Received: 22 November 2022 | Revised: 22 November 2023 | Accepted: 26 November 2023

DOI: 10.1111/famp.12962

FAMILY PROCESS

ORIGINAL ARTICLE

Different perceptual worlds: Parent and youth perspectives on parenting outcome trajectories from a Latino family-based program

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Funding information
National Cancer Institute, Grant/Award Number: 1U54CA153603-01

Abstract

Discrepancies between parent and youth perceptions of their relationship are a common aspect of generational acculturation gaps influencing immigrant families. Programs designed to strengthen parenting practices among immigrant Latino families commonly address immigration stresses, including differences between parent and youth perceptions, but little is known about discrepancies in their appraisals of program effects on parenting behavior. A randomized trial was conducted examining effects on parent behavior of a program for immigrant families with youth aged 10–14, developed through community-based participatory research principles. Families (346 parents and youth) were recruited by organizations serving Latino families in a Midwestern metropolitan area and randomly assigned to the eight-session psychoeducation and skill-building program or a waitlist control. Parents and youth completed self-report measures at pre-intervention, post-intervention (4 months), and a 6-month follow-up regarding parents' expression of acceptance, efforts to solicit information about the child's experiences, and consistency of discipline, key foci of the program. Based on social cognition theory, the study focused on possible differences in parents' and youths' perceptions of change in parenting behavior. Parents in the treatment group reported pre-post improved acceptance, consistent discipline, and solicitation, whereas youth reported improvement only in parental solicitation,

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a pattern maintained at follow-up. In the control group, the only change was youth-reported reduction in parental acceptance. Parents' perceptions of improvement are encouraging, but overall lack of improvements from the youth perspective poses a potential problem for impact on parent–child relations. Interventions may need to target both parent and youth cognitions about behavior changes directly.

KEYWORDS

community-based participatory research, Latino immigrant families, parent–child perceptual discrepancies, parenting intervention

Increased diversity in the United States has been fueled by immigration, transforming communities in positive ways, as immigrants commonly enhance the workforce at all occupational levels; make contributions to the performing arts, sciences, high-tech industries, and academia; revitalize cities that had lost population; and foster economic growth as consumers (Foner, 2022; Hirschman, 2013; National Academies of Sciences, Engineering, and Medicine, 2015). Many immigrant families demonstrate resilience as they cope with acculturation stressors regarding language, values, and traditions, as well as barriers to employment (Doty, 2019).[1] At the same time, immigrant parents face challenges raising children within unfamiliar cultural contexts, often with limited access to supportive community services (Gonzales et al., 2006; Parra Cardona et al., 2009). As immigrant youth navigate cultural differences between their country of origin and new home, they often are motivated to fit in with the culture of their peers. Generational differences that develop are an example of what Stattin et al. (2021) describe as youth and their parents living in "different perceptual worlds."

Discrepancies in values, interests, and language between parents and youth may produce conflict, youth perceptions that parents' guidance is irrelevant to their experiences, and parents' negative beliefs that their children are abandoning traditional culture and family relations (Deater-Deckard, 2004; Kiang et al., 2017). Studies with Latino samples have indicated that parent–adolescent conflict is associated concurrently and longitudinally with adolescent mental health problems (Delgado et al., 2019; Huq et al., 2016; Kuhlberg et al., 2010; Li & Warner, 2015). In contrast, positive parent–adolescent relationships (e.g., warmth, acceptance, positive discipline, positive communication) have been found across cultures to protect children against negative psychological and behavioral outcomes (e.g., Hill et al., 2005; Watkins et al., 2006).

Immigrant parents commonly have cultural values that influence the quality of their parenting. Across Latino cultures, parents are motivated to teach their children values of *familismo* (strong bonds and caretaking with significant others, rather than independence), *respeto* (respect toward elders, decorum in public), and *educación* (responsibility and high morals; Ayon et al., 2015; Calzada et al., 2010, 2012; Domenech Rodríguez et al., 2006; Halgunseth et al., 2006). Firm parenting with a mixture of authoritative and authoritarian methods (warmth, demandingness, and restricted autonomy) focuses on teaching children to live by those values. Parents' protective emphasis on familism, respeto, and educación commonly instills positive social values, but it also may lead to parent–adolescent conflict. Consequently, programs designed to enhance skills of Latino immigrant parents commonly address cultural influences on parenting, to increase constructive strategies for passing on social values. Increasingly, family

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educators, researchers, and staff at community agencies serving immigrant families have collaborated to develop culturally relevant interventions to improve parent–child relationships and child health outcomes.

Several such programs for Latino parents have been developed, evaluated, and found to be effective. They have tended to use two approaches to program design—taking an evidence-based intervention developed in one culture and adapting it to be relevant in other cultures, or designing a new intervention from the beginning so it is consistent with a target culture's values while incorporating core components of empirically supported programs (Baumann et al., 2015; Parra Cardona et al., 2009). In practice, there is not a clear dichotomy between the two types of programs. First, both commonly use community-based participatory research (CBPR) methods to build in cultural relevance. CBPR engages community stakeholders such as parents and community members as collaborators to ensure that interventions are relevant to the target population (Bernal & Domenech Rodríguez, 2012; Israel, 2006). Interventions are based on characteristics such as language(s) used, cultural beliefs, and content such as raising children in a bicultural context (Baumann et al., 2015). The difference between the types of programs is when the CBPR process occurs. Second, programs designed from their inception to be culturally relevant commonly incorporate generic components of evidence-based parenting programs (e.g., communication skills, building positive bonds with children, consistent discipline; Kaminski et al., 2008).

Examples of evidence-based programs adapted for use with Latino populations are Parent Management Training—Oregon Model (GenerationPMTO; Cai et al., 2022; Parra Cardona et al., 2012; Parra-Cardona et al., 2022; Parra-Cardona et al., 2023), and Parent–Child Interaction Therapy (PCIT; Christian-Brandt & Philpott, 2018; Matos et al., 2006; McCabe & Yeh, 2009; McCabe et al., 2012; Ramos et al., 2018).

An example of a program developed initially from a foundation of cultural sensitivity is Familias Unidas (Estrada et al., 2017; Pantin et al., 2009; Prado & Pantin, 2011), based on a culturally specific model of family relations and adolescent functioning in Hispanic populations (Coatsworth et al., 2002). The Bridges/Puentes program that includes interventions for improving parenting skills, adolescent coping skills, and family strengths (Gonzales et al., 2012, 2018) also was developed through community partnerships. As described below, the intervention evaluated in the present research, Padres Informados Jóvenes Preparados (Padres), also was developed from its inception through CBPR, using extensive input from local stakeholders (e.g., Latino immigrant parents, staff of community agencies serving immigrant families) while maintaining fidelity to empirically supported programs.

Parent–youth discrepancies in perceptions of intervention on parenting behavior

A key issue in studies on family interventions involves selection of appropriate outcome measures, including the members whose perspectives are obtained. Based on prior research demonstrating discrepancies between parent and child perceptions of parent–child interactions, and principles from social cognition and social interaction learning theoretical frameworks, the present study examined effects of the Padres intervention on particular types of parenting behavior, reported by a parent and by their child, compared to a waitlist control condition, to determine whether the program produced gains in the quality of parenting, from the perspectives of the parents *and* children. Such differences between ways that parents and their children experience the parenting process can have negative consequences if left unaddressed.

Within social cognition theory, when an individual develops a global positive or negative concept or schema about another person based on their past interactions, the individual's preconceived concepts lead them to notice aspects of the other's behavior that are consistent with the existing belief selectively (Fiske & Taylor, 2017). Clinicians also have

identified a process labeled "sentiment override" in which one's pre-existing global positive or negative cognition and associated emotion regarding another person override the quality of the person's current actions in determining one's appraisal of those actions (Hawkins et al., 2002; Weiss, 1980).

Research has demonstrated discrepancies between parents' and adolescents' perceptions of parents' behavior toward the children (e.g., Van Heel et al., 2019). Within social cognition theory, these discrepancies are not surprising because children's perceptions of parents are based on the parents' overt actions, whereas the parent's self-perception is based on *internal experiences* (e.g., awareness that they feel committed to engaging constructively with their child) as well as their external behavior. Parents also may give themselves more credit than their children do for good intentions and effort. Even if a child notices effort from a parent who participated in a parenting program, it may take time for the child to trust that the improved parent behavior is real and stable. Thus, investigations of parenting programs should assess changes in parenting from both the parent *and* child perspectives.

Parent–child differences in perceptions of family interaction pose challenges for therapeutic and skill-building interventions that target distressed relationships and are designed to induce positive changes in individuals, with the hope that other members will notice and be favorably impressed with them. When applied to interventions designed to improve parenting behavior, social cognition theory suggests that parents' positive changes may not be perceived or considered valid by children who had a preconceived view of the parent. It is incumbent on researchers to avoid relying on a single source of data to evaluate treatment effects, because any source can be subject to error, such as a self-enhancing bias when individuals rate their own performance (Krueger, 1998). Discrepancies in family members' perceptions of an individual's actions also can have interpersonal consequences. For example, Janssen et al. (2021) found that adolescents and parents perceived daily levels of parental warmth and criticism differently, and the discrepancies in their perceptions were associated with levels of the adolescents' daily positive and negative emotions.

Parenting programs such as those we cited and the program used in the present research commonly involve child and adolescent family members to some extent (e.g., to learn skills for resisting substance use, learn positive communication skills), because they have a major focus on improving the functioning of youth who have exhibited or are at risk for problems such as psychological distress and conduct disorders. The focus on improving parenting skills as a proximal goal is based on an assumption that this will improve the parent–child relationship, which in turn will improve child functioning. Our study was designed to expand on the tendency in prior studies to assess improvements in parenting behavior predominantly as perceived by the parents. In some cases, both parent and adolescent reports of parenting behavior were collected; for example, the Familias Unidas program collected ratings from the two family members pre- and post-intervention and combined the two reports into a composite index (Pantin et al., 2003), rather than comparing possible differences. Lee et al. (2019) noted that few studies of parenting programs have examined differences in parent and child perceptions of parenting, so their study of Familias Unidas computed an index of discrepancy between parent and youth ratings on a measure of positive parenting and tracked the level of discrepancy from baseline through 30 months post-baseline. When parents rated their behavior more positively than their children did before treatment, the program reduced discrepant parent–youth perceptions, mostly due to adolescents increasing their positive ratings, and this reduction in discrepant perceptions was in turn associated with reduced adolescent substance use. Thus, the impact of a parenting program on how children perceive their parents' behavior is very important. One cannot assume that interventions that lead parents to feel more competent about their parenting behavior will have positive effects on their children. Thus, in order to more fully assess achievement of the proximal goal of improving parenting behavior, it seems important to collect data on children's perceptions as well.

Furthermore, there may be a lag between the time when parents begin to see changes in their interactions with their children and the time when the changes become apparent to the children. In addition, parents may incorporate some aspects of programs (e.g., the importance of expressing interest in your child's life) more readily than others (e.g., consistent discipline). Therefore, it is important that researchers assess parent and child perceptions of changes in parenting longitudinally and include components of parenting that may change at different rates. This will help identify stability of improvement, as well as improvements that take a while to occur. Based on prior evidence that positive parent–child communication such as soliciting information about the child's daily life, acceptance of the child, and consistent discipline is associated with positive adolescent psychological adjustment (Fernandez et al., 2020; Hill et al., 2003, 2005; Prado & Pantin, 2011; Watkins et al., 2006), we selected measures of those three parenting dimensions as outcomes to monitor in the present study. The primary objective of the present study was to compare parent and youth perspectives on changes in particular forms of parenting behavior longitudinally, associated with program participation.

The Padres Informados Jóvenes Preparados program

This study used data previously collected from a clinical trial of the Padres Informados Jóvenes Preparados (Padres) parenting program that was developed for initial implementation in the local community through CBPR approaches (Allen, Garcia-Huidobro, et al., 2012; Allen, Linnan, & Emmons, 2012). A core planning group included local university researchers and educators who provide community-based education, parent educators, and representatives from Latino-serving agencies (mental health and medical providers, social workers, health educators). The planning group consulted with representatives of national established empirically supported programs serving Latino families and decided to develop the Padres program in order to maximize buy-in by local stakeholders and links to local resources that could ensure sustainability beyond initial clinical trials (including ease of implementing it in the collaborating community agencies). Collaboration with community stakeholders also involved a Parent Advisory Board of 13 Latino parents, who identified cultural values that informed their parenting practices. The community agencies that collaborated in the development and implementation of the Padres program have continued to provide the program for local families, supported by local funding sources.

Also following principles of CBPR, the study team shared findings of the clinical trial through four community dissemination events, one with leaders and staff of collaborating community organizations and three with former research participants, all well attended. The presentations included an overview of the program, key program outcomes for families, and a discussion of program sustainability procedures within the community. Findings from a preliminary feasibility study also were shared in the professional literature (Allen et al., 2013).

It also was considered essential to establish fidelity of the program to standard components of empirically supported parenting programs, while maximizing its relevance for the culture and life experiences of the local Latino immigrant population. Therefore, the curriculum emphasized core components of family skills training programs (Kumpfer et al., 2006) delivered to parents—education (e.g., regarding child and adolescent development) and training in parenting skills (e.g., communication, problem-solving). Consistent with other programs such as GenerationPMTO, the developers adhered to social interaction learning theory, in which the context of parenting (e.g., immigrant parents' exposure to discrimination) influences the quality of parenting behavior, which in turn influences the well-being of their children (Domenech Rodríguez et al., 2011).

The program's goals were (a) strengthening Latino immigrant parents' knowledge and skills regarding child development, challenges of adolescence, and special challenges facing

immigrant youth and parents who were navigating different cultural worlds; (b) enhancing parents' attunement with adolescents' experiences, attunement and acceptance of their children; (c) improving parent–adolescent communication and constructive parental monitoring and discipline methods; and (d) improving adolescents' own skills for avoiding substance abuse (e.g., ability to resist peer pressure, self-regulation) in an at-risk population.

A balance between cultural relevance and fidelity to empirically supported parenting program components was achieved in a number of ways. The Parent Advisory Board identified cultural values influencing their parenting practices. Extensive input regarding Latino immigrant families' life experiences was sought from mental health and medical providers, social workers, and health educators from local agencies. Steps taken to make the program culturally sensitive included delivery in Spanish by individuals with extensive experience working with Latino families, use of Spanish language outcome measures previously used with Latino populations, and a pilot study that assessed its feasibility.

Two years were spent developing the intervention curriculum by integrating parent and community goals with standard family skills training components and methods from empirically supported programs (e.g., PMTO). Fidelity of the curriculum was based on the knowledge base regarding the characteristics of constructive parent–adolescent relations, adolescent development, and common components of the existing evidence-based parenting programs. Intervention implementation fidelity for Padres focused on adherence to core components of those evidence-based programs—the necessary/active elements expected to produce the desired outcomes (Allen, Garcia-Huidobro, et al., 2012; Allen, Linnan, & Emmons, 2012; August et al., 2010). Throughout the development process, input regarding feasibility and cultural relevance was obtained from the community collaborators, including the Parent Advisory Board. Decisions regarding family recruitment, assessment methods, and training of individuals to deliver the intervention also were made collaboratively, with an emphasis on integrating cultural sensitivity and standard practice. The involvement of community members has extended through their inclusion as authors on publications regarding the program.

The Padres program included eight group sessions for parents (2.5 h each) and four group sessions for the adolescents. The topics of the eight sessions for parents are: (1) constructive parenting styles; (2) parents and children living in a multicultural world, in which positive effects of the strong Latino family orientation must be balanced with helping one's children navigate a bicultural world; (3) normal adolescent development and the need to adapt parenting strategies for developmental stages; (4) learning and practicing parent–adolescent communication that combines respect for authority and parental emotional support for children; (5) learning effective, consistent discipline methods; (6) normal conflict in parent–adolescent relationships, collaborative problem-solving and conflict resolution skills, and emotion regulation strategies; (7) monitoring adolescent behavior through solicitation of information regarding the adolescent's activities, thoughts and feelings; and (8) the importance of fostering a positive parent–child connection, and strategies for building a strong relationship with one's children. Sessions 1, 2, 3, and 5 are for parents only, whereas for sessions 4, 6, and 8, the adolescents attend their own group meetings on parallel topics to those covered with their parents (parent–adolescent communication, conflict resolution, and connection), and at the end of those sessions parents and adolescents meet jointly to practice the skills. For session 7, adolescents attend an independent group meeting focused on their life dreams and goals, and strategies to avoid risky behavior that could interfere with achieving them. More details regarding session contents are provided by Allen, Garcia-Huidobro, et al. (2012), Allen, Linnan, and Emmons (2012).

The feasibility study of Padres conducted by Allen et al. (2013) with no control group assessed participant retention, participant ratings of program appropriateness (e.g., relevance, comfort level), quality of group session interactions, and several parenting behavior outcomes. Results indicated high retention, very positive program evaluations, and significant pre-post

improvements on the parenting measures. Based on those encouraging findings, the developers of the program conducted a more extensive controlled clinical trial comparing the program to a wait-list control (Allen, Garcia-Huidobro, et al., 2012; Allen, Linnan, & Emmons, 2012). The present study uses data from that larger trial, focused on effects of the intervention on parenting behavior, to examine parent and adolescent perceptions of effects the intervention had on particular parenting behaviors.

Furthermore, Latino families traditionally have had different gender roles for females (marianismo) and males (machismo), emphasizing greater involvement with family rather than independence for females, and some research has found differences in parenting behavior toward daughters and sons (e.g., Bulcroft et al., 1996). However, overall, the literature does not indicate significant parenting differences for Latino daughters and sons, and there has been a trend toward more egalitarian gender roles in families (Chang & Liou, 2009). Thus, based on the possibility of child gender effects in parenting, we tested a research question of whether the present program had different effects on parenting of daughters and sons, who were represented virtually equally in our sample.

A challenge arose during preparation for implementing the Padres program RCT. The RCT emerged from a longstanding University–Community partnership among the PIs, program staff, and community collaborators, but an issue initially developed between the researchers and community partners regarding random assignment of families to the intervention or the delayed treatment control group, based on concerns of community partners that assignment to immediate treatment was random rather than based on assessment of each family's needs. The process used to reconcile this issue emphasized shared power and decision-making through consensus between researchers and community stakeholders. A randomized wait-list control group design was adopted, in which 6 months was the longest acceptable time for families in the control condition to wait for the intervention.

METHOD

Procedure

Data used in this study were collected previously for a CBPR family intervention study conducted in a Midwestern metropolitan area between 2011 and 2015 (masked for review). The investigators included university faculty members, university Extension educators with expertise in parent education, and members of community organizations that serve Latino immigrant families. The investigators collaborated with community stakeholders, including Latino immigrant parents, in the design and implementation of the parenting program. The research was approved by IRBs at the local university and a medical center.

Selection and training of program facilitators

Individuals who delivered the parenting intervention ("facilitators") were staff members from community organizations that participated in the development of the program. They were required to be bilingual in Spanish and English, and preferably bicultural. They had at least 3 years of experience working with Latino families, preferably facilitating groups.

Two Extension educators, one with background in parent education and the other with expertise in couple and family therapy, conducted the training of the facilitators, with the goal of maximizing implementation fidelity by preparing them to deliver standard parenting components. Three days of group training included a description of CBPR principles, the rationale for the intervention (with emphasis on challenges and needs of Latino immigrant families),

an overview of the intervention, in-depth coverage of contents of each session, and specific practice delivering each session. Training for fidelity purposes used a detailed intervention manual (available from the authors) that each facilitator subsequently used when conducting each session. For each session, the manual included (a) a description of all materials needed (e.g., visual aids, handouts for parents); (b) background information regarding definitions of key terms (e.g., acculturation), empirical evidence for the importance of the session content, and how the topic is relevant for Latino immigrant parents; (c) goals for the session (e.g., for session 2, parental support for their children's navigation of multiple cultures of adolescence, parent–adolescent relationships, and the mainstream culture they experience at school); (d) an outline of time to be spent on session topics; (e) detailed descriptions of what the facilitator is to do in delivering the session content; and (f) key points to summarize for the participants. Fidelity also was monitored by having the Extension educators observe each facilitator conducting sessions 2 and 4 with participants and provide supervisory feedback.

Sample

Recruitment and screening of sample

Participants were recruited via fliers, emails, phone calls, and announcements at local community centers, churches, etc., which described the goals (strengthening parenting skills, the parent–adolescent relationship, and adolescents' ability to avoid substance use) and content of the curriculum (e.g., communication skills, constructive discipline strategies). Inclusion criteria were: (1) the parent was born in a Latin American country, speaks Spanish, and is willing to consent for themself and adolescent child to participate; and (2) the child was between ages 10 and 14, speaks English or Spanish, identifies as being Latino/Latina, and is willing to give assent to participate. Exclusion criteria included mental disorders incompatible with participation and prior participation in a pilot version of the program. Participation incentives were $30 gift cards for parents and $25 gift cards for adolescents for each assessment session. Consent was obtained by bilingual research staff.

Sample characteristics

Initially, 392 parents and 346 youth had been recruited at for the evaluation study. Among the parents, 92 participated with their partner (46 couples). One member from each of those couples was randomly selected to be included in the sample for the present study. Families who provided parental consent for their own and their child's participation, and youth assent, were randomized into intervention (receiving the program immediately) or delayed treatment conditions (receiving the program approximately 6 months after the first group) via a SPSS computer-generated sequence. This resulted in a baseline (T1) sample of $N = 346$ parent–youth dyads (control group $n = 172$ dyads; treatment group $n = 174$ dyads). Table 1 presents the demographic characteristics of the control and treatment groups. The CONSORT flow diagram in Figure 1 depicts the randomization, study process, and attrition in sample size.

Measures

Parents and adolescents in both groups completed assessments at: Baseline (T1), before the intervention, post-test (T2), right after the intervention, approximately 4 months from baseline, and at a follow-up 6 months after the post-test (T3). Parents were instructed to complete forms

TABLE 1 Demographic characteristics of control and treatment groups at baseline (T1).

	Control ($n = 172$)	Intervention ($n = 174$)
Parent gender (%)		
Female	91.3	92.5
Male	8.7	7.5
Youth gender (%)		
Female	52.9	49.4
Male	47.1	50.6
Parent age (SD)	37.9 (5.8)	38.2 (6.5)
Youth age (SD)	12.4 (1.4)	12.3 (1.4)
Parent country of birth (%)		
Mexico	87.8	83.3
Ecuador	5.2	7.5
El Salvador	2.3	1.1
Other	4.7	8.1
Parent highest level of education (%)		
Middle school or lower	32.0	25.3
High school/GED	45.4	52.3
Technical school	11.6	12.6
University	8.7	6.3
Monthly family income (%)		
Less than $1000	32.6	36.2
$1000–$2000	44.8	37.9
$2001–$3000	11.0	12.6
More than $3000	5.0	6.3

regarding their parenting behavior in relation to the child who was participating in the program with them. Adolescents for whom both parents participated were instructed to complete separate forms regarding the behavior of each parent, and we only used data regarding the one parent who had been selected randomly for analyses in this study. Adolescents for whom only one parent participated were told to report about that parent. Thus, our data consisted of perceptions of a parent's behavior from that parent and one adolescent from each family.

The assessments included parallel forms of self-report measures of types of parenting behavior that were available in both Spanish and English, had established reliability and validity, and were appropriate for individuals with limited literacy. Item wording for parents had the format of "I …," and that for adolescents was "My parent ….". Bilingual data collectors conducted group assessments using paper surveys with adults and self-administered iPads with youth. Given conceptual overlap among some of the measures in the larger clinical trial (e.g., separate scales for parent positive attachment and acceptance of the child) that were highly correlated had potential to produce redundant findings, and our goal of tapping different types of parenting behavior that might change at different rates (soliciting information from one's child may be more challenging than conveying acceptance of the child, and both may be easier than developing more consistent discipline), we chose the following three measures for this study. Respondents used a 5-point scale ranging from 1 = almost never or never to 5 = almost always or always to describe how often a parent engaged in each behavior during the past month.

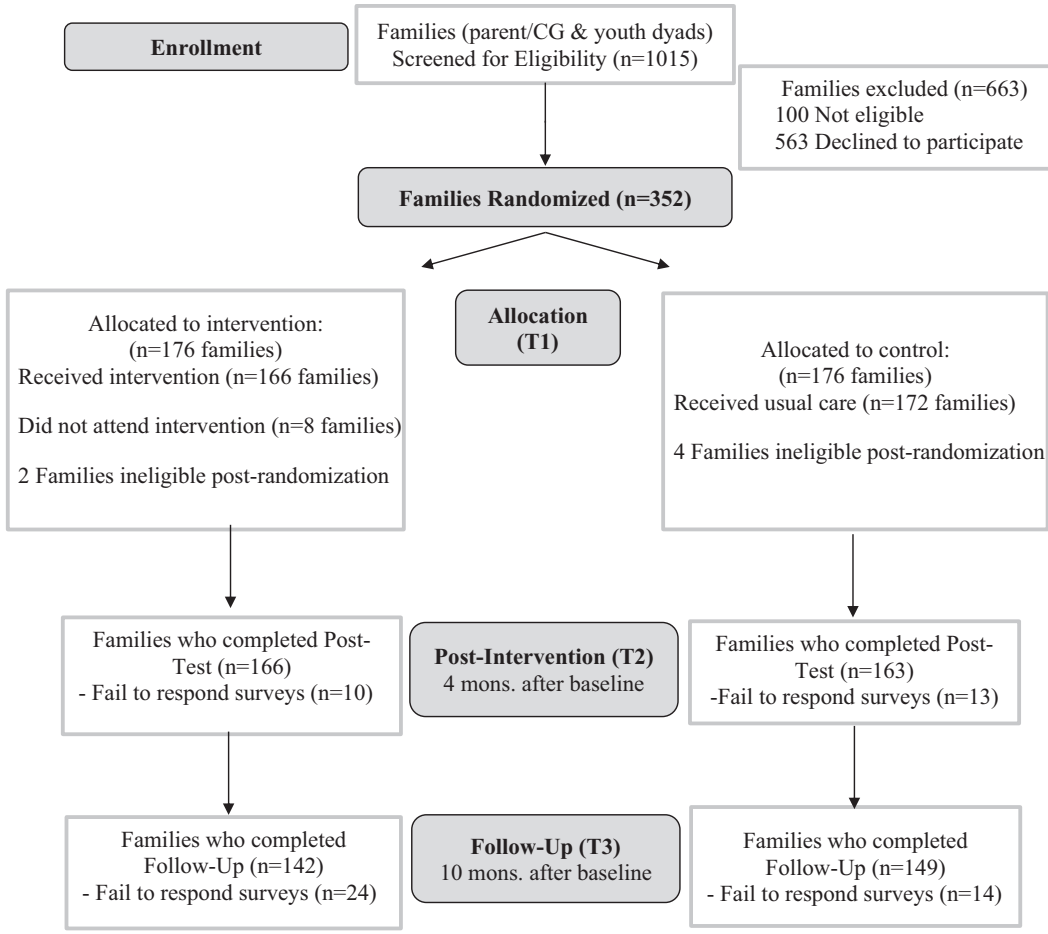

FIGURE 1 Padres Informados, Jovenes Saludables study CONSORT diagram.

Parent–adolescent acceptance

The eight items used to measure parent's acceptance of the adolescent (a positive bond) were derived from the parental acceptance subscale of Schaefer's (1965) Child Report of Parental Behavior Inventory (CRPBI), which has demonstrated good reliability and validity. Knight et al. (1992) found evidence of Hispanic cultural relevance of the items, as well as item equivalence in latent structure analyses across Hispanic and Anglo-American samples of parents. This program adopted Barrera Jr. et al.'s (2002) Spanish translation of the acceptance subscale, and in the present study, it showed good internal consistency at baseline for parents ($\alpha = 0.91$) and adolescents ($\alpha = 0.91$). A sample item is "I spoke with my child in a warm and friendly voice." ["Hablé con mi hijo/a usando una voz cariñosa y amigable."].

Consistent discipline

The eight items used to measure consistent discipline were derived from Schaefer's (1965) inconsistent discipline CRPBI subscale. Knight et al. (1992) also found evidence of Hispanic cultural relevance of those items, as well as item equivalence in latent structure analyses across Hispanic and Anglo-American samples of parents. The items were adapted for use

with culturally diverse parents by White et al. (2009) and used previously with Latino families by researchers such as Gonzales et al. (2012). In the present study, the internal consistency at baseline for parents was $\alpha = 0.90$ and adolescents was $\alpha = 0.89$. A sample item from the parent version is "In the past month, when I made a rule for my child, I made sure it was followed." ["El mes pasado, cuando hice una regla para mi hijo/hija, me aseguré que fuera seguida."].

Solicitation

Stattin and Kerr's (2000) 5-item scale measuring the degree to which parents foster communication by soliciting information from their child regarding their experiences and feelings has been used with Hispanic early adolescents by Fernandez et al. (2020). We omitted the item asking how often parents talk with the child's friends, because it does not assess direct parent–child communication. In the present study, the internal consistency at baseline for the four-item solicitation measure for parents was $\alpha = 0.82$, and for adolescents was $\alpha = 0.84$. A sample item is "How often do you ask your kid about what happened during his/her free time?" ["¿Con cuánta frecuencia usted le pregunta a su hijo/a lo que pasa durante su tiempo libre?"].

Overview of statistical analyses

The analyses were conducted with Mplus (v. 8.3). Maximum likelihood estimation with robust fit statistics and standard errors (MLR) was used to adjust for possible multivariate non-normality in the data. Missing data were accounted for via the full-information (robust) maximum likelihood approach (Enders & Bandalos, 2001) which uses all available data to estimate model parameters. Data-model fit was assessed with three indices: the standardized root mean squared residual (SRMR), root mean squared error of approximation (RMSEA), and comparative fit index (CFI). Commonly accepted model fit values are SRMR ≤ 0.08, RMSEA ≤ 0.06, and CFI ≥ 0.95 (Hu & Bentler, 1999). Analyses were conducted in three phases. First, confirmatory factor analyses (CFAs) were conducted for the three constructs, separately for parents and youth using data at T1. In the second phase, measurement invariance was tested across T1, T2, and T3 for each construct. Measurement invariance testing ensures that comparisons of a construct across time are meaningful (i.e., item factor loadings and intercepts remain the same). Beginning with the second phase, data-model fit was primarily determined by the SRMR and RMSEA indices, because the CFI is deemed inappropriate for models utilizing a mean structure (Preacher, 2019). In the third phase, three unconditional multigroup latent growth models were fitted to investigate the mean trajectory of parental acceptance, consistent discipline, and solicitation. All were fitted as piecewise growth models due to two distinct periods present in the data (i.e., treatment period [T1–T2] and follow-up period [T2–T3]; Duncan & Duncan, 2004). The basic structure of the models is depicted in Figure 2. In each model, the trajectory (slope 1 and slope 2) for parents and adolescents in the treatment group and control group was estimated. To test differences in slopes and intercept between the groups, 95% CIs were constructed using 1000 bootstrap samples (Preacher & Hayes, 2004), and treatment effect sizes (d) were assessed using the method proposed by Feingold (2009), which can be interpreted similarly as Cohen's d (i.e., small effect size [$d = 0.2$], medium [$d = 0.5$], and large [$d = 0.8$]; Cohen, 1988).

Additionally, a conditional latent growth model was fitted to explore whether youth gender would explain individual parental variation in trajectories of change in parenting behavior (slopes). It was chosen as a covariate because the literature is inconclusive whether Latino parents raise daughters and sons differently (e.g., Bulcroft et al., 1996; Chang & Liou, 2009).

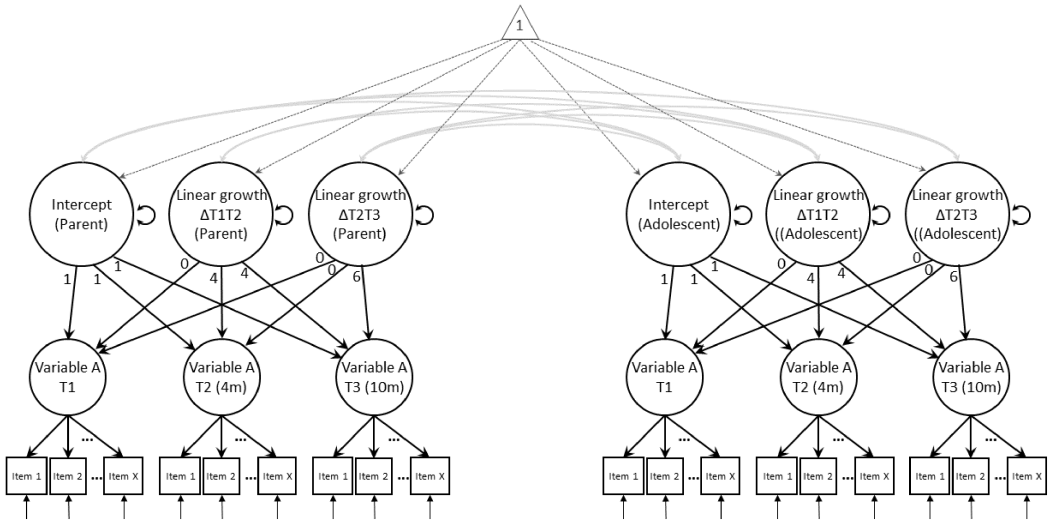

FIGURE 2 Structure of the unconditional latent growth model.

RESULTS

In the first phase, CFA models for parents' reports of acceptance, consistent discipline, and solicitation all showed good data-model fit. All factor loadings were statistically significant, and standardized factor loadings were 0.535 or higher. Models for youth ratings also showed good fit, and all factor loadings were significant with standardized factor loadings 0.610 or higher.

In the second phase, each construct's measurement invariance across T1, T2, and T3 was tested separately for parents in treatment, parents in control, youth in treatment, and youth in control. For all four, all three constructs showed full scalar invariance (i.e., factor loadings and intercepts for each item can be constrained as equal across time) indicating that the construct remained stable. When constraining factor loadings and intercepts of the same items across parent *and* youth, the results varied by construct and group (treatment or control). For parents and youth in the control group, parent–adolescent acceptance showed partial invariance (equality constraints between parent and youth were released in three out of eight items), whereas for those in the treatment group, equality constraints across parent and youth were untenable. In contrast, consistent discipline showed full invariance across parents and youth in both treatment and control. For solicitation, constraints across parents and youth were untenable for both treatment and control. In order to maintain consistency across all three constructs, equality constraints were maintained for parents and youth separately moving to the next phase. These findings are consistent with the social cognition theory assumption that parents and youth think about such constructs differently.

In the third phase, unconditional multigroup latent growth models were fitted for each construct. The model for parent–adolescent acceptance showed good fit (RMSEA = 0.05 [0.04, 0.05], SRMR =0.07, CFI = 0.92). The T1–T2 slope was positive and significantly different from 0 for the parents in the treatment group (indicating improvement; $p < 0.001$). For youth in the control group, the T1–T2 slope was negative (indicating deterioration; $p = 0.04$). All other slopes were not statistically significant (see Table 2). The 95% CI constructed via bootstrap samples showed that the T1–T2 slope for treatment parents was significantly different from the control parents [0.04, 0.11]. The treatment effect size (d) was 0.44. The T1–T2 slope for treatment youth was not significantly different from control youth based on a 95% CI [−0.01, 0.09] but was significant at a 90% CI [0.001, 0.09].

TABLE 2 Latent means from unconditional multigroup growth model for parent–adolescent acceptance.

	Control group			Treatment group		
	Unstd. Est.	**SE**	***p***	**Unstd. Est.**	**SE**	***p***
Parents						
Intercept	4.18	0.05	<0.001	4.10	0.06	<0.001
T1–T2 slope	−0.01	0.01	0.65	0.07	0.01	<0.001
T2–T3 slope	0.01	0.01	0.31	0.000	0.01	0.95
Youth						
Intercept	3.83	0.07	<0.001	3.69	0.08	<0.001
T1–T2 slope	−0.04	0.02	0.04	0.01	0.02	0.62
T2–T3 slope	0.01	0.01	0.45	−0.01	0.01	0.53

TABLE 3 Latent means from unconditional multigroup growth model for consistent discipline.

	Control group			Treatment group		
	Unstd. Est.	**SE**	***p***	**Unstd. Est.**	**SE**	***p***
Parents						
Intercept	3.61	0.08	<0.001	3.61	0.07	<0.001
T1–T2 slope	−0.003	0.01	0.86	0.07	0.01	<0.001
T2–T3 slope	0.02	0.01	0.07	−0.01	0.01	0.38
Youth						
Intercept	3.68	0.08	<0.001	3.71	0.07	<0.001
T1–T2 slope	−0.002	0.02	0.90	−0.001	0.02	0.94
T2–T3 slope	0.01	0.01	0.22	0.01	0.01	0.41

The model for consistent discipline showed good fit (RMSEA = 0.05 [0.04, 0.05], SRMR = 0.07, CFI = 0.91) and only the T1–T2 slope for parents in the treatment group was positive ($p < 0.001$), while all other slopes were not significantly different from 0 (see Table 3). The 95% CI constructed via bootstrap samples showed that the T1–T2 slope for treatment parents was significantly different from that of the control parents [0.03, 0.11]. The treatment effect size (d) was 0.36.

The model for solicitation also showed good fit (RMSEA = 0.05 [0.04, 0.05], SRMR = 0.07, CFI = 0.95) and the T1–T2 slope was positive and significantly different from 0 for both parents ($p < 0.001$) and youth ($p = 0.03$) in the treatment group, while all other slopes were not significant (see Table 4). The 95% CI constructed via bootstrap samples showed that the T1–T2 slope for treatment parents was significantly different from that of control parents [0.01, 0.08] (effect size (d) = 0.12) but the T1–T2 slopes for treatment youth and control youth were not different [−0.02, 0.09]. Mean trajectories, around which individual trajectories vary, for the three constructs are depicted in Figure 3.

The conditional latent growth model with youth gender as a covariate was fitted for each construct. Results indicated that youth gender did not explain individual variation in the slopes for parent–adolescent acceptance and consistent discipline. For solicitation, youth gender was associated with individual variation in the T2–T3 slope for youth in the control group ($\beta = 0.24$, $p = 0.007$), indicating that female youth in the control group were more likely to perceive improvement in their parent's solicitation behavior during T2–T3 compared to male youth.

TABLE 4 Latent means from unconditional multigroup growth model for solicitation.

	Control group			Treatment group		
	Unstd. Est.	**SE**	***p***	**Unstd. Est.**	**SE**	***p***
Parents						
Intercept	4.15	0.05	<0.001	4.07	0.06	<0.001
T1–T2 slope	0.001	0.01	0.93	0.05	0.01	<0.001
T2–T3 slope	−0.002	0.01	0.75	−0.002	0.01	0.81
Youth						
Intercept	3.43	0.09	<0.001	3.35	0.09	<0.001
T1–T2 slope	0.01	0.02	0.54	0.05	0.02	0.03
T2–T3 slope	−0.01	0.01	0.57	0.004	0.02	0.77

DISCUSSION

The findings of the present study support the concept that parents and their children/adolescents to a significant degree "live in different perceptual worlds" (Stattin et al., 2021) that can influence their respective appraisals of the impact of programs. This finding is consistent with social cognition theory, which focuses on individual differences in perceptions of an event, subjective personal appraisals that each person commonly fails to question.

Compared to baseline, parents in the treatment group reported improvement on three key constructs (i.e., acceptance, consistent discipline, and solicitation) during the treatment period (T1–T2), whereas youth only reported improvement in parental solicitation. Changes that occurred (or did not occur) in all three constructs during the treatment period were maintained during the follow-up period T2–T3 (i.e., the T2–T3 slope was not statistically significant). The only statistically significant change in the control group was the youth's T1–T2 slope, which was negative, indicating deterioration in perceived parental acceptance.

Findings suggest that the parenting program had intended positive effects on parenting behavior, but mostly from the parents' perspective. The differences between parents' and adolescents' perceptions of parenting behavior were consistent with prior findings (e.g., Van Heel et al., 2019). Findings suggest that whether a parenting intervention is effective cannot solely be assessed by measuring outcomes from the parents' perspective. Social cognition theory suggests that members of a relationship are likely to perceive interactions differently, based on the information regarding internal and external experiences available to them, as well as potential motivational differences influencing their perceptions (Fiske & Taylor, 2017).

Greater perceptions of positive change reported by parents than their children may be due to parents having an "insider's" perspective of their changes, in contrast to the "outsider's" perspective of their children who were not privy to parents' internal experiences. However, it also may be due to parents' engaging in self-enhancement thinking (Sedikides & Gregg, 2008) to maintain self-esteem and a positive view of themselves, in rating themselves as improving perhaps more than they did. In turn, adolescents' perceptions may be influenced by sentiment override (Hawkins et al., 2002; Weiss, 1980), in which perception of another person's current behavior is influenced by one's pre-existing global cognitions and emotion toward the person. Youth's unchanged perceptions of their parents' behavior might be shaped by relatively stable schemas they formed previously (Fiske & Taylor, 2017), as they are accustomed to observing their parents behaving in particular ways and may not view recent actions as evidence that their parents are changing.

Child reports of parent behavior also must be used with caution regarding the age of the sample, because children's cognitive development levels can influence their abilities to understand

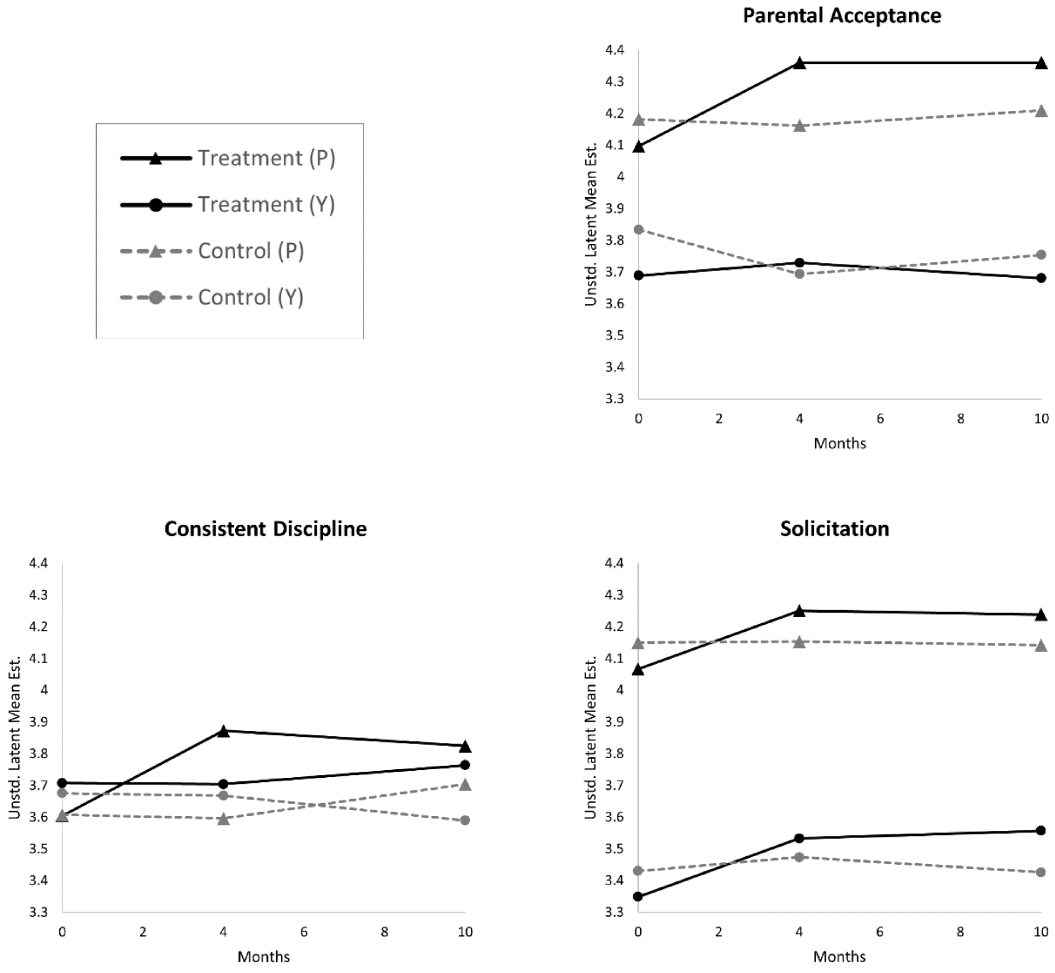

FIGURE 3 Changes in unstandardized latent mean estimates over time.

concepts described by questionnaire items (especially items with complex wording and those requiring inferences from overt actions) and to take the perspective of another person via inferences about their parents' actions (Conijn et al., 2020; Eddy et al., 2011; Taber, 2010). The ages of the present sample are within the range generally accepted as valid sources for reporting personal observations, but researchers need to select samples and measures carefully when attempting to examine effects of parenting programs on children's perceptions.

When using child reports that can be considered reliable and valid, the point in comparing parent and child reports is less about whose perception is more accurate or "right" (both views involve subjectivity), but essentially about how parents and their children can be helped to understand and respect each other's perspective, navigating their differences in a mutually satisfying manner. Even though parenting programs for Latino immigrant families, including the Padres program, include a component focused on increasing parents' (and often youth's) sensitivity to challenges of balancing different cultures, the present findings suggest that more may be needed to develop greater mutual understanding and acceptance between parents and children. As parents receive guidance and positive feedback from program leaders in trying new forms of parenting behavior, neither the parents nor the leaders should assume that the changes will be perceived positively by the children. The finding by Lee et al. (2019) in which

intervention reduced the discrepancy between parents and adolescents regarding parental behavior is intriguing, as to what specific interpersonal process resulted in that improvement.

Therapeutic approaches to producing changes in family relationships involve not only developing new behavioral patterns such as good expressive and listening skills between parents and children; it also is important to alter negative ways in which the members think about each other (Dattilio, 2010; Epstein et al., 2018). The CBPR approach used in developing and delivering the Padres program included standard parenting program components of training in parent–child communication and problem-solving skills for the parents and children, plus education for parents on constructive discipline methods and ways of fostering a connection with their children. However, only the parents received the culturally important input on understanding and helping their children deal with challenges of living in a bicultural world, whereas there was no parallel focus on increasing the children's empathy for challenges their parents experience in raising them in a cultural environment with multiple stressors. Principles of social cognition theory suggest that any positive changes on the parents' part are likely to be filtered through the children's pre-existing conceptions of the parents' characteristics, intentions, etc., and more direct intervention with the children's cognitions may be needed for them to perceive improvements in their parent's behavior, especially over the course of a brief intervention and follow-up period. CBPR approaches were instrumental for building in components of cultural sensitivity regarding values motivating local Latino immigrant parents' goals for their children as well as increasing their understanding of adolescent development and challenges of living in a bicultural world. However, more (culturally based psychoeducation and challenging of children's negative attributions about their parents' motives) may be needed to decrease the children's potentially adversarial views regarding their parents' goals and methods, as well as to increase empathy for parents' challenges. Furthermore, it is valuable for parents and children to learn problem-solving skills for resolving practical issues such as appropriate curfew times, clothing styles, etc., but another important realm for problem-solving is parent–child differences in their views of whether traditional cultural values such as familism are meaningful and appropriate in their current social environment. Thus, the CBPR approach was fruitful in developing the Padres program that engaged many families and exhibited positive outcomes, but it could be applied more comprehensively to address generational gaps in conceptions of positive family functioning.

However, before using the present findings as justification for modifying program content to add a major component addressing subjective perceptions, it will be important to investigate the degrees to which parent and adolescent perceptions of changes in parenting behavior influence the impact of the program on the adolescents' well-being, such as levels of psychological distress (anxiety, depression), engagement in risky behavior such as substance abuse, and other conduct problems. Of course, a direct comparison of changes in health indices between the treatment and control groups will be a natural focus, but an examination within the treatment group of the strength of association between the degree of adolescents' perceptions of positive change in parenting and improvement in their functioning would be of considerable interest. Perceptions of improvement in parenting may influence the parent–adolescent relationship and in turn the child outcomes (consistent with the social cognition framework we are using). Such findings would add further support to the value of adding a component to the program that addresses family cognition.

Limitations

As we have noted, the reliance on self-report measures was a strength to the degree that they tapped meaningful subjective perceptions. Although collecting samples of parent–adolescent communication in a controlled lab-type setting could provide an external source of

data on parenting behavior for comparison with the family members' self-reported perceptions, in CBPR, collecting such data and coding it with behavioral coding systems would be expensive and difficult (e.g., community members might not support putting families in a lab-type setting). However, another way to test the relevance of perceptions of parenting behavior would involve our proposed examination of their association with the achievement of parenting programs' common major goal of improving the functioning of children who exhibited or were at risk for problems such as conduct disorders and substance abuse. Because existing programs that we cited, as well as the Padres program, have been intended to improve parenting (and thus the quality of the parent–child relationship) as a proximal goal that in turn would improve child outcomes, it will be important to extend the present research to investigate degrees to which changes in parent and adolescent perceptions of parenting behavior are associated with improvements in indices of adolescent functioning. Both parent reports of adolescent functioning and adolescent self-reports could be valuable measures of those outcomes. In order to attempt to control for bias when a single data source (parent or child) provides ratings of both parenting behavior and child functioning, a multitrait–multimethod approach could be used to compare within-source to between-source associations.

A second limitation of this study was that most parents who participated were mothers, a limitation commonly experienced by family researchers, so the degree to which findings might be similar for fathers is unknown. Leaving fathers' parenting as an uncontrolled variable (potentially interacting with their co-parent's behavior as well as perceptions of their child) is a significant gap in our understanding of ways to intervene effectively in parent–child relations. Strategies to increase recruitment of fathers (e.g., Yaremych & Persky, 2022) need to be used more with parenting programs such as the present one. Third, addition of measures of parents' and adolescents' cognitions about each other's characteristics (e.g., respect for each other, benign vs Negative intent) would allow mediation analyses to identify factors influencing outcomes such as adolescents' perceptions of changes in parenting behavior.

Fourth, in our introduction to this paper, we identified acculturation as an important factor that can contribute to differences between parent and youth perceptions of parenting behavior and the parent–child relationship. Consequently, we should consider the implications of such influences, especially if this research is aimed at sensitizing those who design and conduct programs to factors that should be addressed in assessments of program participants and in the interventions. For example, youth who are aware of being more highly acculturated than their parents may have more harsh overall perceptions of their parents and be less open to noticing and acknowledging improvements in their parents' behavior toward them. In addition, differences between a parent and child in acculturation may include different standards for appropriate parenting behavior, which would influence ratings on the parenting behavior measures. We recommend that the difference between parent and child levels of acculturation be examined as a possible predictor or moderator of treatment outcomes (perceptions of parenting behavior; indices of child functioning).

Finally, implementation of the intervention within the community required reconciliation of some conflict between goals of researchers (a rigorous design) and community partners (readily accessible treatment for all families). The reconciliation resulted in random assignment to intervention and delayed treatment groups, with a limit of a 6-month waiting period for the control group families. This maintained a strong clinical trial but limited the length of time that outcome measures could be followed. Thus, any longer lags in improvements in parenting outcomes from either the parent or youth perspective might not be detected.

Implications and future directions

The present findings have implications for the design of parenting programs, especially in applying social cognition theory to treatment protocols, and for methods to evaluate them. Even though an intervention may improve parents' empathy for their children and enhance parenting behavior, their children may not perceive those changes, even though parents believe they have changed (and in fact may have changed). If youth who are the objects of parenting behavior fail to notice improvements or discount them, positive outcomes based solely on parents' reports may overestimate a program's effectiveness with family relationships. Furthermore, if youth do not perceive positive efforts from parents and continue to respond to parents negatively, any positive changes by the parents may deteriorate. Although inducing change in one family member has potential to induce change in others, the influence is bidirectional, and without increasing positive responses from other members, conditions can undermine improvements.

Parents who invest time and energy in a parenting program such as Padres, in an encouraging and culturally sensitive social setting, may overestimate the positive changes in their behavior toward their children. Relatively brief education on child development and challenges facing one's child in a bicultural world has potential to soften a parent's adversarial response to an adolescent's rebellious actions, but a danger remains that the parent still may respond in a negative reflexive way, reinforcing the adolescent's negative perception. Culturally sensitive group parenting interventions have a strong record of assisting Latino families, but like all psychoeducational programs, for families with more entrenched negative patterns they may not be a substitute for more intensive individual family interventions.

Our present findings regarding parents' and youths' different perceptions of parental behavior suggest that adding interventions that directly target family members' cognitions and empathy regarding each other's behavior (e.g., Dattilio, 2010; Epstein et al., 2018) could increase agreement about parenting interventions. Program leaders also can coach parents in not being discouraged when their children fail to respond positively to new behaviors they learned in the program. Parents can be provided positive feedback, coached in being patient for changes to be recognized, and guided in self-talk to solicit more information about their child's thoughts and feelings rather than responding defensively. At the same time, program leaders can intervene with children's negative perceptions of their parents' changes (e.g., as "insincere"). Psychoeducation within programs such as Padres can help parents and children understand the importance of noticing and building on incremental changes rather than demanding rapid change.

We had selected the three types of parent behavior to assess based on an expectation that some might be easier to change than others, and the findings suggest that it may be easier to improve soliciting information from one's child (straightforward skills taught during sessions) than to enact consistent discipline or convey greater acceptance of one's child. It also may be easier for youth to notice improvements in parents' solicitation than consistent discipline and acceptance. Educating family members about such differences could be a valuable addition to a program such as Padres.

Measurement invariance results of the three constructs showed that a variable measured from parent and child perspectives cannot be assumed to be the same construct. For example, in Figure 3, although the treatment group parents' perceived parent–adolescent acceptance is noticeably higher than the youth's perceived parent–adolescent acceptance, they cannot be compared meaningfully because the measurement invariance test showed that parents and youth were reporting on somewhat different conceptions of acceptance using the same items. Researchers need to assess measurement invariance prior to comparing parent and child reports. However, this type of difference can be meaningful in itself, as qualitative interviews with parents and youth may

reveal differences in their conceptualization of a characteristic such as acceptance, which could result in family discussions to better understand each other's perceptual world.

In addition, although parents' improvements tended to last, the follow-up period was brief, so it is unknown whether changes would be sustained. Further research with a longer follow-up is needed. In addition, effectiveness in preventing relapses of using "booster" sessions that review concepts and provide parents opportunities to practice skills further could be investigated. Finally, the ultimate effects of the Padres program on children's physical and mental health will be important to investigate in future studies, similar to research that has been conducted on other parenting programs for families of at-risk youth, and we intend to pursue such research. Nevertheless, our focus in this study on an important way in which Latino immigrant parents and children live in different perceptual worlds produced important findings with implications for enhancing parenting programs.

ACKNOWLEDGMENTS

We would like to acknowledge all parents, youth, community agency staff, and other collaborators who contributed to the development of Padres, including Centro, West Side Community Health Services, Neighborhood House, Aquí Para Ti Clinic for Latino Youth, South Saint Paul School District, Centro Campesino, and University of Minnesota Extension. We would particularly like to posthumously acknowledge the essential contributions of Bibiana Garzon and Roxana Linares in building and implementing the Padres Informados, Jóvenes Preparados program.

This project is funded by National Cancer Institute U54 Center Grant, "Minnesota Centers for Cancer Collaboration" 1U54CA153603 and supported by Grant Number UL1RR024150 from the National Center for Research Resources, National Institutes of Health. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

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How to cite this article: Hurtado Choque, G. A., Kim, H., Epstein, N. B., Garcia-Huidobro, D., Svetaz, M. V., & Allen, M. L. (2024). Different perceptual worlds: Parent and youth perspectives on parenting outcome trajectories from a Latino family-based program. *Family Process*, *00*, 1–22. https://doi.org/10.1111/famp.12962