IG and WCG at T1.

Pre- and Post- Between Group Hypotheses Testing Using GEE

As shown in Table 3, IG mothers, when compared to WCG mothers, increased effective and appropriate discipline, parental warmth, emotion coaching, and self-efficacy, and decreased parental rejection and harsh discipline (hypothesis 1). Observational data (i.e. videotapes) showed that IG mothers increased use of positive interactions and praise and decreased use of negative interactions more than WCG mothers. According to reports from mothers and Sunday School teachers, IG children decreased emotional and behavioral problems as compared with WCG children (hypothesis 2). IG children self-reported fewer intergenerational acculturation conflicts with their mothers as compared with WCG children (hypothesis 2). Therefore, both hypothesis 1 and 2 were fully supported using self-report data from parents, Sunday School teachers, and children, as well as videotape data of parent-child interactions. All significant treatment effects were maintained at T3 except teacher's report of child emotional and behavioral problems, child's report of intergenerational acculturation conflict, and videotaped data of mothers' positive and negative interactions with children.

Intervention Group Mothers' Satisfaction with the Program

The overall score of IG mother's general satisfaction with KPTP was 4.1 out of 5 ($SD = 0.5$), indicating that mothers approved of the program. Additionally, mothers said the program's delivery methods ($M = 4.2 \pm 0.4$) and the parenting skills ($M = 4.3 \pm 0.3$) covered were helpful. The parenting strategies most appreciated by mothers included: helping children with emotion regulation (20/42, 48%); learning what the Bible states about parenting (10/42, 31%); use of sticker charts (10/42, 24%) or specific praise (10/42, 24%) to promote good behavior; and how to express love to one's child (9/42, 21%). Overall, participants thought the strategies featured in the KPTP were easy to practice ($M = 2.5 \pm 0.5$), with the easiest being expressing affection to one's child ($M = 1.5 \pm 0.9$), followed by using sticker charts ($M = 2.1 \pm 0.9$), and giving specific praise ($M = 2.1 \pm 0.9$). The hardest parenting strategies to use included: anger management ($M = 3.3 \pm 0.9$); relaxation/meditation ($M = 3.1 \pm 1.2$); and emotion coaching ($M = 2.9 \pm 1.1$). The most commonly cited reasons for attending the class were: to learn effective discipline strategies (31/42, 74%); to learn emotion coaching (21/42, 50%); to better understand parental roles reflected in the Bible (14/42, 33%); to learn about parental stress and emotion regulation (13/42, 31%); and to practice ways to decrease intergenerational acculturation conflict (10/42, 24%).

Discussion

The major finding of this study was that the KPTP appears to be a promising way to promote effective KA parenting and increase positive mental health outcomes for KA children. Compared to WCG mothers, IG mothers were significantly more likely to employ effective/appropriate discipline strategies at both T2 and T3. These results are consistent with previous studies that demonstrated how parent training increases effective parenting strategies among ethnically diverse families (Gross et al., 2003; Martinez & Eddy, 2005; Tucker, Gross, Fogg, Delaney, & Lapporte, 1998). The findings of this study are particularly noteworthy given the results of the lead author's previous research testing the Incredible Years program with KA parents. In that study, all participants increased only their use of positive parenting strategies (Kim, et al., 2008). Furthermore, acculturation showed a significant impact on treatment effect; mothers with low acculturation significantly decreased harsh discipline, whereas those with high acculturation showed a trend of increased, appropriate discipline (Kim, et al., 2008). In the current study, the treatment seemed to impact all mothers as IG mothers reported less harsh discipline, more positive discipline, more appropriate discipline, and more emotion coaching.

Videotape data of parent-child interactions also indicated that study participants significantly increased positive interaction and decreased negative interactions at T2. While IG mothers praised their children an average of 3 times/videotaped session at T1, this number jumped to 9–11 times/videotaped session at T2 and T3. This study also found KA mothers significantly increased parental warmth and decreased parental rejection at T2 and T3. These factors are significantly related to KA children's emotional and behavioral problems and social competence, as well as depressive symptoms among KA adolescents (Kim, 2002; Kim, et al., 2006; Kim & Cain, 2008; Kim, Guo, et al., 2010; Kim, et al., 2007).

Compared to a standardized parenting program, the KPTP was developed to fit Korean culture and faith, which are important social determinants that affect health, functioning, and quality of life outcomes (US DHHS, 2012). The specialized curriculum allowed participating mothers to easily learn and practice strategies taught in the program, which resulted in a high degree of participant satisfaction with the curriculum. KA mothers felt more comfortable adopting and practicing new parenting styles because the KPTP linked these practices to KA culture and faith. For example, a previous study found that KA parents made decisions for their children and asked children to follow them (Kim, Im, Nahm, & Hong, 2012). This practice is strongly supported in collectivistic Confucian Korean society, where parents view their children as extensions of themselves, and as such, assume full responsibility for their children's good and bad behaviors and outcomes (Ahn, 1994). KA parents also perceived this strict parental control as a way of expressing their love for their children (Kim, 2005). The KPTP helped participating parents realize this practice may not fit well within the individualistic American social context where children are encouraged to be independent, nor did it fit with Christian faith principle, which views a child as a separate entity from his/her parents. The KPTP also helped parents to understand that this practice might hinder the development of a child's autonomy.

Once learned, the parenting strategies in the KPTP helped participating mothers feel more competent, as evidenced by their significantly higher parenting self-efficacy scores recorded immediately and three months after taking the KPTP. Previous studies have also demonstrated that participants who take parent trainings become empowered through their experience (Gross, Fogg, & Tucker, 1995; Tucker, et al., 1998).

In the late 1970s, about 60% of first generation KAs in the Midwest saw a need to alter their parenting practices because existing practices delayed cultural adaptation into American society (Hurh, Kim, & Kim, 1979). Recent studies found that KA parents reconstructed their parenting practices after evaluating the pros and cons of Korean parenting, constructed in Korea, and American parenting, observed in the U.S. (Kim & Hong, 2007; Kim, et al., 2012). Findings from the current study indicate the KPTP could help KA mothers make this transition more quickly and successfully. This finding is consistent with health promotion studies that found culturally and linguistically appropriate programs were effective in changing immigrants' health behaviors (Kelly, Huffman, Mendoza, & Robinson, 2003; Zuniga de Nuncio, Nader, Sawyer, & Guire, 2003). However, this pilot-study needs to be expanded using a larger sample.

In this study, children's baseline emotional and behavioral problem score was low in both conditions. Nonetheless, IG mothers reported that their children significantly decreased emotional and behavioral problems at T2 and T3. Sunday School teachers also reported that participating IG children significantly decreased emotional and behavioral problems at T2. Previous studies have shown that parent training promotes effective parenting practices and can lead to a decrease of children's emotional and behavioral problems and the prevention of conduct problems in adolescence (Barlow, et al., 2010; Dretzke, et al., 2009).

Children of IG mothers reported significantly fewer intergenerational acculturation conflicts at T2. Previous studies have shown intergenerational acculturation conflict was significantly related to KA adolescents' depressive symptoms (Kim & Cain, 2008). The KPTP teaches parents how living in two cultures impacts the parent-child relationship and children's mental health based on the acculturative family distancing theory (Hwang, 2006). This study shows that when parents understand and work with the root causes of intergenerational acculturation conflict, children will perceive less conflict. Since this effect was not maintained at T3, this needs to be reexamined using a bigger sample.

Several limitations must be noted. Each outcome variable was analyzed separately at each time point and formal adjustment was made for multiple comparisons; therefore, results should be interpreted with this in mind. Since participants were recruited from KA churches, they may have been more involved in the KA community and more willing to learn new discipline strategies. Hence, results cannot be generalized to the total KA parent population. A partial group randomization assignment weakened the strength of a randomized controlled experimental study. The treatment fidelity was checked by the first author who also was one of the interventionists, which may have decreased the meaningful assessment. Finally, Cronbach's alpha reliabilities for harsh discipline, appropriate discipline, *liaise-faire*, emotion coaching, and parental rejection were low.

A few strengths need to be stated. The KPTP was developed using a great degree of cultural sensitivity and this influenced the positive effects of the program. It combines well researched, effective parenting techniques with KA culture and faith to positively impact KA parenting and child mental health using the parental acceptance-rejection theory and the acculturative family distancing theory as theoretical frameworks. Not only have parental acceptance-rejection and intergenerational acculturation conflict been proven to impact child mental health, they carry particular significance for the KA population and are, therefore, appropriate and effective. This study also used multiple sources of data to test the research hypotheses. The approach used in this study can be applied other immigrant families who face similar challenges of raising children in two cultural parenting norms.

Conclusion

The KPTP was effective in changing KA mothers' parenting practices and improving their children's mental health outcomes because it taught effective discipline strategies using KA culture and faith as a foundation. Future research should be conducted with a larger sample size, should include an assessment of both mothers and fathers, and each site should have both an intervention and a waiting-control group. For example, small churches can be grouped to allow for 20–30 families in one research site. Furthermore, Korean language videotapes of the KPTP program would facilitate understanding of the content.

Implications for healthcare practice must be viewed with caution since this was a pilot study utilizing a small sample. Nonetheless, this study shows that healthcare professionals can positively impact the discipline practices of KA mothers through culturally relevant parenting education training. With practice, specific discipline strategies can effectively increase positive parenting among KA mothers, reduce child/parent intergenerational conflict, and improve the mental health of KA children.

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Table 1

Goals, Weekly Topic, and Theoretical Frameworks of the Korean Parent Training Program

Goals	Weekly Topic	Theoretical Frameworks and Definition
1. To understand the impact of dual cultures	W1. Impact of dual cultures, Christian parenting principles, Korean parenting virtues W1 & W4. Managing stress	◆ The acculturative family distancing theory (Hwang, 2006): acculturation conflict experienced among family members may lead to their poor mental health.
2. To build intimacy	W2. Good time together W3. Affirmative words	◆ Parental acceptance-rejection theory (Rohner, Khaleque, & Cournoyer, 2007): children who feel accepted and loved by their parents develop good mental health.
3. To learn Effective Discipline strategies on managing behavior problems	W4. Managing stress, ignoring, family rules W5. Direction, sticker charts W6-W8 Emotion coaching W9. Routines for children W10. Logical discipline W11. Timeouts W12. Review and graduation	<ul style="list-style-type: none"> ◆ Emotion coaching (Gottman, et al., 1998): parents help children with emotion regulation by recognizing their emotions, taking deep breath to calm self, listening and validating emotions, and helping children to solve problems that triggered the emotion. ◆ Operant conditioning procedures (Gimel & Holland, 2003): parents apply consequences following a child's behavior in order to increase or decrease the likelihood of that behavior recurring. ◆ Bright Futures in Practice: Mental Health (Jellinek, et al., 2002): a national health promotion and disease prevention initiative that addresses children's health needs in the context of family and community. Promotes use of positive discipline (hugging/kissing) and appropriate discipline (sticker charts, timeouts).

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Table 2

Demographic Characteristics of Study Participants

Characteristics		Intervention M ± SD	Waiting-control M ± SD	
Mother	Age in years	36.7 ± 4.3	36.0 ± 4.0	
	Education in years	16.9 ± 1.5	16.5 ± 1.1	
	U.S. residency in years	13.9 ± 10.6*	8.9 ± 4.6*	
	Number of children	2.0 ± 0.5	2.1 ± 0.5	
Children	Age in years	5.8 ± 1.3	5.2 ± 1.7	
Sunday School teacher	Age in years	28.8 ± 6.6	26.4 ± 13.4	
	Education in years	17.0 ± 2.7	11.0 ± 6.3	
	US residency in years	11.5 ± 4.0	14.9 ± 7.0	
		n (%)	n (%)	
Mother	Visa status	Citizen	16 (64%)	7 (32%)
		Permanent resident	4 (16%)	11 (50%)
		Temporary	5 (20%)	4 (18%)
	Annual family income	Under \$40,000	4 (17%)	5 (22%)
		\$40,001-\$80,000	8 (35%)	9 (39%)
		Over \$80,001	11 (48%)	9 (39%)

Note:

*
p < .05.

Table 4
Effect of KPTP on Parenting Practices and Child Outcomes using GEE between Intervention and Waiting-Control Groups

Scale	Group	T1 α M \pm SD	T2 M \pm SD	T3 M \pm SD	Immediate treatment effect (T1 & T2)		Long-term follow up (T1 & T3)	
					Effect size (confidence interval)	Wald Chi square	Effect size (confidence interval)	Wald Chi square
<i>Self-report survey data</i>								
KPDI: Harsh discipline	IG	2.4 \pm 0.8	1.9 \pm 0.6	1.9 \pm 0.6	-1.34 (-1.52, -1.16)	270.0 ^{***}	-0.58 (-0.81, -0.35)	24.1 ^{***}
	WCG	2.5 \pm 0.7	2.3 \pm 0.8	2.3 \pm 0.6				
KPDI: Positive discipline	IG	4.9 \pm 0.9	5.1 \pm 0.6	5.1 \pm 0.6	0.48 (0.19-0.78)	11.9 ^{***}	0.69 (0.47, 0.91)	39.4 ^{***}
	WCG	4.9 \pm 0.8	4.7 \pm 0.5	4.5 \pm 0.6				
KPDI: Appropriate discipline	IG	2.9 \pm 0.7	3.0 \pm 0.9	3.2 \pm 0.9	0.34 (0.10, 0.58)	9.4 ^{**}	0.56 (0.35, 0.76)	34.4 ^{***}
	WCG	3.0 \pm 0.4	2.8 \pm 0.5	2.8 \pm 0.5				
Emotion coaching	IG	0.2 \pm 0.2	0.4 \pm 0.2	0.4 \pm 0.2	0.83 (0.39, 1.28)	13.9 ^{***}	0.89 (0.43, 1.36)	14.1 ^{***}
	WCG	0.2 \pm 0.2	0.3 \pm 0.2	0.3 \pm 0.2				
PARQ: Parental Warmth	IG	27.8 \pm 2.8	29.1 \pm 2.6	28.8 \pm 2.6	0.43 (0.21, 0.66)	15.0 ^{***}	0.49 (0.07, 0.91)	5.5 [*]
	WCG	27.4 \pm 3.0	27.3 \pm 3.5	27.2 \pm 2.7				
PARQ: Parental rejection	IG	28.8 \pm 6.7	26.3 \pm 5.5	26.6 \pm 5.5	-0.53 (-0.86, -0.19)	10.0 ^{**}	0.58 (-0.69, -0.48)	5.2 [*]
	WCG	29.8 \pm 5.6	29.5 \pm 5.4	29.7 \pm 5.7				
Parental self-efficacy	IG	133.7 \pm 13.3	143.2 \pm 16.3	143.5 \pm 18.5	0.49 (0.28, 0.70)	21.6 ^{***}	0.56 (0.08, 1.05)	5.4 [*]
	WCG	131.2 \pm 16.4	134.7 \pm 17.4	135.4 \pm 17.5				
PSC: Parent's report	IG	7.1 \pm 5.3	4.7 \pm 3.7	5.0 \pm 3.2	-0.45 (-0.51, -0.40)	242.6 ^{***}	-0.18 (-0.33, -0.03)	5.5 [*]
	WCG	7.3 \pm 4.3	6.7 \pm 4.1	6.4 \pm 4.0				
PSC: Teacher's report	IG	4.9 \pm 15.3	2.0 \pm 2.6	4.2 \pm 5.3	0.10 (-0.16, -0.04)	11.4 ^{***}	0.09 (-0.01, 0.20)	3.3
	WCG	4.6 \pm 4.7	3.3 \pm 4.2	2.5 \pm 3.1				
AAFCS: Child's report	IG	18.3 \pm 8.0	16.5 \pm 3.8	16.8 \pm 5.3	0.93 (-0.19, -0.77)	137.4 ^{***}	0.17 (-0.44, 0.79)	0.3
	WCG	25.9 \pm 4.1	25.4 \pm 5.6	18.6 \pm 7.3				
<i>Videotape data - Mother's parenting behaviors</i>								
Positive interactions	IG	2.04 \pm 1.9	4.58 \pm 2.3	5.34 \pm 2.7	0.94 (0.35, 1.53)	10.3 ^{***}	0.19 (-0.07, 0.45)	2.2
	WCG	1.85 \pm 1.4	2.27 \pm 1.2	3.94 \pm 3.6				

Scale	Group	T1 ^a M ± SD	T2 M ± SD	T3 M ± SD	Immediate treatment effect (T1 & T2)		Long-term follow up (T1 & T3)	
					Effect size (confidence interval)	Wald Chi square	Effect size (confidence interval)	Wald Chi square
Negative interactions	IG	4.11 ± 3.4	2.18 ± 1.6	2.06 ± 2.0	-0.38 (-0.74, -0.02)	4.5*	-0.13 (-0.61, 0.36)	0.3
	WCG	2.70 ± 1.8	3.46 ± 1.9	2.49 ± 1.4				
# of praise given in 15 minutes	IG	3.08 ± 3.3	9.29 ± 4.9	11.17 ± 6.1	1.10 (0.37, 1.82)	9.2**	0.37 (0.05, 0.70)	5.2*
	WCG	2.86 ± 2.2	3.95 ± 2.59	7.00 ± 7.9				

Note.

* p < .05.

** p < .01.

*** p < .001.

T1 = pre-intervention, T2 = post-intervention, T3 = 3-month follow up; IG = Intervention group, WCG = Waiting-control group.

^aNo significant difference at T1 on all variables using ANOVA

KPDI=Korean Parent Discipline Interview; PARQ= Parental acceptance-rejection questionnaire; PSC = Pediatric Symptom Checklist; AAFCGS = Asian American Family Conflict Scale.

Sample size for mother's self-report survey data: T1 & T2: IG = 8, WCG = 23; T1 & T3: IG = 23, WCG = 21.

Sample size for Sunday School teachers survey data: T1 & T2: IG = 8, WCG = 8; T1 & T3: IG = 8, WCG = 7

Sample size for child's self-report survey data: T1 & T2: IG=16, WCG=9; T1 & T3: IG = 12, WCG = 9

Sample size for observational data of mothers: T1 & T2: IG = 18, WCG = 14; T1 & T3: IG = 12, WCG = 12.