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Evaluation of a Positive Parenting Intervention  
for Mothers with a History of Depression and their Children

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Advisor: Sherryl H. Goodman, Ph.D.

An abstract of  
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## Abstract

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By Katherine A. Cullum

Children of mothers with a history of depression are at heightened risk for developing depression later in life, as well as other maladaptive outcomes. Deficits in parenting are one posited mechanism underlying this transmission of risk from mother to child. Research also suggests that depression in mothers is associated with children's low positive affect and the children's later development of depression. The current study evaluated whether a micro-intervention with mothers with a history of depression would enhance their engagement in positive parenting and increase observed positive affect in their 8- to 10-year-old children. The sample included mothers with a history of depression ( $N = 65$ ), who were randomly assigned to either a positive parenting intervention or an attention control condition; mothers with no history of depression ( $N = 66$ ) served as a pre-intervention comparison group. Results revealed significant short-term increases in specific positive parenting behaviors in mothers in the intervention compared to those in the control condition. Moreover, children of mothers in the parenting intervention showed significant increases in positive affect compared to children of mother in the control intervention. Further, certain positive parenting behaviors predicted children's concurrent positive affect, with clearest evidence for mothers' active listening and smiling/laughing. We found no significant change in contingency of children's positive affect on mother's positive parenting as a function of the intervention. The study provided evidence of the utility of a brief intervention for enhancing interactions between mothers with a history of depression and their children by targeting two putative mechanisms in the transmission of risk for depression: mothers' positive parenting and children's positive affect.



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Depression affects approximately 7.5 million parents in the United States each year, leaving 15 million children at risk for problems associated with having a parent with depression (National Research Council and Institute of Medicine, 2009). Although depression in both mothers and fathers is of concern, depression is more prevalent among women compared to men (Hasin et al., 2018). The most recently available data show that women continue to be the primary caregivers to most children (National Alliance for Caregiving and the AARP, 2009) and, thus, have more opportunities for potential influence on offspring, compared to fathers. Qualitative and quantitative reviews support depression in mothers as a risk factor for children's maladjustment, including the development of psychopathology as well as problems in functioning (for a review, see Goodman et al., 2011).

One way depression in mothers may be linked to adverse offspring outcomes is through parenting deficits, a mediational model that has been implicated in reviews (Goodman & Gotlib, 1999) and supported by evidence from several studies (e.g., Elgar, Mills, McGrath, Waschbusch, & Brownridge, 2007). Among these parenting deficits, the extent to which mothers engage in positive parenting is of particular concern. High levels of positive parenting have been associated with adaptive cognitive, social, emotional, and academic outcomes in children (e.g., Oppenheimer, Hankin, Jenness, Young, & Smolen, 2013; Smokowski, Bacallao, Cotter, & Evans, 2015). Moreover, mothers' more frequent positive parenting when children were 12 years old predicted the children's subsequent (four years later) more optimal development of areas implicated as possible risk factors for later depression onset (Whittle et al., 2014). Consistent with the mediational model, depression in mothers is associated with significantly less positive parenting, compared to the parenting of non-depressed mothers (for a review, see Lovejoy, Graczyk, O'Hare, & Neuman, 2000). This association between depression in mothers and their

use of positive parenting has been found to hold regardless of the timing of depression (i.e., whether depression is operationalized as current depressive symptoms or a past history of depression) (Lovejoy et al., 2000). In sum, the theoretical and empirical literature provides support for positive parenting as one mechanism in the association between depression in mothers and later depression in offspring (Goodman & Gotlib, 1999). Additionally, positive parenting is known to be modifiable (Nowak & Heinrichs, 2008), which has fueled interest in parent training programs for women with depression. Thus, the current study aimed to test an intervention for increasing positive parenting among mothers with a history of depression during their child's lifetime.

Among all of the adverse outcomes in children associated with having a mother with depression, the development of depression is especially concerning. When depression manifests in these children at-risk for depression, it does so, on average, at an earlier age of onset compared to first episodes of depression in children of non-depressed mothers (Weissman et al., 1987). Early-onset depression is a particularly concerning outcome given its associations with impairments in cognitive, interpersonal, and neuroendocrine functioning (Lewinsohn, Rohde, Seeley, Klein, & Gotlib, 2003; Weissman et al., 1987). Moreover, even prior to the typical age of onset of depression, children of mothers with depression are at risk for developing vulnerabilities to depression (Goodman, et al. 2011). Low positive affect is one potential marker of vulnerability that may precede the development of depression in children of depressed mothers and may index risk for the development of depression (Forbes & Dahl, 2005). Given this, the current study aimed to test the effectiveness of a positive parenting intervention on increasing positive affect in children of depressed mothers.

### **Positive Parenting and Depression in Mothers**

**Components of positive parenting and their significance for children.** Positive parenting refers to five core principles for the use of specific parenting skills: ensuring a safe and engaging environment, creating a positive learning environment, using assertive discipline (as an alternative to coercive and ineffective forms of discipline), having realistic expectations concerning children's capabilities related to difficult and prosocial behavior, and taking care of oneself as a parent (Sanders, Markie-Dadds, & Turner, 2003). For example, children who receive more positive parenting have been shown to display higher levels of positive affect, greater social-emotional functioning, and be less likely to develop psychopathology (Maccoby & Martin, 1983; McLeod, Weisz, & Wood, 2007; Yap, Allen, & Ladouceur, 2008). On the other hand, low positive parenting has been associated with adverse outcomes, including lower positive affect and the later development of depression in offspring (Luebbe & Bell, 2014). In sum, parents' use of positive parenting is associated with benefits in their children's functioning and low levels of positive parenting is associated with adverse outcomes in offspring.

**Positive parenting among mothers with depression.** Depression in mothers exposes children to not only the symptoms of depression but also less positive parenting (Lovejoy et al., 2000). Depression is characterized by not only heightened negative affect but also diminished positive affect (Clark & Watson, 1991). In a non-clinical sample, mothers' positive affect has been found to be positively associated with their use of positive parenting (Rueger, Katz, Risser, & Lovejoy, 2011). In the context of depression, low positive affect is linked with a depressed person's withdrawal from social contact and disengagement during social interactions (Beck, 1967). Depression in mothers is also associated with less positive parenting, including lower levels of sensitivity (Foster, Garber, & Durlak, 2008; Lovejoy et al., 2000; Park, Garber, Ciesla, & Ellis, 2008; Pearson et al., 2013). For example, Foster et al. (2008) found that depressed

mothers smile, laugh, provide constructive guidance, offer praise, and make positive statements less frequently than do non-depressed mothers. Given the noted significance of positive parenting for children's adjustment and later development, depressed mothers' use of less positive parenting with their children is concerning.

Such depression-related qualities of parenting can become associated with problems in children in various ways. Goodman and Gotlib (1999) suggested mechanisms that might link the lower levels of positive parenting associated with depression in mothers with children's later development of psychopathology. Whether by modeling, socialization of emotion more broadly, or children's stress or frustration over not having their mothers meet their developmentally salient needs or other mechanisms, mothers' low levels of positive parenting might interfere with children's development of emotional self-regulation, interpersonal and problem-solving skills, and coping skills. Regardless of the specific mechanism, children may show less positive affect with parents' lower positive parenting.

**Positive parenting and its links with both past and current depression.** Given that depression is an episodic disorder with a mean age of onset of 29 years (Hasin et al., 2018), a consideration in studies of positive parenting and depression is whether to focus on mothers' current depression diagnosis or severity (i.e., measured concurrently with positive parenting), or the mothers' history of depression, which is sometimes studied as mothers' lifetime history and other times studied as mothers' history of depression in the target child's lifetime. Reviews of the literature reveal that both approaches are common and that the association between depression and positive parenting does not vary with whether depression was defined as being in the past or current (Lovejoy et al., 2000). Lovejoy et al. (2000) interpreted this finding to suggest that inter-episodic features of depression have effects on mothers' positive parenting, rather than being in



episode per se. More recently, Park et al. (2008) found that mother-child interactions characterized by lower levels of expressed positive emotion and positive family processes, as well as higher levels of expressed negative emotion and other negative family processes, were significantly associated with both history of depression and current depression severity. Collectively, this evidence suggests that mothers' lifetime history of depression or history of depression during their child's lifetime as well as current depression severity is linked with their use of positive parenting.

**Measurement of parenting.** In studies of depressed and non-depressed mothers, parenting is typically assessed via parent-report (e.g., Hankin et al., 2011), child report (e.g., Nomura, Wickramaratne, Warner, Mufson, & Weissman, 2002), or observational methods (e.g., Oppenheimer et al., 2013). Observational methods, which utilize rating or coding of parenting behavior, allow researchers to capture parenting behavior in real time and simultaneous with child behavior. Observational assessments of parenting of children or adolescents typically involve having the mother and child engage in a semi-structured activity (e.g., Bradley, Iida, Pennar, Owen, & Vandell, 2017) or conversation (e.g., Forehand et al., 2012) in a laboratory setting. These interactions or conversations are video recorded, and observers later code or rate mothers' behaviors in terms of duration or frequency of positive parenting (e.g., warmth, positive reinforcement, responsiveness, quality time, etc.). Meta-analytic reviews of the relations between parenting and child outcomes and/or maternal depression have found observational measures of parenting were more strongly predictive of child outcomes than were parent-reported questionnaire methods of parenting (Slagt, Dubas, Deković, & van Aken, 2016; Zaslow et al., 2006). Further, observational assessment of parenting enables micro-level analysis of parent-child interactions, such as the sequential relations between parents' and children's

behavior (i.e., consideration of behaviors that tend to follow on another) (Gordon & Feldman, 2008). These findings offer support for the assessment of parenting using observational methods and micro-level coding.

### **Children's Positive Affect**

Positive affect refers not only to positively-valenced mood and emotion, but also cognition (e.g., the expectation of positive future events) (for a review, see Forbes & Dahl, 2005). Thus, positive affect taps into the experience of pleasure, joy, or excitement. Children's positive affect is important for parent-child relationships, in that it is associated with and may enhance the quality of these relationships (Ramsey & Gentzler, 2015). Children's positive affect is also important for their own behavior and development (Gilbert, 2012). Children's positive affect has been found to be concurrently and prospectively, positively associated with their social competence and cognitive and emotional functioning, which have links to the later development of psychopathology (Davis & Suveg, 2014; Fredrickson, 2001; Hayden, Klein, Durbin, & Olino, 2006). During social interaction, positive affect can function as a signal of reward, such that an individual's display of positive affect (e.g., laughing and smiling) serves to reinforce his or her social partner, which in children's peer relationships has been found to predict social acceptance (Hartup, Glazer, & Charlesworth, 1967). Thus, it is especially important to study children's positive affect in the context of parent-child interactions. Moreover, with behavioral observation, researchers can assess children's moment-to-moment expressions of emotion in real time (Davis & Suveg, 2014). Overall, positive affect is important for children's development, especially in the context of parent-child interactions.

**Children's low positive affect as a vulnerability to depression.** Low positive affect is not only a feature of depression, but also a possible vulnerability to, or marker of children's

increased likelihood to later develop, depression (Kovacs & Lopez-Duran, 2010). Given that a maternal history of depression is a known diathesis for the development of depression in offspring, studies of positive affect as a vulnerability to depression have compared children of depressed mothers with children of non-depressed mothers. Children of depressed mothers have been found to show differences in positive affect during interactions with their mothers, compared to children of non-depressed mothers, regardless of whether the mothers' depression was lifetime or current. For example, a longitudinal study by Olino et al. (2011) found that children of mothers with a history of depression displayed lower positive affect (indexed via physical expression, facial expressions, and verbal comments positive in both content and tone) from infancy through 9 years of age, compared to controls. Studies that sampled age ranges spanning middle childhood and adolescence report similar findings (Dietz et al., 2008; McMakin et al., 2011). In another study, mothers' current depression was found to be associated with lower levels of child positive affect (Durbin, Klein, Hayden, Buckley, & Moerk, 2005). Findings from these studies evidence an association between depression in mothers and lower positive affect among offspring. In further support of low positive affect as a possible vulnerability to depression, evidence suggests that children with depression demonstrate disruptions in reward and positive affect-related neural systems that may precede the onset of the first episode of depression and, further, place them at risk for recurrent depressive episodes (Forbes & Dahl, 2005; Forbes, Shaw, & Dahl, 2007). In previous, unpublished research using the same sample as the proposed study, we failed to find a significant difference in positive affect (defined as observed PA, self-reported (state and trait) PA, and PA as assessed using physiological measures) between children of depressed and non-depressed mothers (Cullum, 2016). However,

overall, findings from this literature provide support for low positive affect as a potential vulnerability to depression.

### **Middle Childhood**

Middle childhood is the period of development that directly precedes the increase in rates of depression onset in females (Hankin et al., 1998) and is also characterized by marked interpersonal growth (Collins, Madsen, & Susman-Stillman, 2005). These changes are important to consider in relation to parent-child relationships and parenting issues. In middle childhood, children spend most of their time with adults, especially family members (Collins et al., 2005). In contrast, by the ages of 10 to 12 years, children exert more agency in maintaining their social networks such that parents play a less direct role in managing their peer relations. Starting in adolescence, time spent with peers, rather than adults, dominates social time (Collins et al., 2005; Larson, Richards, Moneta, Holmbeck, & Duckett, 1996). Thus, middle childhood may be a promising period of development during which to intervene with at-risk youth using a parenting-focused intervention.

### **Positive Parenting-Focused Interventions**

**Modifiability of positive parenting behavior.** One feature that evidence-based parenting interventions have in common is that they typically begin with training on positive parenting. With roots in behavioral parent training, Triple-P Positive Parenting Program (Triple P) and Parent Child Interaction Therapy (PCIT) are two evidence-based parenting interventions, both of which involve parents learning about and using positive parenting skills in didactic sessions and at-home practice. Both interventions are geared towards improving parent-child relationships and reducing child behavior problems by improving parenting behaviors (Thomas & Zimmer-Gembeck, 2007). Differential reinforcement, which involves the rewarding of

prosocial child behavior while giving little attention to undesirable child behavior, is the primary strategy of positive parenting taught to parents in both Triple-P and PCIT. Triple-P was developed to enhance positive parenting in parents of children between 2 and 16 years of age (Sanders, 2003) and has strong evidence supporting it being acceptable to parents from diverse cultures (Morawska et al., 2011). PCIT was designed to improve problem behaviors in 4 to 7 year-old children and increase positive parent-child interactions (Hembree-Kigin & McNeil, 1995). One way that the interventions differ is in their use of direct observation and child involvement. In PCIT, parents are also given positive reinforcement while they interact with their child through the use of direct, in vivo coaching, which does not usually occur as part of Triple-P. Direct coaching involves feedback and instruction being given to the parent as they interact with their child to allow for direct remediation of incorrect skills use and practice with using skills in a way that works for them and their child. This direct feedback facilitates the shaping of parent behavior, as immediate reinforcement is known to be much more effective in terms of changing behavior than is delayed reinforcement (for a review, see Borrego Jr & Urquiza, 1998). It has been suggested that the direct coaching integrated into PCIT may yield larger effects in terms of parent and child outcomes (Thomas & Zimmer-Gembeck, 2007). Both Triple-P and PCIT are interventions that seek to improve child behavior by enhancing parents' use of positive parenting skills and PCIT, in particular, gives parents the opportunity to practice and develop their use of learned skills while getting immediate feedback.

**Parenting-Focused Interventions with Depressed Mothers.** The effectiveness of parenting-focused intervention programs has begun to be tested with depressed mothers and their children, although typically not with an exclusive focus on improving positive parenting. Goodman and Garber (2017) summarized the findings supporting parenting interventions for

mothers with depression who have infants or very young children. Sanders and McFarland (2000) tested the relative effectiveness of behavioral parent training (which involved the teaching of positive parenting skills) and the integration of behavioral parent training and cognitive therapy techniques for reducing mothers' depression and improving child behavior. These interventions were found to be equally effective at reducing mothers' depression and reducing problem behavior in children of mothers with depression. Timmer et al. (2011) found no differences in the effectiveness of PCIT between depressed and non-depressed mothers of young children between two and eight years of age. Although, unexpectedly, both depressed and non-depressed mothers reported using similar levels of encouraged verbalizations (praise, reflection, and descriptions) and discouraged (i.e., commands, questions, and critical statements) verbalizations; both groups significantly increased from pre- to post-treatment in encouraged verbalizations, and decreased in discouraged verbalizations. These findings, however, should be interpreted with caution, as mother-child dyads were not randomly assigned to treatment and no information regarding mothers' mental health was collected beyond their self-reported symptoms of depression at the time of the study. This finding provides preliminary evidence and supports the need for further study of use of such interventions to improve parenting behavior in mothers with depression. These findings add to the support for the use of behavioral parent training interventions with mothers with depression and point to a need for controlled studies to establish the effectiveness of such interventions with depressed mothers.

**Secondary benefits to children of depressed mothers' participation in positive parenting intervention.** Preventative intervention research can offer insight into the etiology and processes underlying adverse outcomes associated with depression in mothers (Cicchetti & Hinshaw, 2002). Consistent with that idea, improvements in child functioning in association with

depressed parents' parenting intervention would support the model of parenting as a mediator between depression and child functioning. Researchers have examined the benefits of changes in positive parenting in terms of various indices of child functioning. For children of depressed parents, improvements in positive parenting behaviors have been associated with children's lower internalizing symptoms (Compas et al., 2010; McKee et al., 2014). The Timmer et al. (2011) study, mentioned earlier, found that engagement in disruptive behavior by children of depressed mothers decreased significantly following mother-child dyad participation in a PCIT intervention; however, this finding was supported only with pre- to post intervention comparisons of mothers' reports on their children's behavior and not with data on child behavior problems using observational measures. Moreover, as mentioned earlier, there was no control condition. This supports that mothers' participation in interventions like PCIT is associated with improvements in the behavior of their children, at least according to mothers' perceptions; however, in the absence of an intervention control condition, we are limited in what conclusions we can make regarding the effectiveness of such interventions. There is also support for the long-term benefits of positive parenting interventions. Compas et al. (2010) found that parents' (in a sample comprised mostly of mothers) increased use of positive parenting skills was found to mediate the effect of a depression prevention program, relative to participation in a control condition, on offspring mental health outcomes the following year. Together, these findings provide preliminary support for behavioral parent training-informed intervention as a means of enhancing parenting in depressed mothers and for enhancement of positive parenting as a possible means of improving short- and long-term child outcomes. Results from a randomized controlled trial would build upon existing findings and provide reliable evidence of the effectiveness of such interventions for enhancing depressed mothers' positive parenting.

Given the role that children's positive affect may play in the pathway from risk to disorder among children of depressed mothers and its importance in the context of mother-child interactions, children's low positive affect is one promising target of parenting interventions. Thus, a positive parenting intervention seeking to enhance positive affect in children of depressed mothers would contribute to and fill a gap in this literature. No study has tested the effectiveness of a positive parenting intervention in enhancing positive affect among children of depressed mothers. However, findings from studies using samples of the general population indicate that increases in children's positive affect follow or coincide with improvements in positive parenting (Webster-Stratton, 1998). For example, in a controlled intervention study that assigned parents to either an 8 to 9-week long behavioral parent training program or a control condition, parent training was found to improve socio-demographically disadvantaged parents' use of positive discipline and effective parenting skills as well as their preschool-aged children's observed positive affect (frequency of smiles, laughs, hugs, affectionate behaviors, and positive statements to others) from pre- to post- intervention; these gains were maintained at follow-up a year later (Webster-Stratton, 1998). Another study, by Landry et al. (2008), tested the effectiveness of a responsive parenting intervention (11 weeks) in terms of mothers' behaviors and their children's social and communication skills, including child PA (frequency of smiling/laughing). They found only trends toward significance in terms of higher post-test levels of PA and rates of increase in PA for children whose mothers were in the intervention condition, relative to a comparison condition. Their sample included women and their toddlers/preschoolers with varied biological risk for problems later on in development. Thus, positive parenting is a promising target for interventions seeking to enhance children's positive



affect and testing this notion with children of depressed mothers would extend this knowledge gleaned from interventions conducted with non-clinical samples.

### **Current Study**

The theoretical and empirical literature provides support for lower levels of positive parenting as one mechanism in the association between depression in mothers and later depression in offspring (Goodman & Gotlib, 1999). Findings support that interventions are effective at increasing positive parenting of mothers with depression and that increases in positive parenting, in turn, may promote adaptive emotional and behavioral functioning, such as reported depressive and parent-reported externalizing symptoms, among offspring (e.g., Compas et al., 2010). An important next step in this line of research is to build on this body of literature by examining the extent to which enhancing mothers' positive parenting is associated with increases in positive affect in children of depressed mothers. Associations between mothers' use of positive parenting and their lifetime history of depression, as well as current depressive symptoms, underscore the promise of an intervention aimed at increasing positive parenting among mothers with current or past depression during the child's lifetime.

The current study sought to fill several of the noted gaps in the literature and replicate observed associations between depression in mothers and positive parenting in a sample of women with a history of depression during the child's lifetime. We tested the effectiveness of an intervention aimed to directly increase depressed mothers' positive parenting and, indirectly, enhance observed positive affect in their children. Additionally, the current study intends to build on the parenting intervention literature by testing such an intervention in the form of a micro-intervention. Micro-interventions are experimental manipulations designed to intervene in potential risk processes implicated in the development of psychopathology (Kiesler, 2004).

Short-term interventions, like the one tested in the current study, may provide us with insight that can then inform the development of a full-scale intervention (Kiesler, 2004).

We conducted both a cross-sectional comparison between middle childhood-aged children and their mothers with a history of depression during their child's lifetime and a non-depressed control group, consisting of mother with no history of depression during their child's lifetime, and a micro-intervention study with the depressed mothers group. Mothers with a history of depression were randomized into either the positive parenting intervention condition or a control condition (i.e., a family nutrition program). Parenting and child positive affect was assessed across four time points: at pre-intervention (Time 1), immediately post-intervention (Time 2), following a second parent training visit (Time 3), and at follow-up (Time 4). The non-depressed control group came to the laboratory for a single visit only (Time 1) and did not receive the intervention.

*Specific Aim 1: To replicate published findings of a negative association between maternal depression during their child's life and mothers' use of positive parenting.*

**Hypothesis 1A)** Mothers with a history of depression during their child's lifetime will engage in less positive parenting (e.g., active listening, praise, positive physical contact) with their children relative to mothers with no depression history in their child's lifetime.

**Hypothesis 1B)** Mothers' current depressive symptom levels will be inversely associated with their use of positive parenting behaviors, such that higher current depressive symptom levels will be correlated with a lower rate of positive parenting (e.g., positive physical contact, active listening skills, praise).

*Specific Aim 2: To examine the effect of a positive parenting intervention for increasing depressed mothers' use of positive parenting behaviors and increasing children's positive affect as compared to a control intervention.*

**Hypothesis 2A)** Mothers with a history of depression randomly assigned to a positive parenting intervention will increase their positive parenting behaviors from pre- to post-training (i.e., Time 1 to Time 2) and from pre-training (Time 1) to a week later (Time 3) as compared to mothers in the control condition. As an exploratory hypothesis, we will examine changes in positive parenting from pre-intervention (T1) to three weeks post-intervention (T4).

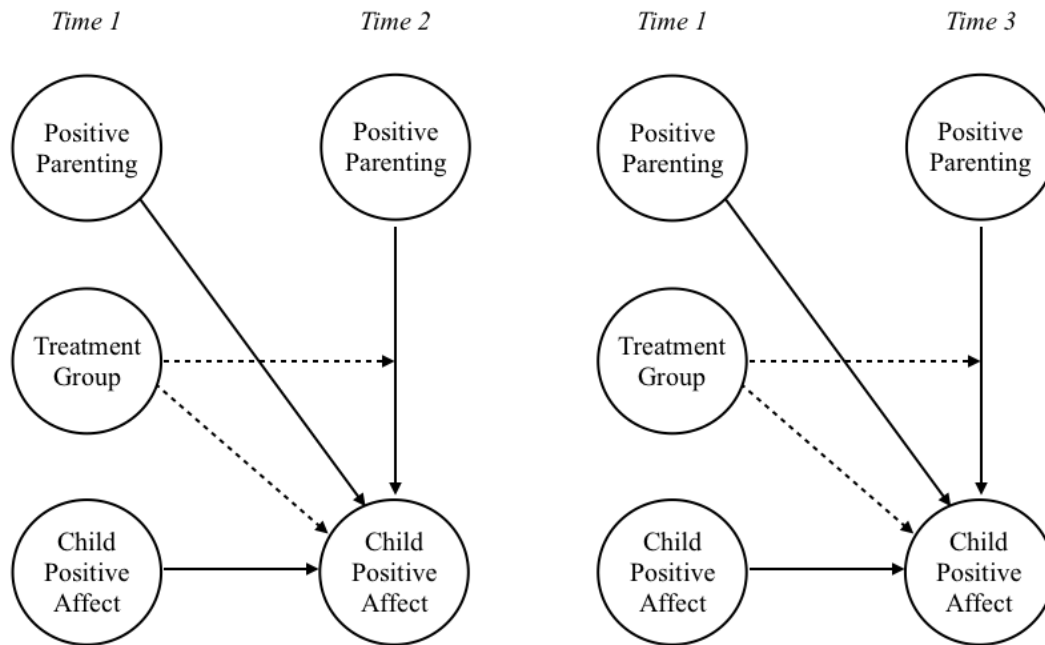
**Hypothesis 2B)** Children of mothers randomly assigned to the positive parenting intervention, relative to mothers randomly assigned to the control condition, will show an increase in positive affect from Time 1 to Time 2, Time 1 to Time 3, and Time 1 to Time 4.

*Specific Aim 3: To examine changes in children's positive affect associated with changes in mothers' use of positive parenting, and to explore whether children's positive affect followed mothers' positive parenting behaviors.*

**Hypothesis 3A)** During the mother-child play interaction, mothers' positive parenting will be associated with children's positive affect in the sample overall, regardless of depression history or intervention condition. That is, mothers' positive parenting – either in terms of frequency (i.e., how many times a positive parenting behavior occurred) or mean duration (i.e., how long the behaviors lasted) – will be positively associated with the proportion of time children spend in positive affect.

**Hypothesis 3B)** For each post-intervention time point (i.e., Times 2, 3, and 4), mothers' positive parenting will be associated with children's concurrent positive affect over and above mothers' positive parenting and children's positive affect at pre-intervention. This effect will be stronger

for mother-child dyads assigned to the positive parenting condition, as compared to those in the control intervention condition. See Figure below.



*Figure 9.* Hierarchical regression models predicting child positive affect from mothers' concurrent positive parenting. This figure illustrates the tested regression models. Solid lines are associations of primary interest. Separate regressions were run for each of the positive parenting behaviors.

**Hypothesis 3C)** We will explore sequential relations between mothers' positive parenting and children's positive affect (i.e., proportion of time spent in positive affect) among mother-child dyads. We expect to find a stronger association between positive parenting and children's positive affect in the positive parenting condition as compared to the control intervention condition. That is, the probability that children will show positive affect following their mother's use of positive parenting behaviors will increase more in the positive parenting condition as compared to the control condition from T1 to T2, T1 to T3, and T1 to T4.

## **Method**

### **Participants**

The sample for the present study included 131 women and their children between 8- and 10-years-old. Data were collected at two sites, Emory University and Vanderbilt University. To enroll a broadly representative sample, we recruited women from several sources, including through the Emory University Child Study Center database, Kaiser Permanente-Georgia, the Vanderbilt University research listserv, referrals, and a birth record database. Trained research staff conducted phone interviews to assess inclusion and exclusion criteria, using a modified Structural Clinical Interview for DSM-IV (SCID; First, Spitzer, Gibbon, & Williams, 2002). Mothers who met diagnostic criteria for a depressive disorder or had no history of depression (during their child's lifetime) and who had a child between 8 and 10 years old were considered eligible. To avoid non-independent data, only one child per family was included, randomly selected if there was more than one eligible child. Mothers were excluded: if they were currently suicidal, psychotic, substance abusing, or had ever had bipolar I disorder or schizophrenia; if their child had a pervasive developmental disorder, intellectual disability, autism, bipolar disorder, or psychosis, or had ever met criteria for major depression or dysphoria, or was monolingual and non-English speaking. A non-depressed comparison group included mothers with no history of depression during their child's lifetime. After the first session, mothers with a history of depression were randomly assigned to either the positive parenting intervention or a nutrition program intervention. Regardless of whether or not mothers were depressed at the time of data collection, those with a history of depression during their child's lifetime are hereafter be referred to as the "depressed group" for ease of reference and comparison.

The final sample consisted of 131 mothers; 65 mothers in the depressed group and 66 mothers were non-depressed. Of the mothers with a history of depression, 37 (57.92%) were randomly assigned to receive the positive parenting intervention and 28 (43.07%) received the control condition (nutrition program). Roughly half (53%;  $n = 70$ ) of the children were female. On average, mothers were 40.00 years old ( $SD = 6$  years) and children were 9.34 years old ( $SD = 0.85$ ). Approximately 55% of the mothers were Caucasian, 31% African American, 4% Asian American, 1% Hispanic or Latino, and 9% did not specify their ethnicity. Seventy-four percent of mothers had completed a four-year college degree or higher. Seventy-nine percent of mothers were married. The median household income was between \$90,000 and \$100,000.

### **Study Attrition**

Of the 65 depressed mothers who participated with their children at the first session (study Times 1 and 2), we obtained a depression rating scale score on the mothers (CES-D) and video recorded mother-child interaction data on 59 participant dyads at sessions two and three (Visit 2/Study Time 3:  $n = 59$ ; Visit 3/Study Time 4:  $n = 59$ ). Thus, the overall retention rate was high (Visit 2: 90.77%; Visit 3: 90.77%; all three visits: 87.69%).

### **Procedure**

Figure 1 depicts the flow of study enrollment, randomization, and participation. The study protocol was approved by the Institutional Review Board at both Emory University and Vanderbilt University; all parents engaged in the informed consent procedure, including providing written informed consent. Prior to Visit 1, mothers completed an online survey, comprised of questionnaires, including the depression rating scale to measure current depression. Mothers with no depression in the child's lifetime and their children participated in Visit 1 only and were observed interacting together once, for ten minutes (T1). Mothers with depression in

the child's lifetime and their children were randomly assigned to either the active intervention (positive parenting) or the control (nutrition) condition. In Visit 1, they were observed interacting together for ten minutes (T1), then they met with a coach to receive the intervention (active or control) for 90 minutes, and finally they were observed again for 10 minutes (T2). Thus, both T1 and T2 were both collected during Visit 1 and serve as our pre-intervention and immediately post-intervention timepoints, respectively. During the interaction tasks, mothers and their children were instructed to engage in play using either Legos or arts and crafts, which were provided to them. These semi-structured interactions were video recorded and later coded for parenting behaviors and child affect. One week later, mothers with depression in the child's lifetime and their children returned to the laboratory (Visit 2), again completed a depression rating scale and were again observed interacting together (T3), and met with the same coach to review their homework from the previous week, review any material they need help with implementing, and given the opportunity to ask any questions regarding the content covered. Two weeks after Visit 2, mothers with depression in the child's lifetime and their children returned for a third visit (Visit 3), during which mothers again completed a depression rating scale and dyads were again observed interacting together (T4). At the end of each visit, the research assistant gave a small toy to the child and compensated the mother financially.

It should be noted that the procedures for the current study were part of a larger study in which the mothers and children participated. Procedures not relevant to the current study included the child completing self-report questionnaires, an effort discounting task, and physiological measures while the mother participated in the training.

### **Intervention Conditions**

The active intervention (positive parenting) and control condition (nutrition training) were designed to be parallel in format, structure, and duration. Both were delivered via one-on-one training with a coach, who was a graduate student in clinical psychology, and included psychoeducation as well as planning and homework for at-home implementation. Before delivering either the active intervention or control condition, graduate students underwent training involving: reviewing coaching materials, watching video-recorded sessions of each intervention being delivered by an already-trained coach, role playing the delivery of each intervention with an already-trained coach, and reviewing mock or practice coaching sessions with an already-trained coach.

Training sessions were video-recorded and, after data collection, 20% of the videotaped sessions were reviewed for the purpose of fidelity checks. A trained research assistant rated the delivery of both the parenting intervention and family nutrition program in terms of fidelity to their respective manuals. The primary investigators (KC, JG, and SHG) developed fidelity rating scales for this study based on a review of checklists used to assess similar interventions, such as the Triple P parenting intervention and in Breitenstein et al. (2010). Training for fidelity checks involved studying the manuals and then viewing and scoring video-recorded training sessions. The research assistant was required to attain an ICC of at least 70% on scores from at least 3 sessions, compared to the lead graduate student (K.C.), prior to being permitted to rate fidelity for study sessions. Findings from the fidelity checks revealed that both the intervention and control conditions were delivered with excellent fidelity. Coaches delivering the positive parenting intervention covered, on average, 93.93% of all positive parenting topics. Coaches delivering the attention control (nutrition) training covered 99.4% of all nutrition topics and 0% of the positive parenting intervention topics.



**Positive parenting intervention.** The positive parenting intervention was developed based on evidence-supported interventions, including: Standard Triple P (Positive Parenting Program; Sanders, Turner, & Markie-Dadds, 2001), ACTION Parenting manual (Stark, 2008), Family Focused Treatment Manual (Miklowitz, 2010), Parent Child Interaction Therapy (Eyberg, 1999), and Adolescent Coping with Depression Course (Lewinsohn, Clarke, Rohde, & Hops, 1991). Borrowing heavily from the manuals for those programs, the senior investigators (J.G. and S.H.G.) wrote a manual specifically for this study (see Appendix). The specific positive parenting strategies we targeted were: engagement in quality time, showing affection, reflecting on the positive, verbal praise, nonverbal praise, positive requests for change, and expressing negative thoughts and feelings about specific behaviors.

**Visit 1.** In Visit 1, while the children were in a separate room filling out forms, mothers met individually with an intervention coach in a psychoeducation format: coaches provided the information in the manual and gave the mothers opportunities to practice each of the positive parenting strategies. The initial session (Visit 1) had several objectives. First, mothers were introduced to the concept and components of positive parenting. Second, mothers were familiarized with different strategies for developing a positive relationship with their child (i.e., showing affection) and helped to generate a plan for how to implement these strategies at home. Third, mothers were familiarized with the strategies for encouraging desirable behavior and, with the coaches' encouragement and assistance, mothers generated a plan for how to implement these strategies at home over the next week. Mothers were provided with a copy of the positive parenting training manual to refer to, along with a workbook in which they had been taking notes and a skills tracking form.

Coaches ended the coaching session by eliciting each mother's input regarding specific skills/behaviors that the mother particularly anticipated needing help in implementing. This provided focus for feedback during a subsequent coached interaction. Following the coaching, mothers were reunited with their children and participated in the video-recorded interaction previously described. After five minutes of interaction, for the subsequent five minutes, using a bug-in-the-ear device (so that the children were not aware of the verbal coaching the mothers would receive), coaches provided verbal input to mothers based on the moment-to-moment observed mother-child interaction. This verbal input focused on: shaping mothers' behavior with labeled verbal praise contingent on her use of any of the positive parenting skills, encouraging mothers to use the skills and providing modeled examples if the coach noticed a missed opportunity, and helping mothers to reframe negative statements in a positive way, if the mother was not doing so on her own. Following the five minutes of *in vivo* coaching, the mothers and children were observed for an additional five minutes of interaction.

**Visit 2.** The second training session was structured similarly to the first session. Coaches first reviewed homework, giving mothers an opportunity to discuss what went well and what challenges the mother faced. Then they reviewed all of the concepts and components of positive parenting. Finally, they engaged in problem-solving around the mothers' future, ongoing use of positive parenting strategies.

**Nutrition training program (control condition).** The nutrition training program included coaches providing psychoeducation regarding the principles of good nutrition, providing strategies for enhancing nutrition in 8-10-year-old children in light of each child's current diet, and suggesting ways to enhance nutrition in family meals. The senior investigators (J.G. and S.H.G.) developed a manual based on sources of information available on line, from

the U.S. government, the Centers for Disease Control, and established nutrition associations. See Appendix for manual. The length of the manual and the components and length of the coaching sessions were designed to parallel the active intervention, so that the control condition served as an attention control while engaging mothers' interest.

The objectives of the initial session (Visit 1) were to help mothers understand the concept and components of healthy nutrition, become familiar with different strategies for helping their child eat a healthy and balanced diet, and to build confidence in their ability to try new healthy recipes for their family. The training modules included: fruits and vegetables, whole grains, milk and dairy, balanced diets on a budget, and healthy recipes. Mothers were provided with a copy of the nutrition training manual, a nutrition workbook, homework, and a recipe booklet. After the one-on-one training session, dyads in the control condition completed the video-recorded play interaction but without the intervening *in vivo* training.

At Visit 2, one week later, the same coach met with the mother for the second training session, which was structured similarly to the first session; it focused on reviewing homework, reviewing the concepts and components of healthy eating, and problem-solving regarding continued application of behaviors consistent with principles of good nutrition.

## **Measures**

**Mothers' History of Depression.** Trained research staff assessed mothers' history of depression using a modified SCID-IV, a semi-structured interview (SCID; First et al., 2002), to assess for a past major depressive episode, Dysthymic Disorder, or Depressive Disorder (Not otherwise specified) and relevant rule out criteria. All information was presented to a senior investigator (JG, SG) who made the final diagnosis of a depressive episode or not.

**Mothers' Current Level of Depression.** The *Center for Epidemiologic Studies - Depression Scale* (CES-D; Radloff, 1977) is a 20-item, self-report questionnaire that assesses depressive symptoms over the past week. Mothers rated their symptoms along a 4-point Likert scale from "Rarely or none of the time (<1 Day)" to "Most or all of the time (5-7 days)." Responses across all items were summed to generate a total score, with a score of 16 or above considered the cut-off for depression (Radloff, 1977). The CES-D has well-established validity and reliability (Radloff, 1977), with internal consistency reliabilities of about 0.85 in a general population and 0.90 in a clinical sample. In the current study, coefficient alpha was .88.

**Behavioral Coding. *Positive parenting.*** Trained observers coded mothers' parenting behaviors from the video-recorded mother-child play interactions. Given that the post coaching interaction (for depressed mothers in the positive parenting condition) was divided into two five minute segments, before and after *in vivo* coaching, all of the 10-minute sessions, across all visits for all participants, were divided into 5-minute segments. In this way, observers exclusively coded 5-minute segments, which enabled them to remain unaware of the mother's depression status or intervention condition. Data from each pair of 5-minute segments were subsequently summed in order to reflect the observed 10 minute segments.

Given that the post coaching interaction (for depressed mothers in the positive parenting condition) was divided into two five-minute segments, before and after *in vivo* coaching; the second five-minute segment was used as the post-intervention (i.e., Time 2) time point. Transcription and coding of the video-recorded interactions was completed by coding team members (undergraduate and graduate-level students) using ProCoder and BXC software. BXC was developed for this study to increase the efficiency and accuracy of coding behavioral interactions. The software application allowed a user to code a video interaction based on

specific markers from an imported transcript of the video interaction. The software contained rules for each interaction code to minimize data entry errors. For example, a coder could rate Looking and/or Nodding only during segments in which the target child was talking (as per the code definitions).

Transcription and coding team members were extensively trained, and they were unaware of the other information about the mother and child, such as whether or not the mother had a depression history and to which, if any intervention condition they had been randomized. Transcription training involved each transcription team member independently transcribing practice segments and demonstrating high reliability (at least 80% agreement) with the master transcriber. The transcribing process involved transcribing each dyad's discourse during the taped interactions; each thought verbalized by the child was counted as an event and mother talk events were unitized in relation to individual child talk events (i.e., mother talk events were punctuated by new child talk events). A subset of weekly assigned transcriptions were double-transcribed as a check. Training involved each coding team member independently rating practice segments and discussing any disagreements with the coding team leader until the group reached a consensus. The rating period began once the team member consistently demonstrated high inter-rater reliability (i.e., kappa above .80 for four consecutive segments).

The parenting behaviors coded were physical contact (i.e., affection or incidental/accidental touch initiated by the mother), reflecting on the positive (i.e., saying something positive or encouraging about things in life or current environment or activity), active listening (i.e., looking, nodding, questioning, or repeating), labeled verbal praise (i.e., making a specific verbalization that expresses favorable judgment), unlabeled verbal praise (i.e., making non-specific verbalization that expressed favorable judgment), nonverbal praise (i.e., gesturing in

a way that conveys approval of child's specific behavior), making positive requests for change (i.e., requesting that the child do a specific behavior, expressing negative thoughts and feelings about specific behaviors (i.e., without using criticism or anger), negative comment or criticism, smiling or laughing, and quality time (i.e., dyad engaged with joint activity and/or each other). Two additional codes were used to categorize seconds in which mothers' behavior was not coded, such as if the mother was out of view or a researcher entered the room. The coding process was as follows: observers watched their assigned segment once through fully, coded the frequency of active listening behaviors, followed by the frequency of verbal behavior codes (i.e., talking about the positive, verbal praise, making positive requests for change, expressing negative thoughts and feelings about specific behaviors, and criticism), coded the duration of mothers' smiling/laughing as well as uncodeable events, and, finally, they reviewed the coding file and refined the timing of codes as needed. A randomly selected 31% of segments (193 out of 625) was rated by two coders in order to assess reliability throughout the study and to prevent observer drift, yielding a kappa of .71.

***Child positive affect.*** Using Interact-9 (Mangold, 2015), undergraduate and graduate student coding team members coded children on a second-by-second basis for observed affect during each parent-child interaction. Coding team members were extensively trained in the coding system, and they were unaware of the other information collected on the mother and child, such as maternal depression history. Training involved each coding team member independently rating practice segments from a pilot study and discussing any disagreements with the lead graduate student (K.C.) until the group reached a consensus. The coding of study sessions began once the team member consistently demonstrated high inter-rater reliability (i.e., kappa above .80 for four consecutive segments). Observers watched their assigned segment once

through fully, then coded the child in terms of second-by-second affect (the Interact system records the time when each affect change is noted) and, finally, reviewed the coding file and refined the timing of individual codes as needed. Weekly, a randomly selected 21% of segments was coded by two observers in order to assess reliability throughout the study and to prevent observer drift. For those segments, reliability was found to be high, with a kappa of .81.

Children's affect was coded according to a 7-point scheme based on well-established rubrics (e.g., Dougherty et al., 2010) that had been used with adults and young children. The coding schema took into account affect valence and affect intensity. Coding decisions reflected the intensity of child affective displays based on facial expressions (e.g., smiling or laughing), physical gestures (e.g., open or engaged posture), and tone of voice (e.g., warm) (Dougherty, Klein, Durbin, Hayden, & Olino, 2010; Olino et al., 2011). Two additional codes were used to categorize seconds in which affect was not coded, such as if the child was out of view or a researcher entered the room to correct for any protocol violations. See Appendix for coding rubric. We generated a positive affect score to reflect the proportion of the codeable observed time that the child spent in positive affect (regardless of intensity) during each observed segment and then summed across the other 5-minute segment of the original 10-minute observed interaction. These steps resulted in a score of percent time in positive affect for T1, T2, T3, and T4, which were used in all indicated analyses.

***Contingency response.*** A contingency response was defined as a sequence in which a child expressed positive affect after the mother engaged in a positive parenting behavior. Using Mangold Interact, we generated a transitional probability statistic for each mother-child dyad at each time point. For each interaction, this statistic reflects the likelihood that child positive affect (relative to non-positive affect) would follow a positive parenting act. Consistent with previous

work on parent-child positive affect (Thomassin & Suveg, 2014), we used a 10-second lag, such that contingency required that a child's positive affect code occurred subsequent to a mother's positive parenting code within a 10-second window.

### **Planned Analyses**

We conducted preliminary analyses to compare groups (groups by maternal depression history and by intervention condition) in terms of demographic characteristics (e.g., family income and mothers' level of education) and mothers' scores on the CES-D. Frequency distributions of and bivariate correlations between all variables were inspected. Additionally, we explored approaches to data reduction and addressing data skew.

Aim 1 analyses sought to replicate findings of a negative association between maternal depression and mothers' positive parenting. To test the first hypothesis that mothers with a history of depression would engage in less positive parenting relative to non-depressed controls, we conducted independent samples *t* tests. We also generated Pearson correlations of mothers' positive parenting behaviors and CES-D scores at Time 1 to test that these variables would be inversely associated.

Aim 2 analyses tested hypotheses regarding the effect of the positive parenting intervention, relative to the control condition, in terms of increasing mothers' positive parenting behaviors and children's positive affect. To test the hypotheses that mothers in the positive parenting intervention would engage in increased levels of positive parenting and their children would show a greater increase in PA, we conducted separate Repeated Measures Analyses of Variance (ANOVA) with intervention condition X time interactions for positive parenting behaviors and for children's positive affect. Follow-up comparisons were performed to examine effects of time and group.



Aim 3 analyses tested whether changes in children's positive affect were associated with changes in their mothers' positive parenting. To test the hypothesis that mothers' positive parenting would be positively associated with children's positive affect, we generated Pearson correlations. To test whether mothers' positive parenting was associated with children's concurrent PA over and above mothers' positive parenting and children's PA at pre-intervention, we ran a series of multiple regression analyses for each time point predicting child PA based on mothers' concurrent positive parenting, intervention condition, and the positive parenting by condition interaction, controlling for children's positive affect and the particular parenting behavior at pre-intervention. Finally, we generated transition probabilities in Mangold Interact to explore the extent to which children's positive affect followed their mothers' use of positive parenting to explore the sequential, moment-to-moment relation between mothers' positive parenting and child PA, and we examined whether these transition probabilities changed over time as a function of intervention condition.

## **Results**

### **Descriptive Statistics and Preliminary Analyses**

We conducted preliminary analyses to compare groups at Time 1 and to check the distribution of scores. One-way ANOVAs and chi-square tests were run to compare demographic characteristics between groups, i.e., depressed vs. non-depressed groups (see Table 1) and mother-child dyads assigned to the positive parenting intervention versus nutrition program (see Table 2).

**Depressed vs. non-depressed group comparisons.** Mothers with and without a history of depression did not differ significantly regarding children's sex or age, mothers' race or ethnicity, or mothers' education level (see Table 1). The groups did differ significantly in terms

of children's race or ethnicity, mothers' age, and marital status. Mothers with a history of depression had children who they were more likely to identify as Black, African American, Asian, Hispanic, or other, and the mothers were significantly younger and less likely to be married compared to those of non-depressed mothers (see Table 1,  $ps < .05$ ). As expected, mothers with a history of depression scored significantly higher in current depressive symptom level on the CES-D at Visit 1 than did mothers in the non-depressed control group. Of note, 12.31% of mothers with a history of depression met or exceeded the established cutoff score of 16 (Radloff, 1977). CES-D scores for Visits 2 and 3 are also reported in Table 1 for descriptive purposes.

**Parenting intervention versus control condition (nutrition program).** As shown in Table 2, the random assignment was effective in that mothers assigned to the active intervention condition (positive parenting) and mothers assigned to the control condition (nutrition program) did not significantly differ in terms of children's sex, age, or ethnicity, or mothers' marital status, education level, or depressive symptom level.

**Parenting data. Data preparation.** Based on frequency distributions of the thirteen coded parenting variables, we underwent data reduction steps. One variable ("Expressing Negative Thoughts/Feelings about Specific Behaviors") was dropped due to insufficient observation; it was observed only once across segments and participants. Consistent with the targets of the positive parenting intervention, and given low base rates of some of the coded variables, we merged some sets of coded variables: affection and accidental touch were merged into "Physical Contact;" and labeled, unlabeled, and nonverbal praise codes were combined into "Praise," as originally intended. The remaining seven composite variables are listed and described in Table 3

We then examined the distributional properties of the composite parenting variables, separately for each of the observed segments, and found that all but one (Active Listening) of the seven variables were not normally distributed across segments. For one of the six not normally distributed variables, Positive Requests for Change, we found that observers rarely coded this more than once per segment and, consequently, we recoded the variable so that 0 = no occurrences and 1 = one or more occurrences. The other five non-normally distributed variables were all positively-skewed. We tested several transformations for their impact on skew, including log, log-10, and square-root transformations, and determined that a square-root transformation best fit the count data and most effectively reduced skew. We used the transformed variables in all subsequent analyses.

***Baseline comparisons: Active intervention (positive parenting) vs. control (nutrition program) condition.*** As shown in Table 4, mothers in the intervention (positive parenting) and control (nutrition) conditions did not differ significantly in any of the positive parenting behaviors at Time 1, consistent with random assignment. Although not statistically significant, there were small effect sizes for group differences on observed frequency of Active Listening, Praise, and Positive Requests for Change, with mothers in the positive parenting condition, relative to those in the control condition, showing more active listening, less praise, and more positive requests for change, relative to those assigned to the control condition.

***Correlations with demographic variables.*** Pearson's correlations were conducted to investigate relations between demographic variables and the observed parenting variables at each time point (reminder: Time 1 includes both depressed and non-depressed mothers; Times 2 through 4 include depressed mothers only). Only three significant associations were found, all with small effect sizes. Maternal age was significantly, positively associated with mothers'

physical contact at Time 3, such that mothers' older age was associated with their more frequently making physical contact with their children ( $r = .27, p = .04$ ). Child age was significantly, positively correlated with mothers' frequency of using positive requests for change at Time 3 and criticism at Time 4; mothers' frequency of positive requests for change was significantly correlated with child age, such that more frequent requests were associated with children being younger, and mothers' criticism was significantly associated with child age, such that more frequent maternal criticisms were associated with children being older ( $r = -.28, p = .03$  and  $r = .36, p = .01$ , respectively).

***Correlations among parenting variables at each time.*** Within-segment correlations between parenting variables were as follows (see Tables 5-8). At Time 1 (all participants), as shown in Table 5, Talking about the Positive was positively correlated with Active Listening; Physical Contact was positively associated with Criticism; Active Listening positively correlated with Smiling/Laughing and Praise, and Physical Contact positively correlated with Criticism, with small to medium-sized effects.

At Time 2 (depressed mothers only) (see Table 6), Talking about the Positive positively correlated with Active Listening; Physical Contact positively correlated with Smiling/Laughing; Active Listening positively associated with Smiling/Laughing, with Praise, and with Positive Requests for Change, with small to medium-sized effects. At Time 3, as shown in Table 7, Talking about the Positive was positively associated with Active Listening; Praise was positively correlated with Talking about the Positive, Smiling/Laughing, and Active Listening; and Active Listening was positively correlated with Praise, all with small effects. At Time 4 (see Table 8), Talking about the Positive was positively associated with Praise; Talking about the Positive was negatively correlated with Criticism, Physical Contact was positively associated with Praise, and

Smiling/Laughing was positively correlated with Active Listening, with small effect sizes.

### **Aim 1: Mothers' Depression and their Observed Parenting Behaviors**

**Depression History and Parenting Behaviors.** Independent samples t-tests and chi-squared tests were conducted to examine Hypothesis 1A, that mothers with a history of depression in their child's lifetime would engage in less positive parenting as compared to non-depressed mothers. Findings were only somewhat consistent with the hypothesis. Results showed that mothers with a history of depression engaged in significantly less active listening than did non-depressed mothers, with a medium sized effect (see Table 9). The two groups did not differ, however, on the other six parenting summary codes, with small effect sizes. To ensure that the results of the parametric t-tests were not biased by data skew, non-parametric tests were run for comparison; results from the non-parametric testing did not significantly differ from those of the t-tests. See Table 9 for details and see below for a description of results.

**Associations between mothers' current depressive symptoms and parenting behaviors.** To test Hypothesis 1B, that mothers' current depressive symptom levels would be associated with their use of positive parenting, we conducted Pearson's correlations on mothers' CES-D scores and observed parenting composite variables assessed at Time 1 for the entire sample of depressed and non-depressed mothers (see Table 5) as well as for the depressed mothers only (all  $r$ 's < .30). Results were only minimally consistent with the hypothesis. Mothers' current depressive symptom level at Time 1 was significantly and inversely associated with their use of physical contact at Time 1 in the overall sample ( $r = .26, p = .05$ ) and at Time 2 among depressed mothers (see Table 6). Mothers' current depressive symptom levels were not significantly associated with their use of the other positive parenting behaviors.

### **Aim 2: Effects of the Parenting Intervention**

**Effects on parenting behaviors.** A two-way Repeated Measures ANOVA was conducted to test Hypothesis 2A, that mothers in the positive parenting intervention, relative to mothers in the control condition, would show greater increases in levels of positive parenting - from Time 1 to Time 2, Time 1 to Time 3, and Time 1 to Time 4 (this last comparison was exploratory). Mauchly's test indicated that the assumption of sphericity had been violated for two of the seven parenting variables, Physical Contact and Positive Requests for Change. Given that in both cases the Greenhouse-Geisser estimate of sphericity was greater than .75, the Huynh-Feldt correction was used (Field, 2017). In partial support of Hypothesis 2A, the results of the ANOVA showed significant time by intervention condition interactions for three parenting variables: Active Listening, Smiling/Laughing, and Praise (see Table 10). This was true for Time 1 vs. Time 2 comparisons for all three of these variables and for Time 1 vs. Time 3 for Active Listening and Praise. This interaction indicates that mothers' parenting behaviors across these visits were different for mothers in the parenting intervention as compared to the control condition. Regarding the exploratory part of Hypothesis 2A, we found a significant time by condition interaction for Time 1 vs. Time 4, on Praise, but not on the other parenting variables.

To interpret the three significant time by group interactions (Active Listening, Smiling/Laughing, and Praise), we plotted the interactions (see Figures 2-8) and generated within-subjects contrasts in SPSS. The contrasts for Active Listening at Time 1 compared to Time 2, and Time 1 compared to Time 3 were significant ( $F(1, 53) = 21.71, p = .00$  and  $F(1, 53) = 8.70, p = .01$ , respectively). Inspection of the interaction (see Figure 4) indicates that increases in Active Listening from Time 1 to Time 2 and from Time 1 to Time 3 were significantly greater for mothers in the parenting intervention as compared to mothers in the control condition. No increase in Active Listening was found from Time 1 to Time 4 for mothers

in the parenting as compared to the nutrition control condition.

The repeated measures ANOVA contrast for Smiling/Laughing at Time 1 compared to Time 2 was significant ( $F(1, 53) = 6.13, p = .02$ ) indicating that, consistent with Hypothesis 2A, the increase in Smiling/Laughing from Time 1 to Time 2 was significantly greater for mothers in the parenting intervention as compared to mothers in the control condition (see Figure 3). No further differences in Smiling/Laughing were found between mothers in the parenting intervention versus the control condition from Time 1 to Time 3 or from Time 1 to Time 4.

Significant effects were found for Praise when comparing Time 1 to Time 2 ( $F(1, 53) = 8.19, p = .01$ ), Time 1 to Time 3, ( $F(1, 53) = 13.06, p = .00$ ), and Time 1 to Time 4 ( $F(1, 53) = 12.22, p = .00$ ). Consistent with Hypothesis 2A, increases in Praise from Time 1 to Time 2, Time 1 to Time 3, and Time 1 to Time 4 were significantly greater for mothers in the parenting intervention as compared to mothers in the control condition. All contrasts for Active Listening and Praise remained significant after we applied a Bonferroni correction for multiple comparisons ( $p = .05/7 = 0.007$ ).

There was a significant main effect of time for criticism,  $F(1, 159) = 4.32, p = .01$  (see Table 10) indicating that mothers decreased in their use of criticism over time, regardless of condition. The within-subjects contrast of time on criticism revealed a significant effect of time for Time 1 vs. Time 3,  $F(1, 53) = 11.66, p < .01$ , such that mothers use of criticism increased significantly from Time 1 to Time 3. There was a significant main effect of condition on talking about the positive ( $F(1, 53) = 13.43, p = .001$ ), physical contact ( $F(1, 53) = 4.21, p = .05$ ), and positive requests for change ( $F(1, 53) = 4.23, p = .045$ ) indicating that mothers engaged in significantly more of these positive parenting behaviors over time relative to mothers in the control (nutrition) condition.

Next, we tested the simple main effects of time for significant time by intervention condition interactions, for mothers who received the positive parenting intervention only in order to identify within-group effects of time (see Table 11). The results revealed three simple main effects of time among mothers who participated in the intervention. There was a simple main effect of time on smiling/laughing,  $F(3, 96) = 6.76, p < .001$ ; within-subjects contrasts revealed a significant difference between smiling/laughing at Time 1 vs. Time 2 ( $F(1,32) = 16.95, p < .001$ ). There also was a simple main effect of time on active listening,  $F(1,32) = 20.126, p < .001$ , such that there was a significant difference for active listening at Time 1 vs. Time 2 ( $F(1,32) = 43.04, p < .001$ ) and at Time 1 vs. Time 3 ( $F(1,32) = 21.3, p = .00$ ). Finally, there was a simple main effect of time on praise,  $F(1,96) = 9.21, p < .001$ , indicating a significant difference in praise at Time 1 vs. Time 2 ( $F(1,33) = 15.20, p < .001$ ), Time 1 vs. Time 3 ( $F(1,33) = 21.18, p < .001$ ), and Time 1 vs. Time 4 ( $F(1,33) = 15.83, p < .001$ ). All contrasts remained significant after we applied a Bonferroni correction for multiple comparisons ( $ps < 0.007$ ).

Given that the parenting of depressed and non-depressed mothers could be distinguished based on active listening at Time 1, we ran an exploratory t-test comparing non-depressed controls at Time 1 with mothers in the parenting intervention at Time 3. There was a significant difference ( $p = 0.01$ ) such that depressed mothers in the parenting intervention engaged in significantly more active listening relative to non-depressed mothers at baseline.

**Effects on Children's Positive Affect.** We tested Hypothesis 2B using a Two-Way Repeated Measures ANOVA, predicting increases in child positive affect (PA) among children whose mothers participated in the positive parenting intervention, relative to children whose mothers were randomly assigned to the control condition. Results from the ANOVA revealed a



significant group by time interaction predicting changes in PA across time points,  $F(1,53) = .46$ ,  $p = .02$ , partial  $\eta^2 = .01$  (see Figure 9). Results showed no significant between-subjects effects of intervention condition nor main effect of time on child PA. However, examination of post-hoc comparisons revealed significant within-subjects contrasts of time on PA, specifically from Time 1 to Time 2 ( $F = 7.28$ ,  $p = .01$ ) and from Time 1 to Time 4 ( $F = 5.34$ ,  $p = .03$ ). Follow-up  $t$  tests indicated that relative to children of mothers in the control intervention, children of mothers in the positive parenting condition showed more PA at Time 2, with a medium effect size,  $t(60) = 2.09$ ,  $p = .04$ ,  $d = .54$ ; this may explain the overall interaction effect found in the repeated measures ANOVA.

### **Aim 3: Associations between Positive Parenting Behaviors and Children's PA**

We generated Pearson correlations to test Hypothesis 3A that mothers' observed positive parenting behaviors would be positively associated with the proportion of time that children were observed to be in PA. Results were partially consistent with the hypothesis. At Time 1, in the sample overall, regardless of condition or depression history, child PA showed weak to moderate associations with mothers' talking about the positive ( $r = .24$ ,  $p = .01$ ), smiling/laughing ( $r = .31$ ,  $p = .00$ ), active listening ( $r = .47$ ,  $p = .00$ ), and praise ( $r = .22$ ,  $p = .01$ ). At Time 2, child PA remained significantly and positively associated with mothers' smiling/laughing ( $r = .48$ ,  $p = .00$ ) and active listening ( $r = .37$ ,  $p = .00$ ), but no longer with talking about the positive or praise. At Time 3, child PA was significantly and positively associated with mothers' physical contact ( $r = .30$ ,  $p = 0.02$ ), smiling/laughing ( $r = .37$ ,  $p = .00$ ), active listening ( $r = .35$ ,  $p = .01$ ), and praise ( $r = .274$ ,  $p = .04$ ). Finally, at Time 4, child PA remained significantly and positively correlated with active listening ( $r = .36$ ,  $p = .01$ ). Child PA was not significantly associated with positive requests for change or criticism at any time point.

**Relation between parenting behaviors concurrent child PA.** We conducted a series of hierarchical regression analyses to test Hypotheses 3B that mothers' amount of observed positive parenting, intervention condition, and the interaction between positive parenting and intervention condition would significantly predict the percentage of time children spent in PA. We entered the control variables (i.e., the relevant maternal parenting behavior for each model and child PA at Time 1) in the first block. In the second block, we entered the relevant parenting behavior at the concurrent time point. In the third block, we entered intervention condition. In the final block, we entered the intervention condition X parenting behavior interaction term. Support for Hypothesis 3B would be indicated by the parenting behavior entered in the second block significantly predicting child affect.

*Time 2.* For each model predicting children's PA at Time 2, positive parenting and child PA at Time 1 were entered first into the regression model, followed by the parenting behavior at Time 2, then intervention condition, and then the condition by parenting behavior interaction term (See Figure 2 for model). Tests for multicollinearity indicated that a very low level of multicollinearity was present overall ( $VIF < 10$ , with the expected exception of the interaction term variables). Consistent with Hypothesis 3B, as shown in block 2 for each of the models of Table 12, regressions revealed that mothers' active listening and smiling/laughing accounted for unique variance in children's positive affect over and above mothers' parenting and children's PA at Time 1,  $\Delta F(1,58) = 5.29, p = .03$ , and  $\Delta F(1,58) = 14.06, p = .05$ , respectively, with a small effect sizes. Follow up analyses indicated that smiling/laughing was significantly associated with child PA,  $\beta = .48, F = 9.35, p = .00$ , with a moderate effect size. Intervention condition and the interaction term were not significant predictors in these two models.

For modeling Positive Requests for Change, the significant predictors of Child PA at Time 2 were Child PA at Time 1 (block 1) and intervention condition (block 3), but not Positive Requests for Change at Time 2 (block 2) nor the interaction term (block 4). Specifically, regressions revealed that mothers' intervention condition accounted for unique variance in children's PA, over and above talking about the positive at Times 1 and 2 and child PA at Time 1,  $\Delta F(1,57) = 4.65, p = .04$ , with a small effect size. Follow up analyses indicated that intervention condition was significantly associated with child PA,  $\beta = .26, F = 4.05, p = .04$ , with a small effect size.

The regression models for testing the relation between the other parenting behaviors (e.g., Talk about the Positive, Physical Contact, Praise, and Criticism) and children's PA were not significant (see Table 12). Additionally, intervention condition did not moderate the association between any parenting behavior and children's PA, as the interaction between intervention condition and parenting behavior did not predict any additional variance over and above main effects of parenting behavior (see Table 12).

*Time 3.* For each model predicting child PA at Time 3, positive parenting and child PA at Time 1 were entered first into the regression model, followed by the respective parenting behavior at Time 3 entered in block 2, intervention condition entered in block 3, and then the group by parenting behavior interaction term in block 4. Partial support for Hypothesis 3B was found, with four of the seven positive parenting behaviors significantly predicting children's PA at Time 3, over and above mothers' positive parenting and child PA at Time 1, when entered into their respective models.

First, mothers' active listening significantly accounted for a unique amount of the variance in children's positive affect, over and above mothers' parenting and child PA at Time 1,

$\Delta F(1,51) = 7.31, p = .01$ , with a small effect size. Follow up analyses indicated that active listening at Time 3 was significantly associated with child PA at Time 3,  $\beta = .29, F = 9.9, p = .03$ . Second, mothers' physical contact significantly accounted for a unique amount of the variance in children's positive affect, over and above mothers' physical contact and child PA at Time 1,  $\Delta F(1,56) = 8.53, p = .01$ , with a small effect size. Follow up analyses indicated that physical contact at Time 3 was significantly associated with child PA at Time 3,  $\beta = .33, F = 6.19, p = .01$ . Third, mothers' smiling/laughing at Time 3 accounted for a significant and unique amount of the variance in children's PA at Time 3, over and above mothers' smiling/laughing and child PA at Time 1,  $\Delta F(1,56) = 11.4, p = .00$ , with a small effect size. Follow up analyses indicated that smiling/laughing was significantly and positively associated with concurrent child PA,  $\beta = .45, F = 8.27, p = .00$ . Finally, mothers' praise at Time 3 accounted for a significant and unique amount of the variance in children's PA at Time 3, over and above mothers' praise and child PA at Time 1,  $\Delta F(1,56) = 5.08, p = .03$ , with a small effect size. Follow up analyses indicated that praise was significantly associated with concurrent child PA,  $\beta = .26, F = 5.87, p = .03$ . In all models, condition did not predict concurrent child PA nor did it moderate any of the significant effects of parenting behavior on child PA, controlling for all of the other variables in the model (see Table 13).

### **Contingency of Positive Parenting with Children's Positive Affect**

Finally, in Hypothesis 3C, we predicted that children of mothers in the positive parenting condition would respond more contingently to their mothers' positive parenting with positive affect, relative to children of mothers in the control (nutrition) condition, from Time 1 to Time 2, Time 1 to Time 3, and Time 1 to Time 4. To test Hypothesis 3C, we generated a transitional probability for each mother-child dyad at each time point indicating the likelihood that the

mother's positive parenting behaviors would be followed by positive affect in their child, relative to non-positive affect (i.e., neutral or negative affect). Support for this hypothesis would be evidenced by greater increases in the transitional probability for dyads in the positive parenting condition, relative to the control (nutrition) condition, over time. That is, we expected that children whose mothers were in the Positive Parenting condition would become increasingly likely to display positive affect following (contingent on) their mothers' positive parenting behaviors. We inspected the distribution of transitional probability values, which revealed one extreme outlier that fell beyond 1.5 times the interquartile range above the third quartile. Upon further examination of this data point, we found that this child participant differed from the other participants in that he/she was the only participant who took anti-seizure medications. Therefore, we excluded this value from subsequent analyses.

A Two-Way Repeated Measures ANOVA was conducted to test Hypothesis 3C that children of mothers in the positive parenting intervention, relative to children of mothers in the control condition, would show greater increases in contingent response to their mothers' positive parenting- from Time 1 to Time 2, Time 1 to Time 3, and Time 1 to Time 4 (with the last comparison being exploratory). Mauchly's test indicated that the assumption of sphericity had not been violated. Results of the ANOVA showed no significant within-subjects main effects of time or time by intervention condition interactions. The results of the tests of between-subjects effects reveal a significant effect of intervention condition. To interpret this effect, we plotted each group's data across time points (see Figure 10) and re-examined the descriptive statistics for these probability variables. Contrary to Hypothesis 3C, the increase in the transitional probability of child positive affect contingent on positive parenting was significantly greater among the dyads in the control (nutrition) condition as compared to dyads in the positive parenting group;

this effect is explained by the increase in transitional probability from Time 1 to Time 2. The probability, on average, that children's positive affect followed positive parenting was higher among dyads in the parenting intervention at Time 1, relative to those in the control (nutrition) condition (Parenting intervention:  $M = .32$ ,  $SD = .10$ ; Control condition:  $M = .29$ ,  $SD = .13$ ). However, the transitional probability was higher among dyads in the control (nutrition) condition, relative to dyads in the positive parenting condition, at Time 2 (Parenting intervention:  $M = .28$ ,  $SD = .10$ ; Control condition:  $M = .36$ ,  $SD = .13$ ), Time 3 (Parenting intervention:  $M = .30$ ,  $SD = .10$ ; Control condition:  $M = .31$ ,  $SD = .09$ ), and Time 4 (Parenting intervention:  $M = .28$ ,  $SD = .07$ ; Control condition:  $M = .32$ ,  $SD = .13$ ). In sum, we found no evidence to support Hypothesis 3C.

### **Changes in other outcomes**

Although not an explicit target of the intervention or hypothesis testing, there was a significant difference in mothers' scores on the CES-D at Time 4, such that mothers assigned to the positive parenting intervention scored significantly lower in current depressive symptom level than mothers in the control condition, with a small effect size.

### **Discussion**

The current study demonstrated the short-term efficacy of a positive parenting intervention for mothers with a history of depression as compared to a control condition – in terms of enhancing mothers' use of positive parenting behaviors and increasing their children's positive affect. Significant intervention effects have been reported previously for programs that targeted depressed mothers' parenting, children's behaviors, and children's mental health outcomes (e.g., Compas et al., 2010; Timmer et al., 2011). The findings from the current study

are consistent with the effects of other parenting interventions on parent and child outcomes and, further showed changes in *specific* positive parenting behaviors relative to a control condition.

This micro-intervention enhanced specific positive parenting behaviors in mothers with a history of depression. In particular, mothers in the positive parenting intervention showed an increase in active listening, praise (verbal and non-verbal), and smiling/laughing during a laboratory interaction with their child, in contrast to mothers in the control (nutrition) condition. These gains were observed immediately post-intervention, a week later for active listening and praise, and three weeks later for praise. The intervention not only increased active listening among mothers with a depression history, who engaged in it less at pre-intervention relative to controls, but increased it to an extent that depressed moms ended up engaging in Active Listening significantly *more* relative to controls. The present findings provide the first evidence that a micro-intervention can produce observable changes in depressed mothers' parenting and add to the evidence that more general parenting interventions improve depressed parents' behaviors toward their children (e.g., Compas et al., 2010; Timmer et al., 2011). Thus this finding contributes to evidence that parenting behavior is a modifiable and promising intervention target for mothers with a history of depression (Goodman & Garber, 2017).

Given the role in the pathway to depression that is conceptualized for positive affect, as a vulnerability factor for depression in offspring of depressed parents (Olinio et al., 2011), the current study took the important next step of designing and testing an intervention specifically meant to enhance positive affect in offspring of depressed mothers. The findings from the current study demonstrate the short-term effectiveness of this parenting intervention at increasing positive affect in children of mothers with a history of depression. Specifically, compared with children of mothers in the control (nutrition) condition, children of mothers in the parenting

intervention showed significantly more observed positive affect immediately post-intervention, although these gains were not maintained at T3 or T4. Thus, the hypothesized effect of the intervention on children's positive affect across time points was only partially supported, in that the effect was short term.

We further expected that changes in positive parenting would produce changes in positive affect on a moment-to-moment basis. Thus, we hypothesized an increase in probability of child transitioning to positive affect following mothers' positive parenting as a function of participation in the parenting intervention. Contrary to our prediction, mothers' participation in the control (nutrition) condition was associated with an increased transitional probability, compared to those in the parenting intervention. Such findings would have indicated that increased positive parenting would produce in the moment increased PA in children, however this was not borne out when looking at transitional probabilities. It may be that children need more sustained exposure to mothers' positive parenting before one would see that the positive parenting in the moment is eliciting children's positive affect in the moment.

### **Study Strengths**

The present study had several strengths. First, it accomplished the intention of demonstrating a "proof of concept" that the targeted mechanism of positive parenting can be modified and in so doing can increase children's positive affect. Second, the sample was racially and ethnically diverse. Third, the current study compared the target intervention (i.e., parenting) to an active comparison program that had an ecologically valid rationale, controlled for amount of time and contact with the interventionist, and had a similar structure with homework assignments. Thus, the present findings provide additional and even stronger support for the effectiveness of a positive parenting intervention (Timmer et al., 2011). Further, the inclusion of



a non-depressed control group allowed us to examine baseline differences in terms of mothers' and children's functioning in relation to mothers' history of depression. Particularly interesting was the finding of significant differences in active listening between depressed and non-depressed mothers. Finally, previous studies have relied on parent- and child-report of parenting and child outcomes (e.g., Timmer et al., 2011). The current study used observational data and micro-level coding to measure both parenting and children's positive affect. The inclusion of micro-coded observed positive affect as an outcome is notable given that it is an index of behavioral PA, a feature of PA most robustly linked with later maladaptive outcomes in children of depressed mothers (compared to other purported features of PA, such as hedonic PA) (Forbes & Dahl, 2005; Hayden et al., 2013; Olino et al., 2014).

### **Limitations and Future Directions**

The findings should be interpreted in the context of several limitations that provide directions for future research. The sample consisted of highly-educated mothers, with 44% of mothers having completed at least a graduate or professional degree. An important next step would be to test these hypotheses in less resourced samples for whom the severity of their depression is likely to be higher. Thus, our findings may not generalize to families with less educated mothers. The range of current maternal depressive symptoms in our sample was restricted, with an overall mean of 8.12 ( $SD = 4.22$ ), although women with a history of depression scored significantly higher ( $M = 10.11$ ,  $SD = 4.95$ ) relative to women with no history of depression ( $M = 6.15$ ,  $SD = 1.9$ ). Only 5% of mothers exceeded the established cutoff for clinically significant levels of depression on the CES-D at the time of the study.

Another limitation concerns dissemination. In the present study, the intervention was delivered under controlled circumstances (e.g., in university psychology departments, use of

well-trained coaches). Future iterations of the intervention should be conducted under less controlled, more naturalistic conditions. Finally, we structured the mother-child interaction around a shared pleasant activity; mothers' behaviors are likely to differ depending on the context in which the dyads are interacting (i.e., neutral as well as situations that elicit positivity or negativity, such as a conflict discussion task). We observed low base rates of certain parenting behaviors (i.e., positive requests for change and criticism); a more structured or challenging task, compared to the activity used in the current study, may have elicited more of these behaviors and, thus, may have allowed for greater change in positive parenting and child positive affect as a function of the intervention.

In conclusion, the mothers who participated in the positive parenting intervention showed increased use of positive parenting during laboratory interactions with their child and their children showed increases in observed positive affect, compared to mother-child dyads that were assigned to an attention control condition. Findings suggests that positive parenting among mothers with a history of depression can be effectively enhanced with a brief intervention and, further, that a parenting micro-intervention designed to enhance positive affect in children can produce such changes in the short-term.

### References

- AARP, N. A. f. C. a. (2009). *Caregiving in the U.S.* . Retrieved from Washington, D.C.:
- Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*: University of Pennsylvania Press.
- Borrego Jr, J., & Urquiza, A. J. (1998). Importance of therapist use of social reinforcement with parents as a model for parent-child relationships: An example with Parent-Child Interaction Therapy. *Child & Family Behavior Therapy*, 20(4), 27-54.
- Bradley, R. H., Iida, M., Pennar, A., Owen, M. T., & Vandell, D. L. (2017). The Dialectics of Parenting: Changes in the Interplay of Maternal Behaviors during Early and Middle Childhood. *Journal of Child and Family Studies*, 26(11), 3214-3225.
- Breitenstein, S. M., Fogg, L., Garvey, C., Hill, C., Resnick, B., & Gross, D. (2010). Measuring implementation fidelity in a community-based parenting intervention. *Nursing Research*, 59(3), 158.
- Cicchetti, D., & Hinshaw, S. P. (2002). Prevention and intervention science: Contributions to developmental theory. *Development and Psychopathology*, 14(4), 667-671.
- Clark, L. A., & Watson, D. (1991). Tripartite model of anxiety and depression: psychometric evidence and taxonomic implications. *Journal of Abnormal Psychology*, 100(3), 316.
- Collins, W. A., Madsen, S. D., & Susman-Stillman, A. (2005). Parenting during middle childhood. *Handbook of parenting*, 1, 73-101.
- Compas, B. E., Champion, J. E., Forehand, R., Cole, D. A., Reeslund, K. L., Fear, J., . . . Garai, E. (2010). Coping and parenting: Mediators of 12-month outcomes of a family group cognitive-behavioral preventive intervention with families of depressed parents. *Journal of consulting and clinical psychology*, 78(5), 623.

- Cullum, K. A. (2016). *Positive Affect in Middle Childhood: Associations with Mothers' History of Depression*. Emory University, Atlanta, GA.
- Davis, M., & Suveg, C. (2014). Focusing on the positive: A review of the role of child positive affect in developmental psychopathology. *Clinical Child and Family Psychology Review*, 17(2), 97-124.
- Dietz, L. J., Birmaher, B., Williamson, D. E., Silk, J. S., Dahl, R. E., Axelson, D. A., & Ryan, N. D. (2008). Mother-child interactions in depressed children and children at high risk and low risk for future depression. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47(5), 574-582. doi:10.1097/CHI.0b013e3181676595.
- Dougherty, L. R., Klein, D. N., Durbin, C. E., Hayden, E. P., & Olino, T. M. (2010). Temperamental positive and negative emotionality and children's depressive symptoms: A longitudinal prospective study from age three to age ten. *Journal of Social and Clinical Psychology*, 29(4), 462-488. doi:10.1111/j.1469-7610.2010.02331.x
- Durbin, E. C., Klein, D. N., Hayden, E. P., Buckley, M. E., & Moerk, K. C. (2005). Temperamental emotionality in preschoolers and parental mood disorders. *Journal of Abnormal Psychology*, 114(1), 28-37. doi:10.1037/0021-843X.114.1.28
- Elgar, F. J., Mills, R. S., McGrath, P. J., Waschbusch, D. A., & Brownridge, D. A. (2007). Maternal and paternal depressive symptoms and child maladjustment: The mediating role of parental behavior. *Journal of Abnormal Child Psychology*, 35(6), 943-955.
- Field, A. (2017). *Discovering Statistics Using IBM SPSS Statistics: North American Edition*: Sage.
- First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. (2002). *Structured clinical interview for DSM-IV-TR axis I disorders, research version, patient edition*. Retrieved from

- Forbes, E. E., & Dahl, R. E. (2005). Neural systems of positive affect: relevance to understanding child and adolescent depression? *Development and Psychopathology*, 17(3), 827-850. doi:10.1017/S095457940505039X
- Forbes, E. E., Shaw, D. S., & Dahl, R. E. (2007). Alterations in reward-related decision making in boys with recent and future depression. *Biological psychiatry*, 61(5), 633-639. doi:10.1016/j.biopsych.2006.05.026
- Forehand, R., Thigpen, J. C., Parent, J., Hardcastle, E. J., Bettis, A., & Compas, B. E. (2012). The role of parent depressive symptoms in positive and negative parenting in a preventive intervention. *Journal of Family Psychology*, 26(4), 532.
- Foster, C. J. E., Garber, J., & Durlak, J. A. (2008). Current and past maternal depression, maternal interaction behaviors, and children's externalizing and internalizing symptoms. *Journal of Abnormal Child Psychology*, 36(4), 527-537.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American psychologist*, 56(3), 218.
- Gilbert, K. E. (2012). The neglected role of positive emotion in adolescent psychopathology. *Child Psychology Review*, 32(6), 467-481. doi:10.1016/j.cpr.2012.05.005
- Goodman, S. H., & Garber, J. (2017). Evidence-Based Interventions for Depressed Mothers and Their Young Children. *Child Development*, 88(2), 368-377.
- Goodman, S. H., & Gotlib, I. H. (1999). Risk for psychopathology in the children of depressed mothers: A developmental model for understanding mechanisms of transmission. *Psychological Review*, 106, 458-490. doi:10.1037/0033-295X.106.3.458

- Goodman, S. H., Rouse, M. H., Connell, A. M., Broth, M. R., Hall, C. M., & Heyward, D. (2011). Maternal depression and child psychopathology: A meta-analytic review. *Clinical Child and Family Psychology Review*, 14(1), 1-27. doi:10.1007/s10567-010-0080-1
- Gordon, I., & Feldman, R. (2008). Synchrony in the Triad: A Microlevel Process Model of Coparenting and Parent-Child Interactions. *Family process*, 47(4), 465-479.
- Hankin, B. L., Abramson, L. Y., Moffitt, T. E., Silva, P. A., McGee, R., & Angell, K. E. (1998). Development of depression from preadolescence to young adulthood: Emerging gender differences in a 10-year longitudinal study. *Journal of Abnormal Psychology*, 107(1), 128-140.
- Hankin, B. L., Nederhof, E., Oppenheimer, C. W., Jenness, J., Young, J. F., Abela, J., . . . Oldehinkel, A. (2011). Differential susceptibility in youth: evidence that 5-HTTLPR x positive parenting is associated with positive affect 'for better and worse'. *Translational psychiatry*, 1(10), e44.
- Hartup, W. W., Glazer, J. A., & Charlesworth, R. (1967). Peer reinforcement and sociometric status. *Child Development*, 1017-1024.
- Hasin, D. S., Sarvet, A. L., Meyers, J. L., Saha, T. D., Ruan, W. J., Stohl, M., & Grant, B. F. (2018). Epidemiology of Adult DSM-5 Major Depressive Disorder and Its Specifiers in the United States. *JAMA psychiatry*.
- Hayden, E. P., Klein, D. N., Durbin, C. E., & Olino, T. M. (2006). Positive emotionality at age 3 predicts cognitive styles in 7-year-old children. *Development and Psychopathology*, 18(02), 409-423.
- Hayden, E. P., Olino, T. M., Mackrell, S. V., Jordan, P. L., Desjardins, J., & Katsiroumbas, P. (2013). Cognitive vulnerability to depression during middle childhood: Stability and

- associations with maternal affective styles and parental depression. *Personality and individual differences*, 55(8), 892-897.
- Hembree-Kigin, T., & McNeil, C. (1995). Parent–child interaction therapy.
- Kiesler, D. J. (2004). Intrepid pursuit of the essential ingredients of psychotherapy. *Clinical Psychology: Science and Practice*, 11(4), 391-395.
- Kovacs, M., & Lopez-Duran, N. (2010). Prodromal symptoms and atypical affectivity as predictors of major depression in juveniles: Implications for prevention. *Journal of Child Psychology and Psychiatry*, 51(4), 472-496. doi:10.1111/j.1469-7610.2010.02230.x
- Larson, R. W., Richards, M. H., Moneta, G., Holmbeck, G., & Duckett, E. (1996). Changes in adolescents' daily interactions with their families from ages 10 to 18: Disengagement and transformation. *Developmental Psychology*, 32(4), 744.
- Lewinsohn, P. M., Clarke, G. N., Rohde, P., & Hops, H. (1991). *Adolescent Coping with Depression Course: Leader's Manual for Parent Groups*: Castalia Pub.
- Lewinsohn, P. M., Rohde, P., Seeley, J. R., Klein, D. N., & Gotlib, I. H. (2003). Psychosocial functioning of young adults who have experienced and recovered from major depressive disorder during adolescence. *Journal of Abnormal Psychology*, 112(3), 353.
- Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review*, 20(5), 561-592.
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In Paul H. Mussen (Ed.), *Handbook of child psychology*.
- Mangold. (2015). INTERACT 14 User Guide. Retrieved from [www.mangold-international.com](http://www.mangold-international.com)
- McKee, L. G., Parent, J., Forehand, R., Rakow, A., Watson, K. H., Dunbar, J. P., . . . Compas, B. E. (2014). Reducing youth internalizing symptoms: Effects of a family-based preventive

- intervention on parental guilt induction and youth cognitive style. *Development and Psychopathology*, 26(02), 319-332.
- McLeod, B. D., Weisz, J. R., & Wood, J. J. (2007). Examining the association between parenting and childhood depression. *Clinical Psychology Review*, 27, 986-1003.  
doi:10.1016/j.cpr.2007.03.001
- McMakin, D. L., Burkhouse, K. L., Olino, T. M., Siegle, G. J., Dahl, R. E., & Silk, J. S. (2011). Affective functioning among early adolescents at high and low familial risk for depression and their mothers: A focus on individual and transactional processes across contexts. *Journal of Abnormal Child Psychology*, 39(8), 1213-1225.
- Medicine, N. R. C. a. I. o. (2009). *Depression in Parents, Parenting, and Children: Opportunities to Improve Identification, Treatment, and Prevention*. Committee on Depression, Parenting Practices, and the Healthy Development of Children. Board on Children, Youth, and Families. Division of Behavioral and Social Sciences and Education. Washington, D. C.: The National Academies Press.
- Miklowitz, D. J. (2010). *Bipolar disorder: A family-focused treatment approach*: Guilford Press.
- Morawska, A., Sanders, M., Goadby, E., Headley, C., Hodge, L., McAuliffe, C., . . . Anderson, E. (2011). Is the Triple P-Positive Parenting Program acceptable to parents from culturally diverse backgrounds? *Journal of Child and Family Studies*, 20(5), 614-622.
- Nomura, Y., Wickramaratne, P. J., Warner, V., Mufson, L., & Weissman, M. M. (2002). Family discord, parental depression, and psychopathology in offspring: ten-year follow-up. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(4), 402-409.



- Nowak, C., & Heinrichs, N. (2008). A comprehensive meta-analysis of Triple P-Positive Parenting Program using hierarchical linear modeling: Effectiveness and moderating variables. *Clinical Child and Family Psychology Review*, 11(3), 114.
- Olino, T. M., Lopez-Duran, N. L., Kovacs, M., George, C. J., Gentzler, A. L., & Shaw, D. S. (2011). Developmental trajectories of positive and negative affect in children at high and low familial risk for depressive disorder. *Journal of Child Psychology and Psychiatry*, 52(2), 792-799. doi:10.1111/j.1469-7610.2010.02331.x.
- Olino, T. M., McMakin, D. L., Morgan, J. K., Silk, J. S., Birmaher, B., Axelson, D. A., . . . Forbes, E. E. (2014). Reduced reward anticipation in youth at high-risk for unipolar depression: A preliminary study. *Developmental cognitive neuroscience*, 8, 55-64.
- Oppenheimer, C. W., Hankin, B. L., Jenness, J. L., Young, J. F., & Smolen, A. (2013). Observed positive parenting behaviors and youth genotype: Evidence for gene–environment correlations and moderation by parent personality traits. *Developmental Psychopathology*, 25(1), 175-191. doi:10.1017/S0954579412000983
- Park, I. J. K., Garber, J., Ciesla, J. A., & Ellis, B. J. (2008). Convergence among multiple methods of measuring positivity and negativity in the family environment: Relation to depression in mothers and their children. *Journal of Family Psychology*, 22, 123-134.
- Pearson, R. M., Evans, J., Kounali, D., Lewis, G., Heron, J., Ramchandani, P. G., . . . Stein, A. (2013). Maternal depression during pregnancy and the postnatal period: risks and possible mechanisms for offspring depression at age 18 years. *JAMA psychiatry*, 70(12), 1312-1319.

- Radloff, L. S. (1977). The CES-D Scale a Self-report Depression Scale for Research in the General Population. *Applied Psychological Measurement, 1*(3), 385-401.  
doi:10.1177/014662167700100306
- Ramsey, M. A., & Gentzler, A. L. (2015). An upward spiral: Bidirectional associations between positive affect and positive aspects of close relationships across the life span. *Developmental Review, 36*, 58-104. doi:10.1016/j.dr.2015.01.003
- Rueger, S. Y., Katz, R. L., Risser, H. J., & Lovejoy, M. C. (2011). Relations between parental affect and parenting behaviors: A meta-analytic review. *Parenting: Science and Practice, 11*(1), 1-33.
- Sanders, M. R. (2003). Triple P—Positive Parenting Program: A population approach to promoting competent parenting. *Australian e-journal for the Advancement of Mental Health, 2*(3), 127-143.
- Sanders, M. R., Markie-Dadds, C., & Turner, K. M. (2003). *Theoretical, scientific and clinical foundations of the Triple P-Positive Parenting Program: A population approach to the promotion of parenting competence* (Vol. 1): Parenting and Family Support Centre, The University of Queensland Queensland.
- Sanders, M. R., & McFarland, M. (2000). Treatment of depressed mothers with disruptive children: A controlled evaluation of cognitive behavioral family intervention. *Behavior Therapy, 31*(1), 89-112.
- Sanders, M. R., Turner, K. M. T., & Markie-Dadds, C. (2001). *Practitioners Kit for Standard Triple P: Practitioner's manual for standard triple P*: Families International Publishing.

- Slagt, M., Dubas, J. S., Deković, M., & van Aken, M. A. (2016). Differences in sensitivity to parenting depending on child temperament: A meta-analysis. *Psychological bulletin*, 142(10), 1068.
- Smokowski, P. R., Bacallao, M. L., Cotter, K. L., & Evans, C. B. (2015). The effects of positive and negative parenting practices on adolescent mental health outcomes in a multicultural sample of rural youth. *Child Psychiatry & Human Development*, 46(3), 333-345.
- Stark, K. D. (2008). Experiences implementing the ACTION treatment program: Implications for preventive interventions. *Clinical Psychology: Science and Practice*, 15(4), 342-345.
- Thomas, R., & Zimmer-Gembeck, M. J. (2007). Behavioral outcomes of parent-child interaction therapy and Triple P—Positive Parenting Program: A review and meta-analysis. *Journal of Abnormal Child Psychology*, 35(3), 475-495.
- Thomassin, K., & Suveg, C. (2014). Reciprocal positive affect and well-regulated, adjusted children: A unique contribution of fathers. *Parenting*, 14(1), 28-46.
- Timmer, S. G., Ho, L. K., Urquiza, A. J., Zebell, N. M., y Garcia, E. F., & Boys, D. (2011). The effectiveness of parent-child interaction therapy with depressive mothers: The changing relationship as the agent of individual change. *Child Psychiatry & Human Development*, 42(4), 406-423.
- Webster-Stratton, C. (1998). Preventing conduct problems in Head Start children: strengthening parenting competencies. *Journal of consulting and clinical psychology*, 66(5), 715.
- Weissman, M. M., Gammon, G. D., John, K., Merikangas, K. R., Warner, V., Prusoff, B. A., & Sholomskas, D. (1987). Children of depressed parents: increased psychopathology and early onset of major depression. *Archives of General Psychiatry*, 44(10), 847-853.

Yap, M. B., Allen, N. B., & Ladouceur, C. D. (2008). Maternal socialization of positive affect:

The impact of invalidation on adolescent emotion regulation and depressive

symptomatology. *Child Development*, 79(5), 1415-1431.

Zaslow, M. J., Weinfield, N. S., Gallagher, M., Hair, E. C., Ogawa, J. R., Egeland, B., . . . De

Temple, J. M. (2006). Longitudinal prediction of child outcomes from differing measures

of parenting in a low-income sample. *Developmental Psychology*, 42(1), 27.

**Appendix A: Tables**

Table 1

*Demographic Characteristics According to Maternal Depression History*

	Group		Statistic	Effect Size ( <i>d</i> )
	Maternal History of Depression	No Maternal History of Depression		
Child sex (% female)	56.9	50.0	$X^2(1, 131) = 0.63$	0.14
Child age (in years), mean (SD)	9.26 (0.82)	9.44 (0.88)	$F(1, 129) = 1.53$	0.22
Child ethnicity (% Black, African American, Asian, Hispanic, or Other)	53.8	36.4	$X^2(1, 131) = 4.04 *$	0.36
Mother age (in years), mean (SD)	38.86 (6.58)	41.49 (7.73)	$F(1, 125) = 5.78 *$	0.43
Mother ethnicity (% Black, African American, Asian, Hispanic, or Other)	47.6	30.8	$X^2(1, N = 128) = 3.82$	0.35
Maternal education, highest grade completed (% completed 4 year college)	68.25	80	$X^2(1, N = 128) = 2.3$	0.20
Maternal marital status (% married)	70.3	89.2	$X^2(1, N = 129) = 7.17 **$	0.49
Visit 1 Maternal current depressive symptoms (CES-D), mean (SD)	10.11 (4.95)	6.15 (1.90)	$F(1, 127) = 36.15 **$	6.37
Visit 3 Maternal current depressive symptoms (CES-D), mean (SD)	11.2 (8.79)	--	--	--
Visit 4 Maternal current depressive symptoms (CES-D), mean (SD)	10.82 (7.44)	--	--	--

*Note.* CES-D = Center for Epidemiologic Studies - Depression Scale; T1 = Time 1; T3 = Time 3; T4 = Time 4

\* $p < .05$

\*\* $p < .01$

Table 2

*Demographic Characteristics for each Intervention Condition*

	Condition		Statistic	Effect Size ( <i>d</i> )
	Positive Parenting	Nutrition		
Child sex (% female)	56.8	57.1	$X^2(1, 65) = 0.001$	0.01
Child age (in years), mean (SD)	9.36 (0.86)	9.18 (0.79)	$F(1, N = 64) = 0.207$	0.22
Child ethnicity (% Black, African American, Asian, Hispanic, or Other)	48.6	60.7	$X^2(1, 65) = 0.934$	0.24
Mother age (in years), mean (SD)	39.16	38.44	$F(1, N = 63) = 0.183$	0.11
Mother ethnicity (% Black, African American, Asian, Hispanic, or Other)	44.4	51.9	$X^2(1, N = 63) = .339$	0.15
Maternal education (% completed 4-year college)	75.0	59.25	$X^2(1, N = 63) = 1.76$	0.17
Maternal marital status (% married)	70.3	70.4	$X^2(1, N = 64) = 0.00$	0.00
Visit 1 Maternal current depressive symptoms (CES-D), mean (SD)	10.21(4.67)	10.03(5.23)	$F(1, N = 63) = 0.949$	-0.04

*Note.* CES-D = Center for Epidemiologic Studies - Depression Scale; T1 = Time 1; T3 = Time 3; T4 = Time 4

\* $p < .05$

\*\* $p < .01$

Table 3

*Summary of coding categories for observed parenting behaviors*

Behavioral code category	Type of Code	Description
Talk about the Positive	Frequency	Number of times that mother said something positive or encouraging to her child about things in their life, current environment, or what she and the child are doing together, e.g., “What was the best part of your day? ...That sounds like fun”
Physical Contact	Frequency	Number of times that mother was affectionate or accidentally touched her child
Smiling/Laughing	Duration	Total duration of time the mother spent smiling or laughing
Active listening	Frequency	Number of times that the mother looked at, nodded at, and responded to or questioned her child
Praise	Frequency	Number of times that the mother provided unlabeled verbal praise, labeled verbal praise, and non-verbal praise to child
Positive requests for change	Dichotomous (yes/no)	Whether or not mother made a positive request of her child, e.g., Please tell me what you want using a pleasant tone of voice
Criticism	Frequency	Number of times mother engaged in verbal expression of disapproval of the child or the child’s attributes, products, or choices, or the mother corrects the child, e.g., “I don’t like it when you make that face”



Table 4

*Descriptive Statistics for Parenting Behaviors, Test Statistics, and Effect Sizes for Comparisons by Intervention Condition*

	Intervention Condition		Statistic	Effect Size ( <i>d</i> )
	Positive Parenting ( <i>n</i> = 37)	Nutrition ( <i>n</i> = 28)		
Talk About the Positive, <i>M</i> ( <i>SD</i> )	3.84 (3.67)	3.18 (3.48)	$t(1, 63) = .71$	0.18
Physical Contact, <i>M</i> ( <i>SD</i> )	1.43 (2.30)	1.57 (3.06)	$t(1, 63) = .293$	0.07
Smiling/Laughing, <i>M</i> ( <i>SD</i> ), duration in seconds	46.31 (43.10)	53.36 (64.94)	$t(1, 63) = .021$	0.01
Active Listening, <i>M</i> ( <i>SD</i> )	55.14 (18.44)	49.57 (22.04)	$t(1, 63) = 1.107$	0.28
Praise, <i>M</i> ( <i>SD</i> )	3.08 (3.19)	4.50 (2.96)	$t(1, 63) = -1.86$	-.47
Positive Requests for Change (% with at least one)	13.51	0.04	$X^2(1, N = 65) = 1.88$	0.35
Criticism, <i>M</i> ( <i>SD</i> )	1.35 (2.98)	1.79 (3.44)	$t(1, 63) = -.75$	-0.19

*Note.* With the exception of Smiling/Laughing and Positive Requests for Change, all observed parenting behaviors are frequency counts.

\* $p < .05$

\*\* $p < .01$

Table 5

*Correlations among Observed Parenting Variables and Concurrent Depression at Time 1 for both the Depressed and Non-depressed Mothers (N = 129)*

Variable	1	2	3	4	5	6	7	8
1. CES-D	-							
2. Talk about the Positive	-.11	-						
3. Physical Contact	-.10	-.02	-					
4. Smiling/Laughing	-.17	.12	.04	-				
5. Active Listening	-.11	.34**	.15	.25**	-			
6. Praise	-.08	.34**	-.07	.07	.26**	-		
7. Positive Requests for Change	-.09	.11	.12	.01	.04	.07	-	
8. Criticism	-.09	.05	.24**	.08	.05	.05	.04	-

\* $p < .05$

\*\* $p < .01$

Table 6

*Correlations among Observed Parenting Variables and Concurrent Depression at Time 2 for Depressed**Mothers (N = 62)*

Variable	1	2	3	4	5	6	7	8
1. CES-D (Time 1)	-							
2. Talk about the Positive	.01	-						
3. Physical Contact	-.26*	-.16	-					
4. Smiling/Laughing	-.22	.02	.37**	-				
5. Active Listening	-.15	.25*	.12	.35**	-			
6. Praise	-.08	.02	.10	.11	.26*	-		
7. Positive Requests for Change	-.08	-.06	.12	.24	.57**	.22	-	
8. Criticism	-.10	-.08	-.01	-.03	-.14	-.08	.20	-

\* $p < .05$ \*\* $p < .01$

Table 7

*Correlations among Observed Parenting Variables and Concurrent Depression at Time 3 for Depressed Mothers (N = 60)*

Variable	1	2	3	4	5	6	7	8
1. CES-D	-							
2. Talk about the Positive	-.21	-						
3. Physical Contact	-.19	-.02	-					
4. Smiling/Laughing	.14	.18	.07	-				
5. Active Listening	-.17	.27*	.1	.18	-			
6. Praise	-.07	.42**	.15	.47**	.29*	-		
7. Positive Requests for Change	.04	-.03	.04	.06	.38**	.17	-	
8. Criticism	.01	-.04	.16	-.04	-.04	-.24	-.04	-

*Note.*  $n = 58-60$

\* $p < .05$

\*\* $p < .01$

Table 8

*Correlations among Observed Parenting Variables and Concurrent Depression at Time 4 for Depressed Mothers (N = 59)*

Variable	1	2	3	4	5	6	7	8
1. CES-D	-							
2. Talk about the Positive	-.24	-						
3. Physical Contact	.00	.06	-					
4. Smiling/Laughing	.01	.1	.17	-				
5. Active Listening	-.08	.20	.04	.32*	-			
6. Praise	-.15	.37**	.27*	.14	.30*	-		
7. Positive Requests for Change	-.12	.09	.08	.10	.01	.12	-	
8. Criticism	.23	-.28*	-.12	-.11	-.08	-.04	.06	-

*Note.*  $n = 55-59$

\* $p < .05$

\*\* $p < .01$

Table 9

*Descriptive Statistics, Test Statistics, and Effect Sizes for Differences in Observed Parenting between Mothers with and without a History of Depression at Time 1*

	Group		Statistic	ES ( <i>d</i> )
	Maternal History of Depression ( <i>n</i> = 65)	Non- depressed Control ( <i>n</i> = 66)		
Talk About The Positive, <i>M</i> ( <i>SD</i> )	3.55 (3.58)	3.68 (3.73)	$t(1, 129) = .39$	0.07
Physical Contact, <i>M</i> ( <i>SD</i> )	1.49 (2.63)	1.74 (2.32)	$t(1, 129) = 1.10$	0.19
Smiling/Laughing, <i>M</i> ( <i>SD</i> ), duration in seconds	49.35 (53.26)	60.52 (68.48)	$t(1, 129) = 1.24$	0.22
Active Listening, <i>M</i> ( <i>SD</i> )	52.74 (20.10)	65.80 (26.48)	$t(1, 129) = 3.18^{**}$	0.55
Praise, <i>M</i> ( <i>SD</i> )	3.69 (3.15)	3.86 (3.64)	$t(1, 129) = .25$	0.04
Positive Requests for Change (% with at least one)	9.2	4.5	$X^2(1, N=131) = 1.12$	0.19
Criticism, <i>M</i> ( <i>SD</i> )	1.54 (3.17)	1.55 (2.87)	$t(1, 129) = .29$	0.05

*Note.* With the exception of Smiling/Laughing and Positive Requests for Change, all observed parenting behaviors are frequency counts; Non-depressed control = no maternal history of depression

\* $p < .05$

\*\* $p < .01$

Table 10

*Contrast of Time 1 with Time 2, Time 3, and Time 4 for Significant Time X Group Interactions:  
Smiling/Laughing, Active Listening, and Praise*

Outcome Variable	Comparisons	SS	F
Active Listening	Time 1 vs. Time 2	14974.94	26.16***
	Time 1 vs. Time 3	10744.51	16.37***
	Time 1 vs. Time 4	672.25	1.36
Smiling/Laughing	Time 1 vs. Time 2	92.53	4.93*
	Time 1 vs. Time 3	16.93	1.51
	Time 1 vs. Time 4	10.25	0.91
Praise	Time 1 vs. Time 2	10.96	5.07*
	Time 1 vs. Time 3	14.95	8.74***
	Time 1 vs. Time 4	4.68	3.83

*Note.* We used a Bonferroni correction for multiple (7) comparisons ( $p = .05/7 = 0.007$ ).

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < 0.007$

Table 11

*Contrast of Time 1 with Time 2, Time3, and Time 4 for Simple Main Effects of Time for Positive Parenting Group Only*

Outcome Variable	Comparisons	SS	F
Active Listening	Time 1 vs. Time 2	34177.09	43.03***
	Time 1 vs. Time 3	20078.67	21.3***
	Time 1 vs. Time 4	1261.09	1.924
Smiling/Laughing	Time 1 vs. Time 2	258.68	16.95***
	Time 1 vs. Time 3	47.63	3.39
	Time 1 vs. Time 4	7.70	.79
Praise	Time 1 vs. Time 2	35.33	15.20***
	Time 1 vs. Time 3	46.15	21.18***
	Time 1 vs. Time 4	22.67	15.83***

*Note.* We used a Bonferroni correction for multiple (7) comparisons ( $p = .05/7 = 0.007$ ).

\*\*\*  $p < 0.007$



Table 12

*Hierarchical Multiple Regression Analyses Predicting Child Positive Affect at Time 2*

Model	Variable	$\Delta R^2$	$\beta$	$B$	95% $CI$	
					$LL$	$UL$
1. Active Listening	Block 1 (Control Variables)					
	Child PA T1	.17	.33	.33*	.06	.61
	Active Listening T1	.17	.14	.00	-.00	.00
	Block 2					
	Active Listening T2	.07	.29	.00*	.00	.00
	Block 3					
	Intervention Condition	.01	.09	.06	-.08	.15
	Block 4					
	Condition X Active Listening T2	.02	-.59	-.00	-.00	.00
	2. Talk about the Positive	Block 1				
Child PA T1		.15	.39	.40**	.13	.66
Talk about the Positive T1		.15	.02	.00	-.04	.05
Block 2						
Talk about the Positive T2		.00	-.06	-.01	-.05	.03
Block 3						
Intervention Condition		.06	.26	.01*	.01	.19
Block 4						
Condition X TAP T2		.00	.07	.01	-.06	.08
3. Physical Contact		Block 1				
	Child PA T1	.15	.39	.40*	.15	.65
	Physical Contact T1	.15	.03	.01	-.04	.05
	Block 2					

Model	Variable	$\Delta R^2$	$\beta$	<i>B</i>	95% <i>CI</i>	
					<i>LL</i>	<i>UL</i>
4. Smiling/Laughing	Physical Contact T2	.05	.22	.03	-.00	.07
	Block 3					
	Intervention Condition	.03	.19	.07	-.02	.17
	Block 4					
	Condition X PC T2	.00	-.12	-.02	-.16	.12
	Block 1					
	Child PA T1	.16	.37	.38**	.11	.65
	Smiling/Laughing T1	.16	.05	.00	-.01	.02
	Block 2					
	Smiling/Laughing T2	.17	.48	.02**	.01	.03
5. Praise	Block 3					
	Intervention Condition	.01	.12	.05	-.04	.13
	Block 4					
	Condition X S/L T2	.00	.03	.00	-.02	.02
	Block 1					
	Child PA T1	.15	.38	.39**	.13	.66
	Praise T1	.15	.03	.01	-.04	.05
	Block 2					
	Praise T2	.01	.11	.01	-.02	.05
	Block 3					
6. PRC	Intervention Condition	.05	.25	.10	-.00	.19
	Block 4					
	Condition X Praise T2	.00	.15	.02	-.05	.08
	Block 1					
	Child PA T1	.18	.38	.39**	.15	.64
	PRC T1	.18	.17	.09	-.04	.22
	Block 2					
	PRC T2	.05	-.22	-.10	-.20	.01

Model	Variable	$\Delta R^2$	$\beta$	<i>B</i>	95% <i>CI</i>	
					<i>LL</i>	<i>UL</i>
7. Criticism	Block 3					
	Intervention Condition	.06	.24	.09*	.00	.18
	Block 4					
	Condition X PRC T2	.02	.26	.14	-.07	.35
	Block 1					
	Child PA T1	.20	.43	.44**	.20	.69
	Criticism T1	.20	-.22	-.04	-.08	.00
	Block 2					
	Criticism T2	.02	-.13	-.02	-.06	.02
	Block 3					
	Intervention Condition	.05	.22	.08	-.01	.17
	Block 4					
	Condition X Criticism T2	.00	-.04	-.01	-.08	.07

*Note.* PA = Positive affect; T1 = Time 1; T2 = Time 2; S/L = Smiling/Laughing; PRC = Positive Requests for Change

Table 13

*Hierarchical Multiple Regression Analyses Predicting Child Positive Affect at Time 3*

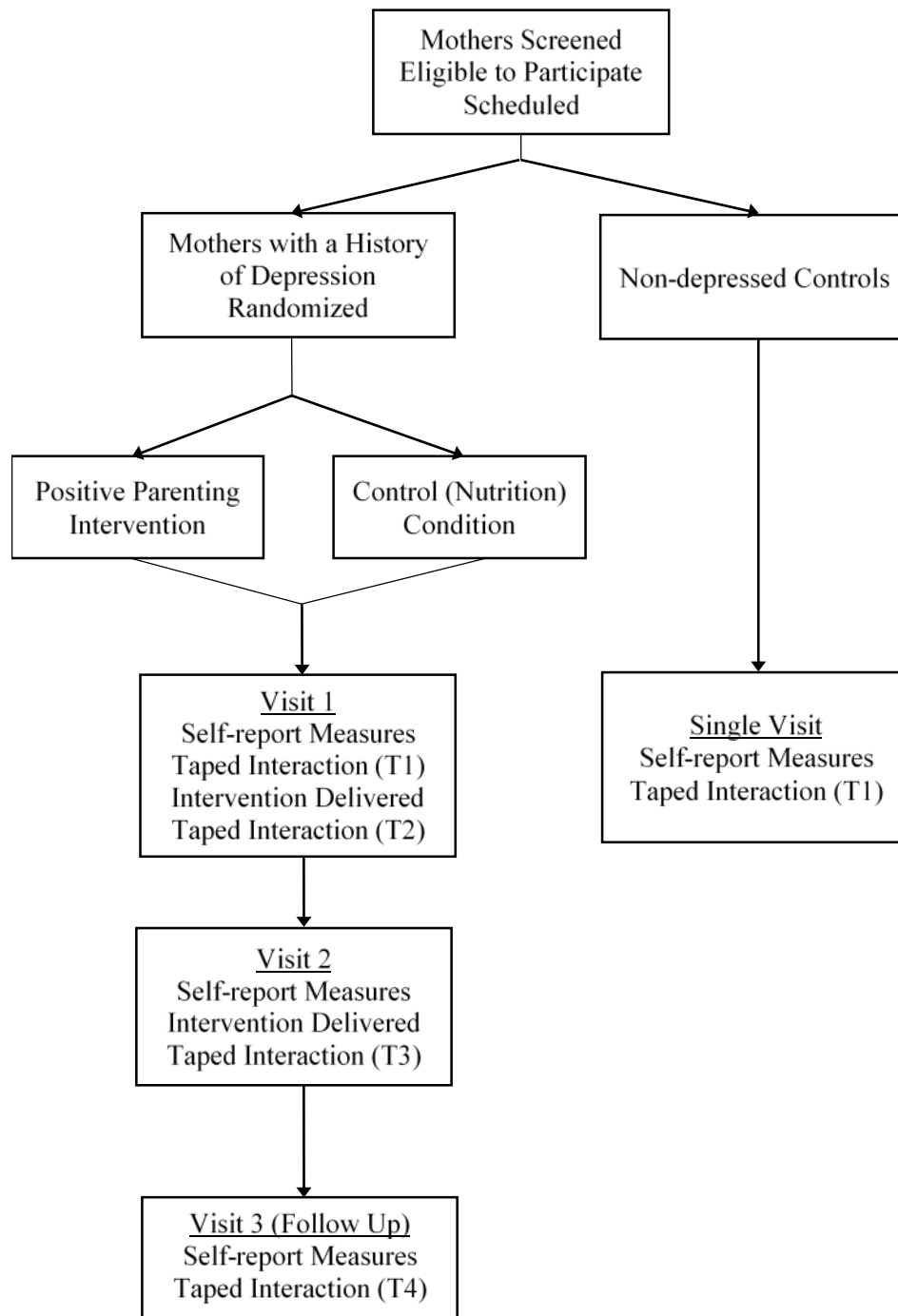
Model	Variable	$\Delta R^2$	$\beta$	$B$	95% CI	
					LL	UL
1. Active Listening	Block 1 (Control Variables)					
	Child PA T1	0.42	0.39	0.36**	0.08	0.71
	Active Listening T1	0.42	0.00	0.08	0.00	0.00
	Block 2					
	Active Listening T3	0.07	0.00	0.29*	0.00	0.00
	Block 3					
	Intervention Condition	0.01	0.02	0.05	-0.09	0.13
	Block 4					
	Condition X Active Listening T3	0.01	-0.01	-1.32**	-0.01	0.00
2. Talk about the Positive	Block 1					
	Child PA T1	0.16	0.40	0.44**	0.16	0.73
	Talk about the Positive T1	0.02	0.00	0.00	-0.05	0.05
	Block 2					
	Talk about the Positive T3	0.02	0.13	0.02	-0.02	0.07
	Block 3					
	Intervention Condition	0.04	0.16	0.07	-0.04	0.17
	Block 4					
	Condition X TAP T2	0.16	-0.46	-0.07	-0.16	0.02

Model	Variable	$\Delta R^2$	$\beta$	$B$	95% CI	
					LL	UL
3. Physical Contact	Block 1					
	Child PA T1	0.18	0.41	0.45**	0.18	0.71
	Physical Contact T1	0.18	0.41	-0.03	-0.08	0.02
	Block 2					
	Physical Contact T3	0.11	-0.13	0.07**	0.02	0.11
	Block 3					
	Intervention Condition	0.02	0.33	0.06	-0.03	0.15
4. Smiling/Laughing	Block 4					
	Condition X PC T3	0.00	0.15	0.01	-0.09	0.11
	Block 1					
	Child PA T1	0.17	0.38	0.42**	0.13	0.26
	Smiling/Laughing T1	0.17	0.06	0.00	-0.01	0.03
	Block 2					
	Smiling/Laughing T3	0.14	0.45	0.03**	0.01	0.05
5. Praise	Block 3					
	Intervention Condition	0.00	0.06	0.02	-0.08	0.03
	Block 4					
	Condition X S/L T3	0.00	-0.08	0.00	-0.04	0.03
	Block 1					
	Child PA T1	0.17	0.38	0.41**	0.13	0.69
	Praise T1	0.07	0.09	0.02	-0.03	0.07
	Block 2					
	Praise T3	0.01	0.26	0.05*	0.01	0.08
	Block 3					
	Intervention Condition	0.03	0.11	0.04	-0.07	0.16
	Block 4					
	Condition X Praise T3	0.17	-0.56	-0.07	-0.17	0.03

Model	Variable	$\Delta R^2$	$\beta$	$B$	95% CI	
					LL	UL
6. PRC	Block 1					
	Child PA T1	0.18	0.39	0.43**	0.17	0.70
	PRC T1	0.00	0.11	0.07	-0.08	0.21
	Block 2					
	PRC T3	0.03	0.00	0.00	-0.09	0.09
	Block 3					
	Intervention Condition	0.01	0.19	0.08	-0.03	0.18
7. Criticism	Block 4					
	Condition X PRC T3	0.18	0.48	0.18	-0.22	0.58
	Block 1					
	Child PA T1	0.17	0.42	0.46**	0.19	0.73
	Criticism T1	0.00	-0.07	-0.02	-0.07	0.04
	Block 2					
	Criticism T2	0.03	0.07	0.01	-0.03	0.06
	Block 3					
	Intervention Condition	0.00	0.19	0.08	-0.02	0.18
	Block 4					
	Condition X Criticism T3	0.17	-0.07	-0.01	-0.10	0.08

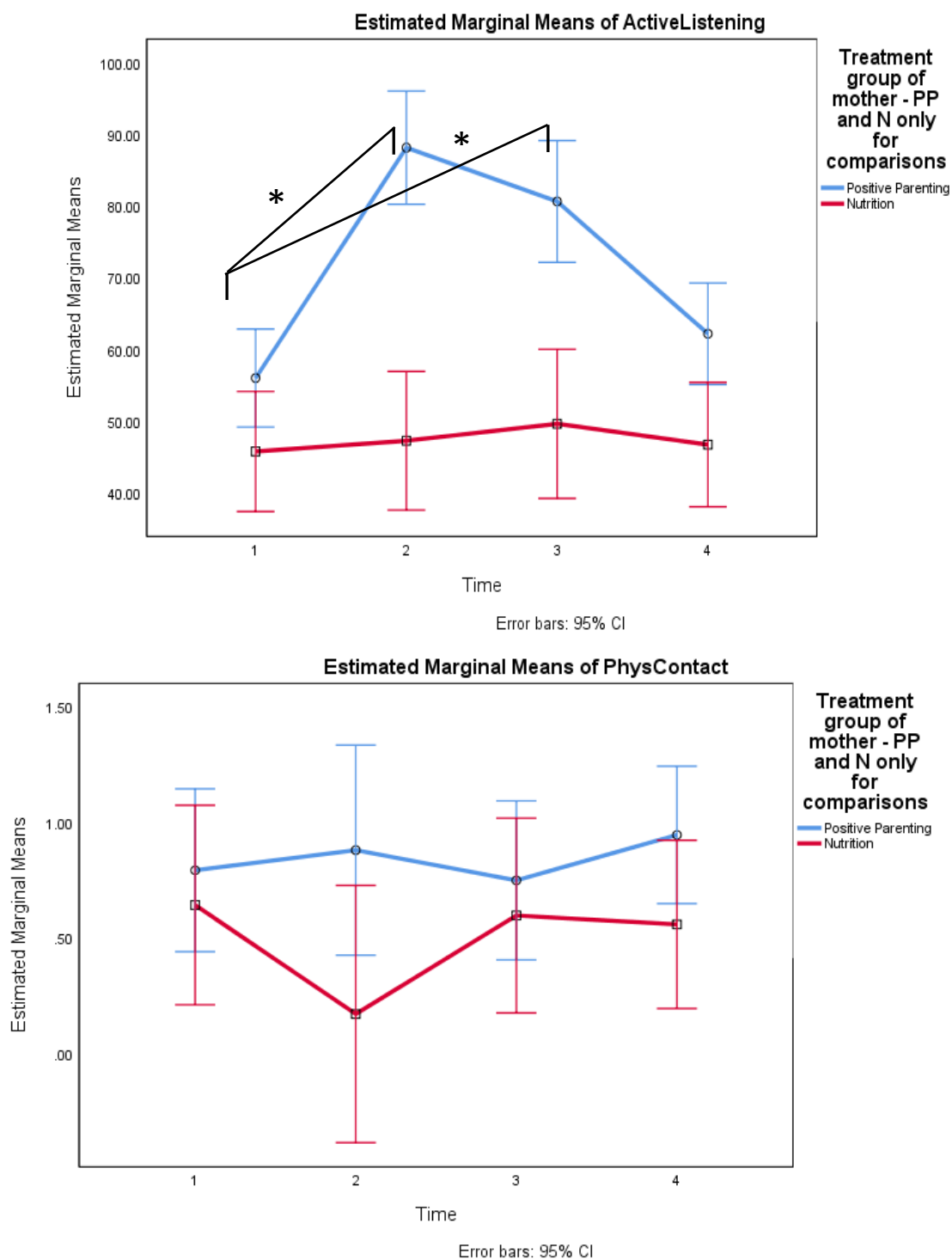
*Note.* PA = Positive affect; T1 = Time 1; T3 = Time 3; S/L = Smiling/Laughing; PRC = Positive Requests for Change

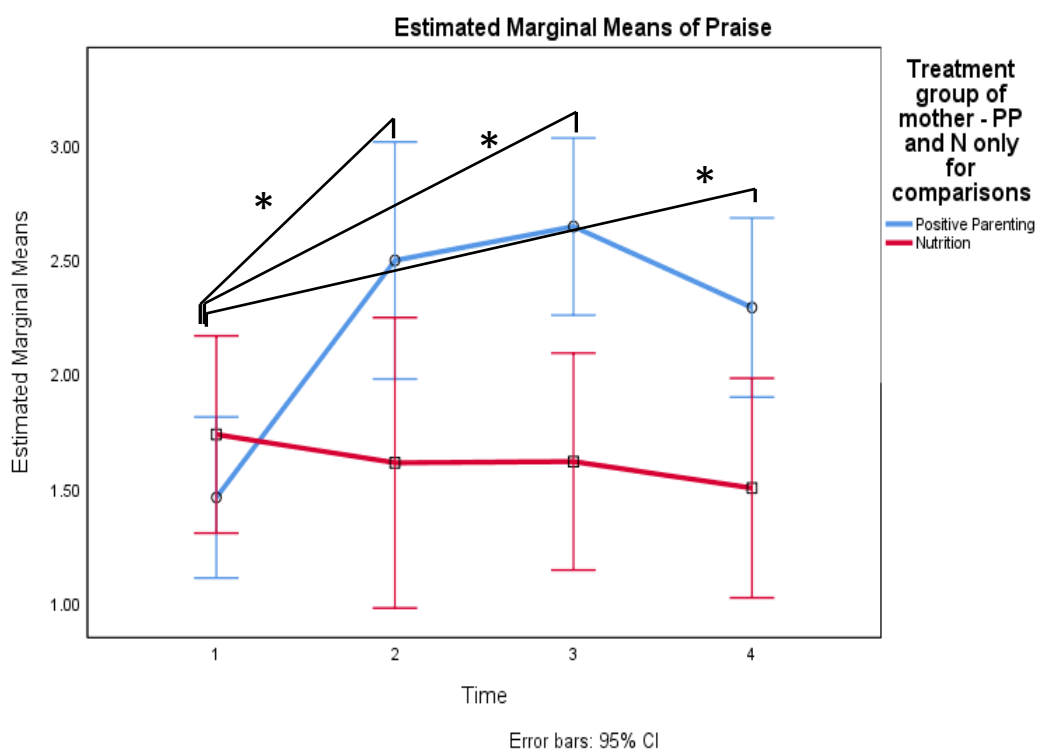
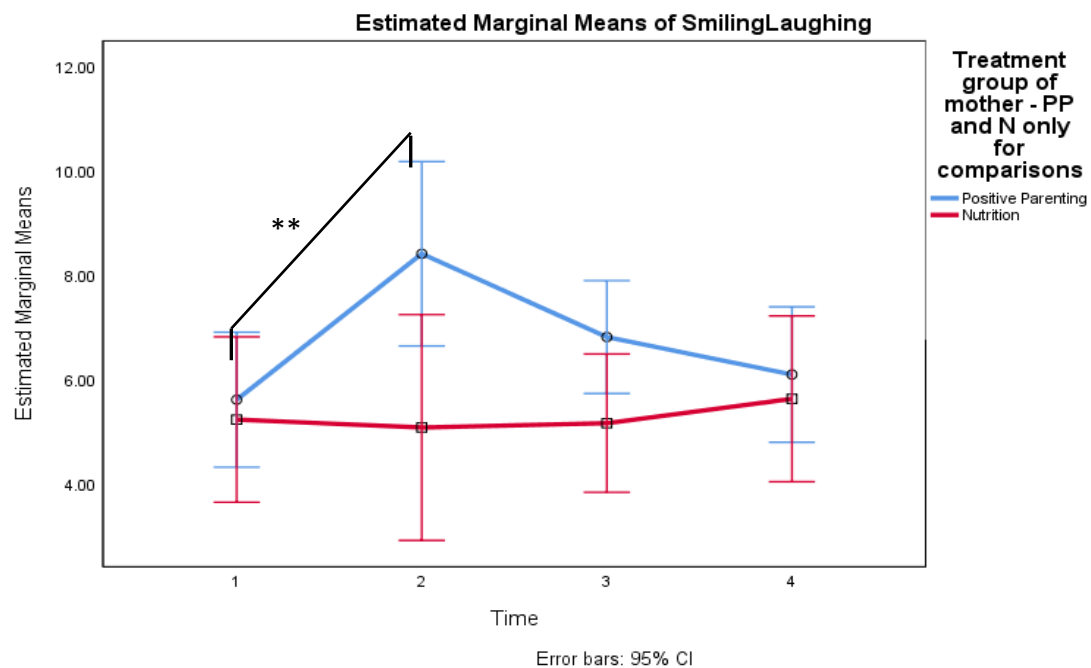
## **Appendix B: Figures**

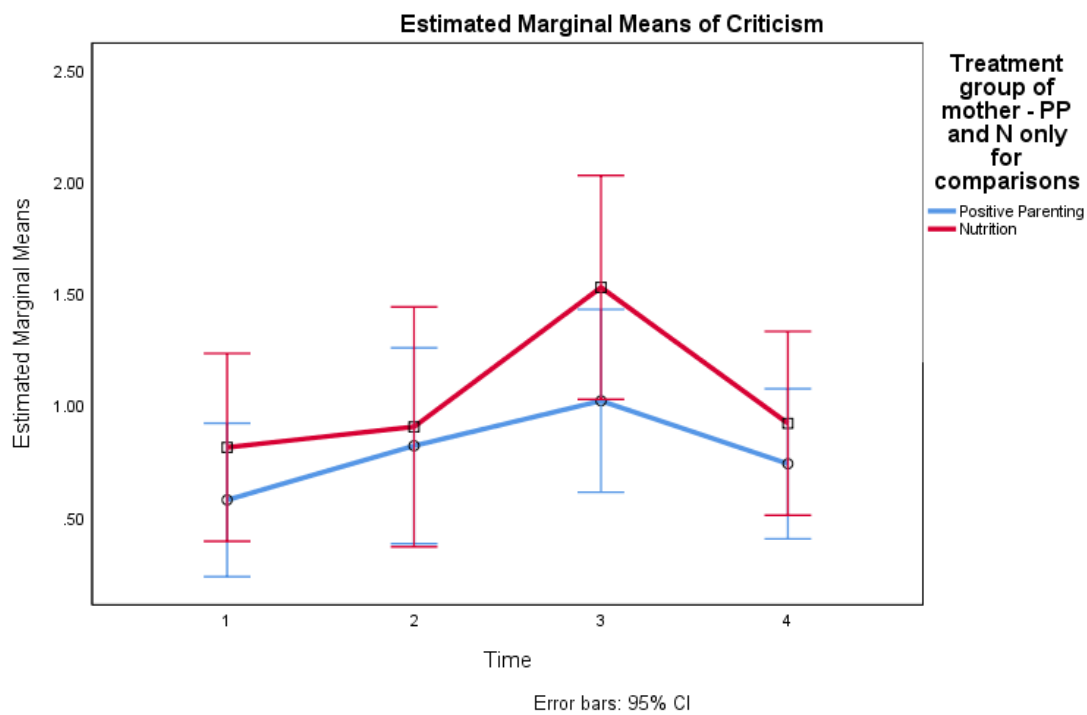
*Figure 1.* Flow of Study Enrollment, Randomization, and Participation



Figures 2-8. Repeated Measures ANOVA Examining Changes in Mother Positive Parenting Behaviors Over Time.







*Note.* Time 1 = Pre-intervention at Session 1; Time 2 = Post-intervention at Session 1; Time 3 = Session 2; Time 4 = Session 3

Figure 9. Repeated Measures ANOVA Examining Changes in Child Positive Affect over Time.

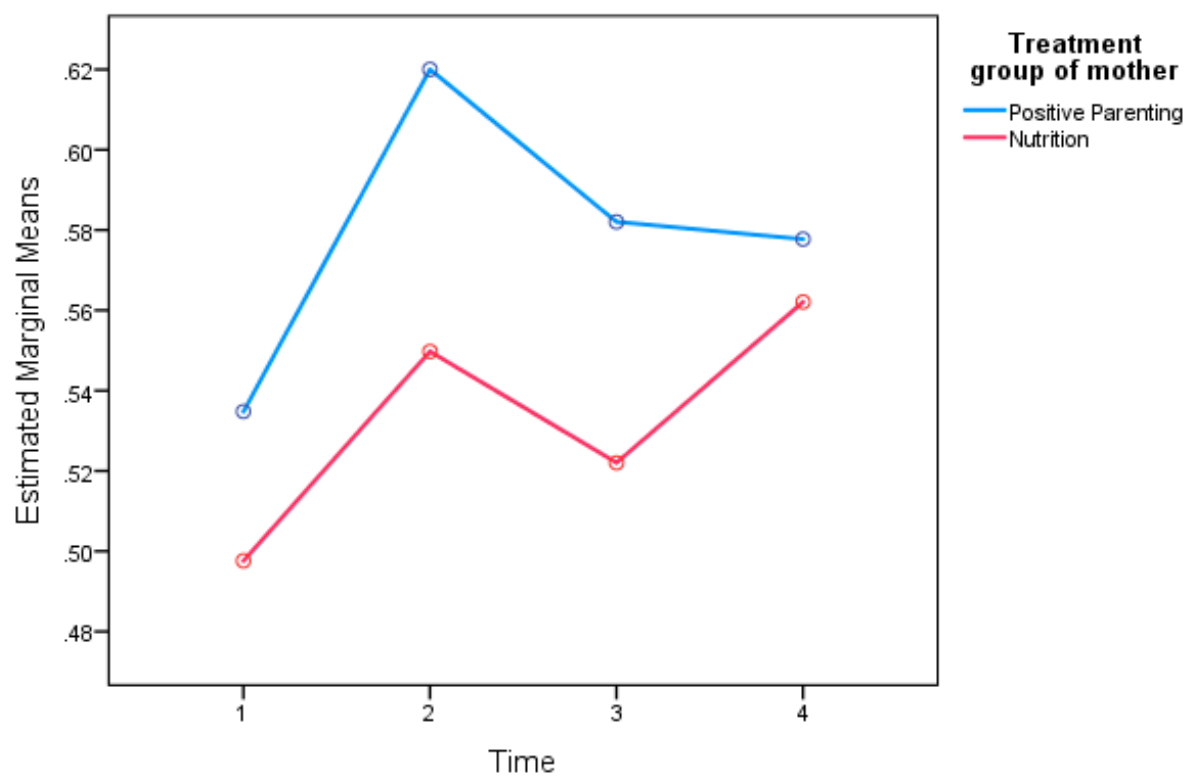
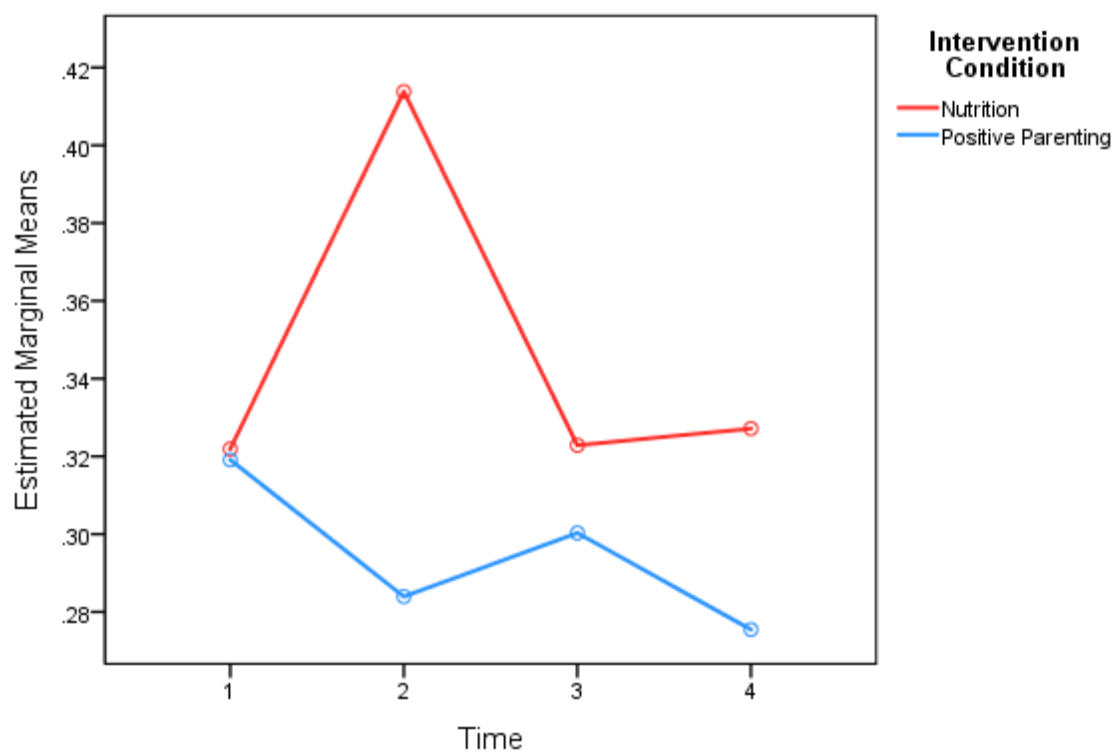


Figure 10. Repeated Measures ANOVA Examining Changes in Transitional Probabilities over Time.



### **Appendix C: Supporting Documents**

### Child Affect Coding Rubric

#### Positive Affect\*

\*Bolded = necessary and sufficient. If there is more than one bolded descriptor within a mode, only one needs to be present to meet criteria for a particular level of affect.

<b>+4 High Intensity Positive Affect</b>	
Face	<b>Outward laughter or giggling</b> (Inward contained chuckles should not be scored as + 4)
Voice	Very enthusiastic and excited. Highly animated, pitched, positive/sing-songy tone. May talk at a markedly rapid rate or loud volume in a pleasant/excited manner.
Body	Behavioral indicators of excitement/joy (e.g., jumping, clapping, and cheering). Or display of physical affection stronger than a +3 (e.g. hug, kiss, etc.) Animated gestures.

<b>+3 Moderate Intensity Positive Affect</b>	
Face	<b>Smiles with any eye involvement (sparkle or crinkles), or smiles with raised eyebrows.</b> May include bright eyes and/or affectionate gaze. Includes <b>chuckles</b> – inward, briefer, and more contained than laughter.
Voice	May include somewhat high pitched, warm/pleasant/soft, or enthusiastic/moderately excited tone of voice. May talk at moderately rapid rate or louder volume in a pleasant/excited manner.
Body	Moderate physical affection (touch, pat on back). Somewhat animated gestures. Nodding. May include open body posture and leaning in.

<b>+2 Low Intensity Positive Affect</b>	
Face	Slight smile without eye involvement. Includes brief, ambiguous mouth or facial movements (i.e. smirks, twitches, broadening of the mouth, or other clear expressions that are not clearly smiles). Expressions of surprise (i.e. open mouth with raised eyebrows).
Voice	May include expressing interest through a slightly high pitched, warm/pleasant/soft tone of voice even in the absence of a clear smile. Includes humming.
Body*	Body should be somewhat engaged and not withdrawn or tense. May include leaning in or nodding.

\* Body alone would not be sufficient

#### Neutral Affect

**1 = None/Neutral Affect**

No indicators of positive or negative affect. Neutral face, voice, and body. Includes coughs, sneezes, and yawns.

Rate “1” if you cannot tell if an expression is positive or negative.

Rule: May be making good eye contact but if no smile or warm/pleasant/upbeat tone of voice then rate as “1”.

**Negative Affect\***

\*For all levels of NA, must show evidence of either anger or sadness or anxiety

<b>-2 Low Intensity Negative Affect</b>		
	Anger	Slight or vague look of anger. Brows slightly slanted or furrowed. Eyelids appear slightly tense, and/or eyes appear slightly hard or blank. Mouth may be straight, pursed, or slightly open as if gritting teeth.
	Sadness	Slight or vague look of sadness. Inside of the eyebrows are raised slightly. Lower eyelid may be slightly raised and eyes may appear slightly downcast and/or droopy. Lip corners may be turned down slightly.
	Anxiety	Slight or vague look of being uncomfortable, anxious, worried, or concerned. Eyebrows are approximately straight and somewhat raised, and the inner corners of the brow are drawn together. Eyes may appear somewhat more open than normal, and tense (the upper eyelid is raised and the lower lid is tense) Mild look of worry or concern. Mouth may be slightly open and the lips may be tense and drawn back, or may include ambiguous mouth movements May include lip biting and pressed lips.
Voice	Anger	Slightly hostile, sarcastic, tense, or otherwise moderately negative tone of voice.
	Sadness	Slightly sad tone of voice. Soft tone of voice. Mild whining or sighing.
	Anxiety	Slightly concerned/worried tone of voice.
Body	Anger	Slight body tensing or crossed arms.
	Sadness	Slight body sadness (e.g., slight angling down of head or slump of shoulders).
	Anxiety	Slight body anxiety (e.g., minor fidgeting).

\*Regarding “sarcasm”, if tone of voice and face are suggesting -2 – then go with that.

<b>-3 Moderate Intensity Negative Affect</b>		
Face	Anger	Moderate look of anger. Same as for -2, but higher in intensity. May include raised cheeks or rolling eyes. Grimaces (gritted smiles with furrowed brow) and sneers also included.
	Sadness	Moderate look of sadness. Same as for -2, but higher in intensity.



		Inner corners of eyebrows raised and may be drawn together. Eyes may crinkle with lower lid raised. May include bottom lip protruding as if pouting.
	Anxiety	Moderate look of anxiety. Same as for -2, but higher in intensity. May include: tightening of lips, grimacing, or tense/non-angry mouth.
Voice	Anger	Same as for -2 but higher in intensity. May include frustrated sighs or raised voice (as indicated by increased volume paired with forcefulness).
	Sadness	Same as for -2 but higher in intensity.
	Anxiety	Same as for -2 but higher in intensity.
Body	Anger	Same as for -2 but higher in intensity. May include: moderate body tensing (balled fists, tight gripping, little raise of the shoulders, neck tensing), head shaking, or frustrated gestures.
	Sadness	Same as for -2 but higher in intensity (e.g., noticeable drop of head or slump in shoulders)
	Anxiety	Same as for -2 but higher in intensity. May include: tense or rigid posture. Rapid and repetitive movements (e.g., jiggling foot). Trembling hands, lips, or mouth.

<b>-4 High Intensity Negative Affect</b>		
Face	Anger	Marked look of anger. Same as for -3, but higher in intensity. Brows are slanted or furrowed and cheeks may be raised, likely includes some bulging or wrinkling around the brows.
	Sadness	Marked look of sadness. Same as for -3, but higher in intensity. Lip corners are distinctly turned down and cheek area droops down. May include bottom lip shaking or crying.
	Anxiety	Marked look of anxiety or fear. Same as for -3, but higher in intensity. Marked look of worry, fear, or concern.
Voice	Anger	Same as for -3, but higher in intensity. May include: yelling, loud “guff”, screaming, or otherwise high negativity.
	Sadness	Same as for -3, but higher in intensity. May include: voice quavering or crying, very soft, slow, monotone, depressed voice, or intense whining or sighing.
	Anxiety	Same as for -3, but higher in intensity. Markedly anxious or fearful tone of voice. May include: elevated voice tone, very frantic and rapid speech, or extreme stuttering or difficulty in speaking.
Body	Anger	Same as for -3, but higher in intensity. May include: Banging of fists, kicking, stomping, throwing/forceful tossing of objects/ materials, hitting self/mom, or forceful, threatening gestures.

	Sadness	Same as for -3, but higher in intensity. May include: putting head down, in hands, or on table in a manner that conveys sadness. Obvious slump of body/shoulders.
	Anxiety	Same as for -3, but higher in intensity. May include: tightening of lips, intense biting of the lip(s), putting hand to mouth, excessive fidgeting/restlessness, hard swallowing. Extreme cowering or flight behaviors.

**Segments that could not be coded or rated**

Not able to Code (U)	Face is partially or completely out of view due to face angle in the camera or hair in the face. Use this only when the child is out of view or looks away so the coder cannot see her face or any affect or clear, obvious bodily indicators (e.g., noticeably tense shoulder may be enough to support a negative code) AND you have no vocal cues to the emotion for at least 3 seconds. Includes being under the table. Uncodeable would end as soon as a codeable emotion (e.g., expression or tone) is observed. One should not try to guess state if face is partially or completely out of view due to face angle (i.e., less than profile – at least 1 eye and ½ of mouth) in the camera or hair in the face – UNLESS there is a clear expression (e.g., pronounced cheek raise)
Not Able to Rate (XX)	Use this when there are circumstances that violate the standards for the particular situation you are observing, such as when there are other people in the room or the child/mother pair is not following the essential instructions or any other ways in which the protocol is not being followed. Includes intentional facial obstruction (e.g., child uses prop to cover face) from camera.  Also to be used in the case of any consumption - food or drink – when the item is making contact with the child's face or if the child is still engaged in the act of consumption (e.g., chewing).

### **Guidelines**

- Watch the entire interaction clip once before coding to get a feel for the interaction.
- Start and stop times for each video segment will be provided to you. Be sure to strictly adhere to these times in your coding.
- As you code, make notes of any questions or concerns you have about the coding. Bring these notes to the weekly coding meetings and let us know about them so we can discuss them.
- Always code with headphones. The sound is much clearer.
- Please don't consult with or discuss your coding file with another RA. Coding needs to be done independently to maintain the integrity of the process.
- Do not do all of your coding (i.e., more than one video) in one sitting.
- If face, tone of voice, and behavior would suggest different codes, code with priority given to facial expression and tone of voice, then *secondarily* behavior or verbal content.
  - Behavior and content can be used to *clarify/support* a code but defer to facial expression and tone when inconsistent with behavior and content. For example, if a child is smiling and criticizing mom in a playful tone, this would be coded as a +2/3.
  - Behavior can be used to choose between codes of the same valence but different intensity (e.g., -2 or -3) OR when the face and tone are neutral [e.g., face/tone would indicate 1, but paired with intense behavior that would suggest a different code (+/-)]. For example, if a child throws down a toy in a markedly aggressive fashion (i.e., not casually) with a neutral face, this would be coded as a -3/4 (depending on the intensity of the action).
- For NA, code based on appropriateness of intensity for any of the emotions listed (i.e., lip biting with no eye movement or vocal indicators would be -2) – emotion categories are listed only for ease in identification and organization.

- "When a person is imitating another, such as when relating a story, still code the appropriate affect." (from FPPC, Stubbs, Crosby, Forgatch, & Capaldi, 1998; RS5). Similarly, if the child is addressing the camera/experimenters directly, still code the child's affect.
- When the child temporarily goes out of view for longer than 3 second – code as U unless you can accurately rate an emotion by other indicators (e.g., you can see strong emotion in part of the body or you can hear strong emotion in the voice) – then code affect accordingly. (adapted from RS5)
- When you are finished coding, review all of your coding to make sure there are no gaps or other errors. To detect gaps, look to see that the start time on each line immediately follows the stop time on the previous line. This is an essential last step in your coding of each segment.

\*In the rare case of a child whose natural resting mouth appears upturned (do not confuse this with someone who smiles most of the time), look for instances when the corners of the mouth are turned up in an even more pronounced manner to determine when s/he is smiling. On the other hand, if a child is smiling much of the time, all of those times count as smiling.

\*In the rare case of a child whose natural eyebrow shape appears furrowed (do not confuse this with someone who furrows their brows most of the time), look for instances when the brows are turned in an even more pronounced manner to determine when they are furrowing their brow. But as with smiles, if a child truly has furrowed brows much of the time, all of those times count as having furrowed brow.

# Positive Parenting Intervention Manual

This manual was based on the following empirically supported interventions:

- Standard Triple P (Positive Parenting Program; Sanders, Markie-Dadds, Turner, 2001)
- ACTION Parenting manual (Stark, 2008)
- Family Focused Treatment Manual (Miklowitz, 2008)
- Parent Child Interaction Therapy (Eyberg, 1999)
- Adolescent Coping with Depression Course (Lewinsohn, 1991)

## VISIT ONE (WEEK 1)

In this visit, the trainer introduces mothers to the principles of positive parenting, as well as two types of positive parenting skills: *strategies for developing a positive relationship with their child* and *strategies for encouraging desirable behavior*. Most of the session is devoted to identifying when and how these skills can be used. At the end of the session mothers will also have an opportunity to practice these skills with their children and under the guidance of the trainer. Although some of these parenting strategies may already be used by some mothers, all techniques will be reviewed in the session.

- 1) Developing a positive mother-child relationship
  - a. Spending quality time with children
  - b. Showing affection to children
  - c. Talking with children (Reflecting on the positive)
- 2) Encouraging desirable behavior
  - a. Verbal praise
  - b. Nonverbal praise
  - c. Making positive requests for change
  - d. Expressing negative feelings about specific behaviors

Each strategy should take no more than 10 minutes, so try to keep an eye on the time and keep up the momentum. Intro should take 10 minutes too and 10 minutes at the end for wrap up and transition to next session.

Module	Start time	Stop time
Intro		(10)
Quality time		(20)
Showing affection		(30)
Reflecting on the positive		(40)
Verbal praise		(50)
Nonverbal praise		(1 hr)
Positive requests for change		(1 hr 10)
Expressing negative feelings		(1 hr 20)
Wrap up and transition to next week		(1 hr 30)

### Visit Objectives

After completing the visit, parents should be able to:

- Understand the concept and components of positive parenting.

- Be familiar with different strategies for developing a positive relationship with their child (i.e. quality time, showing affection, talking with children) and have a plan for how to implement these strategies at home with their own child.
- Be familiar with the strategies for encouraging desirable behavior (i.e. verbal and non-verbal praise, making positive requests for change, and expressing negative feelings about specific behaviors) and have a plan for implementing these strategies with their own child.

### Materials and Equipment

During this session, you will need the following:

- A copy of the *Positive Parenting Manual* to refer to as required
- A binder for mom, prepared to include:
  - The *Positive Parenting Workbook* on hole punched pages
  - The Homework Calendar and the magnet tucked in the pages
- A white board and markers (two colors) and eraser
- The *Skills Tracking Form*

### Lab Set-Up

In Preparation for this session, you will need to arrange the following:

- Book a room in the Psych Center for the training with the mother
  - Bring the white board
- Arrange the observation room so that the white board can be propped in between the two chairs where you and the mother sit. Sit pretty close to the mom so that you can look at her workbook and not always have to ask her to tell you what she's written down. That will speed things up.

## Introduction

Following initial greetings, introduce the agenda for the visit.

Let's begin with an overview of what we will be doing today.

During this session I will be talking with you about two aspects of parenting that researchers have found to promote children's development:

- (1) developing a positive relationship with your child and
- (2) encouraging [his/her] desirable behavior.

We will go over different parenting strategies, with the goal of, *together*, coming up with what might work particularly well for you and [child's name] and practicing these parenting techniques.

How does this sound so far to you?

We realize that much of what we will go over today may be a review for you – that you may already know about these ideas and you may already be doing many of the parenting strategies in your everyday life.

We've found that parents often find it helpful to be reminded of different parenting techniques, particularly as kids get older and the strategies that you used to use may not work so well anymore. Do you have an example of that from your experience with [child's name]?

A lot of parents also find it useful or reassuring to find out which of the parenting strategies they are already using have been found to be useful in promoting children's positive development.

Do you have any other children?

[If yes] Although we are focusing on children in the 8-10 year old range today and will be referring to that child throughout the session, these techniques would almost certainly work with children of other ages as well.

Do you have any questions for me before we get started?

OK, let's get started.

## Overview of Positive Parenting

To introduce the different approaches to positive parenting, I'm going to challenge myself today to be role model of the skills we'll be talking about. Please ask me about this as we go along, from your observations or experiences with me.

We'll also have this workbook [hand the mom the PP workbook] that you will be using during our session today. It provides a summary description of each of the skills and also has places for you to record whatever conclusions we come to in each section. To start, please turn to page 2.

All parents want to promote their children's development and teach them to behave well. And we know how important parents are to children's development. Our goal is to



help parents develop skills for being more *positive* with their children, even when parents might be frustrated with their child's behavior.

So throughout our time today we will be focusing on techniques and strategies for what we call *positive parenting*.

What comes to mind when you think of positive parenting?

We know that most children like to receive attention and praise for their efforts. One way to increase the time parents spend being positive with their children is to increase the likelihood of children behaving in ways parents would like them to behave.

Researchers have found that making your child feel good when [he/she] behaves the way you like [him/her] to behave increases the chances of [him/her] behaving the same way again, which then gives you even more opportunities to praise [him/her].

How does this sound to you so far? [pause for answer] Any questions?

Today we will go through several strategies that are designed to help [child's name] feel good and also to teach [him/her] to behave in appropriate ways.

I also want to note that during this session, I will have you answer questions and complete activities in the workbook I've given you. You will also be taking the workbook home with you. You are welcome to follow along in your workbook as I describe the different strategies and skills for positive parenting, although the words I say will at times be different from what is written down. Most moms have found it most helpful to use our time together to engage in a conversation with me about these skills and then use the workbook descriptions to refer to at home. Are you ready to get started?

Throughout the visit, the trainer should make it clear to the mother that these are just examples of strategies that have been found to be effective, but not all strategies will work with every child in every family. In addition, some mothers may express doubts or reservations about certain techniques (e.g. making positive requests for change instead of punishment). Encourage parents to express these reservations by asking questions about the basis of their concern—*What is it about the idea of making positive requests for change that concerns you? Were there times you tried this technique that it didn't work?* Try not to challenge or confront the parent directly, but instead suggest that sometimes using several techniques in combination works or that there may be other strategies that they will find helpful.



## Part One: Developing Positive Relationships with Children

This section focuses on the following skills that promote the development of parents' caring, loving relationships with their children:

- 1) Spending quality time with your child
- 2) Showing affection to your child
- 3) Positive conversations with your child

The first things we are going to talk about today are skills that have been found to promote parents' caring, loving relationships with their children. The three skills we will cover are listed on page 3 of your workbook, and include:

- (1) spending quality time with your child;
- (2) showing affection to your child; and
- (3) positive conversations with your child.

I will go over each skill in turn, and ask you to fill out a short exercise in your workbook for each one. We will start with *spending quality time with your child*, and there's a definition on page 3 in your workbook if you would like to follow along.

### 1. Spending Quality Time with your Child

The first thing that we will go over is the importance of your spending quality time with [child's name]. For us, quality time does not mean expensive or lengthy family outings or activities (such as a trip to a theme park), it means parents being available to their child and spending even brief amounts of time together each day. It also means parents and children finding fun activities that they can *enjoy together*.

#### EXERCISE: Quality time

First, I'm going to draw a line so you can show how satisfied you are with the quality time you spend with [child's name]. On this line [as you draw it], would you say you are "not satisfied at all," "completely satisfied," or "somewhere in between."

Write a line on the white board and have mom mark the spot to indicate her degree of satisfaction. If the mother asks whether we mean what they do or how much time they spend, tell her to answer the question with both in mind.

[if mom does not say spontaneously, ask:] Why did you give it that rating? In what ways are you satisfied? What could be better? [be aware of the next question, so that you don't end up being repetitive].

Second, what are some specific examples of ways you spend quality time with [child's name] already? Remember, quality time can be brief moments or longer activities. [write these down on the board]

**(satisfied/Good list of quality time activities)** That's great that you spend so much quality time with [child's name]!

**(satisfied/Small list of quality time activities)** It's great that you are satisfied with the quality time you spend with [child's name].

**(Not satisfied/Good list of quality time activities)** Even though you are not quite satisfied with the quality time you spend with [child's name], you came up with a great list of things that you already do to spend quality time with [child's name].

**(Not satisfied/Small list of quality time activities)** You came up with a few things you are already doing to spend quality time with [child's name]. Those look great!

What are some other ways you could spend quality time with [child's name]? Activities that both of you would enjoy doing together? [write the answers] For example [use some or all of these examples],

-What has been enjoyable for you two together in the past, even if it was something small or routine?

-What about some outdoor activities?

-What about some indoor, quiet activities, like reading or games?

-What about just doing some routine tasks together, like cooking or gardening?

-What kinds of things do you normally do that put you in a good mood? Do you think [child's name] could join you in those activities?

-What are some of [child's name] very favorite things to do? Could you join him/her in those activities?).

- What else?

What about additional times of day that might be good for spending quality time with [child's name]?

Praise the mother for the ideas she comes up with.

**EXERCISE: Activities to foster positive mood**

In addition to just being fun and helping to facilitate strong parent-child relationships, spending quality time with children doing fun activities can also help keep parents happy and positive. We know from research that one of the simplest and most powerful ways to keep mood up or to improve mood when it's down is to do something fun.

To demonstrate this technique, I'd like you to think back to something really fun that you did recently with [child's name], something that you *both* really enjoyed. Are you picturing it in your mind? What are you doing? What is [child's name] doing in your memory?

How do you remember feeling during that activity you are remembering?

How do you think [child's name] was feeling?

What were some cues that let you know [he/she] was having a good time?

Just now, did anything happen to your mood after remembering the fun activity that you did with your child?

I realize that what we just did is a very simple activity, but really what I'm trying to illustrate is that even thinking about fun activities with your child can improve your mood, and actually doing fun activities will improve both your mood and [child's name] mood at the same time.

**PLAN: Spending Quality Time with Children**

Now let's look back through your ideas for spending quality time with [child's name] that we've put on the board. Focusing on your ideas for activities that *both you and [child's name] would really enjoy*, choose 2-3 ideas that you would like to try out with [child's name] during the upcoming week. Go ahead and put check marks next to those on the board.

Now, please turn to page 4 of your workbook and write down those activities. Let's get *really specific* about what the activity would involve this week, when you would do the activity with your child, and so forth. We all know that when we want to do something, the more specific we can be about *when, where, what, and how we'll deal with obstacles*, the more likely we are to actually do it.

Go over the mothers' choices for spending quality time with her child over the next week. If needed, say something like "So now let's get even more specific."

Ask questions like:

- "Why did you choose these particular ideas?" Why do you think that particular activity would work well? [e.g. is it similar to something you two have enjoyed before?] "How do you think your child will respond to these activities?"

[if not clear exactly what they will do:] "What would doing this activity actually involve?"

[if not clear when they'll do it:] "When during the week do you think you will engage in these activities with your child?"

- "How realistic do you think this plan is for you to carry out this week?" -

"What might get in the way?" (engage in problem solving if obstacles seem more than minor). Discuss issues of feasibility ("How easy would it be for you to try this activity with your child? What would it take for you to be able to do that activity with [child's name]?")

Make sure that the specific ideas, along with details and plans for implementation, are written down in the workbook. Also, take notes to yourself on our Skills Tracking Worksheet.

Finally, on page 5 in your workbook please indicate on the scale how important it is to you that you spend more quality time with [child's name], and how confident you are that you can spend more quality time with [child's name].

What did you indicate for importance?

What did you indicate for confidence?

[discuss as needed, if low or middling on either scale]

Great, let's move on now to the second skill. I'm going to erase the board so we'll have room to write again.

## 2. Showing Affection to Children

Next we are going to talk about being physically affectionate with [child's name]. Physical affection is important for the development of positive and trusting parent-child relationships. If physical affection is provided after your child does something desirable, it can also be a powerful form of encouragement. Physical affection from parents also helps children to develop the capacity to cope with intimacy later in life.

Although most parents have no problem showing physical affection when their children are infants or toddlers, sometimes we forget that physical affection is important for older children too.

We also know that both adults and children differ in how much they like physical affection and how they respond to it, so it's important to figure out what works best for you and [child's name].

### **EXERCISE: Physical affection**

So first, on this line [draw line and fill in the words at the extreme], overall, how comfortable are you with showing physical affection to [child's name]? Would you say "not at all comfortable" or "completely comfortable" or somewhere in between? Go ahead and put an x on this line.

[If comfortable] That's great that you are so comfortable being physically affectionate with [child's name].

[If uncomfortable] We recognize that adults and children differ in how much they like physical affection and how they respond to it, and it's perfectly fine to be showing [child's name] affection in ways that are comfortable for you. Hopefully we will be able to find some ways of showing physical affection that would be more natural to you, that you could try out with [child's name]. How does that sound?

Second, how satisfied are you with the physical affection you show your child? [draw a new line]. Would you say "not at all satisfied" or "completely satisfied" or somewhere in between? Go ahead and put an x on this line.

Ok, now let's write down some specific examples of ways you are physically affectionate with [child's name] already. Why don't you tell me and I'll write them down on the board. [with each, ask when she normally uses that type of physical affection and jot that down next to it].

[after you have her list and a sense of the list being small or reasonable, say the appropriate one of the following:]

**(Very satisfied/Good list of physical affection)** That's great that you are so physically affectionate with [child's name]! Even though you are already very physically affectionate with [him/her], can you think of any other ways you could be physically affectionate with [child's name], or any other times during the day that might be good for being affectionate with [child's name]? [add these to the list, using a different color pen].



**(Very satisfied/Small list of physical affection)** It's great that you are satisfied with how physically affectionate you are with [child's name]. Can you think of even more ways to be physically affectionate with [child's name] that both you and [child's name] would be comfortable with, or any other times during the day that might be good for being physically affectionate with [child's name]? [add these to the list, using a different color pen].

**(Not satisfied/Good list of physical affection)** You indicated that you are not very satisfied with the physical affection you show [child's name]. Can you tell me more about that? Even though you are not quite satisfied with the physical affection you show [child's name], it looks like you were able to come up with a great list of things that you already do to show [child's name] physical affection. What are some more ways you could be physically affectionate time with your child that both you and [child's name] would be comfortable with. Or, in your case, perhaps different times during the day that might be good for being physically affectionate with [child's name]? [add these to the list, using a different color pen].

**(Not satisfied/Small list of physical affection)** You indicated that you are not very satisfied with the physical affection you show [child's name]. Can you tell me more about that? It looks like you came up with a few things you are already doing to show [child's name] physical affection. Those look great! What are some more ways that you could be physically affectionate with your child that both you and [child's name] would be comfortable with. You can also think about different times during the day that might be good for being physically affectionate with [child's name]. [add these to the list, using a different color pen].

Provide feedback and praise the mother for coming up with appropriate ideas. If the mother has trouble coming up with a list of ideas, help her brainstorm by showing her the list on p. 6.

### **PLAN: Showing Affection to Children**

Now let's look back through your additional ideas for showing affection to [child's name] that we've put on the board. Focusing on your ideas for ways of showing affection that would work for both you and [child's name], choose 2-3 ideas that you would like to try out with [child's name] during the upcoming week. Go ahead and put check marks next to those on the board.

Now, please turn to page 7 of your workbook and write those down. Let's get really specific about what the physical affection would be this week, when you would do it, and so forth. Like we said before, we know that when we want to do

something, the more specific we can be about when, where, what, and how we'll deal with obstacles, the more likely we are to actually do it.

Go over the mothers' choices for showing affection to her child over the next week. If needed, say something like "So now let's get even more specific."

Ask questions like:

-“Why did you choose these particular ideas?” why do you think that behavior would work well with their child (“How do you think your child would respond to that type of physical affection?” How would you feel doing something like that?”) [if not clear exactly what they will do:] “What would doing this would actually involve?”

[if not clear when they'll do it:] “When during the week do you think you will show affection with [child's name] in this way?”

-“How realistic do you think this plan is for you to carry out this week?” -“What might get in the way?” (engage in problem solving if obstacles seem more than minor). Discuss issues of feasibility (“How easy would it be for you do to try this? What would it take for you to be able to do that with [child's name]?”)

Finally, on page 8 in your workbook please indicate on the scale how important it is to you that you show [child's name] more physical affection, and how confident you are that you show [child's name] more physical affection.

What did you indicate for importance?

What did you indicate for confidence?

[discuss as needed, if low or middling on either scale]

Great, let's move on now to the third skill. I'm going to erase the board so we'll have room to write again.

### 3. Positive conversations with children

Next we are going to discuss the importance of talking to [child's name] about positive things. Talking with children about positive things is yet another way that mothers and children can enjoy being together and relationships can be strengthened.

When you have conversations with your child about positive feelings and experiences, children can feel more positive in the moment and, for the future, they can learn to recognize and talk about the positive things in their lives.

**EXERCISE: Reflecting on the positive and experiencing gratitude for these**

It is important to recognize the positives in our lives and to teach our children to do the same. So next we are going to talk about recognizing the positives in our everyday lives and talking to our children about being grateful for these things. These can be things happening in [child's name]'s life, like at school or activities, or things happening in your own life, like at work or your other activities.

If you have frequent casual chats with [child's name] about positive things, you are not only helping [child's name] learn to recognize and talk about positive things in [his/her] life, you are also helping to increase [child's name] positive mood. And even further, when you let a child know that you are listening to [him/her], you also help a child feel good about [himself/herself].

What do you think about this so far?

So there are two parts to this technique. The first is talking more to [child's name] about positive things. The second is being an active listener when [child's name] is talking to you about something. It's the active listening part that we'll focus on now.

Being an active listener conveys to your child that you are interested in what [he/she] is saying and involved in the conversation. Please turn to page 9 in your workbook so we can go over the steps for active listening:

The first step is to look directly at the person you are listening to.

The second step is to nod your head at different points to let the person know you are listening.

The third step is to ask clarifying questions to make sure you understand. An example would be, "what was that like?"

The fourth step is to, at different times during the conversation, repeat back to the person what you just heard them say, either in their own words or your words. You can use phrases like: "It sounds as if you feel..." or "Let's see if I understand what you're saying..." or "You feel..."

Finally, there are a few general rules: first, no judgment – don't express approval or disapproval of the message. Second, wait to say something about yourself until after you have expressed your active listening.

Now we are going to practice these techniques so that you can use them with [child's name]. First, I am going to be the active listener while you talk about something positive that has happened in your life recently.

[Model active listening techniques] So how was this for you about how I tried to act out some of the skills with you?

Great! Now I am going to talk about something positive that has happened in my life recently, and I want you to practice active listening with me.

[Practice active listening techniques with the mother]

Wonderful! How do you think you did with this technique? [if relevant: Of the 4 skills, which one or 2 do you think you were best at? Which one or 2 do you think you could work on to get better in the future?]

**PLAN: Positive Conversations with Children**

The final thing I would like for you to do is to turn to page 10 in your workbook and come up with a list of two to three positive things, experiences, or events that you could talk to [child's name] about in the next week. Also think about and write down when during the day it makes sense for you to have these types of conversations with [child's name].

Finally, write down the types of questions you could ask [child's name] to encourage [him/her] to talk about positive experiences or feelings.

What did you write down?

Why do you think those topics will work well with your child?

How would you feel engaging in that type of positive conversation with your child?

Provide feedback and praise the mother for coming up with appropriate ideas.

If the mother has trouble coming up with a list of ideas, help her brainstorm by asking questions about her child and show her the list.

Discuss the list of positive conversation topics and ideas with the mother. Be sure to ask about:

-“How realistic do you think this plan is for you to carry out this week?” -

“What might get in the way?” (engage in problem solving if obstacles seem more than minor).

Make sure that the specific ideas, along with details and plans for implementation, are written down in the workbook.

Finally, on page 11 in your workbook please indicate on the scale how important it is to you that you have more positive conversations with [child's name], and how confident you are that you can have more positive conversations with [child's name]?

What did you indicate for importance?

What did you indicate for confidence?

**Part Two: Encouraging Desirable Behavior**

This section focuses on four skills that help parents encourage desirable behavior in their children:

- 1) Verbal praise
- 2) Nonverbal praise
- 3) Making positive requests for change
- 4) Expressing negative feelings about specific behaviors

So far we have discussed several ideas for enhancing your relationship with [child's name]: spending quality time together, showing physical affection, and talking to [child's name] about positive feelings and experiences. Now we are going to move on to discuss

some ideas for encouraging [child's name] desirable behavior. These strategies are listed on page 12 of your workbook.

Encouraging desirable behavior is a useful skill for parents to have. When children are doing something that we like, it is important to encourage them by praising them and providing attention.

The reason for praising children when they do something that we like is that we know that behaviors that lead to positive outcomes, like praise or positive attention, are more likely to occur again. This provides parents with even more opportunities for praise and for the child to feel good about himself or herself.

Now we are going to go over each of the skills for encouraging desirable behavior and practice using them.

## 1. Verbal Praise

The first strategy that we will talk about in this section is using verbal praise to encourage desirable behavior in [child's name].

Praise is especially useful when it is in response to a specific behavior, rather than a more general statement.

For example, saying *"You've done a great job cleaning your room today. That's very helpful"* is more likely to increase that behavior than simply saying *"You've been a good boy today"*. The idea behind this strategy is to "catch your child being good", so that he or she will be more likely to be good in the future as well.

It is also especially useful when it comes right after the behavior occurs, rather than some time later, although later is better than never.

### **EXERCISE: Using verbal praise**

Again, the idea behind Verbal Praise is that when we are able to catch children doing something good and praise them for it, those good behaviors are more likely to happen in the future. Verbal praise also helps children feel good about themselves. Let's try this out with some examples of positive things that kids might do.

Let's imagine this scenario: *Your child cleaned his/her room without you asking him/her to do it.* I'll go first and pretend to be you and you pretend to be [child's name]. What I would say to [child's name] is: "[Child's name][sit forward in your chair, smile, and in a warm or enthusiastic tone of voice, say:] "I really like how you cleaned your room! And I especially like that you did it without me asking you!" What do you think about what I

did? [pause for response and, if appropriate, ask: “and did you notice how I sat forward in my chair and smiled and how expressive my voice was?].

Ok, now you try with the next scenario: *Your child was kind to his/her brother or sister or friend.* I’ll pretend to be [child’s name] and you respond to me. [make sure she actually role plays and doesn’t just say what she would say] [praise or encourage with specific feedback if needed].

Great. Let’s do one more. Here’s the next scenario: *Your child waited patiently to show you his/her project while you were fixing dinner.* Again, I’ll pretend to be [child’s name] and you respond to me. [make sure she actually role plays and doesn’t just say what she would say] [praise or encourage with specific feedback if needed].

Wonderful. And in your workbook on p. 13, there are some additional ideas for how to express verbal praise:

I really appreciate you doing ...

It’s really helpful to me when you do...

When you xxx, it really makes me happy

I’m so pleased to see you doing ...

I really enjoy seeing you do x

It’s really fun when you do ...

Remember to praise the specific behavior and to do so as soon as you notice the behavior or as soon after the behavior as possible.



**EXERCISE: Planning verbal praise**

Ok, so now let's get specific about you using verbal praise with [child's name] this next week. First, what are some positive things [child's name] does that you like or appreciate and would like to see [him/her] continue doing? Thinking about the last week or so, what did your child do that you particularly liked or appreciated or made you feel pleased or proud? [If the mother has trouble coming up with a list of ideas, help her brainstorm by asking questions about her child] [write these down on the board].

Tell me what you like about these behaviors? What do you appreciate or like about ... [a brief conversation to make sure she's on board with this being important – to praise children's positive behaviors; it's ok for her to talk about qualities, but try to keep the focus on specific positive behaviors, which is what we want her to be reinforcing]

So what did you do or say the last time you saw [him/her] do behaviors like [first item on list]? What was your reaction at the time and what did you do? [pause for response]. So this next week, what I'd like you to do is to find even more ways or opportunities to let [him/her] know that you like that behavior by praising [him/her] in the ways we've been practicing.

Now let's get even more specific about a plan for this next week. Please turn to p. 14 in your workbook. Looking back at the list on the board - your ideas for using verbal praise to encourage [child's name] desirable behavior - choose 2-3 behaviors that you would like to praise [child's name] for during the upcoming week.

Write your ideas on page 14 of your workbook, and be specific about what the types of behavior will be, when in the day this might occur, and what kinds of descriptive praise statements you might use.

Go over the mothers' plan for using verbal praise with her child over the next week. Ask questions (without being too repetitive with what you've already discussed; if already discussed these things, then just summarize here) like:

- "Why did you choose these particular behaviors to praise?"
- "How do you think your child will respond to these types of verbal praise?"
- "How would you feel engaging in that type of praise with your child?"
- "When during the week do you think you might catch your child engaging in these positive behaviors?"
- "How realistic do you think this plan is for you to carry out this week?" -
- "What might get in the way?" (engage in problem solving if obstacles seem more than minor).

Encourage the mother to add any new ideas that she comes up with during the discussion to her workbook list.

Discuss issues of feasibility (“How easy would it be for you to try this with your child?” “What might get in the way of your doing...” “How could you address those obstacles?”)

Make sure that the specific ideas, along with details and plans for implementation, are written down in the workbook.

Finally, on page 15 in your workbook please indicate on the scale how important it is to you that you use more verbal praise with [child’s name], and how confident you are that you will use more verbal praise with [child’s name]?

What did you indicate for importance?

What did you indicate for confidence?

## 2. Nonverbal Praise

Next we are going to talk about a different type of praise- nonverbal praise. Not all praise needs to be spoken. Sometimes just giving your child a signal or special attention can convey your approval with [his/her] behavior, and can be just as effective as verbal praise. This technique is also helpful with older children when it may not be as easy to verbally praise, such as when [child’s name] is playing with a group of friends and may be embarrassed by praise from you.

I know that we already talked about physical affection earlier today. What’s different about nonverbal praise from general physical affection is that the nonverbal praise is any kind of nonverbal signal that we use specifically to reinforce positive behavior – to increase your child’s positive behavior. In contrast, we can express physical affection any time, and in fact we want to.

### **EXERCISE: Ways to give nonverbal praise**

For the next exercise, tell me, so I can write them on the board, some ways that you at least sometimes let [child’s name] know that [he/she] did something good *without even speaking to [him/her]*.

[if she has a variety, then just praise those and move on to how often she uses them. If her list is skimpy, show her the list in the workbook, p. 16, and ask her how well any of

these might work for her with this child. If she finds some from the list or comes up with others, add them to the list on the board]. [workbook list: A touch on the head, A wink or smile from across the room, Sitting close on the couch while watching TV, A pat on the back, quick hug, squeeze of the hand, thumbs up, high five]

Now thinking back to the list of [child's name]'s positive behaviors you generated when we were talking about verbal praise, what might [child's name] do that would be an opportunity for you to increase your use of nonverbal praise?

Provide feedback and praise the mother for coming up with appropriate ideas.

Prompt the mother to identify when it would be appropriate to use attention to motivate or encourage their child to behave well, and praise her for the ideas she comes up with.

Discuss the list of nonverbal praise ideas with the mother. Be sure to ask about (without being repetitive):

- 1) Specific details regarding the nonverbal praise.
- 2) Ask why that nonverbal praise would work well with their child ("How do you think your child would respond to that type of praise?" How would you feel engaging in that type of praise with your child?")

Encourage the mother to add any new ideas that she comes up with during the discussion to her workbook list.

**PLAN: Nonverbal Praise**

Just like you've done for the other skills, now let's come up with a plan for your using nonverbal praise with [child's name] over the upcoming week. First, I would like for you to think about the ideas you've come up with for using nonverbal praise to encourage [child's name] desirable behavior. From this list (or drawing from our discussions), choose 2-3 specific examples of nonverbal praise that you would like to use with [child's name] during the upcoming week.

Write your ideas on page 17 of your workbook, and be specific about what your nonverbal praise behaviors will be, along with examples of when you would use that nonverbal praise behavior with your child- that is, which behaviors of your child would you try to encourage through the use of nonverbal praise.

What did you write down for your plan to use nonverbal praise with [child's name]?

Go over the mothers' plan for using nonverbal praise with her child over the next week. Ask questions (without being too repetitive with what you've already discussed; if already discussed these things, then just summarize here) like:

- "Why did you choose these particular nonverbal praise behaviors?"
- "Would these behaviors be natural and comfortable for you to do?"
- "When during the week do you think you will engage in these praise behaviors with your child?"
- "How realistic do you think this plan is for you to carry out this week?"
- "What might get in the way?" (engage in problem solving if obstacles seem more than minor).

Recognize that the behaviors for verbal praise may or may not be the same behaviors the mother wants to respond to with nonverbal praise and for some they may want to do both.

Discuss issues of feasibility ("How easy would it be for you to try this with your child?" "What might get in the way of your doing..." "How could you address those obstacles?")

Make sure that the specific ideas, along with details and plans for implementation, are written down in the workbook.

Finally, on page 18 in your workbook please indicate on the scale how important it is to you that you use more nonverbal praise with [child's name], and how confident you are that you will use more nonverbal praise with [child's name]?

What did you indicate for importance?

What did you indicate for confidence?



### 3. Making Positive Requests for Change

As I've mentioned throughout this session, one of the primary goals we have is to foster *positive* parent-child relationships. We've talked about how to do this already by encouraging children's desirable behavior, and now we are going to talk about what parents can do in situations when you need your child to either do something that they are not doing, like doing their homework or helping you out with something, or to stop doing something that you don't like, like whining or making a mess.

The goal is to increase instances of desirable behavior in children using positive methods, as opposed to more negative techniques like criticism or punishment.

The first technique we will talk about today is called "making positive requests for change". This can be a very effective first step in getting your child to change a behavior. This skill involves requesting that your child do a *different* behavior, rather than directly asking that an existing behavior be stopped or changed.

For example, if you are inclined to say to [child's name] "Please stop kicking your sister", consider framing it in a positive way, for example, "Please keep your legs still". When requests for change are made positively, it gives your child one more opportunity to feel good about [himself/herself] and makes it easier for parents not to criticize.

#### **EXERCISE: Practicing making positive requests for change**

Making positive requests for change can be a tricky skill to master, so we are going to practice it here today.

Let's start by you telling me, so I can write them on the board, some things you would like your child to stop doing. [write them on the board; Talk briefly about what the mother generates. Ask for clarification or elaboration if necessary]

Next, let's try this skill of making positive requests for change. Let's start with a role play and I'll play you and you play [child's name]. In this scenario, you, as your child, have just come in the house and tracked dirt all over the kitchen floor. I'm tempted to say, "Stop tracking dirt all over the floor." (say this with an angry voice) But instead, I say: "Please take your shoes off and leave them at the door so we don't get dirt all over the kitchen." [be sure to use neutral or positive tone of voice, as we emphasize in the next paragraph]

Remember, the idea is for parents to *word* their statements in positive ways in order to give children one more opportunity to change their behavior and also to use positive or neutral *tone of voice*, not negative or harsh or critical. Do you see how what I said was a positive request for change? [discuss as needed].

So here's what's involved:

1. Saying please or "I'd appreciate it if..."
2. Make a statement (not a question). Not: "Did you take your shoes off" (sounding accusatory), but "I would appreciate you taking your shoes off so the floor doesn't get dirty"

3. Neutral or positive tone
4. Encourage starting the positive request for change with the word “I” rather than “you”. The example I just used works for this too: You’re tracking dirt all over the kitchen. “I would appreciate you taking your shoes off...”

In other words, what we’re talking about is a positive request for change, instead of telling [him/her] to stop doing something. Positive requests involve saying what you *do* want [him/her] to do and *why you want that*. For this skill you will need to be *very specific* so that [child’s name] will know exactly what you want [him/her] to do.

Ok, here’s another example. This time, you be yourself and I’ll be [child’s name]. In this example, I, as [child’s name] have been fighting with my little brother [ or cousin or whoever]. You might be tempted to say: “Don’t fight with your little brother.” With positive requests for change in mind, what might you say? [let her respond]

Great. Let’s try one more. Instead of “Please stop making such a mess with your toys.” What could you say?

Wonderful. So the main thing to remember is make positive requests for change, saying what you do want and why it’s important.

Praise mother for what she did and give feedback.

Make sure to:

- Help her rephrase a statement if it is negative.
- Encourage her to be specific with the request.
- Help her with additional examples if needed.
- Ask her if she could see herself saying these types of positive requests for change with her own child.
- remind her to say please
- make sure it’s a statement and not a question
- have the tone be neutral or positive
- Encourage starting the positive request for change with the word “I” rather than “you”.
- Be very specific about the behavior they want their child to engage in.
- Say why you want that.

### **PLAN: Positive Requests for Change**

On page 20 of your workbook, let’s come up with a plan for using positive requests in order to change [child’s name] behavior over the upcoming week. Jot down two or three of your child’s behaviors that you might like to see change. Write the specific child behaviors that you will try to change through positive requests in the lines provided, and include examples of the positive request statements that you plan to make.

What did you write down?

Go over the mothers' plan for using positive requests for change with her child over the next week. Ask questions (without being too repetitive with what you've already discussed; if already discussed these things, then just summarize here) like:

- "Why did you choose these particular behaviors?"
- "Would these positive requests for change be natural and comfortable for you to do?"
- "When during the week do you think you will engage in these positive requests with your child?"
- "How realistic do you think this plan is for you to carry out this week?"
- "What might get in the way?" (engage in problem solving if obstacles seem more than minor).

Discuss issues of feasibility ("How easy would it be for you to try this with your child?" "What might get in the way of your doing..." "How could you address those obstacles?")

Make sure that the specific ideas, along with details and plans for implementation, are written down in the workbook.

Finally, on page 21 in your workbook please indicate on the scale how important it is to you that you use more positive requests for change with [child's name], and how confident you are that you can use more positive requests for change with [child's name]?

What did you indicate for importance?

What did you indicate for confidence?

#### **4. Expressing Negative Feelings about Specific Behaviors\***

*\*Keep the list of child's behaviors on the board from last module.*

Before I introduce our final skill, let me ask you this: What do you do if you've made a positive request for change to [child's name] and you don't get the response you wanted? The final skill that we are going to go over today is called "expressing negative feelings about a specific behavior." It is a useful skill to use when you want [child's name] to stop doing something, and you want to get [him/her] to stop doing it without using criticism or expressing anger.

A first step is to quickly check in with yourself to see if you are calm enough to have a positive conversation with your child. If your level of anger or tension is so high that it is likely to spill over into how you talk, then know that this would be a good time to take a few minutes for yourself. Have you ever tried that? [if so] how has that worked for you? [if not] how do you think that would work for you? Or something else like that, to get you ready to be able to have a calm conversation.



Second, once you are sure you are sufficiently calm to proceed, there are four steps to this technique, and they are written down for you on page 22 of your workbook.

- 1) Look directly at your child;
- 2) Say exactly what your child did that upset you;
- 3) Tell your child how his or her behavior made you feel;
- 4) Suggest a way that he or she could prevent it from happening in the future.

As you can see on page 22, the first step of this technique is to look directly at your child, and then say exactly what your child did that upset you. Next you tell your child how his or her behavior made you feel, and then finally suggest a way that [he or she] could prevent the same behavior from happening in the future. Sometimes this last step is the most difficult - it can be tricky coming up with replacement behaviors for things that your child does that really bother you. Let's go ahead and practice that skill now.

**EXERCISE: Expressing negative feelings about specific behaviors**

First, looking back at the list of those behaviors [child's name] has done recently, that we worked on with positive requests for change, which ones of these have made you angry or upset, or have found annoying? Do you want to add any new ones that make you especially annoyed or frustrated? I'll write them down on the board. [go for 3 to 5 total; make sure they're specific behaviors]

How did you respond to [child's name] when [he/she] did that? [get this info for each one or until a pattern emerges]

Ok, next, for the third step, we need you to identify your feelings about the behavior. Common feelings for mothers to have in situations like this are anger, sadness, worry, frustration, irritable, and others. What is the main feeling word or words that you might use to tell [child's name] how you reacted to [his/her] behavior? [write this on the board, next to the behavior; Praise mother for appropriate responses]

Great, next, for the fourth step, we need you to identify a *positive* behavior that you would like [child's name] to replace the negative behavior with? For example, if the negative behavior was hitting [his/her] sister, I might suggest that a positive behavior could be keeping [his/her] hands to [him/her]self.

Good, now we're all set with what we need. Let's practice expressing negative feelings about these behaviors [pointing to the board] using the 4 steps in the workbook. [You take the lead in the first role play with the mother – go through the 4 steps for expressing negative feelings about specific behaviors using the first behavior/feelings/positive behavior she came up with. Ask for feedback. Then have her do the next one and maybe one additional one after that if needed.]

*(Example to share with mom: "When I tell you it's time to go to bed, and you keep playing and ignoring me, I feel really frustrated. Next time, can you please stop playing the first time I ask you to finish up playing, and look at me, so that I know you've heard me?" )*

**PLAN: Expressing Negative Feelings about Specific Behaviors**

On page 22 of your workbook, let's come up with a plan for expressing negative feelings about specific behaviors in order to change [child's name] behavior over the upcoming week. Looking back at the behaviors on the board and any others that you might like to change, list two or three in that table on p. 22 under Child's Behavior. Remember that these might be behaviors for which you have already tried using positive requests for change, and the behaviors have not changed.

Write the specific child behaviors that you will try to change through expressing negative feelings in the lines provided.

Then in the next column, write down the one or two words that best express your feelings about that behavior. You'll probably write down the word(s) we wrote on the board, but you can change those if you think of another word that better fits how you feel.

Finally, in the third column, write down the positive behavior that you want to see, as a substitute.

Go over the mothers' plan for expressing negative feelings about specific behaviors with her child over the next week.

Remind her that she should try using positive requests for change first, but if that doesn't work, to move on to expressing negative feelings about specific behaviors. Ask questions like (without being too repetitive with what you've already discussed; if already discussed these things, then just summarize here):

- "Why did you choose these particular child behaviors to focus on this week?"
- "Can you see yourself using this technique with your own child?"
- "Will this feel natural and comfortable for you?"
- "How realistic do you think this plan is for you to carry out this week?" -
- "What might get in the way?" (engage in problem solving if obstacles seem more than minor "How could you address those obstacles?")

Make sure that the specific ideas, along with details and plans for implementation, are written down in the workbook.)

Finally, on page 23 in your workbook please indicate on the scale how important it is to you that you use the skill of expressing negative feelings about specific behaviors with [child's name], and how confident you are that you will express negative feelings about specific behaviors with [child's name]?

What did you indicate for importance?

What did you indicate for confidence?



## Session Summary

In our time together today we focused on the principles of positive parenting and strategies for promoting children's positive development. The strategies are listed in your workbook to take home with you.

We first talked about strategies for developing positive relationships with children, including:

- Spending quality time with children
- Showing physical affection
- Talking with our children about positive emotions and experiences.

Then we went over strategies for encouraging desirable behavior, including:

- Verbal praise
- Non-verbal praise
- Making positive requests for change
- Expressing negative feelings about specific behaviors.

Do you have any questions about anything we have gone over today?

You've identified several goals for becoming a more positive parent to your child. And you've listed several specific strategies (what and when) to put those goals into practice. Based on work involving helping people to change their behavior, we know that it often helps people to reach their goals if they do two things: make a calendar and plan a follow up. So for the calendar, we've given you a format you can use, tucked into the pocket of your binder.

Now let's make a specific plan for follow up. That's why we've asked you to agree to come in for two more visits, as a follow up, like we discussed on the phone and in the consenting process. We also would like to follow up with you during this week, as you are practicing, to ask you how things are going and to see if you have any questions. Would it be best for you if we did that with a phone call or an e-mail? [fill out that section of the Skills Tracking Form, noting how and when mom wants to be contacted and transfer to your personal calendar or 'to do' list]

## **PRACTICE (BETWEEN WEEKS 1 AND 2)**

Give the mother the Homework Record Calendar. Explain that the goal of the activities during the week between the sessions is to help parents practice implementing strategies for promoting their child's development. Go over the Calendar with the mother and explain that we would like her to *practice three strategies each day*, and to indicate on the Worksheet the behavior she engaged in that was consistent with each strategy, as well as how her child responded.

During the week between today and when you and [child's name] come back next [name the day], we want you to practice all of the positive parenting techniques we covered today. The Calendar is a form to help you keep track of when you used each strategy and how your child responded to it. Not all strategies work for all families, and one goal of this homework is to figure out what works best for you and your child, contributing to the most positive experiences overall.

In your recording on the calendar be *really specific* about how you used each strategy and how your child responded. You can also use this space *on the back* to record any questions or concerns that come up, which we can discuss when you come back for session 2. The goal will be to practice three strategies each day. And here's a magnet to use to post this on your refrigerator if you'd like.

Next, remind mom of the **last step in today's visit** – the second **Parent-Child Interaction Activity** with feedback (*see next page for script*):

### **Introduction of Parent-Child Interaction Activity to Mother**

Now you are going to have an opportunity to put into practice with [child's name] some of the positive parenting techniques we've gone over today. During the first five minutes you will interact with [child's name] on your own, with both of you sitting at the table and using the play materials in any way you two choose. The arrangement will be just like we did at the beginning of your visit today, but now you'll get to practice what we've been talking about. Then, as a transition between our having talked about all of these things together today and you doing these things at home on your own, during the next ten minutes I will listen in and help you along and make suggestions. You will be wearing an ear piece so that you can hear what I am saying, but [child's name] will not be able to hear me. When I am talking, please just continue interacting with your child. After those

ten minutes are over, I will turn off the microphone and you will be on your own again to practice the positive parenting techniques with your child for the last five minutes.

Do you have any questions for me about that?

Again, the point of this activity is to help you practice the positive parenting strategies that we just went over in our session. This is really a transition between you learning these skills during our session and then doing them on your own at home. This is an opportunity for you to practice these positive parenting skills and get some feedback from me at the same time. I want to make sure that this practice is helpful for you, so I'm going to ask you a few questions. Your answers will help me to figure out how to be most helpful to you.

First, during the time when I'm talking to you through the ear piece, what kinds of things would you like to hear from me that would be helpful for you as you try out some of these positive parenting strategies?

Second, of the positive parenting skills that you learned today, which of these skills do you think you are most likely to have trouble remembering, that you would like for me to remind you of through the ear piece? These might be the skills that aren't already part of your normal routine when you interact with [child's name].

Third, thinking ahead to the interaction that you will have with your child in a few minutes, what types of behaviors might we see from your child that might be challenging for you as you try to put some of the positive parenting skills into practice?

Finally, what types of positive behaviors are we likely to see from your child today, that you would want to praise, verbally or nonverbally?

### Trainer's Guide for Bug in the Ear Coaching Session

#### Coaching Actions

- 1) **Label and Praise** (*"I really like the way you..." "Great job with ..."*) **Positive Parenting (PP) Techniques that you see her using:**
  - a. Spending quality time (*"You seem to be enjoying your time together"*)
  - b. Showing affection (*"This might be a good time to reach across the table and pat her on the hand/give her a high five"*)
  - c. Positive conversations
    - i. Making positive statements about the child (*"I like how you're talking about things you enjoy/appreciate about [child's name]."*)
    - ii. Making positive statements about anything (*"I like how you're talking about fun things."*)
    - iii. Active listening skills)(*"Nice eye contact"*)
      1. Making eye contact
      2. Nodding your head
      3. Asking questions to make sure you understand
      4. Repeating back what you heard him/her say
  - d. Verbal praise
  - e. Nonverbal praise
  - f. Making positive requests for change
  - g. Expressing negative feelings about specific behaviors
    - i. Looking directly at your child
    - ii. Saying exactly what your child did that upset you
    - iii. Telling your child how his/her specific behavior made you feel
    - iv. Suggesting a way that he or she could prevent it from happening in the future
- 2) **Encouraging parent to use skills at appropriate times:**



- a. Try first commenting on the interaction and see if that elicits a PP skill
    - i. *"[He/she] seems to be...(e.g. trying to tell you something.)"*
  - b. Suggest PP skill that could be used in the moment
    - i. If a comment on the interaction does not prompt a PP behavior or parent misses an opportunity to use a skill (*"This might be a good time to..."*) (*"This might be a nice time to try those active listening skills."*)
  - c. Prompt parent to make praise more specific
    - i. If parent says *"Great job!"*, you can say *"I like your enthusiasm. Can you tell her what she did that you like?"*
- 3) If mom engages in a negative behavior, help her reframe negative statements in a positive way**
- a. *"How about asking her X...."*
  - b. *"Can you come up with a more positive way to [e.g., ask that]?"*
  - c. *"How about keeping it more positive?"*
  - d. *"Can you try [that skill] like we just practiced?"*

**Notes to Coach:**

- Keep a monologue going for the 10 minutes of coaching, even if it sounds repetitive to you.
- If the parent is using a ½ version of a skill (e.g., active listening, expressing negative feelings about specific behaviors), help them remember the rest of it.
- At least once in the session (if the mother does not comment on this already), comment on how the mother seems to be enjoying spending time with her child.
- Praise for everything positive the mother does.
- Don't be afraid to interrupt the mother when she is speaking.
- Don't assume you know the mother's or child's emotions (be careful when phrasing your observations).

**After the Activity**

I hope it was helpful for you to be able to put the positive parenting skills and techniques that we talked about into action. Now for the next week we want you to continue practicing these skills with your child at home.

**If the parent wants to review the session in detail:**

That worked out exactly like we were hoping, and we hope that you found it helpful to practice the skills you learned. Now you have a good start on what you chose to practice during the week, and we will be eager to hear about how it goes during our next session together.

**Reminder about homework**

Before you leave today, I just want to remind you about the homework we talked about at the end of our discussion in the other room. Please remember to work on the practices for 20 minutes each day, and fill in the calendar I gave you so that we can talk about it at your session next week. Any notes you or write about your experiences are also likely to be helpful to us for next week's discussion. Thank you again, and we look forward to seeing you next week!

**VISIT TWO (WEEK 2)**

In this visit, the trainer reviews the positive parenting practice log with the mother and retrains skills that the mother requests (or that the trainer thinks would be beneficial based on what the mother says).

- 1) Developing a positive mother-child relationship
  - a. Spending quality time with children
  - b. Showing affection to children
  - c. Talking with children - Reflecting on the positive
- 2) Encouraging desirable behavior
  - a. Verbal praise
  - b. Nonverbal praise

- c. Making positive requests for change
- d. Expressing negative feelings about specific behaviors

### Visit Objectives

After completing the visit, parents should be able to:

- Further understand the concept and components of positive parenting.
- Continue to apply behaviors consistent with the principles of positive parenting to their own families.

### Materials and Equipment

During this session, you will need the following:

- A copy of the *Positive Parenting Workbook* to refer to as required.
- The mother's copy of the *Positive Parenting Workbook* from last session.
- Two new copies of the *Homework Calendar* for her to use in the next two weeks.
- The white board
- The mom's *Skills Tracking Form*

## Introduction

Following initial greetings, introduce the agenda for the visit.

Thank you for coming in for this second visit. Today we will be going over in detail your Calendar from the previous week, and talking about your experiences using some of the positive parenting techniques we discussed in the last session with [child's name]. We will also be going over any strategies or techniques that weren't clear last time, or that you realized you might need more practice with after trying them out with your child. Finally, we will have you and your child participate in another guided interaction activity at the end.

So let's get started

## Review of Practice Calendar

First, give me an overview of how things went this past week, with you implementing positive parenting techniques. [discuss, but stay focused]

Ok, next, let's review your practice Calendar. Let's take a look. [set up the Calendar so both of you can see it]

So let's start with Day 1. Why don't you talk me through this – what practices you used and how it went. [be sure to get specifics on three points: what she did for each strategy, how it went for her, how the child responded]

[continue for all of the days]

To know how you want to focus today's training, take notes about which strategies:

- 1) The mother appeared to have difficulty with;
- 2) The child responded negatively to;
- 3) The mother did not practice during the week
- 4) Were implemented and worked well for both mom and child

Some additional possible questions to ask her:

1. Based on your experiences practicing these strategies this past week, which strategies do you think worked best for you and [child's name]?
2. Which strategies did not seem to work well? Why do you think that was? (Was it not a good fit for this mother and child? Was it because the mother was not yet comfortable using the strategy?)
3. I noticed that you did not practice the strategy of \_\_\_\_\_. Is there a reason you didn't, or did you just not get to it?
4. Is there anything else you would like to tell me about your experiences this week with positive parenting practices?

Offer appropriate and specific praise (being a good role model for this skill).



## Review of Positive Parenting Strategies

Now let's take a little time to review and practice some of the strategies [what you say here, specifically, will depend on what you will have learned from the mom so far in this session]

To review each strategy, return to the manual for Session 1. Make sure that the mother is completely comfortable talking about and using the strategy before moving on to the next strategy.

Use the following behavioral activation strategies as appropriate:

- (a) Identify or set goals – Help the mom to clarify which PP skills she might want to further develop. What specific goals might she set relevant to that desired change?
- (b) Brainstorm options to increase the targeted behavior/skill – Help the mom to generate options for activities consistent with that PP skill.
- (c) Evaluates and selects actions to increase the targeted behavior/skill – Help the mom to evaluate and select actions to increase the skill (maybe engage in pros and cons of specific options, evaluating potential consequences of implementing specific options).
- (d) Structure activity (e.g., break down the task; sequences task components)
- (e) Schedule activity – help the mom to identify when she'll do this.
- (f) Assign self-monitoring – discuss how the calendar will help.
- (g) Manage contingencies – discuss possibly adding prompts to engage in the skill in addition to the calendar (e.g. setting a cell phone reminder; scheduling fun activities with the child on her personal calendar, etc.)
- (h) Elicit practicing new behavior in session – practice/role play
- (i) Re-establish or establish routines – help the mom to think through how she can integrate the skills into her daily routines (weekday and weekend days)
- (j) Teach skills – as needed, for any that she didn't seem to grasp
- (k) Provide education – review info on basic positive parenting and it's importance
- (l) Troubleshoots action plans (anticipates potential barriers or identified problems and solutions related to mom implementing PP)

## Session Summary and Final Activity

Summarize the main content areas covered in the session.

In our time together today we reviewed the positive parenting strategies that you practiced with your child this past week, and talked about what worked and did not work so well with your family. [if relevant: We also reviewed and practiced some strategies that you thought could use more practice, or that you didn't have a chance to practice on your own.]

Do you have any questions about anything we have gone over today?

The final thing we are going to do is to let you have one more opportunity to practice these techniques with your [son/daughter]. We're going to leave the two of you alone for 10 minutes- feel free to interaction with [him/her] in any way that you choose, and try to use the techniques of positive parenting when appropriate.  
Do you have any questions?

Remind mom of the third and final session, in two weeks.

Encourage her to continue practicing. Point out the two new calendars.

Tell her you'll call or email once a week with a reminder/encouragement. Confirm that her preference is the same as last week, in terms of how she wants you to contact her.

## Parent-Child Interaction Activity

For this activity, the mother will have another opportunity to practice positive parenting with her own child, this time without any feedback from the trainer. This free-play interaction will take 10 minutes to complete. Interactions will be videotaped and coded for positive parenting behaviors as well as child positive and negative affect.

The positive parenting techniques are:

- 1) Developing a positive mother-child relationship
  - a. Spending quality time with children
  - b. Showing affection to children
  - c. Talking with children - Reflecting on the positive
- 2) Encouraging desirable behavior
  - a. Verbal praise
  - b. Nonverbal praise
  - c. Making positive requests for change
  - d. Expressing negative feelings about specific behaviors



**VISIT THREE (WEEK 3)**

There are two activities for the mother in Session 3.

1. While the child is completing the assessments, mothers will be asked to respond to questions testing their recall of the knowledge that was taught to them. They will also be asked to respond, in writing, to some open ended questions about their overall experience with the study.
2. After the child completes the assessment, the mothers and children will engage in a final 10 minute Parent-Child Interaction segment, which is videotaped and later coded.

# Family Nutrition Workshop

## Trainer's Manual



### **Visit One (Week 1)**

In this visit, the trainer introduces mothers to the principles of family nutrition. Most of the session is devoted to going over basic principles of good nutrition with mothers, as well as how to ensure that their 8-10 year old child is eating a healthy, balanced diet. Although some of these nutrition strategies may already be used by some mothers, all techniques will be reviewed in the session.

- 1) Fruits and Vegetables
- 2) Whole Grains
- 3) Milk and Dairy
- 4) Nutrition Facts Label
- 5) Balanced Diets on a Budget
- 6) Healthy Recipes to Try

Each strategy should take no more than 10 minutes, so try to keep an eye on the time and keep up the momentum.

### **Visit Objectives**

After completing the visit, parents should:

- Understand the concept and components of healthy nutrition.
- Be familiar with different strategies for helping their 8-10 year old children eat healthy, balanced diets.
- Be confident in their ability to try out new healthy recipes with their families.

### **Materials and Equipment**

During this session, you will need the following:

- A copy of the *Family Nutrition Training Manual* to refer to as required.
- A binder with *Family Nutrition Workshop* workbook for the mother, as well as a copy of the *Family Nutrition Homework* and the *Family Nutrition Recipe Booklet* for the mother to take with her.

**Introduction**

Following initial greetings, introduce the agenda for the visit.

Thank you for coming in today. Today we will be talking with you about:

- the principles of good family nutrition,
- strategies for enhancing family nutrition,
- and encouraging good nutrition in 8-10 year old children
- In addition, we will be talking about the foods that your child already eats, and looking at healthy recipes that you may want to try.

At the end of the session, we will have you and [child's name] participate in another video-recorded interaction activity.

Do you have any questions for me?

Let's get started. What I'm about to tell you is also printed on page 2 of your workbook.

## Nutrition and Child Development

Research has shown that nutrition is important for cognitive and brain development; therefore, making healthy food choices becomes vital to a student's academic performance. School-age children need to eat nutritionally balanced meals to keep their growing brains in optimum condition. Nutrients provide the energy that children need to complete simple and complex tasks, and even a moderate lack of nutrients can have lasting effects on children's cognitive development and school performance (Center on Hunger, Poverty, and Nutrition, 1994). The best diet to keep children's brains and bodies healthy is a balanced one, rich in fruits, vegetables, whole grains, dairy products, and healthy proteins.

In this session, we will explore different ways to ensure that your child is eating a healthy, balanced diet. Although some of the things that we will cover will be a review for you, we hope that you will learn some new techniques and strategies for developing healthy nutrition habits in this particular age group that you can use to supplement what you are already doing with your child.

## Family Nutrition Modules

1. Fruits and Vegetables
2. Whole Grains
3. Milk and Dairy
4. Nutrition Facts Labels
5. Balanced Diets on a Budget
6. Healthy Recipes to Try

### **Fruits and Vegetables**

**Discussion Questions (use the white board to record brief versions of mom's responses):**

- 1) How often does your child eat fruits and vegetables? (Place an X on the line).

◆ ----- ◆  
Not often at all Very often

2) What kinds of fruits and vegetables does your child enjoy the *most*?

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3) What kinds of fruits and vegetables does your child enjoy the *least*?

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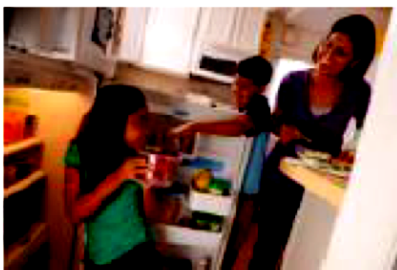
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4) How important is it to you that your child eats lots of fruits and vegetables?

◆-----◆  
Not important at all Very important

## **Messages for Moms**



**Want your kids to reach for a healthy snack? Make sure fruits and veggies are in reach.**

**When they come home hungry, have fruits and veggies ready to eat.\***





### **They learn from watching you. Eat fruits and veggies and your kids will too.**

“My 3-year-old picks up on so much. She loves to copy what I do. Sometimes she will ask for a food she saw me eat. And I didn’t even know she was watching me! So, I try to eat fruits and vegetables. That way she’ll want them too. My doctor told me that kids learn eating habits when they are young. I want my child to learn to eat fruits and vegetables so she’ll be healthy. It makes me feel good that I’m teaching her something she’ll use for life.”

#### **How can I help my child eat more fruits and vegetables?**

- **Eat together.** Let your child see you enjoying fruits and vegetables at meals and snacks.
- **Take it with you.** Show your child how whole fruit is a great snack to eat at the park or in the shopping mall. Put apples, oranges, or bananas in your bag for quick snacks.



#### **What kinds should we eat?**

- Fresh, frozen, and canned fruits and vegetables are all smart choices. Buy some of each to last until your next shopping trip.
- Frozen vegetables have as many vitamins and minerals as fresh. Choose packages that contain vegetables --and nothing else--no added fat, salt, or sugars.
- Buy canned fruits that are packed in “100% juice” or water.--
- Rinse canned beans and vegetables with cold water to make them lower in salt.--
- Look for canned vegetables that say “No added salt” on the front of the can. Buy them when they go on sale.



**Q. How can I get my child to help with choosing fruits and vegetables?****A. Try some of these ideas:**

- Encourage your child to choose from various forms of fruits and vegetables – canned, frozen, and fresh. They all contain important vitamins and minerals. Plus, canned and frozen forms last longer. Buy canned veggies without added salt and canned fruits without added sugar or packed in 100% fruit juice.
- Ask your kids to pick a fruit or vegetable for a snack or dessert.

**Moms Story: Healthy Snacks for Hungry Kids:**

"I'm hungry." That's the first thing my kids say when they come through the door. I need something to feed them—fast. Sometimes they go to the kitchen and get their own snacks. I found that when I put fruits and vegetables in a place where my kids can see them—they eat them. Now I keep cut-up veggies on a low shelf in the fridge and a bowl of fresh fruit on the counter. When I don't have fresh fruits and veggies, I use canned or frozen. It takes a little planning, but it's worth it. I know fruits and vegetables help them stay healthy.

**Keep Fruits and Veggies Where They're Easy To See**

- Keep a bowl of washed fresh fruits on the kitchen table.
- Put washed and cut fruits and vegetables on a shelf in your refrigerator where your child can see them.
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**Make-Ahead Fruit and Veggie Snacks from the Fridge**

- Toss veggies with cooked pasta and fat-free Italian dressing.
- Slice apples. Dip them in pineapple or orange juice to keep them from turning brown. Store apples in plastic snack bags or covered bowls in the fridge.
- Kids love to dip fresh veggies in low-fat ranch dressing. Cut up veggies. Store them near the dip on a low shelf in the fridge.



## Easy Recipes Moms and Kids Love!

### Dip-a-licious!

#### Fruit Wands with Pink Princess Dip or “Swamp Slime”

Put pieces of fruit on a toothpick, skewer, or straw.

Cover with plastic wrap and store in the refrigerator until snack time.

Serve with low-fat strawberry (Princess Dip) or lime yogurt (Swamp Slime) for dipping.



### Happy Snack Packs

Fill small containers or snack bags with cut-up veggies.

Add a small container of fat-free ranch dressing for dipping.

Decorate the outside of the bags with stickers.

Store in the refrigerator on a shelf where they are easy for your child to see.

### Dip Your Favorite Veggies in These Tasty Dips

(1 serving is 2 tablespoons of dip)

Honey-Mustard Dipping Sauce

1/4 cup fat-free plain yogurt

1/4 cup low-fat sour cream

2 teaspoons honey

2 teaspoons spicy brown mustard

Mix all ingredients together. Store in a covered container in the refrigerator.

Makes 4 servings.



### Curry Dip

1 cup fat-free sour cream

1 cup fat-free plain yogurt

1 tablespoon curry powder

Mix all ingredients together. Store in a covered container in the refrigerator. Makes 16 servings.



### Avocado Dip

2 medium ripe avocados

1 tablespoon lemon juice

1/4 cup salsa

1/8 teaspoon salt

Peel and chop avocados. Toss avocado with lemon juice in small bowl. Add salsa and salt. Mash with a fork.

Cover and store in the refrigerator. Makes 12 servings



**Follow-up Discussion Questions (just discuss 1-3 with mom – no need to record on the board; have her record her answers to # 4 -plan for upcoming week - in her workbook, p. 9)**

- 1) Which of these strategies do you think would work well for your child?  
Why?

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- 2) How else do you think you can encourage your child to eat more fruits and vegetables?

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- 3) Do any of the recipes look like things that your child would enjoy eating?

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- 4) Develop a plan for implementing more fruits and vegetables into your family's diet during the upcoming week.

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## Whole Grains

### Discussion Questions (use the white board to record mom's responses):

1) How often does your child eat whole grain foods?

◆ ----- ◆  
Not often at all Very often

2) What kinds of whole grain foods does your child enjoy the *most*?

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3) What kinds of whole grain foods does your child enjoy the *least*?

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4) How important is it to you that your child eats lots of whole grain foods?

◆ ----- ◆  
Not important at all Very important

### Messages for Moms



**Give yourself and those you love the goodness of whole grains.** Make at least half of the grains you eat whole grains – such as bread, tortillas, pasta and cereals. Whole grains are good for your heart and digestion, and can help you maintain a healthy weight and good overall health.



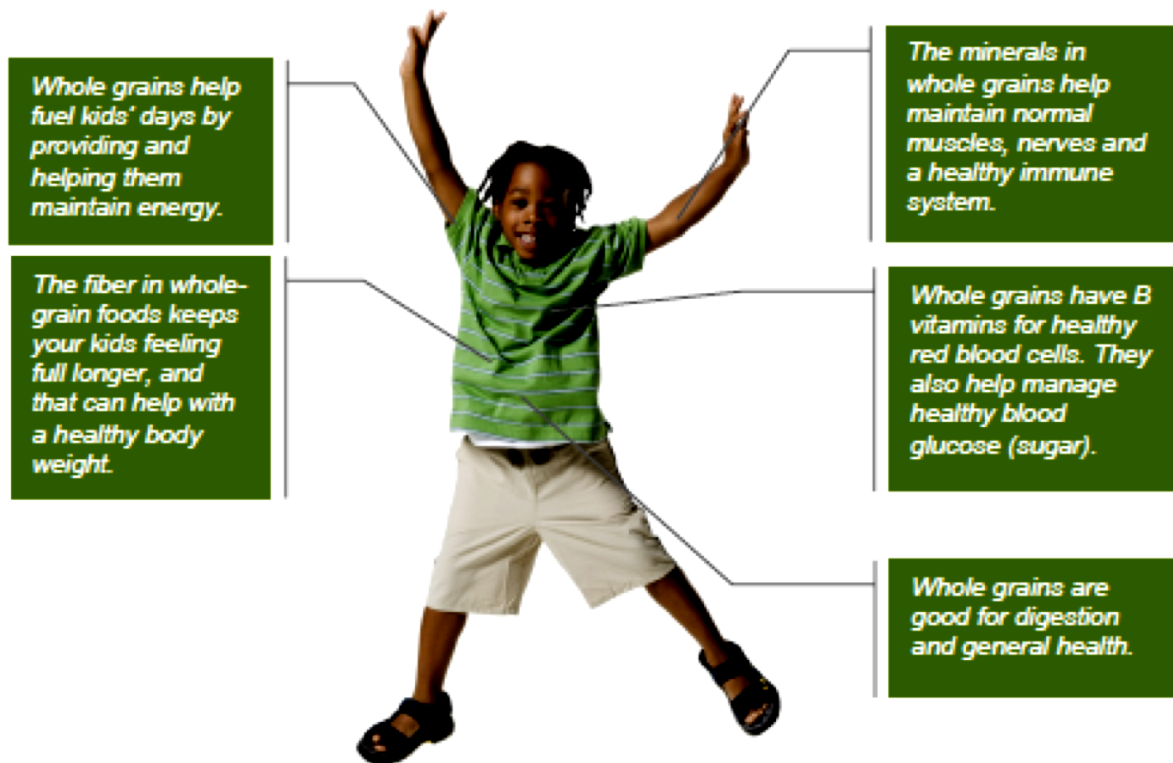
**Whole grains make a difference.** Whole grains help keep your heart healthy and are good for digestion and a healthy weight. Choose foods with “100% whole wheat” or “100% whole grains” on the label. Or check the ingredient list to see if the word “**whole**” is before the first ingredient listed (for example, *whole* wheat flour). If it is, it’s whole-grain.



**Start every day the whole grain way.** Help your kids get their day off to a healthy start. Serve whole-grain versions of cereal, bread, tortillas or pancakes at breakfast. Whole grains give your kids B vitamins, minerals and fiber to help them feel full longer so they stay alert to concentrate at school.

## Whole Grains and Your Family's Health

Whole grains are rich sources of vitamins, minerals, fiber and other nutrients that help keep your kids healthy and strong. Make sure your kids get the goodness of this "whole" nutrition every day. Here is just some of what whole grains can do for your kids:



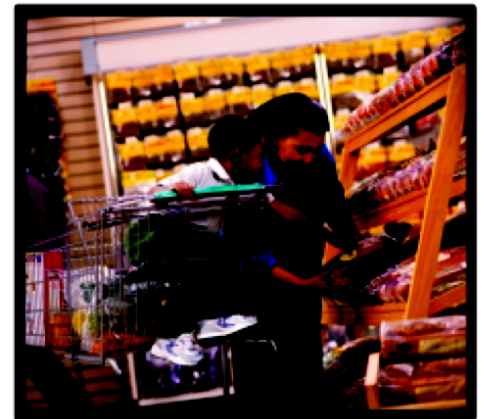
Adults benefit from whole grains, too. Eating whole-grain foods that are high in fiber can help protect against heart disease, reduce the risk of type 2 diabetes, support a healthy body weight, and is good for overall health. That's the goodness of whole grains.



## How to Tell If It Is a Whole Grain?

Make sure you buy the real thing. It's worth it to know that your family will get the healthy goodness of whole grains. Because some foods that seem to be whole grains may not be, it's important to know what to look for. Here are some tips that work:

- **Choose foods that are naturally whole grains:** Some foods are always whole grains, like oatmeal, brown rice, wild rice and popcorn.
- **Check the information on the package:** Buy bread, cereal, tortillas, and pasta with "100% Whole Grain" or "100% Whole Wheat" on the package.



Foods with the following words on the label are usually *not* 100% whole-grain products.

- |                        |                          |
|------------------------|--------------------------|
| – 100% wheat           | – Cracked wheat          |
| – Multi-grain          | – Made with whole grains |
| – Contains whole grain | – Made with whole wheat  |
| – 7 grains             | – Bran                   |

- **Check the ingredient list:** Take a few seconds to see if the food is made from whole grains. Look for the word "whole" before the first ingredient. Some examples of whole-grain ingredients include:

- |                |                      |
|----------------|----------------------|
| – brown rice   | – whole-grain barley |
| – buckwheat    | – whole-grain corn   |
| – bulgur       | – whole oats         |
| – graham flour | – whole rye          |
| – oatmeal      | – whole wheat        |
| – quinoa       | – wild rice          |
| – rolled oats  |                      |



- **Colors can be misleading.** Foods like breads, pasta, rice, and tortillas that are dark in color may not be 100% whole-grain foods. And, some lighter color grain foods may be 100% whole-grain foods, such as "100% White Whole Wheat" bread. To make sure a food is a whole-grain food, check the ingredients using the tips above.

**Practice Identifying Whole Grains**

**Can you tell which food is a whole-grain food based on the ingredients?**

	<b>A) Bread</b> Ingredients: Wheat flour, Malted Barley Flour, Niacin, Iron, Riboflavin, Folic Acid
	<b>B) Tortilla</b> Ingredients: Whole Wheat Flour, Soybean Oil, Salt, Corn, Starch, Wheat Starch
	<b>C) Dry Cereal</b> Ingredients: Whole Corn Meal, Whole Grain Oats, Corn Starch, Canola Oil, Cinnamon, Brown Sugar
	<b>D) Cracker</b> Ingredients: Whole Grain Brown Rice Flour, Sesame Seeds, Potato Starch, Safflower Oil, Quinoa Seeds, Flax Seeds, Salt
	<b>E) Roll</b> Ingredients: Unbleached Enriched White Flour, Sugar, Salt, Soybean Oil, Oat Bran, Yellow Corn Meal, Salt, Barley, Rye

**How did you know which foods were whole grains and which foods were not?**

## Whole Grains: How Much Is Enough Each Day?

**Q. How much whole grains should my family eat every day?**

**A:** In general, most family members need to eat about 6-8 ounces of grains daily, such as bread, cereal, rice, pasta, and tortillas. Younger kids (age 8 or less) need a little less – about 3-5 ounces. A good rule of thumb is that *at least half* of these grains should be *whole grains*. So, that's about 3 ounces of whole grains for adults each day, and 1 ½ to 2 ½ ounces for younger kids age 8 years or less. (Some active children may need more calories and therefore more grains.)



**Q. What counts as an ounce of whole grains?**

**A:** Here are a few easy examples:

- 1 regular slice of whole-grain bread
- 1 cup dry ready-to-eat whole-grain cereal flakes
- ½ cup of cooked brown or wild rice, oatmeal or whole grain pasta
- 1 whole-grain tortilla (6" diameter)
- 1 pancake (5" diameter) made with whole-grain flour
- A small whole-grain muffin



**Q. How can I fit the recommended amount of whole grains into my family's day?**

**A:** Here are some easy ways to include whole-grain foods in your meals throughout the day. Each food shows the amount and the number of ounces of whole grains it equals. Remember that children age 8 or less need a total of about 3-5 ounces of grains each day, so make half of these (about 1 ½ to 2 ½ ounces) whole grains!\*

The total amount of grains adults and older kids need is about 6-8 ounces so they need about 3 – 3 ½ ounces of whole grains each day.

### *Ideas for Including Whole Grains at Every Meal*

Breakfast	Lunch	Snack	Dinner
<ul style="list-style-type: none"> <li>▪ One cup of whole-wheat cereal flakes (1 ounce) with fat-free or low-fat milk</li> <li>▪ ½ cup cooked oatmeal (1 ounce) topped with a favorite fruit and a little sugar or honey</li> <li>▪ One regular slice of whole-grain toast (1 ounce) with a slice of low-fat cheese</li> </ul>	<ul style="list-style-type: none"> <li>▪ Two regular slices of whole-wheat bread (2 ounces) as part of a sandwich (each regular slice of bread is one ounce)</li> <li>▪ One small whole-grain tortilla (1 ounce) sprinkled with low-fat cheese and veggies</li> <li>▪ 1/2 cup cooked brown rice (1 ounce) with stir fry</li> </ul>	<ul style="list-style-type: none"> <li>▪ Five whole-grain crackers (1 ounce) with low-fat cheese and apple slices</li> <li>▪ Three cups of popped corn ** (1 ounce)</li> <li>▪ 1/2 cup of dry whole-grain cereal flakes (1/2 ounce) mixed into low-fat yogurt</li> </ul>	<ul style="list-style-type: none"> <li>▪ One cup of cooked brown or wild rice (2 ounces) with chili and beans</li> <li>▪ One cup of cooked whole-grain pasta (2 ounces) with tomato sauce</li> <li>▪ One small whole-grain dinner roll (1 ounce)</li> </ul>

\*(Some active children may need more calories and therefore more grains.)

\*\* Popped corn is a choking risk for children under 4 years old.

**Follow-up Discussion Questions (discuss # 1-3 with mom; have her record her answer to # 4 in her workbook, p. 15):**

- 1) Which of these strategies do you think would work well for your child?  
Why?

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- 2) How else do you think you can encourage your child to eat more whole grains?

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- 3) Do any of the meal ideas look like things that your child would enjoy eating?

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- 4) Develop a plan for implementing more whole grains into your child's diet during the upcoming week.

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## Milk and Dairy

### Discussion Questions:

1) How often does your child drink milk or eat dairy products?

◆ ----- ◆  
Not often at all Very often

2) What kinds of dairy products does your child enjoy the *most*?

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3) What kinds of dairy products does your child enjoy the *least*?

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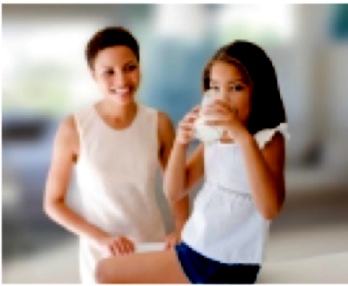
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4) How important is it to you that your child consumes lots of dairy products?

◆ ----- ◆  
Not important at all Very important

## Messages for Moms



**There's no power like Mom Power. You are a positive influence in your children's lives. Help them develop healthy eating habits for life. Offer them fat-free or low-fat (1%) milk and yogurt at meals and snacks.**



**Milk Matters. Children of every age, and adults too, need the calcium, protein and vitamin D found in milk for strong bones, teeth and muscles. Serve fat-free or low-fat (1%) milk or yogurt at meals and snacks.**

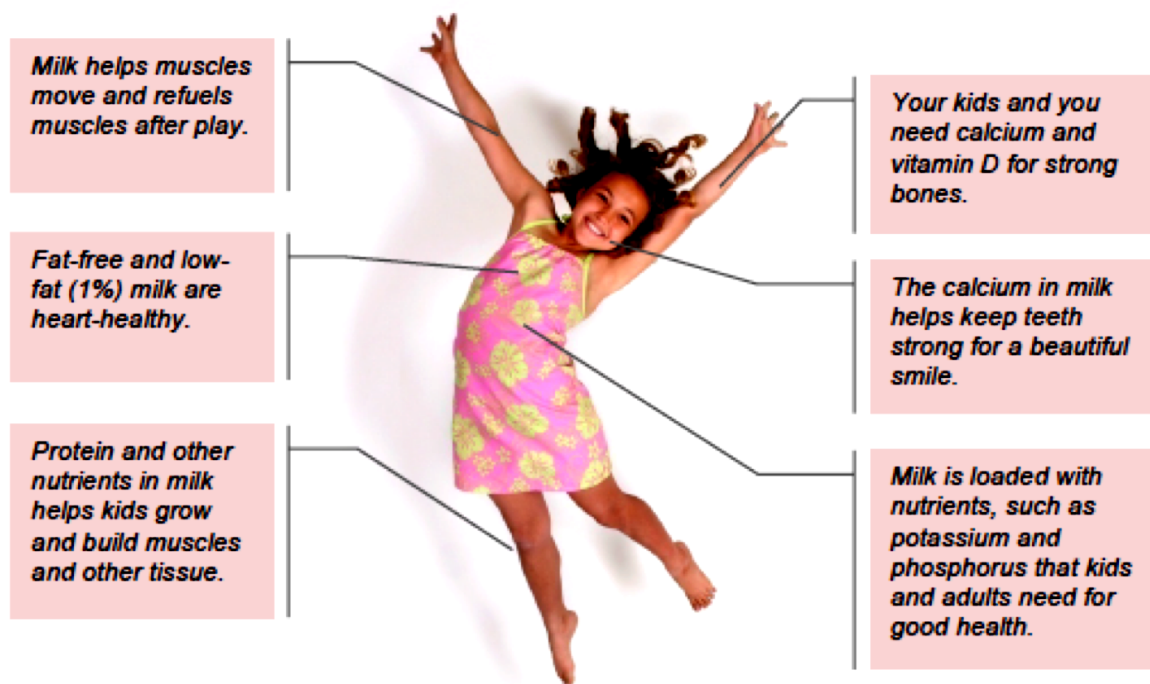


**They're still growing. Help your kids grow strong. Serve fat-free or low-fat (1%) milk at meals.**



## **Fat-Free and Low-Fat (1%) Milk Have Nutrients Everyone Needs**

Did you know that milk is loaded with vitamins, minerals and protein, with nine (9) key nutrients? Better yet, fat-free and low-fat (1%) milk still deliver this nutrition, just without the extra fat that is in whole and reduced-fat (2%) milk. But many kids are not getting enough milk to keep their bodies growing strong. Here's what fat-free and low-fat milk and the nutrients they contain can do for your family:



Flex your Mom Power and serve fat-free or low-fat (1%) milk or yogurt to your family for a lifetime of healthy eating. Studies show that adults who drink milk are less likely to have heart disease, type 2 diabetes and high blood pressure.

## Moms often ask:

### Q. How much milk does my family need each day?



**A:** The amount of milk we need each day depends on age. Younger kids need 2 cups, while older kids and adults need 3 cups. Here are daily recommendations by age:

Age	Daily Amount Recommended
Children ages 2-3	2 cups
Children ages 4-8	2 ½ cups
Kids ages 9-18	3 cups
Adults	3 cups

### Q. Do my kids get enough milk at school?

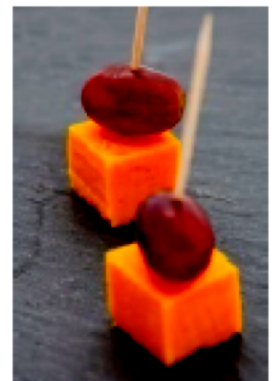
**A:** Probably not. Most kids only get 1 cup (8 ounces) of low-fat milk as part of a school lunch. So, to get the recommended amount of milk each day, many kids need to have some at home, too.

### Q. How can I help my family get the milk they need each day?

**A:** Try to make milk a part of the meals and snacks kids have at home. A cold glass of milk goes great with dinner, and after school or play.

Offer foods made from milk – like low-fat or fat-free yogurt – as snacks and desserts. Eight ounces of yogurt is about the same as a cup of milk.

You can also try small amounts of low-fat cheese as snacks. About 1½ - 2 ounces of most types of hard cheese is about the same as a cup of milk. Try cutting an eight-ounce block of cheese into eight equal, bite-sized pieces—each piece will be approximately 1 ounce. Plus, a block of cheese is usually less costly than pre-sliced cheese. If you buy sliced cheese, count each slice as about 1/3 cup of milk. Here are other ideas – check those you plan to try.





### Dairy Ideas for Children

#### **Give Them the Milk They Need**

*Check items you have tried or may try over the next week or two.*

	<i><b>Tried It!</b></i>	<i><b>May try it.</b></i>
Use fat-free or low-fat milk (1% fat) instead of water to make oatmeal and hot cereal for breakfast.		
Serve fat-free or low-fat yogurt as a snack. Mix it up with fruit and nuts.		
Try a grilled cheese sandwich made with low-fat cheese for breakfast.		
Make a dip for fruits or vegetables from fat-free or low-fat yogurt.		
Try chocolate or butterscotch pudding made from fat-free or low-fat milk.		

**Moms often ask:**

**Q: Does fat-free and low-fat (1%) milk deliver the same good nutrition as whole milk?**

**A:** Yes. Fat-free and low-fat (1%) milk contain the same vitamins and minerals, like calcium, potassium, magnesium, vitamin D and others needed to keep the body growing strong and healthy.

**Q: Why should I switch from whole milk to fat-free or low-fat (1%) milk?**

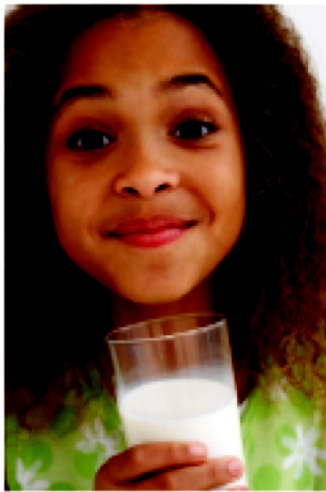
**A:** Fat-free and low-fat (1%) milk are better for the health of you and your children. They deliver the same nutrients as other milk without the saturated fat. The saturated fat in other milk increases the risk of heart disease. Plus, fat-free and low-fat milk have fewer calories. And controlling calorie intake helps manage body weight.

**Q: My family has been drinking whole milk for years. How will I get them to switch to low-fat milk?**

**A:** Try these tips to help make the switch to low-fat milk easy for you and your family:

- **Take it slow.** If your young child or family is drinking whole milk, first change to reduced-fat (2%) milk for a few weeks, then switch to low-fat (1%) milk. Later, you can try fat-free milk.
- **Try low-fat yogurt.** If some family members don't like milk, try offering low-fat or fat-free yogurt.
- **Try different forms of low-fat cheese.** There are many kinds you can try. For example, start with low-fat cheddar – it's delicious melted on a whole-wheat bagel with a little jam.



**Moms often ask:**

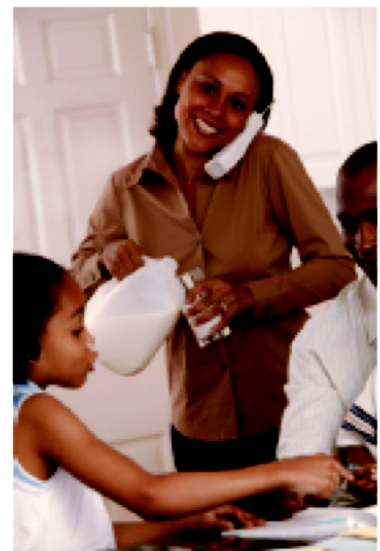
**Q. Why is it important for my elementary child to drink milk?**

**A.** Like children of all ages, elementary kids are still growing. So it's important they drink the recommended amount of fat-free or low-fat (1%) milk to grow healthy and strong. For kids ages 9-13, that's about 3 cups of milk each day. And fat-free and low-fat (1%) fat milk contains nine key nutrients like calcium, protein, and vitamin D, just without the extra saturated fat.

**Q. How do I increase the amount of milk my child gets?**

**A.** Here are some tips moms can use to get their kids to drink more fat-free or low-fat (1%) milk:

- Serve fat-free or low-fat (1%) milk with meals and snacks.
- Put fat-free or low-fat (1%) milk at eye level in the refrigerator, so kids are more likely to see and ask for a glass or to have it poured over whole-grain cereal.
- Add milk to some of your child's favorite foods, such as soups and oatmeal. For example, make creamy tomato soup instead of classic tomato soup by adding 1% fat milk.
- Occasionally, let your kids have some flavored fat-free or low-fat (1%) milk. Compare nutrition labels at the store and choose flavored milks with the least amount of sugar.
- Enjoy a glass of low-fat milk or yogurt with your child. Or, make a parfait together by layering low-fat yogurt, your favorite fruit, and unsalted nuts or cereal. There are many types of low-fat milk foods, so there is something for everyone to enjoy.



**More Dairy Ideas**

- **Keep it quick and easy**
  - Pour fat-free or low-fat (1%) milk over whole-grain cereal. Or, melt a slice of low-fat mozzarella cheese on toasted whole-wheat bread for a quick and easy breakfast.
  - Keep fat-free or low-fat (1%) milk in the refrigerator. A cold glass of milk is a tasty way to quench your kids' thirst after play or school. And milk is a healthy way to replace some of the fluids lost during the day.
  - Pair their favorite fruit with low-fat cheese and whole-grain crackers for a quick and easy snack.



Follow-up Discussion Questions (discuss # 1-3 with mom; have her record her response to # 4 in her workbook, p. 23):

- 1) Which of these strategies do you think would work well for your child?  
Why?

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- 2) How else do you think you can encourage your child to eat more dairy and drink more milk?

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- 3) Do any of the ideas look like things that your child would enjoy eating?

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- 4) Develop a plan for implementing more milk and dairy into your child's diet during the upcoming week.

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## **Nutrition Facts Label**

### **Discussion Questions (record short versions of mom's responses on white board)**

- 1) When grocery shopping, how often do you look at nutrition facts labels before buying a food product?

◆-----◆  
Not often at all Very often

2) Which parts of the nutrition facts label do you look at most?

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3) With all of the information on them, most people find nutrition labels at least somewhat confusing to interpret and use in their daily lives. In your opinion, how confusing are nutrition labels to interpret?

◆-----◆  
Not confusing at all Very confusing

### **Nutrition Facts Labels: Spot the Block!**

You probably already use the nutrition facts label in some way—maybe to check calories, fat, or sodium content. But, the more familiar you are with the information, the more you'll want to use it daily to ensure that you and your family are eating a healthy, balanced diet. Use the label when you shop, as you plan your meals, and as you cook each day. The label makes it easy to determine the amounts of nutrients you're getting and to compare one product to another. Strive for a diet that emphasizes fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products. Include lean meats, poultry, fish, beans, and nuts. Choose foods that are low in saturated fats, trans fats, cholesterol, salt, and added sugar.





## What's On the Label?

<b>Nutrition Facts</b>			
<b>Serving Size 1 cup (228g)</b>			
<b>Servings Per Container about 2</b>			
<b>Amount Per Serving</b>			
<b>Calories 250</b>	<b>Calories from Fat 110</b>		
	<b>% Daily Value*</b>		
<b>Total Fat 12g</b>			<b>18%</b>
Saturated Fat 3g			<b>15%</b>
Trans Fat 3g			
<b>Cholesterol 30mg</b>			<b>10%</b>
<b>Sodium 470mg</b>			<b>20%</b>
<b>Total Carbohydrate 31g</b>			<b>10%</b>
Dietary Fiber 0g			<b>0%</b>
Sugars 5g			
<b>Proteins 5g</b>			
<b>Vitamin A</b>			<b>4%</b>
<b>Vitamin C</b>			<b>2%</b>
<b>Calcium</b>			<b>20%</b>
<b>Iron</b>			<b>4%</b>
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

### 1 Serving Size

This section is the basis for determining number of calories, amount of each nutrient, and %DVs of a food. Use it to compare a serving size to how much you actually eat. Serving sizes are given in familiar units, such as cups or pieces, followed by the metric amount, e.g., number of grams.

### 2 Amount of Calories

If you want to manage your weight (lose, gain, or maintain), this section is especially helpful. The amount of calories is listed on the left side. The right side shows how many calories in one serving come from fat. In this example, there are 250 calories, 110 of which come from fat. The key is to balance how many calories you eat with how many calories your body uses. *Tip: Remember that a product that's fat-free isn't necessarily calorie-free.*

### 3 Limit these Nutrients

Eating too much total fat (including saturated fat and trans fat), cholesterol, or sodium may increase your risk of certain chronic diseases, such as heart disease, some cancers, or high blood pressure. The goal is to stay below 100%DV for each of these nutrients per day.

### 4 Get Enough of these Nutrients

Americans often don't get enough dietary fiber, vitamin A, vitamin C, calcium, and iron in their diets. Eating enough of these nutrients may improve your health and help reduce the risk of some diseases and conditions.

### 5 Percent (%) Daily Value

This section tells you whether the nutrients (total fat, sodium, dietary fiber, etc.) in one serving of food contribute a little or a lot to your total daily diet.

The %DVs are based on a 2,000-calorie diet. Each listed nutrient is based on 100% of the recommended amounts for that nutrient. For example, 18% for total fat means that one serving furnishes 18% of the total amount of fat that you could eat in a day and stay within public health recommendations. Use the Quick Guide to Percent DV (%DV): 5%DV or less is low and 20%DV or more is high.

### 6 Footnote with Daily Values (DVs)

The footnote provides information about the DVs for important nutrients, including fats, sodium and fiber. The DVs are listed for people who eat 2,000 or 2,500 calories each day.

- The amounts for total fat, saturated fat, cholesterol, and sodium are maximum amounts. That means you should try to stay below the amounts listed.



## Details on the Daily Value

### 3 Easy Ways to Use the % Daily Value

#### 1. Look at highs and lows.

The %DV gives you a framework for deciding if a food is high or low in a nutrient. Use the Quick Guide to %DV: 5% or less is low and 20% or more is high.

**Compare products** – Use the %DV to compare one food product or brand to a similar product. Make sure the servings sizes are similar, especially the weight (e.g., gram, milligram, ounces) of each product so you can see which foods are higher or lower in nutrients.

#### 2. Evaluate claims.

So you don't have to memorize definitions, use the %DV to help you quickly distinguish one claim from another, such as “reduced fat” vs. “light” or “nonfat.” Just compare the %DVs for Total Fat in each food product to see which one is higher or lower in that nutrient. There is no need to memorize definitions. This works when comparing all nutrient content claims, e.g., less, light, low, free, more, high, etc.

#### 3. Make dietary trade-offs.

Make dietary trade offs using the %DV. For example, when a food you like is high in saturated fat, select foods that are low in saturated fat at other times of the day.

Follow-up Discussion Questions (discuss # 1 and 2; have mom record her plan/response to # 3 in her workbook, p. 28):

- 1) Did you learn anything about the nutrition facts label that surprised you or that you did not already know?

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- 2) Did you learn anything about the nutrition facts label that you will want to implement in your daily life with your own family?

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- 3) Develop a plan for using nutrition facts labels over the next week.

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## Balanced Diet on a Budget

**Discussion Questions (use the white board to record short versions of mom's responses):**

- 1) How important is it to you to remain within a certain grocery and food budget each week?

◆-----◆  
Not important at all Very important

- 2) In your experience, how difficult is it for you to incorporate healthy food choices into your food and grocery budget?

◆-----◆  
Not difficult at all Very difficult

- 3) What kinds of strategies do you use to maintain healthy food choices for your family while still keeping costs down?

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## Eating Healthy Without Breaking the Bank

Eating healthy doesn't necessarily have to cost more. Cooking and eating at home can help your family maintain a healthy diet on a budget. Do most of your shopping in the perimeter (around the edges) of the grocery store. Avoid the middle aisles, including pre-packaged food, frozen meals, and sweets, and spend most of your shopping dollars on fruits and vegetables, whole grains, fresh meats and seafood, and dairy.

In this section we will discuss cost-saving tips for ensuring that your child is eating the healthy, balanced diet that we've been talking about throughout this session. First, we will review the "3 P's of Eating on a Budget". Following that, we will discuss budget-friendly tips for including fruits and vegetables, whole grains, and proteins in your child's diet.



## Eating on a Budget — The 3 P's

### PLAN

- ✓ Plan meals and snacks for the week according to an established budget.
- ✓ Find quick and easy recipes online.
- ✓ Include meals that will “stretch” expensive food items (stews, casseroles, stir-fried dishes).
- ✓ Make a grocery list.
- ✓ Check for sales and coupons in the local paper or online and consider discount stores.
- ✓ Ask about a loyalty card at your grocery store.



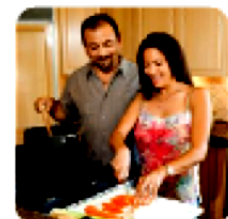
### PURCHASE

- ✓ Buy groceries when you are not hungry and when you are not too rushed.
- ✓ Stick to the grocery list and stay out of the aisles that don't contain items on your list.
- ✓ Buy store brands if cheaper.
- ✓ Find and compare unit prices listed on shelves to get the best price.
- ✓ Purchase some items in bulk or as family packs which usually cost less.
- ✓ Choose fresh fruits and vegetables in season; buy canned vegetables with less salt.
- ✓ Pre-cut fruits and vegetables, individual cups of yogurt, and instant rice and hot cereal are convenient, but usually cost more than those that require a bit more prep time.
- ✓ Good low-cost items available all year include:
  - Protein — beans (garbanzo, black, cannellini)
  - Vegetables — carrots, greens, potatoes
  - Fruit — apples, bananas



### PREPARE

- ✓ Some meal items can be prepared in advance; pre-cook on days when you have time.
- ✓ Double or triple up on recipes and freeze meal-sized containers of soups and casseroles or divide into individual portions.
- ✓ Try a few meatless meals by substituting with beans and peas or try “no-cook” meals like salads.
- ✓ Incorporate leftovers into a subsequent meal.
- ✓ Be creative with a fruit or vegetable and use it in different ways during the week.



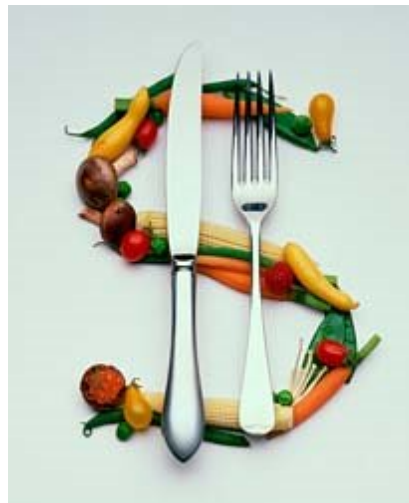
### Fruits and Vegetables

Fruits and vegetables should always be at the top of your grocery list. Fruits have natural sugars that gives your child longer-lasting energy than the refined sugars in snack foods. Fruits and vegetables are also a great source of fiber.

Here are some tips for buying fruits and vegetables on a budget:

- Buying fresh fruits and vegetables is less expensive and healthier than buying pre-cut and bagged produce. You have to do more prep work, but in the long run you can save money, and you know exactly what goes into food preparation.
- You can save money on your fruits and vegetables by purchasing in-season produce.
- Frozen fruits and vegetables will often go on sale, and, thanks to modern flash-freezing, they are just as healthy as fresh produce.
- Search for bargains on fruits and vegetables at farmer's markets, which often offer lower prices than grocery stores.

For more budget-friendly ways to include more fruits and vegetables in your child's diet, refer to the next page.



### **10 Tips for Affordable Fruits and Vegetables**



**1 celebrate the season**

Use fresh vegetables and fruits that are in season. They are easy to get, have more flavor, and are usually less expensive. Your local farmer's market is a great source of seasonal produce.

**2 why pay full price?**

Check the local newspaper, online, and at the store for sales, coupons, and specials that will cut food costs. Often, you can get more for less by visiting larger grocery stores (discount grocers if available).

**3 stick to your list**

Plan out your meals ahead of time and make a grocery list. You will save money by buying only what you need. Don't shop when you're hungry. Shopping after eating will make it easier to pass on the tempting snack foods. You'll have more of your food budget for vegetables and fruits.

**4 try canned or frozen**

Compare the price and the number of servings from fresh, canned, and frozen forms of the same veggie or fruit. Canned and frozen items may be less expensive than fresh. For canned items, choose fruit canned in 100% fruit juice and vegetables with "low sodium" or "no salt added" on the label.

**5 buy small amounts frequently**

Some fresh vegetables and fruits don't last long. Buy small amounts more often to ensure you can eat the foods without throwing any away.

**6 buy in bulk when items are on sale**

For fresh vegetables or fruits you use often, a large size bag is the better buy. Canned or frozen fruits or vegetables can be bought in large quantities when they are on sale, since they last much longer.

**7 store brands = savings**

Opt for store brands when possible. You will get the same or similar product for a cheaper price. If your grocery store has a membership card, sign up for even more savings.

**8 keep it simple**

Buy vegetables and fruits in their simplest form. Pre-cut, pre-washed, ready-to-eat, and processed foods are convenient, but often cost much more than when purchased in their basic forms.

**9 plant your own**

Start a garden—in the yard or a pot on the deck—for fresh, inexpensive, flavorful additions to meals. Herbs, cucumbers, peppers, or tomatoes are good options for beginners. Browse through a local library or online for more information on starting a garden.

**10 plan and cook smart**

Prepare and freeze vegetable soups, stews, or other dishes in advance. This saves time and money. Add leftover vegetables to casseroles or blend them to make soup. Overripe fruit is great for smoothies or baking.

Whole grains are chock-full of fiber, which helps keep your child's digestive system healthy and moving, and expands once inside the stomach, to help your child feel full. You can easily work many good sources of fiber into your meals. These small changes don't have to cost you any extra money.

Here are some tips for incorporating whole grains into your child's diet on a budget:

- If you eat white flour bread, switch to whole grain breads. Instead of buying Saltine crackers, choose whole grain crackers. Eat a lot of white rice? Switch to brown rice. You can easily make these changes, and they won't cost you any extra money.
- Buying grains in bulk is a wonderful way to save money. You can buy many whole grains, like bulgar, couscous, and rice in bulk at larger supermarkets, and natural food stores like Whole Foods.
- Air-popped popcorn is another budget-friendly, delicious way for your child to get whole grains. This popular snack is low-calorie, high in fiber, and cheap. The loose kernels cost less than pre-bagged popcorn, and buying them enables you to skip the extra fat and high sodium content of pre-packaged popcorn. If you don't already own an air popper, you can pour several tablespoons of kernels into a brown paper lunch sack, fold up the bag, and microwave for a minute or two. When it's done, drizzle a small amount of olive oil and a little salt over the popcorn for a delicious treat.



**Protein**



Meat can be very expensive at the grocery store, and it is often loaded with saturated fat. We need to eat protein every day, but we don't need to eat an excessive amount of it. Adult men need 55 grams of protein per day, while adult women need 46 grams. Children need 0.5 grams of protein for every pound they weigh. For example, a child weighing 70 pounds would need 35 grams of protein each day.

Calculate how many grams of protein your child needs each day:

**Child's Weight/2 = \_\_\_\_\_ grams protein/day)**

It doesn't take much for your child to get the protein he or she needs every day. One egg contains 6 grams of protein. A 3.5 ounce piece of chicken has more than 30 grams of protein. One cup of cooked lentils gives you 18 grams of protein. Protein hides in a lot of places you might not expect.

Here are some cheap and healthy ways to add protein to your diet:

- 1 cup of low-fat milk: 8 grams of protein
- 1 cup of dried beans: 16 grams of protein
- 2 tablespoons of peanut butter: 8 grams of protein
- 2 slices of whole grain bread: 8 grams of protein
- 1 ounce of walnuts: 4 grams of protein
- 1/2 cup of cottage cheese: 16 grams of protein
- 1 cup of tofu: 16 grams of protein
- 5 ounces of Greek yogurt: 15 grams of protein



**Some Final Ideas to Stretch Your Food Dollars**

**1 plan, plan, plan!**

Before you head to the grocery store, plan your meals for the week. Include meals like stews, casseroles, or stir-fries, which "stretch" expensive items into more portions. Check to see what foods you already have and make a list for what you need to buy.

**2 get the best price**

Check the local newspaper, online, and at the store for sales and coupons. Ask about a loyalty card for extra savings at stores where you shop. Look for specials or sales on meat and seafood—often the most expensive items on your list.

**3 compare and contrast**

Locate the "Unit Price" on the shelf directly below the product. Use it to compare different brands and different sizes of the same brand to determine which is more economical.

**4 buy in bulk**

It is almost always cheaper to buy foods in bulk. Smart choices are family packs of chicken, steak, or fish and larger bags of potatoes and frozen vegetables. Before you shop, remember to check if you have enough freezer space.

**5 buy in season**

Buying fruits and vegetables in season can lower the cost and add to the freshness! If you are not going to use them all right away, buy some that still need time to ripen.

**6 convenience costs... go back to the basics**

Convenience foods like frozen dinners, pre-cut vegetables, and instant rice, oatmeal, or grits will cost you more than if you were to make them from scratch. Take the time to prepare your own—and save!

**7 easy on your wallet**

Certain foods are typically low-cost options all year round. Try beans for a less expensive protein food. For vegetables, buy carrots, greens, or potatoes. As for fruits, apples and bananas are good choices.

**8 cook once...eat all week!**

Prepare a large batch of favorite recipes on your day off (double or triple the recipe). Freeze in individual containers. Use them throughout the week and you won't have to spend money on take-out meals.

**9 get your creative juices flowing**

Spice up your leftovers—use them in new ways. For example, try leftover chicken in a stir-fry or over a garden salad, or to make chicken chili. Remember, throwing away food is throwing away your money!

**10 eating out**

Restaurants can be expensive. Save money by getting the early bird special, going out for lunch instead of dinner, or looking for "2 for 1" deals. Stick to water instead of ordering other beverages, which add to the bill.

Follow-up Discussion Questions (discuss # 1 – 3; have mom record her plan/response to # 4 in her workbook, p. 35):

- 1) Did you learn anything about incorporating healthy, lower-cost food choices into your family's diet that surprised you or that you did not already know?

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- 2) Did you learn anything about maintaining a balanced diet on a budget that you will want to implement in your daily life with your own family?

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- 3) Which of the strategies for incorporating healthy, lower-cost food choices into your child's diet do you think would work well for your child? Why?

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- 4) Develop a plan for your family to eat healthy meals on a budget over the next week.

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### **Healthy Recipes to Try**

**Discussion Questions (discuss with mom and record short versions of her responses on the white board):**

- 1) How often do you try out new recipes in your family?

◆ ----- ◆  
 Not often at all Very often

2) How receptive is your child to trying new foods and recipes?

◆ ----- ◆  
 Not receptive at all Very receptive

3) What kinds of recipes would you most want to try out with your family?

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**\*Refer to Family Nutrition Healthy Recipe Booklet\***



**Reactions to Recipes (just discuss these; no need for you or mom to record anything, although you might encourage her to make a check mark or star next to the recipes she wants to try this next week; she can record that in her workbook on p. 37):**

1) Of the recipes we've given you, which ones do you think your child would like best?

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- 2) Develop a plan for trying out one recipe from the packet with your family over the next week.

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#### Primary Sources

The information in this Family Nutrition Training is based on recommendations for nutrition in school-aged children from the following sources. More information about family nutrition can be obtained from the websites below.

- The U.S. Food and Drug Administration (FDA) Center for Food Safety and Applied Nutrition Food Information ([www.fda.gov](http://www.fda.gov))
- United States Department of Agriculture (USDA) Food and Nutrition Service ([www.fns.usda.org/fns](http://www.fns.usda.org/fns))

### **VISIT TWO (WEEK 2)**

In this visit, the trainer reviews the family nutrition homework with the mother and goes over family nutrition modules that the mother requests (or that the trainer thinks would be beneficial based on what the mother says).

- 1) Fruits and Vegetables
- 2) Whole Grains
- 3) Milk and Dairy
- 4) Nutrition Facts Labels
- 5) Balanced Diets on a Budget
- 6) Healthy Recipes to Try

#### **Visit Objectives**

After completing the visit, parents should be able to:

- Further understand the concept and components of family nutrition.
- Continue to apply behaviors consistent with the principles of healthy eating with their own families.

#### **Materials and Equipment**

During this session, you will need the following:

- A copy of the *Family Nutrition Training Manual* to refer to as required.
- Toys for the mother-child interaction activity at the end of the intervention
  - Craft supplies
  - Legos
  - Gear toys

**Introduction**

Following initial greetings, introduce the agenda for the visit.

Thank you for coming in again. Today we will be going over in detail your homework from the following week, and talking about the food logs that you wrote down for [child's name]. We will also be talking about your experience trying out a new recipe with your family, and how your child reacted to that. Finally, we will go over any of the family nutrition modules that weren't clear last time, or that you realized you may want to review again after trying some things out with your own child this past week. Finally, we will have you and [child's name] participate in another video-taped interaction activity at the end.

So let's get started

**Review of Practice Worksheet**

First we are going to review your homework. Did you bring your homework booklet in with you today today?

Great! So let's start with Day 1. What foods did your child eat for breakfast? [Discuss the foods, why the mother made that food choice for the child, how those foods fit into milk and dairy/whole grains/fruits and vegetables/healthy proteins, etc.]

How about for lunch? [Go over food choices for lunch, dinner, and snacks]

Overall, how would you say Day 1 went for your child in terms of nutritious food choices?

In your view, was there any room for improvement for Day 1?

Were there any foods that you asked [child's name] to try that [he/she] would not?

After discussing Day 1, move on to Day 2, and continue to ask the questions. Allow the mother to elaborate on her answers, and ask additional questions as needed.

Take notes about which aspects of nutrition the child's food log did not include (or included little of):

- 5) Fruits and vegetables
- 6) Whole grains
- 7) Milk and dairy
- 8) Healthy proteins

You did a great job keeping track of your child's food intake this week. Is there anything else you would like to tell me about your experiences this week?

### **Review of New Recipe**

The second part of your homework was to try out a new recipe with your child over this past week. Were you able to do this?

Go over the mother's answers to the 8 questions on the homework sheet.

- 1) Which recipe did you choose to make for your child?
- 2) Why did you choose this particular recipe to make for your child?
- 3) Overall, what were your child's reactions to the new food you prepared?
- 4) On the line below, how much do you think your child liked the recipe?  
(Place an X on the line).
- 5) If your child liked the recipe, what do you think he/she liked most about it?  
If your child did not like the recipe, how might you modify the recipe so that your child would like it more?
- 6) How important is it to you that your child tries new foods when you make them for him/her?



- 7) Do you think you will be making this recipe again in the future? Would you like to try out more recipes like this with your child?
- 8) Overall, how was this experience for you?

**Wrap-up**

During this session we've reviewed your child's diet over the past week, and also talked about your experience trying out a new, healthy recipe with [child's name]. Is there anything else that you would like to bring up in our session today? The last thing we are going to do is to have you and [child's name] participate in another play interaction that we will video tape. Then we will see you in 2 weeks for a short follow-up appointment. Thank you so much for coming in!

**Positive Parenting Fidelity Checklist**

**Directions:** For each item, rate whether it was observed in the Y/N column. Add the total number of observed items and record the sum out of the total possible. Calculate the percentage of treatment fidelity by dividing the total observed by the total possible and multiply by 100. Record comments and notes that are relevant to the session observation in the space provided on the back of this form if necessary.

Did the Leader...	Observed (Y / N)
<b>1. Present "Positive Parenting"</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
a) Provide rationale for positive parenting skills and strategies	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>2. Present "Spending quality time with your child"</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
a) Complete Exercise: Quality Time	<input type="checkbox"/> Y <input type="checkbox"/> N
b) Complete Exercise: Activities to Foster Positive Mood	<input type="checkbox"/> Y <input type="checkbox"/> N
c) Complete plan for spending quality time with child	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>3. Present "Showing affection to children"</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
a) Complete Exercise: Physical Affection	<input type="checkbox"/> Y <input type="checkbox"/> N
b) Plan for showing affection to children (e.g., identify targets, get specifics, feasibility)	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>4. Present "Positive conversations with children"</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
a) Complete Exercise: Reflecting on the positive:	<input type="checkbox"/> Y <input type="checkbox"/> N
b) Complete plan for having positive conversations with children (e.g., identify targets; feasibility)	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>5. Present "Verbal Praise"</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
a) Complete Exercise: Using verbal praise	<input type="checkbox"/> Y <input type="checkbox"/> N
b) Complete plan for using verbal praise	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>6. Present "Nonverbal Praise"</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
a) Complete Exercise: Ways to Give Nonverbal Praise	<input type="checkbox"/> Y <input type="checkbox"/> N
b) Plan for giving nonverbal praise (e.g., identify targets, get specifics, discuss feasibility)	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>7. Present "Making positive requests for change"</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
a) Complete Exercise: Practice Making Positive Requests for Change	<input type="checkbox"/> Y <input type="checkbox"/> N
b) Plan for making positive requests for change (e.g., identify targets, get specifics, feasibility)	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>8. Present "Expressing negative feelings about specific behaviors"</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
a) Complete Exercise: Expressing Negative Feelings About Specific Behaviors	<input type="checkbox"/> Y <input type="checkbox"/> N
b) Plan for Expressing Negative Feelings about Specific Behaviors (e.g., identify targets, get specifics, feasibility)	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>9. Provide homework calendar to mother</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
a) Provide rationale for homework	<input type="checkbox"/> Y <input type="checkbox"/> N
b) Explain goals of 3 strategies per day	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>Total</b>	Main Topics ____/10 All Topics ____/27

**VISIT 1**

Main Topics Fidelity Percentage: \_\_\_\_\_%

All Topics Fidelity Percentage: \_\_\_\_\_%

**NOTES**


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**VISIT 2**

	Observed (Y / N)
<b>Did the Leader...</b>	
1. Reviews homework	<input type="checkbox"/> Y <input type="checkbox"/> N
2. Determines if mother needs more help with certain skill(s).	<input type="checkbox"/> Y <input type="checkbox"/> N
3. Goes over skills for which mother needs more training <b>OR</b> If no additional help needed, circle Y.	<input type="checkbox"/> Y <input type="checkbox"/> N
4. Answers mothers' questions about the skills <b>OR</b> If no questions, circle Y.	<input type="checkbox"/> Y <input type="checkbox"/> N
5. Points out new homework calendars	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>Total</b>	____/5

Fidelity Percentage: \_\_\_\_%

**NOTES**


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**Control (Nutrition) Condition Fidelity Checklist**

**Directions:** For each item, rate whether it was observed in the Y/N column. Add the total number of observed items and record the sum out of the total possible. Calculate the percentage of treatment fidelity by dividing the total observed by the total possible and multiply by 100. Record comments and notes that are relevant to the session observation in the space provided on the back of this form if necessary.

Did The Leader...	Observed (Y / N)
<b>10. Present Nutrition and Child Development</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>11. Present and plan for including Fruits and Vegetables</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>12. Present and plan for including Whole Grains</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>13. Present and plan for including Milk and Dairy (or Non-Dairy Alternative)</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>14. Present Nutrition Labels</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>15. Present Eating a Balanced Diet on a Budget</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
<b>16. Discuss Healthy Recipes to Try</b>	<input type="checkbox"/> Y <input type="checkbox"/> N
	Total ___/7
<b>17. *Present topic of "Positive Parenting"</b>	<input type="checkbox"/> N <input type="checkbox"/> Y
<b>18. *Present topic of "Spending quality time with your child"</b>	<input type="checkbox"/> N <input type="checkbox"/> Y
d) *Discuss Activities to Foster Positive Mood	<input type="checkbox"/> N <input type="checkbox"/> Y
<b>19. *Present topic of "Showing affection to children"</b>	<input type="checkbox"/> N <input type="checkbox"/> Y
c) *Discuss how to increase affection to children	<input type="checkbox"/> N <input type="checkbox"/> Y
<b>20. *Present topic of "Positive conversations with children"</b>	<input type="checkbox"/> N <input type="checkbox"/> Y
c) *Teach how to Reflect on the Positive:	<input type="checkbox"/> N <input type="checkbox"/> Y
<b>21. *Present how to give "Verbal Praise"</b>	<input type="checkbox"/> N <input type="checkbox"/> Y
<b>22. *Present how to give "Nonverbal Praise"</b>	<input type="checkbox"/> N <input type="checkbox"/> Y
<b>23. *Present how to "Make positive requests for change"</b>	<input type="checkbox"/> N <input type="checkbox"/> Y
<b>24. *Present how to "Express negative feelings about specific behaviors"</b>	<input type="checkbox"/> N <input type="checkbox"/> Y
<b>25. *Present topic of positive parenting homework calendar to mother</b>	<input type="checkbox"/> N <input type="checkbox"/> Y
a) *Explain goal of 3 positive parenting strategies per day	<input type="checkbox"/> N <input type="checkbox"/> Y
<b>Total</b>	Main Nutrition Topics ___/7 Main Parenting Topics ___/9 <b>TOTAL</b> ___/16 All Topics ___/20
*Reverse scoring for items 8-16a (i.e., N=1, Y=0).	

**VISIT 1**

Main Topics Fidelity Percentage: \_\_\_\_\_%

All Topics Fidelity Percentage: \_\_\_\_\_%

**TOTAL Fidelity Percentage:** \_\_\_\_\_%**NOTES**


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## VISIT 2

Did The Leader...	Observed (Y / N)
6. Review family nutrition homework	<input type="checkbox"/> Y <input type="checkbox"/> N
7. Determine if mother would benefit from review of certain nutrition module(s)	<input type="checkbox"/> Y <input type="checkbox"/> N
8. Go over nutrition module(s) for which mother needs additional review <b>OR</b> if no additional help needed, circle Y.	<input type="checkbox"/> Y <input type="checkbox"/> N
9. Answer mothers' questions about the modules <b>OR</b> If no questions, circle Y.	<input type="checkbox"/> Y <input type="checkbox"/> N
10. Review positive parenting homework	<input type="checkbox"/> N <input type="checkbox"/> Y
11. Review positive parenting skills	<input type="checkbox"/> N <input type="checkbox"/> Y
12. Present new positive parenting homework calendars	<input type="checkbox"/> N <input type="checkbox"/> Y
*Reverse scoring for items 5-7 (i.e., N=1, Y=0). <span style="float: right;">Total</span>	<span style="float: right;">____ / 7</span>

Fidelity Percentage: \_\_\_\_%

## NOTES

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