Engaging Parents in Preventive Parenting Groups: Do Ethnic, Socioeconomic, and Belief Match Between Parents and Group Leaders Matter?

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The authors evaluate the relation of ethnic, socioeconomic status (SES), and belief match between parents and group leaders and engagement in a preventive intervention for parents of preschoolers. Engagement was assessed through attendance, retention, and quality of participation in sessions with 171 parents and 11 group leaders. SES match predicted attendance, retention, and quality of participation. Parents attended more sessions, remained longer in the program, and participated more actively when their group leader came from comparable SES backgrounds. Ethnic match predicted retention only, with parents attending longer when their ethnicity matched their group leader's. Engagement was unrelated to the extent of match across different characteristics, nor was the link between ethnic match and retention mediated by SES or belief match. Results suggest that social, cultural, and belief similarities between parents and group leaders may be less salient in preventive parenting interventions than is assumed. Implications for research and practice are discussed.

Keywords: *ethnic match; SES match; belief match; parenting; engagement*

Ineffective parenting is a major risk factor for adverse child outcomes (e.g., Cicchetti & Olsen, 1990; Dumas & LaFreniere, 1993, Patterson, Reid, & Dishion, 1992). Parent management training (PMT) targets this factor through systematic instruction, modeling, and support to increase positive and decrease aversive parent-child interactions

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(e.g., McMahon & Forehand, 2003). PMT is an effective treatment strategy (Kazdin, 2005; Serketich, & Dumas, 1996) and appears equally promising as a preventive intervention (e.g., Conduct Problems Prevention Research Group [CPPRG], 2002; Dumas, Prinz, Smith, & Laughlin, 1999; Webster-Stratton, 1998).

Although effective, PMT programs are often undermined by poor parental attendance and premature termination (e.g., Barkley et al., 2000; Kazdin, Mazurick, & Siegel, 1994). Many parents are also reluctant to engage in preventive efforts, especially when their children are not presenting immediate problems, and poor attendance in prevention programs is high, as is dropout. This may be especially true for ethnic minority parents and socioeconomically disadvantaged parents (e.g., Cunningham et al., 2000; Orrell-Valente, Pinderhughes, Valente, Laird, & CPPRG, 1999). However, sweeping generalizations about entire groups are unwarranted in light of inconsistencies across studies (Dumas, Nissley-Tsiopinis, & Moreland, 2005; Spoth & Redmond, 2000).

To understand the challenge of engaging parents in PMT, researchers have focused on numerous predictors of engagement, including parental and child characteristics, family stressors and obstacles (e.g., lack of time or transportation), and personal or cultural differences between parents and service providers. Conducted with a sample of predominantly African American and European American participants attending preventive parenting groups, the present study focused on differences in ethnicity, socioeconomic status (SES), and parenting beliefs between parents and group leaders as potential obstacles to engagement.

Ethnic and SES Match and Engagement

Recommendations that therapists and clients be matched on ethnicity are common in the clinical literature on the assumption that this maximizes similarities in beliefs, comfort, and trust (Alladin, 1994; Reis & Brown, 1999); increases intervention relevance (Flaskerud, 1986); and contributes positively to engagement and outcome. Research is limited and has focused mostly on ethnic match in individual psychotherapy. A meta-analysis found that ethnic match predicted higher rates of attendance and lower rates of dropout in minority clients (Maramba & Hall, 2002). However, effect sizes were small, and the authors concluded that ethnic match, though statistically significant, is not a strong predictor of attendance or dropout beyond the initial sessions.

We are only aware of one study of ethnic and SES match as predictors of engagement in a preventive PMT program. Orrell-Valente et al. (1999) found that family coordinators who shared similar ethnic and socioeconomic backgrounds to the parents with whom they worked (at home and in parenting groups) were better able to form a therapeutic alliance with them than were family coordinators from dissimilar backgrounds. In turn, a strong alliance predicted better attendance and quality of participation in group sessions.

Belief Match and Engagement

Attempts to explain why ethnic and SES match may matter to engagement have focused mainly on differences in beliefs between therapists and clients (Bernal, Bonilla, & Bellido, 1995; Coatsworth, Szapocznik, Kurtines, & Santisteban, 1997). Such differences are assumed to lead clients to feel that treatment is not relevant or useful and, because of poor communication, lack of trust, or even resentment, discourage them from attending and participating. For example, Guerra, Attar, and Weissberg (1997) speculated,

> In some cultures, respect for authority is paramount and children are not permitted, let alone encouraged, to discuss or participate in rule setting. Interventions promoting firm, clear, and understanding parenting might be readily dismissed by parents who do not subscribe to such normative beliefs about effective child rearing. (p. 379)

Evidence abounds regarding cultural variations in parenting beliefs (Garcia-Coll, Meyer, & Brillon, 1995; Julian, McKenry, & McKelvey, 1994; Rosenthal & Roer-Strier, 2001), but we are not aware of studies that tested whether attitude or value match matter to attendance, dropout, and participation in PMT, and whether—as theoretical speculations would predict—they can account for the more distal links between ethnic and SES match and attendance, dropout, and participation.

PACE—Parenting Our Children to Excellence

This study is part of a prevention project known as Parenting Our Children to Excellence, or PACE. PACE assesses the impact of a group PMT program, with emphasis on the process of engagement and its relation to parental and child outcomes. The eight-session program is designed for parents of preschoolers and delivered at the day-care centers the children attend. Interested parents are invited "to meet with other parents to talk about parenting issues and to learn how to prepare young children for success." All session topics cover normative parenting issues, which are described below. PACE has research sites in Indianapolis, Indiana, and Harrisburg, Pennsylvania. Data reported here come from the second year of the project in Indiana and the first year in Pennsylvania, where research began a year later.

The study sought to replicate Orrell-Valente et al.'s (1999) findings and, in line with theoretical speculations, to extend them by testing three nonexclusive explanatory models:

1. The *cumulative* model states that ethnic, SES, and belief match best predict attendance, dropout, and quality of participation when combined into a cumulative index of match. According to the model, the extent to which parents and group leaders match across different characteristics matters more than the specific characteristics on which they match.
2. The *timing* model states that ethnic and SES match matter primarily to early dropout and, consequently, to low attendance overall. In this model, participants are more likely to drop out from intervention in the first few sessions when they are mismatched with group leaders in terms of ethnicity or SES than when they are not.
3. Finally, the *mediation* model states that any link between ethnic match and attendance, dropout, or quality of participation is mediated by SES or belief match. In other words, it assumes that ethnic match is only a proxy for what matters most in this area—namely, that parents and group leaders come from comparable socioeconomic backgrounds and/or share similar beliefs.

METHOD

Participants

Day care centers in Indianapolis were recruited with the help of Child Care Answers, a child care provider training and licensing agency, and in Harrisburg with that of the Early Childhood Training Institute, a training and research service of the Pennsylvania State University. To receive the PACE program, centers had to serve (a) a minimum of

Table 1. Descriptive Statistics by Site

	Indianapolis (n = 85)	Harrisburg (n = 86)		
	M (SD) or %	M (SD) or %	χ^2 or t (df)	p
Sociodemographic measures				
Parent gender: female/male	91/9%	93/7%	.34 (1)	*ns*
Parent age	29.74 (8.02)	29.76 (7.02)	–.02 (164)	*ns*
Parent ethnicity: AA/EA/OT[a]	67/22/11%	54/38/8%	5.19 (2)	*ns*
Parent family income	$19,192 (7,086)	$28,153 (6,253)	–3.29 (169)	.01
Parent education (years)	12.71 (1.03)	12.79 (.92)	–.57 (169)	*ns*
Parent marital status: single/dual	69/31%	70/30%	.00 (1)	*ns*
Predictor variables				
Ethnic match: match/no match	67/33%	23/77%	33.14 (1)	.00
Socioeconomic match: match/no match	41/59%	44/56%	.16 (1)	*ns*
Value match: match/no match	52/48%	55/45%	.14 (1)	*ns*
Attitude match: match/no match	54/46%	42/58%	2.57 (1)	*ns*
Outcome variables				
Attendance (0 to 8)	5.31 (2.42)	5.38 (2.38)	–.21 (169)	*ns*
Dropout (0 to 8)	1.51 (2.47)	1.69 (2.48)	–.48 (169)	*ns*
Quality of participation (1 to 5)	4.19 (.44)	3.86 (.48)	4.70 (169)	.00

a. African American, European American, Other.

35 families with children between the ages of 3 and 6 at time of recruitment and (b) an economically and ethnically diverse population. Families did not have to meet set income criteria to participate and were not recruited to obtain predetermined percentages of participants from specific ethnic groups. Daycare center statistics indicated that approximately 4 out of 5 families qualified for financial assistance in Indianapolis, M = 79% (SD = 22%), and 2 out of 5 in Harrisburg, M = 43% (SD = 37%).

Parents. Parents or caregivers (hereafter referred to as "parents") were recruited by displaying poster advertisements at each center, sending registration forms to eligible parents, and staffing a registration table for 2 days during which parents were informed about the program and the survey that accompanies it. As Table 1 shows, 85 parents took part in this study in Indianapolis and 86 in Harrisburg. Ranging in age from 20 to 63 (M = 29.75; SD = 7.50), 104 (61%) described their ethnic origins as African American, 52 (30%) as European American, 6 (4%) as Hispanic, and 9 (5%) as other (3 as Asian American, 1 as Native American, and 5 as biracial). They reported an average of $23,753 ($SD$ = $9,595) in annual family income and an average of 12.75 (SD = 1.77) years of education; 119 (70%) were single (i.e., never married, separated, divorced, or widowed).

Group Leaders. Group leaders were recruited with the help of day care center directors and of Child Care Answers in Indianapolis and the Early Childhood Training Institute in Harrisburg. Minimum requirements were (a) a bachelor's degree in a family- or child-related field, (b) relevant experience, and (c) successful completion of a standardized interview and training process. Eleven group leaders participated in this

study. Ranging in age from 26 to 59 (M = 47.99; SD = 9.86), 6 (55%) described their ethnic origins as African American, 4 (36%) as European American, and 1 (9%) as Hispanic. They reported an average of $47,986 ($SD$ = $2,335) in annual family income and an average of 16.45 (SD = 0.52) years of education; 3 (27%) were single.

Procedures

The university's Institutional Review Board at each site approved all procedures. Prior to program start, parents and group leaders completed surveys to obtain parallel measures of their sociodemographic characteristics and parenting beliefs. The Parent Survey was a structured interview individually administered by trained staff at the parents' home or at their children's day care center. Parents provided informed consent before the interview and received $35 in cash at completion. The Group Leader Survey was completed individually by group leaders, who also provided informed consent and received $15 in cash at completion. In addition, group leaders monitored parental attendance and quality of participation weekly in all the groups they facilitated.

Measures: Predictor Variables

Ethnic Match. Parents received a score of 1 (match) when their ethnicity corresponded to that of their group leader; otherwise, they received a score of 0.

SES Match. A SES index was first calculated for each participant. The index, which reflected annual family income, education, and marital status, was obtained by converting parental and group leader responses on those measures to z scores and adding those scores. The distribution of parental scores was then subjected to a median split. Parents received a score of 1 (match) when their and their group leader's SES indices were both greater than or both less than the median; otherwise, they received a score of 0.

Belief Match. Whether parents and group leaders shared comparable attitudes and values was assessed with the help of two measures. Group leaders completed parallel but "generic" versions of each measure, in which first-person singular statements had been reworded to apply to parents in general. For example, "I respect my child's opinions and encourage him/her to express them" was reworded to read as follows: "Parents should respect their children's opinions and encourage them to express them." The Parental Attitudes Towards Child Rearing Scale (PACR; Easterbrooks & Goldberg, 1984) is a 51-item measure assessing parental warmth, encouragement of independence, strictness, and conflict with child on a 6-point, Likert-type scale. The 10-item warmth subscale, which was used in this study, measures affection and closeness between parent and child. The PACR has been shown to be valid and reliable in studies conducted with diverse populations (Easterbrooks & Goldberg, 1984; Holden & Edwards, 1989; McGuire & Earls, 1993). In the present sample of parents, Cronbach's α for the warmth subscale was .88. The Parental Values Scale (PVS; Julian et al., 1994) is a 12-item measure of the importance that parents attach to commonly shared social expectations and goals about children. Each item is rated on a 6-point, Likert-type scale. For example, the PVS asks, "How important is it to you that children: always follow family rules; do well in school; or be kind and considerate?" The PVS is a reliable measure known to capture important cultural variations in parenting among Caucasian,

African American, Hispanic, and Asian American parents (Julian et al., 1994). In the present sample of parents, Cronbach's α for the scale was .87.

To assess attitude match and value match, parental and group leader responses on each scale were converted to *z* scores. The distributions of parental scores were then subjected to median splits. For each scale, parents received a score of 1 (match) when their scores and their group leader's scores were both greater than or both less than the median; otherwise, they received a score of 0.

Group leaders also completed the Marlowe-Crowne Form C (M-C Form C; Reynolds, 1982), a well-established short form of the Marlowe-Crowne Social Desirability Scale (MCSD; Crowne & Marlowe, 1960). This scale, which consists of 13 true/false statements describing socially desirable characteristics and traits, was used to assess group leaders' degree of self-enhancement in responding to the attitude and value measures just described.

Measures: Outcome Variables

Attendance, point of dropout, and quality of participation were used to assess parental engagement in the PACE program.

Attendance. The number of parenting program sessions that parents attended (from 0 to 8) provided a measure of attendance.

Point of Dropout. The point at which parents dropped out of the program (when they did so before completion) provided a measure of retention. This measure, which reflected when parents ceased coming to the program, accounted for the fact that many parents kept coming but were not always able to attend every session, often for reasons beyond their control (e.g., work schedule, sick child or relative). Point of dropout ranged from 7 to 0: parents received a score of 7 when they did not return after the first session, a score of 6 when they did not return after the second session, a score of 5 when they did not return after the third session, and so on. Parents who did not drop out (i.e., attended session 8) received a score of 0.

Quality of Participation. At the end of each session, group leaders completed a rating of how well each parent participated during the session. Ratings ranged from 1 (*did not participate or obstructed group functioning and activities*) to 5 (*participated enthusiastically, was obviously interested and attentive to other group participants*). Each anchor point had specific definitions. Before they were asked to complete it, group leaders were trained to use the measure through examples and observations of PACE sessions.

PACE Program

Each parenting group, which served between 5 and 15 parents, met weekly for 2 hours at the day care center that had recruited group members. To reduce situational barriers to attendance, groups were offered free of charge, and at each session, parents and their children received a free meal, free child care, and $3 in cash to cover transportation costs.

The PACE program was developed by Dumas on the basis of earlier research on the promotion of parenting effectiveness and child-coping competence (Dumas et al., 1999;

Webster-Stratton, 1999). It is manualized in terms of content and process and addresses child-rearing issues and challenges commonly faced by parents of young children in a format that fosters active parental participation and mutual support. Sessions cover the following eight topics: (a) developing our children's self-esteem, (b) promoting our children's early thinking skills, (c) bringing out the best in our children, (d) setting clear limits for our children, (e) making sure that our children have enough sleep, (f) helping our children behave well at home and beyond, (g) helping our children do well at school, and (h) anticipating challenges and seeking support.

Group Leader Training and Supervision

Group leader training and supervision followed procedures described extensively elsewhere (Dumas, Lynch, Laughlin, Smith, & Prinz, 2001). Instruction focused on a thorough understanding of PMT principles before turning to the PACE program manual for content and process training. Content training pertained to the topics to be covered in sessions, their rationale and presentation, and their supporting materials (e.g., videotapes, posters, handouts). Process training focused on effective communication skills. It emphasized the importance of involving parents in all aspects of each session and provided specific instruction on how to encourage and channel parental discussion, avoid criticism and unsolicited advice giving, provide frequent positive feedback, and deal with resistance. All training was conducted in small groups and consisted of didactic presentations, vignettes, modeling, role-playing, discussions, and practice. Staff competence was tested regularly using formal quizzes and observations. In addition, throughout the study, group leaders received weekly supervision from an advanced doctoral student extensively trained and familiar with PMT and the PACE protocol. Supervision included feedback from weekly fidelity assessments.

Fidelity

Fidelity was assessed with procedures also described in Dumas et al. (2001). Group leaders wore a lapel microphone attached to a portable recorder to audiotape all sessions. Trained coders supervised by an expert coder listened to these tapes weekly and coded them for fidelity to program content and process with the help of purpose-made checklists. Results from these assessments were sent to the group leaders' supervisor on a weekly basis for ongoing feedback and provided overall estimates of adherence to protocol. On average, group leaders covered 79% (range: 20%-100%) of all content items (interrater reliability, kappa = 0.79) and attained an average score of 91% (range: 63%-100%) on process fidelity (interrater reliability, kappa = 0.88).

RESULTS

Social Desirability

To test whether group leaders gave socially desirable responses on the two parenting belief measures because they knew that they were being evaluated, their scores were correlated with their social desirability scores. As both correlations were nonsignificant ($r = –0.08$ and $r = 0.07$, respectively), social desirability was not considered further.

Site Comparisons

Descriptive analyses showed that there were more similarities than differences between the two sites on all study variables (see Table 1). Indianapolis parents had lower incomes than their Harrisburg counterparts, but there were no site differences on parental age, ethnicity, education, or marital status. Ethnic match was the only match variable on which sites differed, as there were more opportunities for ethnic match in Indianapolis, where the majority of parents and group leaders were African American, than in Harrisburg, where the majority of parents were African American but the majority of group leaders were European American. Finally, parents did not differ between sites on attendance or point of dropout, but Indianapolis parents received somewhat higher participation ratings than Harrisburg parents. Overall attendance and retention were high: 67% of parents attended more than half of the eight sessions and only 22% of parents had dropped out by the fourth session. Quality of participation was also high, with 63% of parents receiving participation ratings in the 4 to 5 range (on a 1 to 5 scale).

Full Sample and African American and European American Subsample

Given the unequal number of mothers and fathers in the sample (157 versus 14), analyses were conducted with the full sample and with mothers only. Because results did not change, fathers are included in all analyses. As 90% of parents and 91% of group leaders were African American or European American, each model was evaluated on the full sample and on the subsample of African American or European American parents who participated in PACE groups led by African American or European American leaders (the AAEA subsample). The subsample consisted of 140 parents. Of the 31 parents it excluded, 16 were African American or European American parents in groups led by a Hispanic leader, and 15 were parents of other ethnicities in groups led by African American or European American leaders. Results obtained with the full sample were almost identical to those of the AAEA subsample, but we only report results for the subsample here.

Cumulative Model

Multiple regressions were conducted to test the separate and cumulative contributions of ethnic, SES, attitude, and value match to attendance, dropout, and quality of participation. Initial models were set up hierarchically, with three blocks of variables entered sequentially: site (1 variable), sociodemographic characteristics of parents (5 variables), and separate measures of match (4 variables) or cumulative index of extent of match (1 variable). That index was obtained by adding the separate measures of match; because those were dichotomous, the index ranged from 0 to 4. Following Judd and Kenny's (1981) recommendation, nonsignificant variables in the first two blocks were then dropped and the data reanalyzed to produce final models (see Table 2).

Attendance. As neither site nor any of the sociodemographic characteristics of parents predicted attendance in the initial model, these variables were dropped. The final model showed that African American and European American parents attended more sessions, on average, when they and their group leaders matched on SES but not when they matched on any of the other three predictors. The model accounted for 8%

Table 2. Hierarchical Regressions Predicting Attendance, Point of Dropout, and Quality of Participation—African American and European American Subsample

	Attendance			Point of Dropout			Quality of Participation		
Model *F* test	*F* (4, 135) = 2.97*			*F* (4, 135) = 3.44*			*F* (4, 131) = 2.72*		
Model variance	R^2 = 0.08			R^2 = 0.09			R^2 = 0.17		
Block *F* change: Site	NA *ns*			NA *ns*			*F* (1, 135) = 15.08***		
Block *F* change: Sociodemographic variables	NA *ns*			NA *ns*			NA *ns*		
Block *F* change: Match variables	*F* (4, 135) = 2.97*			*F* (4, 135) = 3.44*			*F* (5, 131) = 5.34***		
Variables	*B*	*SE B*	*T*	*B*	*SE B*	*t*	*B*	*SE B*	*t*
Site							–0.32	0.08	–0.88***
Parental age									
Parental ethnicity									
Parental marital status									
Parental education									
Family income									
Ethnic match	0.12	0.09	1.42	–0.18	0.09	–2.11*	0.11	0.09	1.16
SES match	0.24	0.08	2.85**	–0.23	0.08	–2.82**	0.16	0.08	1.99*
Attitude match	0.09	0.09	1.03	–0.04	0.08	–0.51	0.13	0.08	–1.61
Value match	0.09	0.08	1.02	–0.13	0.09	–1.53	0.14	0.08	1.62

*$p < .05$. **$p < .01$. ***$p < .001$.

of variance. In a separate regression, extent of match between parents and group leaders was a poorer predictor of attendance than the four measures of match separately, $R^2 = 0.03$, *F* (1, 138) = 3.51, *ns*.

Point of Dropout. Site and sociodemographic characteristics of parents did not predict early dropout in the initial model and were excluded. The final model, which accounted for 9% of variance, showed that parents dropped out of the intervention earlier, on average, when they did not match group leaders on ethnicity or on SES. Attitude match and value match were not related to early dropout. Here also, extent of match between parents and group leaders was not a significant predictor of early dropout, $R^2 = 0.02$, *F* (1, 138) = 2.78, *ns*.

Quality of Participation. Site predicted quality of participation in the initial model, but sociodemographic characteristics did not and were excluded. The final model showed that average quality of participation was higher in Indianapolis than in Harrisburg and that parents participated more actively in sessions when they and their group leaders matched on SES but not when they matched on any of the other three predictors. The model accounted for 17% of variance, 10% in block 1, site: F^{change} (1, 135) = 15.08, $p < .001$, and the remaining 7% in block 2, match variables: F^{change} (5, 131) = 5.34, $p < .01$. After controlling for site differences, extent of match between parents and group leaders predicted quality of participation but did not account for as much variance as the separate measures of match, $R^{2\,change} = 0.07$, *F* (1, 134) = 10.49, $p < .01$.

Timing Model

To test the prediction that ethnic and SES match matter primarily to early dropout and, consequently, to low attendance overall, we divided participants into early and late or no dropout (i.e., dropped out before or at the fourth session versus all others) and into low and high attenders (i.e., attended four sessions or fewer versus all others). On average, parents who dropped out early did so before the third session. Ethnic mismatch predicted early dropout (χ^2 1 = 5.08, $p < .05$), as did SES mismatch (χ^2 1 = 4.07, $p < .05$); 37% of parents who did not match group leaders on ethnicity dropped out early, compared to 19% of parents whose ethnicity matched that of leaders; and 16% of parents who did not match group leaders on SES dropped out early, compared to 5% of parents who matched leaders on SES.

Turning to attendance, low and high attenders attended 2.36 (*SD* = 1.28) and 6.79 (*SD* = 0.96) sessions, respectively. Ethnic mismatch did not predict low attendance (χ^2 1 = 1.00, *ns*), but SES mismatch did, as 26% of parents who did not match group leaders on SES were low attenders, compared to 6% of parents who matched leaders on SES (χ^2 1 = 12.86, $p < .001$).

Mediation Model

As ethnic mismatch was linked to early dropout, three models were evaluated to test the assumption that that link was mediated by mismatch between parents and group leaders on: (a) SES, (b) attitudes, and/or (c) values. As SES match was correlated with dropout (r 140 = –0.23, $p < .01$) but not with ethnic match (r 140 = –0.10, *ns*), the necessary requirements for mediation were not met, and no further testing of the first model was conducted (Baron & Kenny, 1986). The same was true for the other two models. Attitude match was correlated with ethnic match (r 140 = 0.23, $p < .01$) but not with value match (r 140 = –0.04, *ns*); and neither attitude nor value match were correlated with dropout (r 140 = 0.11, *ns*, and r 140 = 0.01, respectively).

DISCUSSION

Results provide limited support for the assumption that successful engagement in preventive PMT groups depends in important ways on whether parents and group leaders share similar sociodemographic characteristics and beliefs. First, only two of the four predictors we measured—ethnic and SES match—were significantly related to engagement; attitude and value match were not. Second, whenever ethnic and/or SES match predicted attendance, point of dropout, or quality of participation in the PACE program, they accounted for less than 10% of variance. Third, SES match emerged as a more significant predictor of engagement than ethnic match. We will discuss these results in light of the three theoretical models that guided the study before considering their implications for preventive research and intervention.

Cumulative Model

Contrary to the model, in all analyses a cumulative index of match accounted for less variance than the measures of match considered separately. In other words, we found no evidence that program engagement reflected the extent to which parents and group

leaders shared similar ethnic, socioeconomic, or belief characteristics. Rather, each facet of engagement was accounted for by SES or SES and ethnic match. Socioeconomic similarities appear to matter to engagement as a whole, as parents attended more sessions, remained in the program longer, and participated more actively when they and their group leader came from comparable socioeconomic backgrounds than when they did not. In contrast, ethnic similarities between parents and group leaders may matter most to retention, as parents stayed in the program longer when their ethnicity matched that of their group leader than when it did not.

Timing Model

Analyses conducted to test the timing model pointed in similar ways to the different roles that ethnic and SES match may play in the engagement process. The finding that, on average, more than a third of parents whose ethnicity did not match that of group leaders dropped out before the third session, compared to 19% of parents whose ethnicity matched, suggests that a minority of parents may feel uncomfortable in such circumstances and decide not to come back. Unfortunately, we did not have enough power or measures to compare this subgroup with parents who did not drop out even though their ethnicity differed from that of their group leader.

The timing model confirmed also that socioeconomic similarities mattered most to high retention (i.e., late or no dropout) and to regular attendance. Parents who did not drop out early and attended PACE sessions regularly matched their group leader's SES more often than not. This means that high retention and regular attendance tended to improve as parental SES increased (even though none of the sociodemographic covariates we controlled for emerged as significant). This is because parents could only match group leaders on SES if their education level was high (as all group leaders had to have a college degree) and/or if their family income was higher than that of most parents in the sample (as group leaders reported average incomes of approximately $48,000, in comparison to $24,000 for parents). This is in keeping with studies that have shown that parents need a minimal level of resources and support to benefit from prevention programs requiring significant personal investment and time commitment—weekly meetings for 2 months in PACE (e.g., Dumas et al., 2005; Perrino et al., 2001).

Because SES match with group leaders was only possible for parents at a relatively higher end of the socioeconomic spectrum, these findings are open to different explanations. It is possible that, as predicted, SES match facilitates retention and attendance. Alternatively, it may be that access to adequate resources matters most to engagement in PMT and that our SES-match findings reflect the fact that there was less variability in the socioeconomic background of group leaders than of parents. However, as mentioned, when we controlled for parental marital status, education, and family income, none of those variables predicted point of dropout or attendance. This suggests that the link between SES match and these two measures of engagement cannot simply be accounted for by socioeconomic differences among the parents who participated in the study. Additional research will be necessary to address this issue, if possible with group leaders who differ as much in their socioeconomic backgrounds as parents.

Mediation Model

Finally, we found no support for the prediction that the link between ethnic mismatch and early dropout was mediated by socioeconomic or belief differences between

parents and group leaders. The fact that none of the parental covariates we controlled for was related to point of dropout suggests that, at least in this predominantly disadvantaged sample, socioeconomic differences with group leaders were not salient for parents who did not return after one or two sessions. Similarly, differences in parenting beliefs between parents and group leaders may not have been salient in most groups, further explaining the lack of significant mediation effects. This finding, if confirmed, would call into question the assumption often found in the clinical literature that ethnic match largely stands for similarities in SES status, attitudes, and values.

Limitations

As 90% of parents and group leaders were African American or European American, our findings do not apply to other ethnic groups. Similarly, our findings do not apply across a wide range of socioeconomic conditions, as most parents were disadvantaged financially. Median family income per year was US$22,500, well below the median household income in Indianapolis ($40,421) and Harrisburg ($41,507) at the time of the study (for more information, see the U.S. Census Web site: http://quickfacts.census.gov/qfd/index.html). Other studies will need to be conducted with samples from different ethnic and socioeconomic backgrounds to see to what extent our results can be generalized.

Another limitation of the study stems from the fact that it identified relations between ethnic, SES, attitude, and value match and engagement in the program, but it did not address the processes that may account for those relations. As we saw already, match may enhance the perceived relevance of the program for parents (Flaskerud, 1986) or the therapeutic alliance between parents and group leaders (Orrell-Valente et al., 1999) and, in turn, increase engagement. It is also possible that mismatch activates meta-stereotypes—a "person's beliefs regarding the stereotype that [other ethnic group] members hold about his or her own group" (Vorauer, Main, & O'Connell, 1998, p. 918; also see Sigleman & Tuch, 1997)—and that some parents fail to engage in a PMT program because of their fears of being judged by an ethnically or socially dissimilar authority figure (Vorauer et al., 1998). These processes are not mutually exclusive. They may operate in concert and carry different weight for different parents.

Finally, future studies will need to consider the extent to which group leaders' ability to lead PMT sessions play a role in parental engagement. Although our group leaders maintained satisfactory content and process fidelity throughout the intervention, the ease with which they presented materials and communicated with parents may have differed in ways that were not captured by our fidelity coding system. Indirect support for this possibility comes from evidence showing that there are important differences in communication styles among persons from different ethnic and socioeconomic backgrounds (e.g., Ting-Toomey, 1986), which may partly explain why some parents have greater difficulties engaging in a PMT program than others.

Implications for Preventive Research and Intervention

Although ethnic and SES match accounted for small amounts of variance in engagement, PMT programs may benefit from focusing early on the subgroup of parents who participate minimally, especially when social or cultural barriers may explain their apparent lack of interest. Addressing such barriers openly may encourage their commitment at the first session they attend and maximize the probability that they will

come to other sessions. Alternatively, it may be mistaken to expect that most parents who make an initial commitment to attend a PMT program can be persuaded to come regularly. In a marketing perspective, some early dropouts would be expected in a consumer-oriented society that promotes choice and makes multiple demands on parents' time. In other words, irrespective of social or cultural barriers, every program may have a subgroup of parents consisting of consumers who tried a new product once or twice but did not develop "brand loyalty" (Henning-Thurau & Klee, 1997). If this is correct, PMT programs may be better served by investing their limited resources in parents who are committed and attend regularly than in parents who, from the outset, show little interest.

Preventive programs may also benefit from asking parents directly what they look for in group leaders. It may be that similarities with themselves are not salient for most parents. This is supported by our finding that attitude and value match played no significant role in the engagement process. More generally, it is supported by the fact that, as in other PMT programs, our group leaders were explicitly trained in effective communication skills and required to treat parents with respect at all times, even when they disagreed with them. (Our leaders also knew that all of their sessions were audiotaped and would later be coded for fidelity to content and process.) In other words, researchers and practitioners may need to question the widely shared assumption that parents are more likely to engage in PMT programs when they and their group leader hold similar beliefs. Taking effective communication and respect on the part of group leaders as a given, parents who attend a program regularly and participate actively may not do so because they perceive that their beliefs match those of the leader but because they see the program as relevant and the leader as competent and respectful.

Conclusion

There is considerable agreement among researchers and practitioners that it is a challenge to engage parents in preventive PMT groups. However, we found little evidence that ethnic, SES, attitude, or belief match between parents and group leaders facilitated that task in major ways. Rather, ethnic and SES match were the only significant predictors of the different facets of engagement we studied and, as Maramba and Hall's (2002) meta-analysis of the psychotherapy literature showed, they accounted for small amounts of variance in all cases. Of greater interest is the finding that ethnic similarities between parents and group leaders may matter most to retention in PMT programs, whereas socioeconomic similarities may matter most to attendance, retention, and quality of participation. This suggests that, in the first sessions, ethnic match may help some parents who would otherwise be reluctant to engage to "give the program a try" but that, over time, SES match best predicts which parents will remain in the program, attend most sessions, and participate most actively.

Future studies will need to replicate these results and to extend them to ethnically and socially more diverse groups. However, they suggest already that many parents may place less emphasis on social, cultural, and belief similarities between themselves and group leaders than researchers and service providers often assume. When group leaders are well trained and supervised to insure that they communicate effectively and respect group differences while offering relevant advice and suggestions, parents may focus on those positive characteristics and appreciate the diversity they find in the group instead of perceiving it as a concern or a threat.

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