

## Research Article

# Low Socioeconomic Status and Ethnicity Do Not Predict Dropout of Behavioral Parent Training

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**Abstract**

Although some previous research suggests that various parent demographic and psychosocial variables may be associated with rates of attendance to and completion of behavioral parent training (BPT), findings are often limited by examining small samples of parents. The present study explores the connection between parent characteristics (ethnicity and SES), attendance, and attrition to group BPT among a sample ( $n = 177$ ) of parents seeking treatment at a university-based clinic. Results highlight that parents' self-reported ethnicity and SES were not associated with greater attendance or drop-out during group BPT. The findings are discussed in their relation for future research to examine the interactions between parent demographic and psychosocial characteristics on attendance and attrition during treatment in order to appropriately address barriers to treatment.

**ABBREVIATIONS**

SES: Socio-Economic Status; BPT: Behavioral Parent Training

**INTRODUCTION**

While widely considered to be an effective intervention for child disruptive behavior problems, behavioral parent training (BPT) programs are often characterized by both low enrollment and high attrition [1], thus limiting the effectiveness of these interventions [2]. Approximately half of parents who intended to enroll in BPT terminate treatment early [3]. Efforts to address potential barriers to BPT such as offering sliding scales for payment [4], financial incentives for participation [5], concurrent child treatment [6], or assistance with transportation [7] may do little to deter premature termination of treatment.

A variety of familial psychosocial variables have been suggested as predictors of enrollment and early attrition during BPT. Research on barriers to treatment, which may contribute to lack of attendance or early dropout, has identified several parent specific characteristics that may lead to a higher likelihood of non-enrollment in treatment or premature termination [8]. Characteristics such as parent beliefs and attitudes regarding the intervention [9], logistical concerns (e.g. lack of time to attend treatment; [10]) as well as parent specific variables such as gender [11], marital status [12], and parent mental illness [13] have all previously been implicated in effecting the outcomes associated with participation in BPT.

Parent sociocultural characteristics have also been identified as salient factors associated with enrollment, attendance, and

completion of BPT [1,13]. High-SES and/or non-ethnic minority parents have previously been found to comprise the majority of individuals enrolled in research on parent training interventions [14]. Development of cultural adaptations of parent training have emerged in order to address the needs of economically and ethnically diverse families [15,16]. While there may be utility in creating interventions that are cognizant of issues of diversity, empirical research has provided mixed results on the role of ethnicity and SES on parent attendance and completion of BPT.

Lavigne et al. [17], found the combination of ethnic minority status and low SES to be significant predictors of attendance to and completion of parent training in a sample consisting of mostly white (73%) and African American parents. Other researchers similarly found that African Americans relative to non-ethnic minority parents, as well as low-SES, ethnic minority parents were more likely to terminate prematurely from parent training [18]. Kazdin, Holland, and Crowley [19] suggested that greater attrition among ethnic minority and low-SES parents might be attributable to the increased likelihood of perceived barriers to treatments, such as stressors and obstacles that compete with treatment (e.g., conflict with partner over treatment, lack of transportation), perceived treatment demands and complaints (additive to other life stressors), perceived irrelevance of treatments, as well as poor relationship with therapists (e.g., due to different cultural/ethnic and socioeconomic backgrounds). Notably, Lavigne et al., found barriers to treatment such as life stress and treatment demands to be unrelated to parent attendance [17]. Attempts to address barriers to treatment (e.g., sliding fee scale for service, offering treatment for a reduced

cost to lower SES families) have been largely ineffective with high SES families nonetheless attending more sessions and completing parent training at a higher rate than low SES families [4]. Other studies have found no connection between ethnicity and SES and low attendance during family interventions [20-22]. In particular, Dumas et al. (2007), found that although maternal ethnicity was not associated with enrollment or attendance of a BPT intervention, high SES was predictive of lower attendance to the intervention when high demands were placed on the mother [10].

### Current study

The goal of the current study is two-fold. First, we sought to clarify the extent to which ethnicity and SES are predictive of lower attendance rates and early dropout. Prior research has produced inconsistent findings regarding the predictors of enrollment and premature treatment termination of low-SES and non-White parents. Inclusion and exclusion criteria for these studies differed considerably, such as only including families with children within a specific age range [23], children who had been referred for treatment to a Child Conduct Clinic [19], children considered at risk for conduct problems [20], meeting specific criteria on a measure of conduct problem [17], or employing no inclusion/exclusion criteria [18]. Relatedly, studies' treatment approaches differed substantially, depending on the treatment goal, with some sites offering a general parent education program to prevent child maltreatment [18] to highly specific interventions for a DSM-based diagnosis of oppositional defiant disorder [17]. It is possible that the severity of a diagnosis, the associated stigma, particularly within one's own ethnic/cultural group, and subsequent parental stress affect enrollment differently, which would explain the inconsistency across findings.

Moreover, the proportion of low-SES and non-White participants in the different studies varied wildly, with 41% [18] to 73.3% [17] families being of White/non-ethnic origin, and between 34% [23] and 86.2% [17] of all families reporting either a middle-class or upper-class background. Given the resources that high vs. low SES families have access to, as well as how families from various ethnic backgrounds may approach child behavior problems, those results may not generalize to most parents attending BPT. In addition, whereas some studies reported the impact of SES and minority status on enrollment and dropout rates separately [9], others looked at the combined effect [18], thus further complicating the ability to draw conclusions about the impact of these factors.

Given the differences in sample characteristics, inclusion/exclusion criteria, and treatment approaches of prior studies, our goal is to elucidate the impact of SES and ethnicity on enrollment and attrition in a community-based BPT group that does not employ strict inclusion/exclusion criteria, and aims to reduce common child behavior problems by teaching standard behavioral parenting skills. The second goal of this study was to better understand the potential differences among Hispanic/Latino and White racial/ethnic groups. This is especially important given similar rates of Hispanic/Latino and White parents in the current sample, and the relative lack of research that has examined rates of attrition among Hispanic/Latino parents outside of culturally adapted BPT programs.

## MATERIALS AND METHODS

### Participants and procedure

The final sample consisted of 177 families who had sought parent training at a university-based clinic. Families were included in the present analyses if they had attended at least 1 session of parent training. This is a diverse sample that represents well the community in which the services are provided. Each of the families included in the study had contacted the university seeking enrollment in a 9 or 10-week group (1 session a week, 2-hour sessions) Behavioral Parent Training (BPT) program. The Incredible Years Parent Training Program aims to reduce child behavior problems (with specific focus on assisting the parents of children with aggressive behavior problems and ADHD, however, parents were able to participate regardless of the specific parenting issue they experienced) through improving parent-child interactions and teaching parents behavioral discipline techniques such as ignoring and redirecting [24]. At the beginning of the BPT, parents were asked to self-report a number of demographic information, including those reported here (e.g., race/ethnicity, income). In order to gather data on attendance, a chart review was conducted by graduate level trainees involved in the study. This study has received IRB approval at the University of the Pacific.

### Ethnicity

Thirty-nine percent of parents self-identified as White, 37% as Hispanic/Latino, 7% as Asian, 6% as Black, 3% as Filipino, 2% as Other Ethnicity and 6% of parents declined to state. For the present study, ethnicity was dichotomized, such that White/nonethnic minority parents were coded as "0", and non-white/ethnic minority parents were coded as "1".

### Socioeconomic status (SES)

Parents reported income based on increments of \$5000/year. Families were categorized as having either low-SES ("0") or high-SES ("1") status based on reported income being below or above \$40,000 a year, which was roughly 175% of federal poverty income guidelines at the time of the study.

### Attendance

Parent attendance to the program was tracked for every session. To assess whether a parent completed the program, the method used in the present analysis was consistent with previous research on attendance during parent training [17]. A parent was considered to have completed the program if they had attended at least 70% of the 9 or 10 classes and was coded as "1". Attendance of fewer than 70% of the session was coded as "0".

## RESULTS

### Treatment attendance

Of the 177 participants, 96 (54%) attended at least 70% of available sessions. Results of an independent *t*-test indicated no difference in attendance rates for low-SES parents (59.5%) compared to high-SES parents (62.7%),  $t(174) = .63, p = .52$ . Similarly, there was no difference in attendance for ethnic

minority individuals (60.3%), relative to White individuals (66.7%),  $t(164) = 1.42, p = .15$ . See Table 1 for a summary of the results.

### Treatment completion

Attrition was fairly spread over sessions, with no one session having a significantly larger attrition rate than others. Results of a chi-square test of independence revealed no difference between White parents (63.8%) meeting completion criteria vs. ethnic minority parents meeting criteria (51.5%),  $\chi^2(1,166) = 2.45, p = .12$ . Likewise, there was no significant association between SES and treatment completion,  $\chi^2(1,176) = .23, p = .63$ , with 51.9% of low-SES parents completing treatment, relative to 55.7% of high-SES parents.

Further analyses were conducted to determine whether low completion rates were associated with being an ethnic minority of low-SES as Lavigne et al. (2010), predicted. Approximately 38 parents self-identified as an ethnic minority and were categorized as low-SES. Of these parents, 53% completed at least 70% of treatment. No differences in treatment completion were observed among low (53%) and high (52%) SES ethnic minority parents,  $\chi^2(1, 96) = .01, p = .93$ . Similarly, in examining differences among White parents categorized as low and high SES, no statistically significant differences were found in completion rates,  $\chi^2(1, 69) = 1.71, p = .19$ , though the trend was toward higher completion rates for those of higher SES.

### Exploratory analysis

Again, given similar rates of enrollment between White (39%) and Hispanic/Latino (37%) parents, we sought to explore differences in rates of BPT attendance and completion among these racial/ethnic groups. In comparing rates of attendance, results of an independent t-test suggested no significant differences,  $t(133) = .72, p = .43$ , with White and Hispanic/Latino parents, on average, attending approximately 66% and 62% of treatment sessions. Similarly, a chi-square test of independence suggested that White (64%) and Hispanic/Latino (58%) parents completed at least 70% of the intervention at similar rates,  $\chi^2(1, 135) = .54, p = .46$ . In comparing more specific groups of racial minorities, 57.6% of Hispanic/Latino, 50% of Filipino, 45.5% of Asian, and only 18.2% of African American parents met completion criteria.

## DISCUSSION

Positive outcomes (e.g., a decrease in child disruptive behavior) are frequently associated with completion of behavioral parent training [25]. Although there is substantial evidence for the efficacy of behavioral parent training, research shows that large numbers of parents terminate treatment prematurely [26,27]. Given that family psychosocial characteristics may identify parents who are likely to drop out of treatment early [8], the purpose of the present study was to examine whether parent ethnicity and SES were associated with attendance and completion of parent training. This study sought to extend the current literature base, which highlights that ethnicity and SES are predictors of treatment attrition among parents of young children seeking services in a primary care setting [17]. Findings from the present study highlight that, attendance may be related to some parental demographic variables but not others.

First, our findings suggest minimal differences in rates of attendance between parents of low and high SES groups. Further, minority status was not related to lower rates of attendance. Second, although parents of minority status and low-SES had slightly lower completion rates than White and high-SES parents, no significant differences were observed when each of these variables was examined independently. Third, we found no differences between low-SES minority parents and high-SES minority parents on completion rates. Fourth, our exploratory analyses suggest that Hispanic parents attend and complete BPT at similar rates to White parents.

Despite prior studies that have demonstrated minority status [18] and low-SES [4,8] may differentially impact rates of attendance to parenting interventions, our findings provided minimal support that these demographic factors were associated with lower attendance and higher attrition during treatment. Unlike Lavigne et al. (2010), who found that minority status and low-SES predicted non-completion of parent training approximately 72% of the time, similar findings with a larger sample size were not observed when these variables were examined independently of each other.

Previous researchers have hypothesized that low-SES racial minority parents may have unique needs that are not addressed using standardized parent training programs [14,28]. Although

**Table 1:** Results of independent t-test and chi-squares test of independence.

	N	Treatment Attendance				Treatment Completion			
		%	t	DF	p	%	$\chi^2$	DF	p
Low SES	54	59.1	0.78	174	0.38	51.9	0.23	1,176	0.63
High SES	122	63.2				55.7			
Minority	97	60.3	2	164	0.16	51.5	2.45	1,166	0.12
White	69	66.7				63.8			
Minority Low SES	38	59.7	0.03	94	0.87	52.6	0.01	1,96	0.93
Minority High SES	58	60.7				51.7			
White Low SES	16	57.6	1.94	67	0.17	50	1.71	1,69	0.19
White High SES	53	69.4				67.9			
White	69	66.7	0.63	133	0.43	63.8	0.54	1,135	0.46
Hispanic/Latino	66	62.8				57.6			

attempts have been made to provide culturally sensitive interventions within diverse communities, many of these programs are limited by targeting a singular type of diversity (e.g., African Americans) as well as having small sample sizes [28-30]. Ortiz and Del Vecchio (2012) recommend 5 strategies for improving the cultural climate of parent training interventions. Notably, they state that generic programs (programs not targeting specific racial groups) are flexible in meeting the needs of racially diverse families. However, they also highlighted that researchers need to look beyond ethnicity when identifying ways to make parent training more culturally competent [14]. Our findings demonstrating no statistically significant differences in completion rates among Hispanic/Latino families and White families; further supports this idea of the need to move beyond a singular view of culture. It also suggests that having sufficient numbers of ethnic minority parents may overcome any possible negative impacts on attendance.

Several factors may explain the differential findings from the study conducted by Lavigne et al., (2010). First, their sample derived from various clinics around the metropolitan Chicago area and minority participants were almost predominately African American. Parents in the current study were recruited from one moderately-sized city, surrounded by farmland, with a highly diverse population (approximately 60% minority). Unlike other studies examining these variables, to be included in the present study parents were not excluded on the basis of severity of child behavior problems [9,17].

One possible explanation for not finding results similar to Lavigne et al., may be due to minority and low SES parents in this study feeling that they were able to relate to the other group members who possibly shared a similar background as well as values consistent with that background. Therefore, being able to relate to and feeling understood by their peers may have increased parents' engagement and commitment to BPT, and subsequently their attendance. Although parent values were not assessed in the present study, future studies examining attendance among diverse families should include measures of parental values.

## CONCLUSION

Overall, these findings may reflect expected outcomes of diverse families seeking treatment for a range of child behavior difficulties. The current study is not without limitations. First, due to the retrospective examination of parents demographic variables as well as attendance and completion data, we were unable to examine other pretreatment variables such as parent views of treatment, which may also be associated with attrition over the course of treatment. Second, as Lavigne et al. (2010), suggested, the ability to conduct exit interviews with parents following treatment termination would have further shed light on how clinicians may modify parent training to meet the specific needs of the enrolled families. Consequently, future research would benefit from collecting data on perceived variables associated with higher dropout rates of low-SES and minority parents (e.g., job situation, lack of perceived benefit), both at the beginning and throughout treatment participation.

Much of the literature examines treatment enrollment,

attendance, and attrition among racially diverse parents enrolled in randomized clinical or control trials primarily consisting of White middle- or upper- class parents or targeted minority groups (e.g., only African American parents). Therefore, a significant strength of this study is the ethnically and socioeconomically diverse sample of parents who presented with a wide variety of common parenting issues, which allowed for the assessment of attendance and attrition in a sample representative of many American communities. In particular, our findings provide important information about community Hispanic/Latino parents, and parents seeking treatment for a range of child behavior issues regardless of clinical elevations. Our results suggest that BPT groups mainly comprised of parents from minority and low-SES backgrounds, as opposed to White majority or high-SES parents, lessen the risk of minority and low-SES parent drop-out. One possible explanation may be that minority and low-SES parents are more engaged in BPT if they are able to relate to the experience of other parents with similar backgrounds and who experience challenges due to their minority or SES status.

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## Cite this article

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