# Collaborative Goal Setting in the Family Check-Up: Do parents' goals relate to improvement in positive behavior support and child behavior?

by

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Goal setting is used in many parenting interventions to tailor treatment to families' needs and bolster motivation. The present study describes the thematic content of parents' treatment goals in the early childhood Family Check-Up (FCU) and investigates whether goals focused on positive behavior support (PBS) or child externalizing behavior at child age 2 relate to improvements in these domains one year later and examines moderators of such associations. Participants included 250 families who set goals at child age 2 in the intervention arm of the Early Steps Multisite Study, which is a randomized controlled trial of the FCU among 731 families who were screened for risk and recruited from Women, Infants, and Children (WIC) clinics. Family assessments occurred at child ages 2 and 3 and included observational assessment of parenting. Setting a PBS goal and/or a child externalizing behavior goal were not related to growth in observed PBS or child externalizing behavior, respectively, nor did parental self-efficacy, parental social support, or attendance in follow-up treatment sessions moderate these relationships. These results suggest that setting goals to improve PBS and child externalizing behavior may not uniquely contribute to established treatment effects of the FCU in these domains. Findings run contrary to theory suggesting that goals motivate behavior change. If replicated, null findings may inform adaptations to the use of and/or methods for goal setting in the FCU.

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# 1.0 Introduction

Numerous evidence-based interventions designed to reduce or prevent child problem behavior target parenting practices as a mechanism of change (Eyberg, Nelson, & Boggs, 2008). Recently, there have been calls to identify discrete elements of parenting interventions that contribute to their efficacy (Leijten et al., 2015). Collaborative goal setting is an intervention element shared across many parenting interventions (e.g., Incredible Years, Webster-Stratton & Reid, 2018; Parent Management Training – Oregon Model, Forgatch & Patterson, 2010). While transtheoretical models of behavior change identify goal setting as an important facilitator of change (Prochaska, 2008), few studies have investigated whether goal setting contributes to the efficacy of parenting interventions, described the thematic content of parents' goals, or investigated whether goals focused on parenting or child behavior are actually related to changes in these domains. The present study explores parents' goals in a randomized controlled trial (RCT) testing the efficacy of the Family Check-Up (FCU) – an early childhood preventive intervention. We examine whether the thematic content of parents' FCU goals predicts change in positive parenting practices (specifically, positive behavior support) and child problem behavior. Further, we explore moderators of the hypothesized association between goal content and change in positive behavior support (PBS).

## 1.1 Theoretical Justification for Goal Setting in Behavioral Interventions

There is a sound theoretical basis indicating the utility of goal setting in behavioral parenting interventions. Goals have been defined broadly as mental representations of desired future outcomes that differ from present states (Mann, De Ridder, & Fujita, 2013). By making explicit the discrepancy between a current state and a desired state, setting goals is posited to motivate behaviors that decrease this dissonance (Carver & Scheier, 2001). As goal setting is amenable to intervention at the individual level, it may be an important component to the success of behavioral interventions in effecting behavioral change (MacLeod et al., 2008).

When synthesizing findings from the interdisciplinary goal setting literature, it is important to consider differences in how goals are defined across disciplines and settings. Personal goals are mental representations of what an individual hopes to achieve or avoid in their current life circumstances and may or may not be clearly formulated (e.g., becoming independent; Emmons, 1996; Michalak & Holtforth, 2006; Tryon, 2018). Treatment goals are a subset of clients' personal goals and represent what a client hopes to accomplish during an intervention and are typically (although not always) more concrete, explicit, and time-bound than personal goals (e.g., reducing frequency of a specific behavior; Tryon et al., 2018).

## 1.2 Goal Content Predicts Goal Attainment and Treatment Outcomes

Past research examining goals in psychological and behavioral interventions supports the hypothesis that treatment goals' thematic content and characteristics (e.g., avoidance/approach

formulation) differentially predict outcomes including self-reported goal attainment in clinical samples and improvement in positive parenting practices following parenting interventions.

The *thematic content* of psychotherapy treatment goals has been systematically categorized and shown to predict goal attainment. The Bern Inventory of Treatment Goals (BIT-T; Gross Holtforth & Grawe, 2002) is an empirically derived taxonomy of treatment goal content with three levels of abstraction. The first and highest level of abstraction includes five overarching themes – symptom/problem-related goals, interpersonal goals, wellbeing goals, existential goals, and personal growth goals – as well as one residual category. The second and middle level of abstraction includes 26 thematic categories (e.g., depressive symptoms), while the third and most specific level of abstraction includes 52 subcategories (e.g. negative thoughts).

Several studies have used the BIT-T to link the thematic content of goals to goal attainment in non-psychotic psychiatric inpatient samples, even after accounting for patient diagnosis, symptom severity, and treatment motivation (Holtforth et al., 2004; Berking et al., 2005). These studies operationalize goal attainment at the end of hospital stays using goal attainment scaling (GAS; Kiresuk & Sherman, 1968), in which patients rate their perceived attainment of each goal on a 6-point Likert scale. Holtforth and colleagues (2004) determined that goal themes were partially determined by patient diagnosis, but even after accounting for diagnosis, patients with symptom-related and wellbeing goals reported greater goal attainment than patients with interpersonal goals. In further support of a relationship between goals' thematic content and goal attainment, Berking and colleagues (2005) found that patients with goals addressing wellbeing reported the greatest goal attainment, followed by patients with interpersonal, personal growth, symptom-related, and lastly, existential goals. At the most specific level of abstraction, patients with goals addressing panic attacks and self-acceptance reported the greatest goal attainment, and

patients with goals related to chronic pain and sleep problems reported the least goal attainment. Effect size of goal theme on goal attainment was greater when goal themes at more specific levels of abstraction were compared.

The aforementioned studies represent a first step toward applying taxonomies of treatment goal themes to understand associations between the content of treatment goals and goal attainment in clinical populations. While the patterns of goal attainment observed in inpatient settings may not generalize beyond symptom-focused, time-limited treatments in high acuity clinical samples, findings from treatment goal research in these settings support the broad notion that goal attainment varies by goal content and that goal content is not solely determined by patients' clinical characteristics. More research is needed to understand associations between goal content and goal attainment in outpatient samples or those enrolled in prevention programs that address risk factors for clinical problems. Further, these studies assess *perceived* change using idiographic goal attainment scales. To our knowledge, no research has examined whether the thematic content of goals predicts symptom improvement or changes in parenting behavior, the latter of which might have positive collateral effects on young children.

In fact, few empirical studies have examined treatment goals in parenting interventions. In one exception, van Aar and colleagues (2021) tested the effect of one discrete goal characteristic – approach vs. avoidance formulation – on outcomes in a brief intervention for treatment-seeking parents of children with clinically elevated disruptive behavior ($N$ = 224; ages 4-8). Approach goals specify desired behaviors to increase, and avoidance goals specify undesired behaviors to reduce. Prior to enrollment, parents were aware of the intervention's focus on praising positive behavior to reduce disruptive behavior. Prior to setting goals, parents received one of two handouts: the approach condition handout specified behaviors/situations that praise could increase,

and the avoidance condition handout specified behaviors/situations that praise could reduce. Results indicated more improvement in self-reported positive parenting (but not audio-recorded praise) among parents randomized to set avoidance goals compared to those who set approach goals or no goals. The authors surmise that it might be more motivating for parents to "cure" a current problem than to pursue a hypothetical desired outcome. It is important to note, however, that an overall effect of goal-setting did not emerge. Findings are consistent with the hypothesis that, in the short term, goals in parenting interventions may have differential effects on improvements in parenting depending on their formulation, but do not support the hypothesis that goal-setting enhances the efficacy of parenting interventions overall. Importantly, the study's prescriptive approach to goal setting limited variability in goals' thematic content, precluding investigation of associations between thematic content and treatment outcomes.

In sum, extant research on goal-setting across disciplines suggests that all goals are not equally associated with change. Variation in treatment goals' thematic content has been shown to explain some variation in treatment goal attainment in inpatient populations, with wellbeing goals associated with the highest levels of self-reported goal attainment at hospital discharge. In parenting interventions, preliminary research suggests that goal formulation (i.e., approach vs. avoidance) may predict improvements in perceived parenting skills, with avoidance goals increasing self-reported positive parenting to a greater extent than approach goals (van Aar et al., 2021). Of note, the only extant study of goals in parenting interventions focused on treatment-seeking families, randomized goal formulation, and systematically limited variation in thematic content. No research has examined whether the *thematic content* of parent goals in parenting interventions is related to goal attainment or observable improvements in parenting or child behavior outcomes. Further, no studies have systematically described or examined the goals

parents set in *preventive* parenting interventions wherein parents were not seeking support for modifying their child's behavior. In preventive parenting interventions, goals' thematic content is likely to vary considerably based on parents' perspectives toward their child's current behavior, motivation to change their parenting practices, and concerns about domains of family functioning that may seem more pressing than child behavior. Lastly, most studies examining goal-setting in psychological or parenting interventions have measured treatment effects of goal-setting immediately following treatment, with no follow-up assessments of whether goal attainment or other treatment outcomes were sustained more than a few weeks post-treatment.

### 1.3 Strategies and Individual Attributes that Enhance Goal Attainment

In addition to specifying goal characteristics and themes associated with goal attainment, existing research identifies strategies and individual attributes that enhance goal-outcome associations for workplace goals (e.g., Locke & Latham, 2019), personal goals (e.g., Koestner et al. 2002), and treatment goals (e.g., Harkin et al., 2016). To date, no researchers have examined parent/family characteristics or intervention strategies that may enhance goal-outcome associations in parenting interventions. Here we focus on three potential moderators because of their relevance to family-based interventions in general and the FCU in particular: parenting self-efficacy, social support, and intervention attendance.

### 1.3.1 Parenting Self-Efficacy

Self-efficacy is an established moderator of goal-performance associations, with higher levels associated with higher goal attainment. Social-cognitive theory posits that an individual's expectations of one's own abilities affect the initiation and persistence of behavior change, such that higher self-efficacy results in more active efforts to persist in goal-directed behaviors, even in the face of obstacles (Bandura, 1977). Industrial/organizational I/O research on goal-setting theory also supports this hypothesis (Locke & Latham, 2002). Self-efficacy, defined as "task-specific confidence" in organizational contexts, has been shown to moderate goal-performance associations, such that goals more strongly predict performance when individuals have higher self-efficacy because those with high self-efficacy employ more effective strategies to pursue their goals (Locke & Latham, 2002). Parents with high parenting self-efficacy believe that they have the ability to modify their parenting and their child's behavior, and these expectations promote initiation of and persistence in efforts to change child problem behavior (Sanders & Mazzucchelli, 2013). Accordingly, improving parenting self-efficacy is an objective of many parenting interventions, with empirical validation of this premise (Wyatt Kaminski et al., 2008). In fact, using data from the current sample, higher pre-treatment levels of parenting self-efficacy at child age 2 predicted lower child problem behavior at age 4 (Weaver et al., 2008). This relationship was mediated through lower maternal depression at age 3. Based on these findings, it is plausible that parents with higher pre-treatment self-efficacy would make more progress toward their goals, including their parenting goals for this parenting-focused intervention.

### 1.3.2 Social Support

Although parents' access to social support has not been studied in relation to attainment of parenting goals, there is a theoretical premise and related empirical work that would suggest parents' relationships with close others may influence their goal attainment in parenting interventions. Theoretically, it would follow that attainment of parenting-related goals would increase in the context of higher levels of support from romantic partners and/or close family members involved in co-parenting and childcare. Empirically, studies of nonclinical samples have linked couples' perceptions of support from their romantic partner to their perceived likelihood of attaining personal goals (Feeney, 2004) and importantly, later goal attainment (Brunstein et al., 1996). Indirect support for a link between social support and attainment of parenting-related goals is also evident from research finding consistent associations between parental social support and positive parenting behavior (Ceballo & McLoyd, 2002; Jennings et al., 1991). For example, longitudinal work in infancy has shown that mothers' post-partum perceived social support predicts greater sensitivity and responsiveness in mother-infant interactions at 9 months (Feeley, Gottlieb, & Zelkowitz, 2005). Using longitudinal data from the present early childhood sample, Dolcini-Catania et al. (2023) found that greater maternal social support at child age 2 predicted lower levels of maternal depressive symptoms at age 3, which in turn predicted lower levels of coercive parenting at age 4. Taken together, these findings suggest that parents' access to support from friends or family may enhance their ability to pursue goals that address parenting behavior and/or child problem behavior in parenting interventions.

### 1.3.3 Attendance in Behavioral Parenting Interventions

When parents' goals pertain to improvements in parenting or reductions in child behavior problems, parents' engagement in behavioral parenting interventions may promote goal attainment. Attaining goals will be limited to the extent an individual does not have the requisite skills to achieve them. This common-sense proposition finds robust empirical support in the I/O literature (Locke & Latham, 2019). Accordingly, increasing parents' family management skills is a core component of most behavioral parenting interventions. Further, meta-analytic evidence suggests that *in-session* practice of parenting skills increases intervention effect sizes for parenting and child behavior outcomes (Wyatt Kaminski et al., 2008). Attendance in more sessions of a behavioral parenting intervention may provide parents with more opportunities for in-session skill building, which in turn could enhance improvements in parenting skills and consequent improvements in child behavior.

Most behavioral parenting interventions assign homework, and completion of homework may also enhance goal attainment when parents set goals to improve parenting or child behavior. To our knowledge, this possibility has not been empirically tested and is instead based on non-clinical research demonstrating that individuals are more likely to attain their personal goals when they formulate plans for how and when a goal will be pursued (i.e., implementation intentions; Koestner et al., 2002; Webb & Sheeran, 2006), consistent with the theoretical premise that initiating goal-directed actions is a difficult prerequisite of goal attainment (Gollwitzer & Brandstätter, 1997). When parents are motivated and engaged in parenting interventions, homework assignments may function as implementation intentions. Greater attendance may provide parents with more opportunities to plan goal-directed behaviors and troubleshoot obstacles, which could in turn enhance their attainment of parenting and/or child behavior goals.

## 1.4 The Family Check-Up

### 1.4.1 Goals in the Family Check-Up

The FCU is a brief, annually-repeated intervention that aims to prevent child problem behavior by promoting positive parenting. To accomplish these aims, the FCU incorporates elements of motivational interviewing (MI, Miller & Rollnick, 2012) with evidence-based family management practices (Gill, Dishion, & Shaw, 2014). At its core, the FCU is assessment-driven and strengths-based, and this ethos is reflected in the goal-setting process. After two sessions to build rapport and assess family functioning, parents are presented with assessment results during a feedback session. Although FCU providers incorporate MI throughout the FCU, MI is heavily relied upon during feedback to situate assessment results in the context of research evidence and, when appropriate, heighten parents' motivation to implement parenting practices associated with adaptive child behavior. At the end of the feedback session, parents set goals. Providers are non-prescriptive in goal setting, guided by the assumption that parents will integrate assessment results with their own priorities to formulate goals they are motivated to pursue. Accordingly, family goals do not always align with the priorities of the FCU – parenting and child behavior – and may incorporate parents' other aspirations (e.g., getting a job). Said differently, the thematic content of parents' FCU goals varies. After goal setting, parents are offered optional follow-up treatment sessions whose content is tailored to support goal attainment.

When parents' goals address parenting or child behavior, follow-up sessions incorporate the Everyday Parenting Curriculum (EPC), which is based on the principles and skills emphasized in Parent Management Training (Dishion, Stormshak, & Kavanagh, 2012; Gill et al., 2014). Parent Management Training is an empirically supported treatment with demonstrated efficacy in

improving parenting and reducing child problem behavior (Chambless & Ollendick, 2001; Forgatch & Patterson, 2010). EPC follow-up sessions are designed to bolster three skill sets: positive behavior support, limit setting and monitoring, and relationship skills, including for children ages 2 to 5 as in the present trial (Gill et al., 2014). The EPC incorporates in-session skill building and homework. In context of the present study, it is important to note that parents who set at least one goal addressing the increased use of PBS strategies are offered EPC follow-up sessions, although not all parents choose to participate in such sessions.

### 1.4.2 Positive Behavior Support: A target and mechanism of the FCU

Improvement in parent use of positive behavior support (PBS) is the outcome of interest in the present study and has been found to be a mechanism of change in the early childhood FCU, including in the current sample (Chang et al., 2014, 2017; Dishion et al., 2008; Lunkenheimer et al., 2008; Shaw et al., 2016). PBS was originally defined by educational psychologists to describe school-based strategies for preventing problem behavior (Horner et al., 1990) and later adapted to describe a constellation of positive parenting practices. Parenting practices included within PBS are 1) proactive parenting (e.g., creating routines, structuring multi-step tasks), 2) contingent rewarding of positive child behavior, and 3) provision of warmth and sensitivity to children's emotional experiences (Waller et al., 2015). Alternate definitions of parenting PBS place less emphasis on warmth and sensitivity (e.g., Dishion et al., 2008). We include these constructs in our definition based on documented associations between warmth/sensitivity in early childhood and adaptive child outcomes (see Taraban & Shaw, 2018).

Parents' PBS practices in early childhood are associated with reduced child problem behavior over time and across contexts. Using the multi-method, multi-informant observed

measure of PBS employed in the present study, Waller et al. (2015) found that higher levels of parenting PBS at age 2 predict teacher-rated child outcomes at age 7.5, including fewer externalizing problems, higher effortful control, more social competence, and higher academic skills even after controlling for a range of child- and family-level risk factors (e.g., family income, parent education; Waller et al., 2015). The use of multiple observational measures to create a latent variable is a methodologically robust strategy for operationalizing PBS that circumvents threats to validity that are characteristic of self-report measures (e.g., social desirability, variability in parents' interpretations of items) and single-informant observational measures (e.g., observer reactivity, inadequate behavior sampling) (Waller et al., 2015).

Improvements in parents' PBS practices are an empirically supported mechanism through which the FCU prevents child problem behavior (Dishion et al., 2008; Lunkenheimer et al., 2008; Sitnick et al., 2015). The Early Steps Multisite Study, from which the present sample is drawn, tested the efficacy of the FCU in a longitudinal RCT that included 731 low-income families. Randomization to the FCU resulted in statistically reliable improvements in PBS from age 2 to age 3 (Dishion et al., 2008). This improvement in PBS in turn predicted less growth in child externalizing behavior from ages 2 to 4 (Dishion et al., 2008) and improved child self-regulation at age 4 (Lunkenheimer et al., 2008), improvements that also mediated later improvements in child self-regulation (Chang et al., 2014), and teacher-reported age 9.5 conduct problems (Shaw et al., 2016). These findings support FCU efficacy in modifying PBS and subsequent child behavior. However, few studies have sought to identify intervention elements that predict or enhance this improvement (for exceptions, see Smith et al., 2013a and Smith et al., 2013b, which examine providers' use of video feedback and overall fidelity to the FCU).

## 1.5 The Present Study

The present study examines whether the thematic content of parents' FCU goals predicts change in positive behavior support and child externalizing behavior over a period of one year, above and beyond standard demographic characteristics and baseline child externalizing behavior. Additionally, we explore potential moderators of goal-outcome associations. The following aims and hypotheses are proposed.

Aim/Hypothesis 1. Examine whether setting an age 2 FCU goal addressing PBS predicts improvements in observed PBS at age 3. We hypothesize that parents who set at least one PBS goal will demonstrate greater growth in observed PBS from ages 2 to 3 than parents who set goals addressing other dimensions of parenting, parents who set at least one child behavior goal with no parenting goals, or parents who select no parenting or child behavior goals (Table 4).

Aim/Hypothesis 2. Examine parenting self-efficacy as a moderator of the association between setting at least one PBS goal at age 2 and growth in PBS from ages 2 to 3. We hypothesize that the association will be stronger among parents with higher parenting self-efficacy.

Aim/Hypothesis 3. Examine parental social support as a moderator of the association between setting at least one PBS goal at age 2 and growth in PBS from ages 2 to 3. We hypothesize that the association will be stronger among parents who report more social support.

Aim/Hypothesis 4. Examine follow-up treatment attendance as a moderator of the association between setting at least one age 2 PBS goal and growth in observed PBS from ages 2 to 3. We hypothesize that the association will be stronger among parents who attend more follow-up treatment sessions.

Aim/Hypothesis 5. Examine whether setting at least one age 2 FCU goal addressing child externalizing behavior (hereafter, "externalizing goal") predicts change in child externalizing

behavior from ages 2 to 3. We hypothesize that children of parents who set at least one externalizing goal will demonstrate greater reductions in parent-reported externalizing behavior from ages 2 to 3 than parents who select goals addressing other domains of child behavior or development, parents who set at least one parenting goal without any child-focused goals, or parents who select no parenting or child-focused goals (Table 5).

Exploratory Aim/Hypothesis 6. Examine whether setting at least one externalizing goal *in addition to* at least one PBS goal at age 2 is associated with greater reductions in child externalizing behavior from age 2 to 3 compared to setting an externalizing goal with a non-PBS parenting goal (i.e., discipline, other parenting), an externalizing goal with no parenting goals, or neither a parenting nor an externalizing goal. We hypothesize that families who set an externalizing goal and a PBS goal will demonstrate greater reductions in child externalizing behavior than children in the other goal groups listed above. This aim is considered exploratory because of the modest number of families with the goal combination of interest (Table 6).

# 2.0 Method

## 2.1 Participants

The present study will examine a subsample of parent-child dyads drawn from the Early Steps Multisite Study, which recruited families from Women, Infants, and Children Nutritional Supplement (WIC) clinics in three geographically diverse regions of the United States: Charlottesville, VA, Eugene, OR, and Pittsburgh, PA between 2002 and 2004. Heretofore, we use the terms "parent" and "primary caregiver" interchangeably. Families were invited to participate if they had a child between the ages of 2 years 0 months and 2 years 11 months and if they demonstrated, on a brief screen, elevated risk for child conduct problems in at least two of the following domains: 1) existing child externalizing behavior problems; 2) family problems (e.g., maternal depression); 3) sociodemographic risk (e.g., low income). Families enrolled in the study were not seeking treatment for child behavior problems. Comprehensive information regarding the study protocol can be found in Dishion et al. (2008).

In the overall Early Steps sample ($n$ = 731), 367 families were randomized to be offered the FCU, and 276 (75.2%) of these 367 families completed the age 2 FCU feedback session (Dishion et al., 2008; Smith et al., 2018). Goal sheets were located in archival data storage for 255 (92.4%) of the 276 families who completed an age 2 feedback. Five of these 255 families recorded zero goals on their goal sheets and were excluded. Hence, the present subsample is comprised of 250 parent-child dyads from three sites (VA, 69; OR, 93; PA, 88) who were randomized to be offered the FCU, who completed the age 2 feedback session, whose goal sheets were located, and who set at least one goal (see Tables 1 and 2). Although primary caregivers were typically

consistent from age 2 to age 3, in six of these 250 families, the adult participating as primary caregiver was different at age 3 compared to age 2. These families were retained in the subsample (with analyses to be computed with and excluding them to check for differences).

To examine "selective retention" of goal sheets, chi-square and independent sample *t*-tests were conducted to compare families in the intervention group *whose age 2 goal sheets were available* with families *whose goal sheets were not available* (i.e., because the hard copies were not retained). Analyses did not support selective retention based on child race, child ethnicity, study site, family income, parent education, and child externalizing behavior at age 2.

## 2.2 Assessment Protocol

Observational assessments and questionnaires were collected annually during 2.5-hour home visits at child ages 2-5 and 7.5-10.5, as well as at ages 14, 16, and 19. As the current study is limited to data collected at the age 2 and 3 assessments, the discussion below will focus on these two waves of data collection. The baseline assessment at age 2 was conducted before families received their first dose of the FCU. The one-year follow-up assessment at age 3 took place before families received their second dose of the FCU.

Assessments included primary caregivers and, if present, alternative caregivers (e.g., fathers or grandmothers). All assessments were videotaped and began by giving the child an opportunity for free play with age-appropriate toys while mothers completed questionnaires. After free play, caregiver-child dyads participated in a variety of tasks, including clean-up, teaching, meal preparation, and delay of gratification tasks. Clean-up, teaching, and meal preparation tasks

were used for observational coding of the PBS subscale measures described below. See Dishion et al. (2008) for comprehensive description of assessment procedures.

## 2.3 Treatment Protocol

One full "dose" of the FCU in the Early Steps trial involved three sessions in the following order: 1) comprehensive assessment; 2) initial interview; 3) feedback session. Note this ordering of sessions was atypical relative to FCU practice in community settings and followed to ensure that both FCU and control families were administered the same assessment by a research assistant prior to FCU families meeting with their provider. Following the home-based assessment, intervention families met with a FCU provider for the initial interview to discuss child/family strengths and challenges. The feedback session included guided discussion of assessment results and goal setting (see Introduction). Post-feedback follow-up sessions were optional and tailored to address families' goals. Further descriptions of the FCU can be found in Dishion et al. (2008) and Gill et al. (2020).

## 2.4 Measures

### 2.4.1 Thematic Content of Goals

Most families in the subsample set more than one goal ($M$ = 2.83, SD = 0.84, range = 1-7); a total of 708 goals from age 2 FCU feedback sessions are included in the present study. These

goals were categorized according to a taxonomy developed for the present study (Table 3). Categories were developed by a team of clinicians and the first author who, after reviewing the FCU goals from more than 200 families, identified recurrent themes at multiple levels of abstraction. The highest level of abstraction in the taxonomy includes five themes – parenting, child, parent wellbeing, family self-sufficiency, and family relationships – and one residual category. Parenting and child goals, the two themes of most interest in the present study, were divided into subcategories. Parenting goals included 1) positive behavior support goals, 2) discipline goals, and 3) other parenting goals. Child goals include those for improvement in 1) externalizing behaviors, 2) other child behaviors, or 3) developmental milestones.

In accordance with Holtforth's and Grawe's (2002) guidelines for developing taxonomies of treatment goals, goals with multiple themes were divided into "goal units." For example, the following goal contains multiple goal units: "PC wants to improve parenting skills – discipline, praise, understand child better." As both discipline and praise are mentioned, the above goal was categorized as a discipline goal and a PBS goal. Categories were assigned to 726 goal units in total (out of 708 goals, 18 goals contained 2 goal units and 690 contained 1 goal unit).

To address our aims, we created decision rules to sort families into four family-level categories based on their goals and determined which goal themes prevailed if multiple themes were present for a single family (Tables 4-6). Based on our primary focus on PBS practices, the order of trumping for Aim 1 was as follows: 1) positive behavior support (PBS); 2) discipline *or* other parenting; 3) child behavior (externalizing *or* other behaviors); 4) none of the above (Table 4). For example, if a caregiver set a PBS goal, a discipline goal, and a child development goal, the family would be placed in the PBS category. Assignment to the PBS goal category ($n$ = 51) required setting one or more PBS goals (50 families set one PBS goal, 1 family set two PBS goals).

Family-level categories were reconfigured for Aims 5 and 6 based on their focus on child externalizing behavior (Tables 5 and 6). Assignment to the child externalizing behavior goal category ($n$ = 99; Aim 5) required setting one or more externalizing goals (85 families set one externalizing goal; 13 families set two externalizing goals).

#### 2.4.1.1 Coding Procedures

Goals were coded by a team of three undergraduates that was led by the first author, using a codebook written by the first author with input from Dr. Daniel Shaw (Appendix A). The codebook was updated based on coding team discussions during training. Note that the codebook divides child behavior goals into those that are formulated as "parent-centered" versus "child-centered" in addition to specifying whether or not these goals pertain to child externalizing behavior. Parent-centered goals identify the caregiver as an agent of change in the modification of child behavior (e.g., "Learn how to manage child's tantrums more effectively"), whereas child-centered goals do not (e.g., "Reduce frequency of tantrums"). Because of our focus on goals' *thematic content,* rather than their formulation, the parent- vs. child-centered distinction is not included in the present study's taxonomy. Consequently, goals with child-centered and parent-centered formulations are included in the Child Externalizing Behavior and Child Other Behavior categories utilized in the present study.

The coding team met weekly for twelve weeks to review goals and resolve coding questions. The codebook was revised based on team discussions. Coders demonstrated reliability across codes ($\kappa > .80$) with the first author on a random subset of 20 goal sheets before coding independently. After undergraduates began coding independently, the first author double-coded 25% of the assigned goals each week to ensure that reliability was maintained. A total of 87 goal sheets (239 goals) were double-coded by the first author and overall kappas for each coder across

codes were greater than 0.8 (coder 1 $\kappa$ = .82; coder 2 $\kappa$ = .86; coder 3 $\kappa$ = .82). Sixteen goal sheets were written in Spanish, and these sheets were translated into English by the first author and a bilingual member of the research team prior to coding.

### 2.4.2 Positive Behavior Support

A latent variable for parenting PBS was created using items from three observational measures, which were based on approximately 50-55 minutes of videorecorded parent-child interaction tasks collected at the ages 2 and 3 assessments. The internal reliability and predictive validity of this multi-method observational measure of PBS is supported by past research (Waller et al., 2015). Descriptions of PBS subscales below are drawn from Waller et al. (2015).

#### 2.4.2.1 HOME Inventory

Home visitors completed the infant/toddler home observation for measurement of the environment (IT-HOME; Caldwll & Bradley, 1979). The Early Steps study includes IT-HOME responsivity, acceptance, and involvement scales using examiner observation only. In addition, various examiner impressions of the home environment and parent social skills were added. Thirteen items from the modified IT-HOME were related to the PBS construct. Items were chosen if they reflected (1) proactive parenting/effective management of child's behavior or structuring of the child's environment (six items; e.g., 'parent structures child's play'), or (2) parental warmth, positive reinforcement through praise, or displays of affection (seven items; 'parent caresses or kisses child at least once'). The 13 items were summed to create a directly observed PBS subscale from ratings on the modified IT-HOME, which demonstrated satisfactory reliability in the overall Early Steps sample (age 2; $\alpha$ = .73; age 3, $\alpha$ = .76).

#### 2.4.2.2 Relationship Affect Coding System

A team of undergraduates, blind to child/family data, coded videotaped family tasks using the relationship affect coding system (RACS; Peterson et al., 2008), which is a micro-social coding system that captures three dimensions of parent and child behavior simultaneously: verbal behaviors, physical behaviors, and affect. The cues used to code affect include facial expression, vocal tone, and non-verbal cues, such as body posture.

Six behavior clusters were created to summarize possible data streams for both parent and child during interactions: positive, neutral, directives, negative, no talk, and ignore. Decision rules determined which behavior stream prevailed if two different streams were present simultaneously. For example, a caregiver could say something negative to the child (negative verbal) and then laugh (positive affect). In such a case, the decision rules dictated that negative interactions would trump positive. The order of trumping was as follows: ignore, negative, positive, directive, no talk, and neutral.

Using these behavior clusters, simultaneous states of parent and child were determined to derive four dyadic states: positive engagement, neutral engagement, coercive engagement, and non-interactive. For the current study, the durations of positive and neutral engagement between the parent and child were used to create a summary score that reflected positive behavior support (4 out of 36 possible cells). See Waller et al. (2015) for examples. The total duration that each dyad was observed in the positive and neutral engagement regions was calculated and divided by the overall session time to calculate a *duration proportion score*. Reliability coefficients for the RACS coding in the overall Early Steps sample were in the ‘good’ to ‘excellent’ range with an overall kappa score of .93 and agreement of 93% for the 15% of tapes that were coded twice.

#### 2.4.2.3 Coder Impressions Subscale

Following micro-social coding, coders completed a macro-social rating scale on the same videotaped interactions, using the coder impressions (COIMP) inventory (Dishion et al., 2004). As with the HOME, 11 macro-social items were drawn from the COIMP inventory to assess PBS: (1) proactive parenting/effective management of child behavior (seven items; e.g., 'parent uses verbal structuring to make the task manageable'), or (2) parental affection (four items; e.g., 'parent hugs, kisses, cuddles, or tickles the child'). The 11 items were summed to form a composite COIMP PBS subscale, showing good reliability in the overall Early Steps sample (age 2; $\alpha = .85$; age 3, $\alpha = .84$).

### 2.4.3 Parenting Self-Efficacy

Parenting self-efficacy was measured at age 2 using the 10-item efficacy subscale of the Parenting Sense of Competence Scale, which assesses parents' sense of competence and problem-solving ability in the parenting role (Johnston & Mash, 1989). Items were rated on a 6-point Likert scale ranging from "strongly agree" to "strongly disagree." Items were reworded to reflect an eighth-grade reading level. See Weaver et al. (2008) for further description of scale adaptation. In the current sample, internal consistency of the scale was adequate ($\alpha = .76$).

### 2.4.4 Social Support

Social support was measured at age 2 using a 6-item "personal support" index drawn from items of the General Life Satisfaction scale (GLS; Crnic et al., 1983). The GLS is a self-report measure that assesses available support across three social domains (i.e., intimate relationships,

friendships, community) and respondents' satisfaction with various aspects of their lives. The personal support index measures availability of emotional support from close others and ratings of respondents' satisfaction with these supports. Higher scores on the personal support index at age 2 have been indirectly linked to lower mother-child coercion at age 4 in the Early Steps sample (Dolcini-Catania et al., 2023). Internal consistency was $\alpha = .65$ at age 2.

### 2.4.5 Follow-Up Treatment Attendance

Engagement in follow-up treatment was operationalized as the total number of follow-up sessions that families attended between the age 2 FCU feedback session and the age 3 assessment (subsample $M = 2.76$ sessions, $SD = 4.74$, range = 0-29). All contacts with families, including initial interviews, feedback sessions, and follow-up treatment sessions, were recorded by FCU providers using a Parent Consultant Log (PaCL; Appendix B) developed for the present study. PaCL entries indicating a completed follow-up treatment session, via phone or in-person, were included in the count of each family's follow-up session attendance.

As previously noted, the content of follow-up treatment sessions varied according to parents' goals and preferences. The PaCL includes session-level information regarding 1) parent-identified child issue(s) covered, 2) parent-identified need(s) covered, and 3) underlying problems from the perspective of the FCU provider. Some of these issues, needs, and problems overlap with EPC treatment targets or treatment content, while others do not (see Appendix B). 84.8% of follow-up sessions between ages 2 and 3 covered at least one child or parent issue, or underlying problem that overlapped with these EPC targets/content.

### 2.4.6 Child Externalizing Behavior

Child externalizing behavior was measured via primary caregiver reports at the age 2 and age 3 home assessments using the Child Behavior Checklist (CBCL) for ages 1.5 – 5 (Achenbach & Edelbrock, 1991), a 99-item measure that assesses problem behaviors in young children. The CBCL externalizing factor was used to evaluate the frequency of child externalizing behavior during the study period. In the current sample, internal consistencies were .87 and .89 at ages 2 and 3 for the externalizing factor, respectively.

### 2.4.7 Demographics

Using a study-generated interview, demographics data were collected from primary caregivers at the age 2 home assessment (Dishion et al., 2008), including information about child race/ethnicity, parental education, and family income. In analyses, the race variable was comprised of four categories: White, Black, Biracial, Another Race. The binary ethnicity variable included Latino and non-Latino. The education variable was comprised of three categories: less than high school education, high school education or GED, more than high school education. The family income variable included 13 categories ranging from (1) $4999 or less to (13) $90,000 or more and was treated continuously in analyses.

## 2.5 Data Analysis

PBS latent variables at age 2 and age 3 were calculated using Mplus Version 7.31 (Muthén & Muthén, 1998). Variables were calculated at both ages on the full Early Steps sample ($N$ = 731) and the present subsample ($n$ = 250). Comparing models using full sample data versus subsample data, the three indicator variables loaded onto the PBS factor significantly and overall model fit was strong in both models. Because full sample data were available and were used in past research validating the PBS latent variable (Waller et al., 2015), we calculated PBS factor scores at age 2 and age 3 using data from the overall Early Steps sample.

Data cleaning and analysis were conducted in R version 4.1.0 (R Core Team, 2021) using the following R packages: *tidyverse* (Wickham et al., 2019) and *apaTables* (Stanley, 2023).

Study hypotheses were tested using multiple linear regression. Child race, child ethnicity, maternal education, income, and study site were included as covariates in all models. Models testing aims 1-4 predict to primary caregivers' observed PBS at child age 3, holding constant age 2 PBS to measure change in parenting behavior. Age 2 CBCL externalizing scores were included as a covariate in analyses for aims 1-4 to control for the possibility that parents of children with more severe behavior problems may be more likely to set PBS goals and may also be more motivated to change their parenting behavior. Models testing moderation (aims 2-4) included the hypothesized moderator and an interaction term as predictors in the linear regression model. Models testing aims 5-6 predict to CBCL externalizing factor scores at age 3, holding constant age 2 CBCL externalizing factor scores to measure change in child behavior.

## 3.0 Results

Descriptive statistics for study variables are presented in Tables 1 and 2. The sample mean for the CBCL Externalizing factor T-score ($T$=59.6) was approximately 1 SD above the normative mean for this age group, with 26% of the sample in the clinical range for externalizing behavior. This elevated rate of externalizing symptoms was expected based on child conduct problems being one of the criteria for study eligibility. Bivariate correlations among primary study variables are presented in Table 7.

Univariate analyses indicated that setting at least one PBS goal was not related to any child or parent variables, including child externalizing behavior and observed PBS at ages 2 and 3. Setting at least one PBS goal was related to study site, with more families setting PBS goals in Charlottesville, VA versus Pittsburgh, PA ($r$ = .18, $p$ < .01). Greater child externalizing behavior at age 2 was correlated with setting at least one child externalizing behavior goal ($r$ = .22, $p$ < .01), and negatively related to parenting self-efficacy ($r$ = -0.17, $p$ < .01), PBS at both ages (age 2, $r$ = -0.21, $p$ < .01; age 3, $r$ = -0.15, $p$ < .05), and family income ($r$ = -0.18, $p$ < .01). PBS at age 2 was significantly and positively related to family income ($r$ = .21, $p$ < .01) and follow-up treatment attendance *(*$r$ = .17, $p$ < .05).

Global (Cook's D) and specific ($dfbetas_{ij}$) measures of influence identified no outliers. Multicollinearity among predictor variables was not indicated (VIF $\leq$ 2.05 for all regressors in all models). Diagnostic residual plots for all models did not indicate violations of linear regression assumptions including linearity, homoscedasticity of residuals, and normality of residuals.

Variable-level missing data are reported in Tables 1 and 2. Cases with missing data were removed from analyses (model *n*'s with missing data removed ranged from 231-233 out of 250).

Chi-square and independent sample *t*-tests were conducted to compare families who were retained in analyses to those with missing data. Analyses did not support selective retention based on child race, child ethnicity, study site, family income, parent education, and child externalizing behavior at age 2.

## 3.1 Hypothesis Testing

### 3.1.1 Positive Behavior Support

**Hypothesis 1 (Tables 8 and 9).** To test the hypothesis that setting a PBS goal at age 2 would predict improvements in PBS from age 2 to age 3, we generated two linear regression models. First, we used a binary independent variable (≥1 PBS goal vs. 0 PBS goals) to predict age 3 PBS, as only one family set more than one PBS goal. After accounting for covariates and age 2 PBS, setting at least one PBS goal at age 2 did not significantly predict PBS at age 3, $B$ = -.02, $t(219) = -0.70$, *ns*.

Second, to probe the relationship between PBS versus other goal themes, we compared parents who set a PBS goal to parents in each of the other three categories delineated in Table 4 (Parenting – Not PBS; Child Behavior (Any); None of the Above) using dummy-coded categorical predictor variables with PBS as the reference group. Model results indicated no significant differences in observed PBS at age 3 between parents who set a PBS goal versus parents who set goals addressing other dimensions of parenting ($B$ = -0.03, $t(217) = -0.25$, *ns*), parents who set a child behavior goal without any parenting goals ($B$ = 0.08, $t(217) = 0.64$, *ns*) or parents who selected no parenting or child behavior goals ($B$ = 0.04, $t(217) = 0.27$, *ns*).

**Hypothesis 2 (Table 10).** To test the hypothesis that parenting self-efficacy would moderate the association between setting at least one PBS goal at age 2 and growth in PBS, PSOC efficacy subscale scores and a PSOC efficacy score*PBS goal interaction term were added as predictors to the first model described in Aim 1, using a binary PBS variable (i.e., $\geq$ 1 vs. 0 PBS goals) to predict to age 3 PBS. Parenting self-efficacy was not directly related to observed PBS at age 3, nor did it significantly moderate the association between setting a PBS goal at age 2 and observed PBS at age 3.

**Hypothesis 3 (Table 11).** The hypothesis that parental social support would moderate the association between setting at least one PBS goal at age 2 and growth in PBS was tested in the same manner as hypothesis 2. Parental social support was not directly related to age 3 PBS, nor did it significantly moderate the association between setting a PBS goal at age 2 and age 3 PBS.

**Hypothesis 4 (Table 12).** The hypothesis that follow-up treatment attendance would moderate the association between setting a PBS goal at age 2 and growth in PBS was tested in the same manner as hypotheses 2 and 3. Attendance was not directly related to observed PBS at age 3, nor did it strengthen the association between setting a PBS goal at age 2 and PBS at age 3.

### 3.1.2 Child Externalizing Behavior

**Hypothesis 5 (Table 13 and 14).** To test the hypothesis that setting at least one externalizing goal at age 2 would predict reductions in child externalizing behavior from age 2 to age 3 compared to setting goals in other domains, we generated two linear regression models. First, we used a binary independent variable ($\geq$1 vs. 0 externalizing goals) to predict age 3 CBCL scores. After accounting for covariates and age 2 child externalizing behavior, setting at least one

externalizing goal at age 2 did not significantly predict age 3 child externalizing behavior, $B = .21$, $t(221) = .198$, *ns*.

Second, to probe the relationship between externalizing goals versus other goal themes, we compared parents who set an externalizing goal to parents in each of the other three categories delineated in Table 5 using dummy-coded categorical predictor variables with externalizing as the reference group. After accounting for covariates and age 2 child externalizing behavior, model results indicated no significant differences in child externalizing behavior at age 3 when comparing parents who set at least one externalizing goal to parents who set goals addressing other domains of child behavior/development ($B = -0.01$, $t(219) = -0.01$, *ns*), parents who set at least one parenting goal with no child goals ($B = -1.39$, $t(219) = -0.96$, *ns*), and parents who selected no parenting or child goals ($B = 1.75$, $t(219) = 0.88$, *ns*).

**Exploratory Hypothesis 6 (Table 15 and 16).** To explore the relationship between setting a combination of age 2 goals – at least one externalizing goal *and* one PBS goal (externalizing + PBS) – with changes in child externalizing behavior from age 2 to age 3, we again generated two linear models. Analyses mirrored those employed to test hypothesis 5 using reconfigured family-level categories delineated in Table 6. The first model used a binary predictor variable (i.e., families with vs. without the externalizing + PBS goal combination). Controlling for age 2 child externalizing behavior, setting an externalizing goal *and* a PBS goal did not significantly predict age 3 externalizing behavior, $B = 4.31$, $t(221) = 1.889$, $p = .06$. Although not statistically reliable, these results indicate a trend toward higher age 3 externalizing behavior among families who set at least one externalizing and one PBS goal at age 2, compared to all other families in the sample, contrary to study hypotheses.

The second model used dummy-coded categorical predictor variables to compare parents with the externalizing + PBS goal combination to parents in three other categories (Table 6). After accounting for covariates and age 2 child externalizing behavior, model results indicated no statistically significant differences in child externalizing behavior at age 3 when comparing parents with the externalizing + PBS goal combination to parents who set at least one externalizing goal with at least one non-PBS parenting goal ($B$ = -4.24, $t$(219) = -1.57, *ns*), an externalizing goal with no parenting goals ($B$ = -4.80, $t$(219) = -1.93, $p$ = .06), or neither parenting nor externalizing goals ($B$ = -4.17, $t$(219) = -1.80, $p$ = .07). Although not statistically reliable, two unexpected trends emerged. The first trend suggests higher age 3 child externalizing behavior among families with the externalizing + PBS goal combination compared to those with at least one externalizing goal and *no* parenting goals. The second trend suggests higher age 3 child externalizing behavior among families with the externalizing + PBS goal combination compared to families with no externalizing goals and no parenting goals.

### 3.2 Sensitivity Analyses

Study analyses were run with and excluding the six families with different primary caregivers completing the assessment at ages 2 and age 3. Results remained the same. These families were retained in the final analyses reported above.

## 4.0 Discussion

This study described the thematic content of parents' goals in a RCT of the early childhood version of the FCU, examining whether setting goals addressing positive behavior support and/or child externalizing behavior predicted change in these outcomes from child ages 2 to 3. As expected, thematic content of parents' goals varied widely, ranging from parenting practices and child behaviors to milestones of child development, parent wellbeing, family self-sufficiency (e.g., finances), and family relationships. Contrary to study hypotheses, parents who set a PBS goal did not demonstrate greater growth in observed PBS from child ages 2 to 3 compared to other parents, and parents who set an externalizing goal did not report greater reductions in child externalizing behavior compared to other parents. Further, none of the hypothesized moderators – parenting self-efficacy, parental social support, and follow-up treatment attendance – strengthened the association between PBS goals and observed PBS. Regarding combinations of goal themes, parents who set both a PBS goal and an externalizing goal did not report significantly greater reductions in child externalizing behavior compared to other parents. In fact, results indicated a non-significant trend toward *higher* age 3 child externalizing behavior among parents with the PBS + externalizing goal combination at age 2.

While past research demonstrates that randomization to the FCU improves observed PBS from age 2 to 3 in the Early Steps sample (Dishion et al., 2008), setting a goal to improve PBS did not uniquely contribute to this improvement within our subsample. This finding suggests that, overall, parents who receive the FCU improve their parenting regardless of the thematic content of their goals. Importantly, goals do not reflect everything that parents and providers discuss during the feedback session; FCU providers always praise parents' existing PBS practices and, when

indicated, support motivation to improve PBS. It is possible that this MI-based discussion is sufficient to promote change in PBS regardless of goal content. However, it is also important to note that our null findings run counter to the theoretical premise that setting goals motivates behavior change (Carver & Scheier, 2001) and past empirical work linking goal themes to goal attainment in clinical samples (e.g., Berking et al., 2005). Methodological differences in 1) our goal setting procedures and 2) our primary outcome variable, compared to past research on treatment goals, warrant consideration when interpreting the null findings.

FCU goal setting procedures prioritized using parents' own words over formulating goals with the *specificity* that facilitates goal attainment in professional and clinical contexts (Locke & Latham, 2002, 2019; Michalak & Holtforth, 2006; Tryon, 2018). Goal specificity varied widely in the present sample, including within the PBS goal category (e.g., "Have set routine" and "Praise my kids more often (3x/day)" differ in specificity and were both categorized as PBS goals). The FCU approach to goal setting is designed to ensure that providers center parents' priorities and, in line with principles of MI, remain attentive to parents' readiness for change. It is possible, however, that writing goals in parents' words might come at the expense of setting maximally effective goals when parents do express motivation to support positive behavior in their children. If replicated, our null results could justify increasing the involvement of FCU providers in goal formulation once the parent has identified the issues they would like to address.

To our knowledge, no prior research on treatment goals has utilized a multi-method observational measure as a primary outcome to examine change in parenting practices. Most studies have used idiographic goal attainment scaling (GAS; Kiresuk & Sherman, 1968) or self-report measures of target symptoms/behaviors (e.g., positive parenting; van Aar et al., 2021). Our use of an observational variable to operationalize PBS provided rich information about the

affective quality of parent-child interactions in the home environment, but it may also have limited our ability to detect change in PBS practices that take place over time or at specific times of day. For example, goals to improve consistency of daily routines were prevalent in the present sample and were included in the PBS goal category (because consistent routines are a form of proactive parenting). Although the observational measure assessed proactive parenting practices over a 50-minute period and included such variables as verbal structuring of tasks, measuring the consistency of daily routines was beyond the scope of an annual 2.5-hour home visit. Hence, it is possible that parents who set PBS goals addressing proactive parenting demonstrated goal-related improvements over time that are not reflected in our measure of PBS, leading to null results in the present study. Future research on goals in parenting interventions could explore whether goals' thematic content is related to parent-reported growth in PBS practices including daily routines (e.g., by using self-report questionnaires, daily diaries, or ecological momentary assessment), and/or parents' later perceptions of goal attainment (e.g., by using GAS).

Findings did not support moderation of PBS goals' relationship with observed parenting behavior by parenting self-efficacy, parental social support, or follow-up treatment attendance. First, parents with higher parenting self-efficacy at baseline did not demonstrate greater growth in PBS after setting a PBS goal (Aim 2), despite theory suggesting that parents who believe they are capable of managing child behavior demonstrate greater persistence in efforts to change (Bandura, 1977; Sanders & Mazzucchelli, 2013). It is important to note that the present study is underpowered to detect very small effects, and meta-analytic studies on behavioral interventions for adults have only found small effects of self-efficacy on target behavior after accounting for 'behavioral intentions' (i.e., goals) (Webb & Sheeran, 2006). Further, it is possible that *pre-intervention* parenting self-efficacy does not moderate the hypothetical association between setting

a PBS goal and improvement in positive parenting, but that parenting self-efficacy measured later in the FCU process could moderate this association. Meta-analytic research has shown that parenting interventions improve parenting self-efficacy (Wyatt Kaminski et al., 2008), and parents might report higher self-efficacy after discussing strengths and setting goals during the FCU feedback session. Future longitudinal projects could examine whether growth in parental self-efficacy is associated with attainment of parenting goals over time.

Second, age 2 PBS goals were unrelated to growth in PBS from ages 2 to 3 *regardless* of parents' level of self-reported social support (Aim 3). Although parental social support in early childhood is associated with a range of positive outcomes for families, including positive parenting (Ceballo & McLoyed, 2002) and reduced maternal depressive symptoms (Dolcini-Catania et al., 2023), social support may not provide the additional benefit of promoting attainment of parenting goals in the FCU. Importantly, as social support has been conceptualized and operationalized in a variety of ways, our null findings should be replicated using other measures of this construct before they are used to inform providers' efforts to support attainment of parenting goals in the Family Check-Up.

Third, parents who set a PBS goal did not demonstrate greater growth in PBS when they attended more follow-up treatment sessions (Aim 4). This finding stands in contrast to study hypotheses, which were based on theories suggesting that goal attainment would be facilitated by engaging in more goal-directed behaviors with the FCU provider (Locke & Latham, 2019; Gollwitzer & Brandstätter, 1997). Results are in line with past empirical work that found no significant association between number of FCU treatment sessions between ages 2 and 3 and later child problem behavior in the Early Steps sample (Dishion et al., 2008). Whereas parent participation in a FCU feedback session has been consistently associated with improvements in

child problem behavior, participation in follow-up treatment sessions may be comparatively less influential – or even ineffective – in supporting long-term changes in parenting or child behavior. It is also possible that 1) the content of FCU follow-up treatment sessions is too variable to detect benefits of follow-up sessions across the sample, and/or 2) for families facing multiple adversities who engage in follow-up treatment, retaining the child's present level of problem behavior represents a major achievement that would not be demonstrated in statistical analyses.

Our finding that parents who set an externalizing goal did not report greater reductions in child externalizing behavior from age 2 to 3 (Aim 5) did not support study hypotheses; however, this null finding comports with some prior research. Consistent with our results, the one extant study of parents' treatment goals in a parenting intervention found that setting goals – most of which focused on child behavior – did not predict improvements in child behavior above and beyond the effects of the intervention overall (van Aar et al., 2021). Although setting an externalizing goal demonstrates that a parent believes child behavior is a problem, such a goal does not necessarily indicate that the parent believes they have a role in bringing about desired change (see Morrissey-Kane & Prinz (1999) for discussion of the role of parental beliefs in child/family therapy). For instance, if a parent sets a goal for the child to "follow directions without tantruming" but is unmotivated (or unable) to change features of the home environment that support positive behavior (e.g., praise, routines), the goal is unlikely to facilitate a reduction in tantrum frequency. While FCU providers use MI and strengths-based parent management strategies to highlight connections between parenting and child behavior, parents begin this preventive intervention with wide-ranging beliefs about child behavior and levels of motivation to change parenting. In the present study, families in the 'externalizing goal' category likely varied in their motivation or

ability to make changes that would support positive child behavior, and this variability may partially account for our null finding for this aim.

In our exploratory analyses, we expected to find greater improvement in child behavior among families who set *both* child externalizing behavior and PBS goals (Aim 6). Unexpectedly, marginal trends emerged in the opposite direction – families with the externalizing + PBS goal combination exhibited greater age 3 child externalizing behavior, controlling for age 2 externalizing behavior, compared to all other families. We interpret these findings with caution based on their marginal reliability and the modest number of families with this goal combination ($n$ = 14). There may be unmeasured confounding variables that distinguish these 14 families. For example, it is possible that providers recognized elevated risk for child behavior problems that was not adequately captured in parent-report measures and consequently focused MI on positive parenting, child behavior, and the links between the two. As such, providers may have guided higher-risk families toward PBS and child externalizing goals. Overall, trajectories of child problem behavior in families who set externalizing and PBS goals should be tested in larger samples before conclusions are drawn about the implications of these trends for clinical practice.

### 4.1 Limitations

Among this study's strengths are its intensive observational measurement of parenting, longitudinal follow-up over one year, and use of a socioeconomically and geographically diverse sample. However, several limitations should be noted when interpreting results.

First, goal themes were not randomized, introducing the possibility that unmeasured differences between families with different goal themes could explain any (hypothetical)

associations between goal themes and improvements in parenting or child behavior. Although nonrandomization presents methodological challenges, centering parents' voices and priorities during goal setting aligns with the culturally-sensitive ethos of the FCU and likely also facilitates a positive working alliance between the parent and the FCU provider (Tryon & Winograd, 2011).

Second, procedures for documenting goals were not standardized across sites or providers. FCU providers typically recorded goals on two goal sheets during the Feedback – one for the family, and one for study records – and some providers wrote goals in shorthand on the latter, as these goal sheets were not originally intended for research. It is possible that some thematic content may have been removed or slightly modified for efficiency of record-keeping.

Third, our measure of follow-up treatment attendance – a count of the in-person and phone-based sessions delivered to families after the age 2 feedback – did not account for wide variability in session content (e.g., brief parent training sessions, family therapy, case management). Families typically set multiple goals and may have resource needs that require case management. While FCU providers were encouraged to incorporate material from the EPC into follow-up sessions when this material was relevant to parents' goals, adherence to this guideline was not monitored and data regarding use of in-session skill practice or homework assignments during follow-up treatment sessions were not collected. Because our crude measure of attendance was not sensitive to session content, we were limited in our ability to detect improvements in parenting related to participation in parenting-focused follow-up treatment.

## 4.2 Future Directions

Future research on goals in parenting interventions could more systematically define a taxonomy for categorizing goals. Existing taxonomies of treatment goal themes for adult psychotherapy settings (i.e., the BIT-T) were developed through an iterative process that involved large samples of goals ($n$ > 1000), a team of more than twenty clinicians that independently categorized goals, cluster analyses that systematically combined clinicians' taxonomies, and repeated tests of the resulting taxonomy to ensure its reliability and validity in other samples (Holtforth & Grawe, 2002). Future researchers might consider adopting the rigorous methodology that has been applied to adult psychotherapy goals to create a taxonomy of goal themes that can be applied across parenting interventions. While the coding system developed for the present study represents a first step toward this end, methods for developing an exhaustive taxonomy were beyond this project's scope. A more exhaustive taxonomy might also include subcategories for goal themes other than parenting and child behavior—such as parent wellbeing and family self-sufficiency—and facilitate research examining goal themes and ecological factors that are related to parenting and child behavior but extend beyond the primary foci of parenting interventions (e.g., maternal depression (Shaw et al., 2009)).

Further, future research on goals in the FCU should include longitudinal follow-up over multiple years. The three core sessions of the FCU (initial interview, assessment, feedback) are designed for annual delivery, in line with a health maintenance model. Hence, parents who remain engaged in the FCU over time receive strengths-based feedback on family functioning across multiple years, and this feedback often includes a review of progress toward goals they set during past feedback sessions. Feedback on goal progress has been shown to enhance goal attainment in workplace settings (Locke & Latham, 2002) and in behavioral interventions (Harkin et al., 2016),

particularly when the feedback is positive and strengths-based (Fishbach & Finkelstein, 2012). It follows that goal-related changes in positive parenting and child behavior might emerge if these outcomes were assessed after families received one or more annual Family Check-Ups subsequent to setting PBS and/or externalizing goals at their first feedback session.

## 4.3 Conclusion

To our knowledge, this study is the first to describe the thematic content of goals in a preventive parenting intervention and examine whether goals focused on parenting or child behavior were related to changes in these domains one year later. While the Family Check-Up has been shown to improve positive behavior support and child externalizing behavior and did so in the current RCT (e.g., Dishion et al., 2008), our findings suggest that setting goals to improve PBS or child externalizing behavior may not uniquely contribute to these treatment effects. Findings run contrary to theory suggesting that goals motivate behavior change. If replicated, our null findings could inform adaptations to the use of, and/or methods for, goal setting in the FCU.

# Appendix A Figures

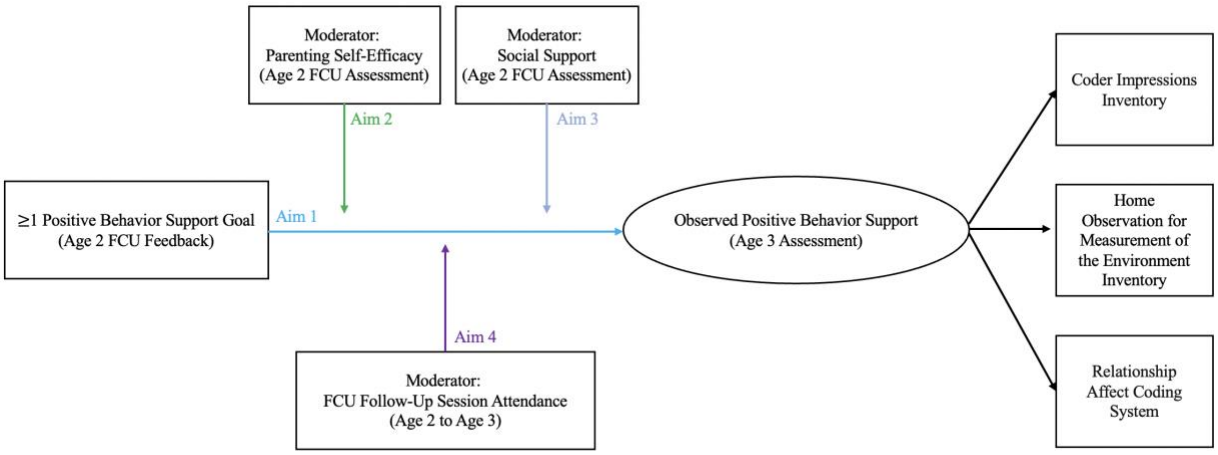


**Figure 1. Conceptual Model for Aims 1-4.**


**Figure 2. Conceptual Model for Aim 5.**

*Note*. Age 2 externalizing behavior and demographic variables (child race/ethnicity, maternal education, family income, study site) held constant.


**Figure 3. Conceptual Model for Aim 6.**

*Note*. Age 2 externalizing behavior and demographic variables (child race/ethnicity, maternal education, family income, study site) held constant.

## Appendix B Tables

**Table 1. Subsample Descriptives at Baseline (Age 2) Assessment (N = 250)**

| | |
|---|---|
| Site | |
| Charlottesville | 69 (27.6%) |
| Eugene | 93 (37.2%) |
| Pittsburgh | 88 (35.2%) |
| PC relation to child | |
| Biological mother | 240 (96%) |
| Biological father | 5 (2%) |
| Other caregiver | 5 (2%) |
| Child Race, *n* = 249 | |
| Black | 66 (26.4%) |
| White | 128 (51.2%) |
| Biracial | 32 (12.8%) |
| Another Race | 23 (9.2%) |
| Child Ethnicity, *n* = 248 | |
| Hispanic | 38 (15.2%) |
| Child age in months, *M (SD)* | 28.0 (3.3) |
| PC age in years, *M (SD)* | 27.2 (6.7) |
| Child sex | 52.8% female |
| Annual Family Income, *M (SD)* | $22,317 ($9675) |
| *N (%)* less than $20,000, *n* = 249 | 108 (43.2%) |
| PC Education | |
| Less than high school/GED | 56 (22.4%) |
| High school/GED | 104 (41.6%) |
| More than high school/GED | 90 (36%) |
| CBCL Externalizing Factor T-Score, *M (SD)* | 59.6 (8.5) |
| *N (%)* in clinical range | 65 (26%) |

*Note:* N = 250 unless otherwise specified due to missing data. *CBCL* = Child Behavior Checklist; T-scores at or above 65 indicate clinically elevated externalizing behavior.

**Table 2. Descriptive Statistics for Primary Study Variables**

| Variable | *n* | *Range* | *Mean* | *SD* |
|---|---|---|---|---|
| PBS Age 2 | 250 | -2.56-1.59 | 0.04 | 0.73 |
| HOME Inventory | 249 | 14-37 | 29.42 | 5.25 |
| RACS Duration Proportion Score (positive/neutral engagement) | 249 | 0.03-0.78 | 0.33 | 0.14 |
| RACS COIMP | 248 | 2.45-8.70 | 6.10 | 1.00 |
| PBS Age 3 | 236 | -2.52-2.07 | 0.07 | 0.81 |
| HOME Inventory | 236 | 11-37 | 30.25 | 5.62 |
| RACS Duration Proportion Score (positive/neutral engagement) | 233 | 0.03-0.72 | 0.38 | 0.14 |
| RACS COIMP | 233 | 2.55-8.82 | 5.96 | 0.98 |
| Child Externalizing Behavior T-Score (age 2) | 250 | 32-86 | 59.64 | 8.51 |
| Child Externalizing Behavior T-Score (age 3) | 237 | 28-82 | 55.82 | 9.26 |
| Parenting Self-Efficacy | 249 | 11-50 | 35.31 | 7.21 |
| Follow-Up Treatment Session Attendance | 250 | 0-29 | 2.76 | 4.74 |
| Social Support | 249 | 0.75-6.0 | 4.1 | 0.95 |

**Table 3. Taxonomy of Family Check-Up Goals**

| Category | Subcategory | Example | *N*[a] |
|---|---|---|---|
| 1. Parenting | | | |
| | 1.1 Positive Behavior Support | "Be consistent about telling child what he is doing well." | 52 |
| | 1.2 Discipline | "Limit setting during busy times." | 56 |
| | 1.3 Other Parenting | "More parenting skills." | 74 |
| 2. Child | | | |
| | 2.1 Child Behavior: Externalizing | "Child will follow directions without resistance". | 112 |
| | 2.2 Child Behavior: Other | "Child will pick up toys." | 61 |
| | 2.3 Child Development | "Improve child's speech/language." | 97 |
| 3. Parent Wellbeing | | "Mom would like more personal time." | 81 |
| 4. Family Self-Sufficiency | | "Improve our financial situation with the bills." | 107 |
| 5. Family Relationships | | "Plan family activities." | 21 |
| 6. Other | | "Help older sister be successful in school." | 65 |

[a] Out of 726 goal units (from 708 goals) in the present sample.

**Table 4. Family-Level Categories for Aim 1**

| Category | Definition | Count[a] |
|---|---|---|
| Parenting – Positive Behavior Support (PBS) | Family set ≥ 1 PBS goal. | 51 |
| Parenting – Not PBS | Family set zero PBS goals *AND*<br>≥ 1 Discipline goal *OR*<br>≥ 1 Other Parenting goal. | 79 |
| Child Behavior (Any) | Family set zero Parenting goals *AND*<br>≥ 1 Child Externalizing Behavior goal *OR*<br>≥ 1 Child Other Behavior goal. | 79 |
| None of the Above | Family set zero Parenting goals *AND*<br>zero Child Behavior goals. | 41 |

[a] Out of 250 families in the present sample.

**Table 5. Family-Level Categories for Aim 5**

| Category | Definition | *N*[a] |
|---|---|---|
| Child Externalizing Behavior | Family set ≥ 1 Child Externalizing Behavior goal | 99 |
| Child-Focused – Not Externalizing | Family set zero Child Externalizing Behavior goals *AND*<br>≥ 1 Child Other Behavior goal *OR*<br>≥ 1 Child Development goal. | 83 |
| Parenting (Any) | Family set zero Child-Focused goals *AND*<br>≥ 1 Parenting – PBS goal *OR*<br>≥ 1 Parenting – Discipline goal *OR*<br>≥ 1 Parenting – Other goal | 45 |
| None of the Above | Family set zero Parenting goals *AND*<br>zero Child goals. | 23 |

[a] Out of 250 families in the present sample.

**Table 6. Family-Level Categories for Aim 6**

| Category | Definition | *N*[a] |
|---|---|---|
| Externalizing + PBS | Family set ≥ 1 Child Externalizing Behavior goal *AND* ≥ 1 Parenting – PBS goal | 14 |
| Externalizing + Non-PBS Parenting | Family set ≥ 1 Child Externalizing Behavior goal *AND* zero Parenting – PBS goals *AND*<br>(≥ 1 Parenting – Discipline goal *OR*<br>≥ 1 Parenting – Other goal) | 26 |
| Externalizing with no parenting goals | Family set ≥ 1 Child Externalizing Behavior goal *AND* zero Parenting goals | 59 |
| None of the Above | Family set zero Child Externalizing Behavior goals *AND* zero Parenting goals. | 151 |

[a] Out of 250 families in the present sample.

**Table 7. Bivariate Correlations Among Study Variables**

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Family Goal Category: PBS† | | | | | | | | | | | | | | | | | |
| 2. Family Goal Category: Ext †† | -.13* | | | | | | | | | | | | | | | | |
| 3. Family Goal Category: Ext + PBS††† | .48** | .30** | | | | | | | | | | | | | | | |
| 4. PBS (Age 2) | .01 | -.03 | .01 | | | | | | | | | | | | | | |
| 5. PBS (Age 3) | .02 | -.06 | -.03 | .53** | | | | | | | | | | | | | |
| 6. Ext (Age 2) | .00 | .22** | .04 | -.21** | -.15* | | | | | | | | | | | | |
| 7. Ext (Age 3) | .02 | .13* | .11 | -.20** | -.21** | .54** | | | | | | | | | | | |
| 8. Parenting Self-Efficacy | -.08 | -.10 | -.12 | -.04 | .01 | -.17** | -.19** | | | | | | | | | | |
| 9. Follow-Up Treatment Sessions | -.07 | .01 | -.07 | .17** | .18** | .12 | .12 | -.11 | | | | | | | | | |
| 10. Social Support | -.02 | -.07 | -.10 | .03 | -.04 | -.12 | -.10 | .15* | -.06 | | | | | | | | |
| 11. Race = Black | -.10 | -.04 | -.07 | -.28** | -.36** | .01 | .03 | .13* | -.17** | .10 | | | | | | | |
| 12. Race = Biracial | .10 | -.07 | .11 | .06 | .01 | .05 | .08 | -.03 | .07 | -.06 | -.23** | | | | | | |
| 13. Race = Another | .04 | -.06 | .04 | .10 | .22** | -.15* | -.14* | .04 | .04 | -.16* | -.19** | -.12 | | | | | |
| 14. Annual Family Income | .10 | -.07 | cl.00 | .21** | .21** | -.18** | -.22** | .01 | .07 | .05 | -.17** | -.01 | -.05 | | | | |
| 15. PC Ed = More than HS | .08 | -.10 | .03 | .19** | .22** | -.19** | -.09 | -.02 | .10 | .04 | .00 | .16* | -.15* | .20** | | | |
| 16. PC Ed = Less than HS | .04 | .08 | .08 | -.23** | -.10 | .09 | .10 | .02 | -.03 | -.04 | -.06 | .03 | .23** | -.19** | -.40** | | |
| 17. Site = VA | .18** | -.15* | .08 | -.15* | -.15* | -.10 | -.13* | .05 | -.17** | -.01 | .14* | .03 | .08 | -.00 | -.09 | .05 | |
| 18. Site = OR | .02 | .09 | .03 | .34** | .33** | .06 | -.06 | -.13* | .21** | -.08 | -.43** | .05 | .16* | .02 | .01 | .00 | -.48** |

† Family set ≥ 1 PBS goal; independent variable for aims 1-4; see Table 4; †† Family set ≥ 1 Child Externalizing Behavior goal; independent variable for aim 5; see Table 5;

††† Family set ≥ 1 PBS goal & ≥ Child Externalizing Behavior goal; independent variable for aim 6; see Table 6.

*Note*. PBS = positive behavior support; Ext = Child Externalizing Behavior; PC Ed = primary caregiver education; HS = high school; VA = Charlottesville, Virginia; OR = Eugene, Oregon. * indicates $p < .05$. ** indicates $p < .01$.

**Table 8. Results for Aim 1a; Predicting Age 3 Positive Behavior Support (N = 232)**

| Variable | *B* | 95% CI |
|---|---|---|
| (Intercept) | -0.27 | -1.02, 0.49 |
| Family Goal Category: PBS | -0.02 | -0.25, 0.20 |
| PBS (Age 2) | 0.43** | 0.30, 0.57 |
| Ext (Age 2) | 0.00 | -0.01, 0.01 |
| Ethnicity = Latino | 0.15 | -0.18, 0.48 |
| Race = Black | -0.33** | -0.56, -0.09 |
| Race = Biracial | -0.17 | -0.45, 0.10 |
| Race = Another Race | 0.27 | -0.14, 0.68 |
| PC Education = Less than HS | 0.07 | -0.17, 0.31 |
| PC Education = More than HS | 0.30** | 0.10, 0.51 |
| Annual Family Income | 0.01 | -0.00, 0.02 |
| Site = OR | 0.18 | -0.05, 0.41 |
| Site = VA | 0.01 | -0.23, 0.24 |

*Note.* CI = confidence interval. Family Goal Category: PBS means family set ≥ 1 PBS goal (see Table 4). PBS = positive behavior support; Ext = Child Externalizing Behavior; PC Ed = primary caregiver education; HS = high school; VA = Charlottesville, Virginia; OR = Eugene, Oregon; reference group for ethnicity = non-Latino; reference group for race = White; reference group for education = HS diploma/GED; reference group for site = Pittsburgh, PA.

*indicates $p < .05$. **indicates $p < .01$.

**Table 9. Results for Aim 1b; Predicting Age 3 Positive Behavior Support (N = 232)**

| Variable | *B* | 95% CI |
|---|---|---|
| (Intercept) | -0.29 | -1.09, 0.50 |
| Family Goal Category: Parenting – Not PBS | -0.03 | -0.29, 0.22 |
| Family Goal Category: Child Behavior (Any) | 0.08 | -0.18, 0.34 |
| Family Goal Category: None of the Above | 0.04 | -0.26, 0.35 |
| PBS (Age 2) | 0.43** | [0.29, 0.56 |
| Ext (Age 2) | 0.00 | -0.01, 0.01 |
| Ethnicity = Latino | 0.15 | -0.18, 0.48 |
| Race = Black | -0.33** | -0.57, -0.10 |
| Race = Biracial | -0.17 | -0.44, 0.11 |
| Race = Another Race | 0.28 | -0.13, 0.70 |
| PC Education = Less than HS | 0.04 | -0.20, 0.29 |
| PC Education = More than HS | 0.31** | 0.10, 0.52 |
| Annual Family Income | 0.01 | -0.00, 0.02 |
| Site = OR | 0.19 | -0.05, 0.42 |
| Site = VA | 0.03 | -0.21, 0.27 |

*Note.* Family Goal Category: Parenting – Not PBS means family set zero PBS goals AND ≥ 1 Discipline goal OR ≥ 1 Other Parenting goal. Family Goal Category: Child Behavior (Any) means family set zero parenting goals AND ≥ 1 Child Externalizing Behavior goal OR ≥ 1 Child Other Behavior goal. Family Goal Category: None of the Above means family set zero Parenting goals and zero Child Behavior goals. Reference group for family goal categories = PBS. See Table 4.
CI = confidence interval; PBS = positive behavior support; Ext = Child Externalizing Behavior; PC Ed = primary

caregiver education; HS = high school; VA = Charlottesville, Virginia; OR = Eugene, Oregon; reference group for ethnicity = non-Latino; reference group for race = White; reference group for education = HS diploma/GED; reference group for site = Pittsburgh, PA.

*indicates $p < .05$. **indicates $p < .01$.

**Table 10. Results for Aim 2; Predicting Age 3 Positive Behavior Support (N = 231)**

| Predictor | *B* | 95% CI |
|---|---|---|
| (Intercept) | -0.46 | -1.39, 0.48 |
| Family Goal Category: PBS | 0.09 | -1.08, 1.26 |
| Parenting Self-Efficacy | 0.00 | -0.01, 0.02 |
| (Family Goal Category: PBS)*(Parenting Self-Efficacy) | 0.00 | -0.04, 0.03 |
| PBS (Age 2) | 0.43** | 0.30, 0.57 |
| Ext (Age 2) | 0.00 | -0.01, 0.01 |
| Ethnicity = Latino | 0.14 | -0.19, 0.48 |
| Race = Black | -0.34** | -0.58, -0.10 |
| Race = Biracial | -0.17 | -0.45, 0.10 |
| Race = Another Race | 0.27 | -0.14, 0.69 |
| PC Education = Less than HS | 0.07 | -0.18, 0.32 |
| PC Education = More than HS | 0.31** | 0.10, 0.51 |
| Annual Family Income | 0.01 | -0.00, 0.02 |
| Site = OR | 0.17 | -0.06, 0.41 |
| Site = VA | 0.01 | -0.23, 0.24 |

*Note*. CI = confidence interval. Family Goal Category: PBS means family set $\geq$ 1 PBS goal (see Table 4). PBS = positive behavior support; Ext = Child Externalizing Behavior; PC Ed = primary caregiver education; HS = high school; VA = Charlottesville, Virginia; OR = Eugene, Oregon; reference group for ethnicity = non-Latino; reference group for race = White; reference group for education = HS diploma/GED; reference group for site = Pittsburgh, PA.

*indicates $p < .05$. **indicates $p < .01$.

**Table 11. Results for Aim 3; Predicting Age 3 Positive Behavior Support (N = 231)**

| Variable | *B* | 95% CI |
|---|---|---|
| (Intercept) | -0.25 | -1.14, 0.64 |
| Family Goal Category: PBS | 0.61 | -0.39, 1.60 |
| Social Support | 0.00 | -0.10, 0.10 |
| (Family Goal Category: PBS)*(Social Support) | -0.15 | -0.39, 0.08 |
| PBS (Age 2) | 0.44** | 0.30, 0.57 |
| Ext (Age 2) | 0.00 | -0.01, 0.01 |
| Ethnicity = Latino | 0.15 | -0.18, 0.48 |
| Race = Black | -0.34** | -0.58, -0.11 |
| Race = Biracial | -0.19 | -0.47, 0.09 |
| Race = Another Race | 0.22 | -0.20, 0.64 |
| PC Education = Less than HS | 0.08 | -0.16, 0.33 |
| PC Education = More than HS | 0.30** | 0.09, 0.51 |
| Annual Family Income | 0.01 | -0.00, 0.02 |
| Site = OR | 0.17 | -0.06, 0.40 |
| Site = VA | 0.01 | -0.23, 0.25 |

*Note.* CI = confidence interval. Family Goal Category: PBS means family set $\geq$ 1 PBS goal (see Table 4). PBS = positive behavior support; Ext = Child Externalizing Behavior; PC Ed = primary caregiver education; HS = high school; VA = Charlottesville, Virginia; OR = Eugene, Oregon; reference group for ethnicity = non-Latino; reference group for race = White; reference group for education = HS diploma/GED; reference group for site = Pittsburgh, PA.

*indicates $p < .05$. **indicates $p < .01$.

**Table 12. Results for Aim 4; Predicting Age 3 Positive Behavior Support (N = 232)**

| Variable | *B* | 95% CI |
|---|---|---|
| (Intercept) | -0.21 | -0.97, 0.55 |
| Family Goal Category: PBS | -0.06 | -0.33, 0.21 |
| Follow Up Treatment Session Attendance | 0.01 | -0.01, 0.03 |
| (Family Goal Category: PBS)*(Follow Up Treatment Session Attendance) | 0.02 | -0.04, 0.08 |
| PBS (Age 2) | 0.42** | 0.29, 0.56 |
| Ext (Age 2) | -0.00 | -0.01, 0.01 |
| Ethnicity = Latino | 0.15 | -0.18, 0.48 |
| Race = Black | -0.33** | -0.56, -0.09 |
| Race = Biracial | -0.19 | -0.47, 0.09 |
| Race = Another Race | 0.27 | -0.14, 0.68 |
| PC Education = Less than HS | 0.06 | -0.18, 0.31 |
| PC Education = More than HS | 0.30** | 0.09, 0.50 |
| Annual Family Income | 0.01 | -0.00, 0.02 |
| Site = OR | 0.17 | -0.06, 0.40 |
| Site = VA | 0.02 | -0.22, 0.26 |

*Note.* CI = confidence interval. Family Goal Category: PBS means family set $\geq$ 1 PBS goal (see Table 4). PBS =

positive behavior support; Ext = Child Externalizing Behavior; PC Ed = primary caregiver education; HS = high school; VA = Charlottesville, Virginia; OR = Eugene, Oregon; reference group for ethnicity = non-Latino; reference group for race = White; reference group for education = HS diploma/GED; reference group for site = Pittsburgh, PA.

*indicates $p < .05$. **indicates $p < .01$.

**Table 13. Results for Aim 5a; Predicting Age 3 Child Externalizing Behavior (N = 233)**

| Variable | *B* | 95% CI |
|---|---|---|
| (Intercept) | 28.40** | 19.67, 37.12 |
| Family Goal Category: Child Externalizing Behavior | 0.21 | -1.88, 2.30 |
| Ext (Age 2) | 0.54** | 0.41, 0.67 |
| Ethnicity = Latino | -5.14** | -8.91, -1.38 |
| Race = Black | -0.97 | -3.64, 1.70 |
| Race = Biracial | 2.19 | -1.00, 5.37 |
| Race = Another Race | 2.60 | -2.08, 7.28 |
| PC Education = Less than HS | 1.00 | -1.72, 3.73 |
| PC Education = More than HS | 0.21 | -2.14, 2.55 |
| Annual Family Income | -0.12* | -0.22, -0.01 |
| Site = OR | -3.31* | -5.87, -0.75 |
| Site = VA | -2.91* | -5.53, -0.28 |

*Note*. CI = confidence interval. Family Goal Category: Child Externalizing Behavior means family set $\geq$ 1 Child Externalizing Behavior goal (see Table 5). PBS = positive behavior support; Ext = Child Externalizing Behavior; PC Ed = primary caregiver education; HS = high school; VA = Charlottesville, Virginia; OR = Eugene, Oregon; reference group for ethnicity = non-Latino; reference group for race = White; reference group for education = HS diploma/GED; reference group for site = Pittsburgh, PA.

*indicates $p < .05$. **indicates $p < .01$.

**Table 14. Results for Aim 5b; Predicting Age 3 Child Externalizing Behavior (N = 233)**

| Variable | *B* | 95% CI |
|---|---|---|
| (Intercept) | 28.10** | 19.14, 37.06 |
| Family Goal Category: Child-Focused – Not Externalizing | -0.01 | -2.41, 2.38 |
| Family Goal Category: Parenting (Any) | -1.39 | -4.26, 1.48 |
| Family Goal Category: None of the Above | 1.75 | -2.17, 5.67 |
| Ext (Age 2) | 0.55** | 0.42, 0.68 |
| Ethnicity = Latino | -5.11** | -8.88, -1.35 |
| Race = Black | -1.16 | -3.84, 1.52 |
| Race = Biracial | 2.12 | -1.07, 5.32 |
| Race = Another Race | 2.71 | -2.06, 7.48 |
| PC Education = Less than HS | 0.76 | -1.99, 3.51 |
| PC Education = More than HS | 0.19 | -2.16, 2.54 |
| Annual Family Income | -0.12* | -0.22, -0.01 |
| Site = OR | -3.33* | -5.90, -0.75 |
| Site = VA | -2.87* | -5.49, -0.25 |

*Note.* Family Goal Category: Child-Focused – Not Externalizing means family set zero Child Externalizing Behavior goals AND ≥ 1 Child Other Behavior goal OR ≥ 1 Child Development goal. Family Goal Category: Parenting (Any) means family set zero child-focused goals AND ≥ 1 Parenting goal (PBS, Discipline, or Other Parenting). Family Goal Category: None of the Above means family set zero Parenting goals and zero Child-Focused goals. Reference group for family goal categories = Child Externalizing Behavior. See Table 5.

CI = confidence interval; Ext = Child Externalizing Behavior; PC Ed = primary caregiver education; HS = high school; VA = Charlottesville, Virginia; OR = Eugene, Oregon; reference group for ethnicity = non-Latino; reference group for race = White; reference group for education = HS diploma/GED; reference group for site = Pittsburgh, PA.

*indicates $p < .05$. **indicates $p < .01$.

**Table 15. Results for Aim 6a; Predicting Age 3 Child Externalizing Behavior (N = 233)**

| Variable | *B* | 95% CI |
|---|---|---|
| (Intercept) | 28.68** | 20.02, 37.34 |
| Family Goal Category: Externalizing + PBS | 4.31† | -0.19, 8.81 |
| Ext (Age 2) | 0.54** | 0.41, 0.66 |
| Ethnicity = Latino | -4.90* | -8.65, -1.16 |
| Race = Black | -0.95 | -3.60, 1.69 |
| Race = Biracial | 1.95 | -1.20, 5.09 |
| Race = Another Race | 2.27 | -2.38, 6.91 |
| PC Education = Less than HS | 0.86 | -1.84, 3.57 |
| PC Education = More than HS | 0.06 | -2.27, 2.39 |
| Annual Family Income | -0.11* | -0.22, -0.00 |
| Site = OR | -3.51** | -6.06, -0.96 |
| Site = VA | -3.23* | -5.84, -0.63 |

*Note.* CI = confidence interval. Family Goal Category: Externalizing + PBS means family set ≥ 1 Child Externalizing

Behavior goal & ≥ 1 PBS goal (see Table 6). PBS = positive behavior support; Ext = Child Externalizing Behavior; PC Ed = primary caregiver education; HS = high school; VA = Charlottesville, Virginia; OR = Eugene, Oregon; reference group for ethnicity = non-Latino; reference group for race = White; reference group for education = HS diploma/GED; reference group for site = Pittsburgh, PA.

†indicates $p < .10$. *indicates $p < .05$. **indicates $p < .01$.

**Table 16. Results for Aim 6b; Predicting Age 3 Child Externalizing Behavior (N = 233)**

| Variable | *B* | 95% CI |
|---|---|---|
| (Intercept) | 32.98** | 23.03, 42.94 |
| Family Goal Category: Externalizing + Non-PBS Parenting | -4.24 | -9.58, 1.10 |
| Family Goal Category: Externalizing with No Parenting | -4.80† | -9.71, 0.11 |
| Family Goal Category: None of the Above | -4.17† | -8.75, 0.40 |
| Ext (Age 2) | 0.54** | 0.41, 0.67 |
| Ethnicity = Latino | -4.86* | -8.62, -1.10 |
| Race = Black | -0.95 | -3.61, 1.72 |
| Race = Biracial | 1.89 | -1.30, 5.08 |
| Race = Another Race | 2.16 | -2.53, 6.84 |
| PC Education = Less than HS | 0.93 | -1.80, 3.66 |
| PC Education = More than HS | 0.01 | -2.34, 2.36 |
| Annual Family Income | -0.11* | -0.22, -0.01 |
| Site = OR | -3.55** | -6.12, -0.99 |
| Site = VA | -3.38* | -6.06, -0.70 |

*Note*. Family Goal Category: Externalizing + Non-PBS Parenting means Family set ≥ 1 Child Externalizing Behavior goal AND zero Parenting – PBS goals AND (≥ 1 Parenting – Discipline goal OR ≥ 1 Parenting – Other goal). Family Goal Category: Externalizing with No Parenting Goals means family set ≥ 1 Child Externalizing Behavior goal *AND* zero Parenting goals. Family Goal Category: None of the Above means set zero Child Externalizing Behavior goals *AND* zero Parenting goals. Reference group for family goal categories = Externalizing + PBS. See Table 6.

CI = confidence interval; Ext = Child Externalizing Behavior; PC Ed = primary caregiver education; HS = high school; VA = Charlottesville, Virginia; OR = Eugene, Oregon; reference group for ethnicity = non-Latino; reference group for race = White; reference group for education = HS diploma/GED; reference group for site = Pittsburgh, PA.

†indicates $p < .10$. *indicates $p < .05$. **indicates $p < .01$.

# Appendix C Family Check-Up Goals Codebook

## Appendix C.1 Introduction

Holtforth & Grawe (2002) outline seven criteria for a good taxonomy of psychotherapy treatment goals:

1. Precision: categories are exact and clearly defined.
2. Exclusivity: categories do not overlap.
3. Exhaustivity: categories are sufficient to describe the material fully. Residual categories are used sparingly.
4. Empirical foundation: material used to construct the taxonomy is taken from actual treatment.
5. Ease of application: categories are easily understandable for patients, therapists, and researchers. Labels are formulated in everyday language. Taxonomy categorizes treatment goals at multiple levels of abstraction.
6. Reliability: independent raters agree on the categorization of the same treatment goals.
7. Validity: category membership of treatment goals stands in meaningful relationship to other clinically relevant measures and allows for clinically relevant predictions to be made

The purpose of the present study is not to develop a taxonomy of treatment goals for the Family Check-Up, but rather to examine goal themes expressed by parents. These goal themes will then be used to predict change (or lack thereof) in parenting behavior. As such, the following categories are not intended to be exhaustive (criterion 3). They do, however, have an empirical foundation (criterion 5) – categories were developed by a team of clinicians and one graduate student after reading and coding actual Family Check-Up goals (i.e., an inductive approach, see Ambühl & Strauss, 1999; Bihlar & Carlsson, 2000), rather than imposing categories based on theory. Furthermore, detailed descriptions and prototypical examples are provided below to facilitate precision, exclusivity, ease of application, and reliability (criteria 1, 2, 4, 6). The clinical validity

of these categories (criterion 7) is unknown; examining the relationship between goal categories and clinically relevant outcomes is one aim of the present research.

## Appendix C.2 Coding Guidelines

- A team of three undergraduates will be trained in coding scheme by team leader (Sonia Rowley, B.A.).
- Each goal must be assigned a goal category and, if applicable, a subcategory.
    - Parenting goals must be assigned a subcategory.
    - Child goals must be assigned a subcategory. Child behavior goals will further be assigned a tag indicating whether they pertain to externalizing behavior. Child development goals will further be assigned a tag indicating developmental domain for future exploratory research.
    - Parent Wellbeing, Family Self-Sufficiency, Family Relationships and Other goals are not assigned a subcategory.

Assigning Multiple Categories

In some cases, goals may be assigned more than one category. For a goal to be assigned multiple categories, the goal *must have several distinguishable thematic aspects, or "goal units".* Goals with multiple goal units state more than one discrete intention or desired future state. **Multiple categories should not be assigned when the coder is unsure how to categorize an ambiguous goal that has only one goal unit.** As long as each category assigned to a goal corresponds to a single goal unit, there is no maximum number of categories that can be assigned to a goal.

Examples of goals with multiple goal units:

- "Increasing time for self. Dad being more responsible for child."
- "Child to have more patience at bedtime and parent to be more consistent with routines."

## Appendix C.3 Overview of Goal Categories

1. Parenting goals
    1.1. Positive behavior support goals
    1.2. Discipline goals
    1.3. Other parenting goals (e.g., dyadic play, co-parenting, parent-child relationship)
2. Child goals
    2.1. Child behavior goals (parent-centered)
        2.1.1. Externalizing
        2.1.2. Other
    2.2. Child behavior goals (child-centered)
        2.2.1. Externalizing
        2.2.2. Other
    2.3. Child development goals (parent- or child-centered)
        2.3.1. Speech/language development
        2.3.2. Reading books or learning alphabet letters
        2.3.3. Finding a preschool, Head Start, or Kindergarten
        2.3.4. Potty training
        2.3.5. Other
3. Parent wellbeing goals
4. Family self-sufficiency goals
5. Family relationship goals
6. Other goals

## Appendix C.4 Goal Category Descriptions

### 1. PARENTING GOALS

#### 1.1 Positive Behavior Support

Key words: encouragement, praise, routine, schedule, proactive parenting

Positive behavior support (PBS) is a collection of parenting practices that promote and reward appropriate child behavior. PBS practices are distinct from discipline in their emphasis on preventing problem behavior rather than responding to problem behavior that has already occurred. PBS has been previously defined as "parents' proactive establishing of activities to encourage positive child behavior, contingent rewarding of positive child behavior, and provision of warmth and sensitivity to children's emotional experience" (Waller et al., 2015). Positive behavior support goals must include at least one factor of this PBS definition – proactive parenting, reward, or sensitivity. All three factors prevent and reduce child problem behavior.

**Proactive parenting** involves planning ahead, creating a consistent schedule, and scaffolding child activities to prevent problem behavior. Scaffolding child activities typically involves communicating with the child in simple, concrete, clear terms, using verbal structuring to make tasks and transitions more manageable, and providing age-appropriate reasons for behavior change. Discrete proactive parenting strategies include predictable routines around bedtime / meals and planned activities for the child while caregiver is occupied. Additional examples of proactive parenting include warning children about transitions (e.g., "Five minutes until clean-up time!"), making specific, developmentally appropriate, positive requests (e.g., "Please put your blocks in the red box" instead of "Clean your room"), and providing children with choices within required behavior change (e.g., "It's time to get dressed. Would you like to

wear your blue shirt or your red shirt?"). Proactive parenting PBS goals must identify one of the above themes and/or strategies. Because this parenting domain is listed on the FCU Feedback Form as "proactive parenting," some families use the phrase verbatim in their FCU goals.

Examples of proactive parenting PBS goals:

- "Learning some positive, proactive parenting strategies."
- "Mom and dad will help make requests and options clear for child."
- "Improve schedule, routines, being home more during the day."
- "Add structure for child when mom is busy."

**Contingent reward of positive child behavior** involves the caregiver noticing positive child behavior and providing reinforcement (e.g., praise). Reward PBS goals must include some form of positive reinforcement. Because this parenting domain is listed on the FCU Feedback Form as "praise and encouragement," some families use these terms verbatim in their FCU goals.

Examples of reward PBS goals:

- "Be consistent about telling child what he is doing well."
- "Give more positive reinforcement for minding."
- "Increasing encouragement."

**Sensitive parenting** involves caregiver attunement and responsiveness to the child's needs, moods, interests, and capabilities. Sensitive parenting PBS goals go beyond spending quality time with the child or improving the parent-child relationship. These goals must specifically mention wanting to be more in sync with the child or sensitively responding to child emotion, honoring child interests, and/or dyadic engagement in child-led play. Because sensitivity is not included on the FCU Feedback Form and may not be explicitly discussed in the Feedback session, there may be a very small number of families who set these goals.

Examples of sensitive parenting PBS goals:

- "Follow child's lead/timing/emotional mood when time allows."

### 1.2 Discipline

Key words: limits, limit setting, discipline

Discipline strategies are parenting practices that respond to child problem behavior. These include setting limits, consistently enforcing rules & expectations, and using consequences (e.g., time out). Because this parenting domain is listed on the FCU Feedback form as "limit setting," some families use this term verbatim in their FCU goals.

Examples of Discipline goals:

- "Improve consistency and discipline."
- "Limit setting on tantrum behavior."
- "Limit setting during 'busy times.'"
- "Mom will follow through with her rules."

### 1.3 Other Parenting Skills

Any parenting goal that does not focus on positive behavior support or discipline strategies will be coded *Other Parenting Skills*. "Other" parenting goals tend to be broad aspirations the parent has or caregiver strategies for fostering healthy child development, spending time with the child, or improving/maintaining the parent-child relationship. Goals regarding the definition/division of co-parent responsibilities, seeking parent support groups, and improving parenting confidence will also be included in this category.

Examples of Other Parenting Skills goals:

- "Spend more 1:1 time with Crystal."
- "Improving relationship with children."
- "Learn new play skills to help child learn about his world and improve his language."
- "More parenting skills."
- "Go to parenting classes."
- "Mom will be less reactive to child emotions."
- "Parents will parent successfully together."
- "Improve parents' communication and cooperation with each other."
- "Teach child her numbers and letters."

- "Find ways of channeling his energy"
- "Improve parents' ability to be consistent"
    - Note that, for this goal, the "consistency" could be referring to positive behavior support, discipline, both, or neither. Because there is no way of knowing, code as Other Parenting.

## 2. CHILD GOALS

### 2.1 Child Behavior (Parent-Centered)

Child behavior goals pertain to reduction in problem behavior or increase in positive or prosocial behavior. Problem behavior includes the following externalizing behaviors: oppositional behavior, noncompliance, aggression, and tantrums. Problem behavior includes the following internalizing behaviors: separation anxiety or excessive fear. Positive and prosocial behaviors can be conceptualized as *positive opposites* of the aforementioned problem behaviors, such as following directions, accepting limits, handling transitions, and sharing/cooperating with siblings and peers.

It may be challenging to differentiate between *child behavior* and *child development* goals, especially when child behavior goals are stated in terms of increasing positive or prosocial behavior. In these instances, consider whether the opposite of the behavior in question would be considered externalizing or internalizing "problem behavior" (oppositionality, noncompliance, aggression, tantrums, separation anxiety, or excessive fear). If so, the goal is a child behavior goal. If not, the goal is most likely a child development goal.

**Parent-centered** child behavior goals identify the caregiver as an agent of change. Put another way, the goal's primary action is a caregiver action, such as *helping* the child (e.g., "Help child be less aggressive") or *learning* strategies for managing child frustration (e.g., "Learn ways to respond if child uses bad words.") Goals to seek family therapy to address child problem

behavior also fall in this category, as these goals reveal an understanding that family systems – including caregivers – impact child behavior.

It may also be challenging to distinguish parent-centered child behavior goals and between parenting—PBS or parenting—discipline goals. These two categories overlap conceptually. Parent-centered child behavior goals inherently identify the *parent as a mechanism of change* in child behavior. Parenting goals identify *specific parenting behaviors* to employ in order to promote positive behavior (PBS) or respond to problem behavior (discipline).

To receive a parent-centered child behavior code, the behavior specified in the goal is a *child* behavior. For instance, "develop strategies for dealing with defiance and aggression in child" is a parent-centered child behavior code because it focuses on specific child behaviors – aggression and defiance. While it identifies parenting strategies as a mechanism of change, it does not specify which strategies the parent will use (e.g., creating predictable routines, setting limits). Goals that specify parenting behaviors or strategies that the parent intends to employ to increase positive behavior or reduce problem behavior (e.g., creating predictable routines, setting limits) must be assigned a parenting—PBS or parenting—discipline code.

In uncommon instances, there may be goals that identify *both* a child behavior to improve *and* specific parenting strategies that the parent intends to employ to address child behavior. An example is, "Develop strategies for improving child's behavior, including praise and clear rules." These goals should be assigned both codes.

Examples of Parent-Centered Child Behavior goals:

- "Work with child to improve her temper."
- "Help child improve her coping skills."
- "To manage child's tantrums more effectively."
- "Learn how to better manage child's stubbornness and aggression (want her to stop hitting me)."

### 2.1.1 Externalizing.

Child behavior goals pertaining to externalizing behavior will be further labeled "externalizing." Externalizing behaviors have been defined in the literature as those "marked by defiance, impulsivity, disruptiveness, aggression, antisocial features, and overactivity" (Hinshaw, 1992). Additionally, in the present sample, externalizing behaviors are sometimes referred to as "temper tantrums," "frustration," "disobedience," and "stubbornness." To receive this code, goals must specifically pertain to reducing an externalizing behavior (e.g., reducing disobedience) or increasing the very clear opposite of an externalizing behavior (e.g., increasing obedience). *Whining* and *crying* are not always considered externalizing behaviors – consider the context in which these terms are used. Goals that provide no context for *whining* or *crying* (e.g., "reduce whining", "reduce crying") are <u>not</u> considered sufficiently specific to receive an "externalizing" code. Goals in which the whining and crying are clear expressions of defiance, impulsivity, disruptiveness, or tantrums may be coded as "externalizing" (e.g., "Decrease TC's crying and screaming. For instance, have him listen and know how to wait.") *Following directions* and *accepting limits* are considered sufficiently clear opposites of externalizing behaviors. Goals about *sharing* and getting along with peers/siblings are NOT a clear enough opposite of externalizing behavior and should be coded as Child Behavior – Other.

### 2.1.2 Other.

All child behavior goals that do not meet the above criteria for externalizing behavior will be labeled "other." Goals about *sharing* and getting along with peers/siblings are not sufficiently clear to qualify as opposites of externalizing behavior. Accordingly, they should be coded as Child Behavior – Other.

### 2.2 Child Behavior (Child-Centered)

Child behavior goals pertain to reduction in problem behavior or increase in positive or prosocial behavior. Problem behavior includes the following externalizing behaviors: oppositional behavior, noncompliance, aggression, and tantrums. Problem behavior includes the following internalizing behaviors: separation anxiety or excessive fear. Positive and prosocial behaviors can be conceptualized as *positive opposites* of the aforementioned problem behaviors, such as following directions, handling transitions, and sharing/cooperating with siblings and peers.

It may be challenging to differentiate between *child behavior* and *child development* goals, especially when child behavior goals are stated in terms of increasing a positive or prosocial behavior. In these instances, consider whether the opposite of the behavior in question would be considered externalizing or internalizing "problem behavior" (oppositionality, aggression, tantrums, separation anxiety, other fears). If so, the goal is a child behavior goal. If not, the goal is most likely a child development goal.

As an example, consider the goal "TC will pick up toys." This identifies a positive behavior that the parents hope will increase. Identifying the opposite of this behavior requires some inference, but very likely involves a *refusal* to pick up toys (i.e., noncompliance). Hence this goal would be categorized as child behavior.

**Child-centered** behavior goals identify a desired change in child behavior without identifying the caregiver as an agent of change. To distinguish between parent-centered and child-centered goals, keep the following in mind. First, goals worded in a way that states the passive wish of the caregiver, e.g., "Caregiver *would like* [alternatively, *wants*] child behavior to improve" should be coded as child-centered, because the caregiver is not explicitly making the connection between their own parenting behavior and their child's behavior. Second**,** child behavior goals

with ambiguous wording regarding the agent of change should be categorized as *child-centered*. Examples of child-centered child behavior goals where the role of the parent is ambiguous include "calm son down," "focus on compliance," and "improve child behavior."

Examples of Child-Centered Behavior Goals:

- "Child will follow directions without resistance."
- "Child will use a calm voice to call for mom in the mornings."
- "Have child respond to one verbal command."
- "Decrease child's crying and screaming. For instance, have him listen and know how to wait."
- "TC will be able to entertain himself and not be clingy with mom."

**2.2.1 Externalizing**.
See section 2.1.1

**2.2.2 Other.**
See section 2.1.2.

### 2.3 Child Development

Child development goals pertain to developmental milestones, academic school readiness (i.e., child's readiness to attend preschool or Kindergarten), and other child behaviors beyond the scope of self-regulation. Child development goals may be parent-centered (e.g., "Teach child her numbers and letters") or child-centered (e.g., "Improve child's speech/language"). Included in this category are goals pertaining to speech/language development, sleep, potty training, activities to promote school readiness (e.g., learning letters/numbers, reading books), and developmental delay. Goals to seek services supporting healthy child development – such as language assessments, early intervention programs (e.g., Birth to Three), special needs advocacy, and preschool – are also included in this category.

Examples of Child Development goals:

- "Potty training"
- "Child will sleep in his own bed throughout the night"

- “Language development”
- “Improve child’s speech/language”
- “Getting language assessment or oral motor evaluation”
- “Explore preschools in the family neighborhood”
- “Assistance with getting child services for special needs”

**3. PARENT WELLBEING GOALS**

Parent wellbeing goals involve specific behaviors or general aspirations to improve caregiver physical, emotional, relational, or spiritual health. Included in this category are goals to seek individual counseling or medical care for the caregiver, improve depression/anxiety (or other mental health) symptoms, lose weight, exercise, engage in hobbies, improve social support or otherwise invest in relationships with adult friends, family, romantic partner, religious community (e.g., church), or a higher power. Goals for romantic relationships in this category do not specifically address co-parenting but instead address more general indicators of relationship quality with their romantic partner, such as spending quality time together, resolving conflicts, and communicating clearly. Goals surrounding marriage also belong in this category.

Examples of Parent Wellbeing goals:

- "Mom would like more personal time.”
- “Dealing with the blues.”
- “Coping with emotions as a parent.”
- “Mom will participate in individual therapy.”

**4. FAMILY SELF-SUFFICIENCY GOALS**

Family self-sufficiency goals are a blend of goals that address parents’ desire to improve socioeconomic indicators of family functioning. This category includes goals regarding employment, finances, moving to a new neighborhood or apartment, or completion/ continuation of parent education.

Examples of Family Self-Sufficiency goals:

- “Improve our financial situation with the bills.”
- “Mom will complete GED.”
- “Getting into CNA school.”
- “Buying a house.”
- “Mom get a job.”

**5. FAMILY RELATIONSHIP GOALS**

Family relationship goals pertain to improving overall family emotional climate, spending more time as a whole family, or planning whole family activities. Goals that specifically address the parent-child relationship or the caregivers’ relationship with one another *do not* belong in this category. Goals to seek family therapy fall under this category if they do not specify that the therapy is designated to address child problem behavior.

Examples of Family Relationship goals:

- “Spend more time as a family”
- “Increase a sense of security in the family”
- “Plan family activities”
- “Family counseling”

**6. OTHER GOALS**

*Other* is a residual category of goals that do not meet criteria for Parenting, Child, Parent Wellbeing, Family Self-Sufficiency, or Family Relationship categories. This category will include goals regarding the target child’s sibling, the parenting behavior or wellbeing of an alternate caregiver (often the father), and changes in family structure, among others. Goals to seek childcare also fall in this category. This category will also include goals that are too vague to meet criteria for any of the other categories (e.g., “Bedtime”).

Examples of Other goals:

- "Mom would like father to let child be more independent”

- “Help older sister be successful in school”
- “Teach kids how to be involved with baby”
- “Help child adjust to new family situation (parents separated)”

## Appendix D Parent Consultant Log

*Note.* Items related to the Everyday Parenting Curriculum are highlighted.

**Contact was:**

- Successful (complete entire form)
- Unsuccessful
    - Called – no answer
    - Called – phone disconnected
    - Called – left message
    - Received phone message
    - Appointment – no show
    - Client cancelled appointment
    - Visited but nobody home
    - Other (specify) _____

**Purpose**

- Get to Know You (GTKY)
- Treatment Visit
- Referral
- Feedback Session
- Parent Group
- Get Information
- Other (specify) _____

**Method of Contact**

1. Phone
2. In-person
3. Email
4. Letter/card

**Participants, not including yourself (mark all that apply)**

- Mother
- Father or Alternate Caregiver
- Target child
- Target child's siblings
- Teacher
- Early Steps (ES) Staff
- Non-ES Babysitter
- Community partner
- Parent's partner
- Friend

- Other (specify) _____

**Time**

1. 0-10 min
2. 11-20 min
3. 21-30 min
4. 31-40 min
5. 41-50 min
6. 51-60 min
7. 1-2 hours
8. 2-3 hours
9. More than 3 hours

**Place**

1. Home
2. School
3. Community Organization
4. Onsite/Clinic
5. Park
6. Restaurant
7. Other (specify) _____

**What Happened:**

- Scheduled visit (specify) _____
- Requested further home visits
- Left written info
- Completed purpose of contact
- Showed video (specify) _____
- Referred to community resource (specify) _____
- Other (specify) _____

**Parent-defined child issue(s) that was focus of session (mark all that apply)**

- Approaching strangers/risky behavior
- Biting, hitting, fighting
- Creating positive routines
- Disciplining toddler
- Feeding/weaning
- Non-compliance (following directions)
- General development
- Managing toddler emotions
- Positive communication
- Sibling rivalry
- Tantrums
- Toilet training
- Whining

- Other (specify) _____
- N/A

**Parent-identified need that was focus of session (mark all that apply)**

- Advocate for self
- Child-proofing
- Co-parenting
- Dealing with energetic child
- Dealing with multiple births
- Dealing with unsolicited advice (e.g., grandparents)
- Emergency training/CPR
- Family goals
- Finding a preschool
- Handling changes in the household
- Help with applications, community referrals
- Improving parent/child relationship, enjoying child
- Self-care, health
- Transportation needs
- Other (specify) _____
- N/A

**Underlying problem from perspective of parent consultant (mark all that apply)**

- Limit setting
- Relationship building
- Monitoring/safety
- Compliance
- Co-parenting
- Coercive patterns
- Proactive/anticipatory
- Communication
- Incentives/positive reinforcement
- Other (specify) _____
- N/A

**Comments**

_____

_____

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