

CULTURAL CONSIDERATIONS  
OF THE FILMING INTERACTIONS TO NURTURE  
DEVELOPMENT INTERVENTION

by

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A THESIS

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Bachelor of Science

## **An Abstract of the Thesis of**

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Title: Cultural Considerations of the Filming Interactions to  
Nurture Development Intervention

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Primary Thesis Advisor

The Filming Interactions to Nurture Development (FIND) intervention is a strengths-based video coaching program designed to disrupt the consequences of early exposure to toxic stress and promote naturally occurring, developmentally supportive interactions between infants and their caregivers. While the FIND intervention has been shown to be effective in improving certain child and parent outcomes, no prior study has explored the importance of cultural factors when implementing the FIND intervention. The focus of this paper is to better understand the cultural differences between English-speaking and Spanish-speaking families, and to identify if these differences influence the intervention's effects on parent outcomes (i.e., parent sense of competence, parental stress, and parental self-efficacy). Data was derived from a randomized controlled trial using a pretest-posttest design. Families were randomly assigned to an active control or the FIND intervention group. Results indicated no significant interactions between preferred administration language and condition. Caregivers in the FIND condition were found to improve significantly more in their parent-reported sense of competence from pre- to post-intervention compared to those in the active control condition.

Additionally, Spanish-speaking caregivers saw a significantly greater decrease in parent-reported stress from pre- to post-intervention than English-speaking families. Implications and limitations of the FIND intervention's cultural considerations will be discussed.

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## Introduction

The activation of the hypothalamic-pituitary-adrenocortical (HPA) axis and the ensuing increase in production of cortisol is the major endocrine mechanism behind the mammalian reaction to stress (Aguilera, 1994; Tarullo & Gunnar, 2006). Early life stress (e.g., non-responsive caregiver, multiple caregiver transitions, neglect) has been found to have a significant impact on the future functioning of a child's stress response system and especially of the HPA axis. Dysfunction of the HPA axis has been linked to an increased likelihood of a variety of poor physical and physiological health outcomes in adolescence and adulthood (Bruce et al., 2013; Halligan et al., 2007, Sánchez et al., 2001; Tarullo & Gunnar, 2006).

There is significant evidence that HPA axis dysregulation is associated with a variety of poor outcomes later in life (Guerry & Hastings, 2011; Guilliams & Edwards, 2010). Research has shown that some interventions can disrupt this cycle and even reverse these effects (e.g., Fisher et al., 2007). More specifically, research has shown that a strong, supportive relationship between a child and caregiver can be a significant protective factor that has long-term benefits for both the caregiver and the child (Cicchetti et al., 1991; Gunnar et al., 1996). A strong, established relationship between an infant and a caregiver can act as a "buffer" that regulates and dampens the infant's physiological response to stress (Flannery et al., 2017; Hostinar et al., 2014). For example, parents who were higher in sensitivity and responsiveness when their children were 2, 4, and 6 months old had children who exhibited significantly smaller cortisol responses to a stressful experience in infancy than parents who were lower in those

variables (Gunnar et al., 1996). This protective effect has also been replicated in a variety of different stressful environments (Gunnar et al., 1996). These findings have significant implications in a clinical setting, and many interventions now seek to establish a strong, supportive attachment between caregivers and their children.

### **FIND Intervention**

Among these interventions is the Filming Interactions to Nurture Development (FIND) intervention, a strengths-based video coaching program designed to disrupt the consequences of early exposure to toxic stress. The FIND intervention is a brief program for caregivers and is designed to promote naturally occurring, developmentally supportive interactions between infants and their caregivers (Fisher et al., 2016). These interactions, often labeled “serve and return” interactions, occur when an infant “serves” by presenting a signal or gesture and a caregiver “returns” that serve by responding in an appropriate or nurturing manner (Fisher et al., 2016; Schindler et al., 2017; Shonkoff & Bales, 2011). Even the smallest back-and-forth interaction can be considered a serve and return interaction. Serve and return interactions are crucial for infant brain development, influencing later life outcomes such as academic performance and mental health (Schindler et al., 2017; Shonkoff & Bales, 2011). Young children naturally seek interaction with their environment, and the way that caregivers respond to these cues has a significant impact on the child’s development.

FIND is flexible, brief, and appropriate for use across a variety of contexts. The FIND intervention has been implemented in a variety of different settings including in homeless shelters and primary care settings. The intervention is derived from



microsocial interaction research at the Oregon Social Learning Center (Patterson et al., 1992) and the Marte Meo video coaching intervention (Axberg et al., 2006; Fisher et al., 2016) and focuses on supportive “serve and return” interactions. These interactions are broken down into five core elements that are described in behavioral terms to make it easier for caregivers to understand and implement (Fisher et al., 2016). The first element is *Sharing the Focus*, which occurs when the caregiver notices and shows interest in the stimuli that the child is focused on. The second element is *Supporting and Encouraging*, which includes the caregiver responding by offering help/support, acknowledging the infant, or praising the infant. The third element is *Naming*, which occurs when the caregiver verbally labels what the infant is seeing, doing, or feeling. The fourth element is *Back and Forth*, which is an extension of the serve and return process that takes place when a caregiver “returns” an infant’s “serve” and follows that by waiting for the infant’s further initiations. The fifth and final element is *Endings and Beginnings*, which includes the transitions from one back and forth interaction to another (Fisher et al., 2016).

There are several aspects of the FIND intervention that makes it unique. First, the FIND intervention presents caregivers the opportunity to view their interactions with their infant from a different perspective (i.e., through videos of themselves rather than actors). Using recorded videos also allows implementation of these interventions to be highly flexible, which is especially important when working with parents. Additionally, the FIND intervention utilizes strictly a strengths-based approach. Rather than focusing on what the caregiver did wrong or could improve on, the coach uses clips of the caregiver successfully using a core element and builds on these examples.

The FIND intervention is specifically implemented in this way to increase caregiver self-efficacy (Fisher et al., 2016; Liu et al., 2021) – the degree to which a parent feels competent and confident in raising their children and handling problems (Johnston & Mash, 1980).

## **Relevance**

The importance of the child-caregiver relationship and parental self-efficacy may be especially relevant for families living in poverty, whose environmental stressors often force their way into all aspects of life. There are a number of environmental risk factors associated with childhood poverty: increased family turmoil, family instability, less social support, and poorer schools/childcare (Evans, 2004). Without intervention, these early life stressors can lead to poor long-term outcomes for both children and caregivers. Caregivers living in poverty are also more likely to resort to negative parenting styles such as corporal punishment and reduced parent-child interactions (Albright & Tamis-LeMonda, 2002; Bluestone & Tamis-LeMonda, 1999; Sheely-Moore & Bratton, 2010). Living in poverty is the harsh reality that a growing number of families are forced to face. Alongside the beginning of the coronavirus pandemic, the United States saw an increase in its poverty rate from 10.5% in 2019 to 11.4% in 2020. Perhaps even more surprising, a staggering 17% of Hispanic individuals lived in poverty compared to just 8.2% of non-Hispanic Whites (Shrider et al., 2021). The Hispanic population continues to be disproportionately represented below the United States poverty line (Quillian, 2012). The impact of this overrepresentation is even more pronounced for immigrant Hispanic families. Families of Hispanic immigrants have

been found to experience greater economic strain than nonimmigrant Hispanic or White families (Lubotsky, 2011).

Economic stressors, however, are far from the only significant stressors that Hispanic families have to overcome. In the United States, Hispanic families are met with an oftentimes contradictory patchwork of welcoming or stigmatizing sociopolitical environments that vary depending on the context (Smokowski et al., 2008). For most families, acculturative stress also underlies the way that they react to all of these environments. Acculturative stress is reductions in the health status of individuals that are related in a systematic way to known features of the acculturation process (Berry et al., 1987). The dual stressors of parenting and acculturation can lead to heightened levels of stress for both the caregiver and the child (Kim, 2008). High levels of acculturation stress are also associated with fewer positive parenting practices and compromised family functioning (Boruszak-Kiziukiewicz & Kmita, 2003; Lorenzo-Blanco et al., 2016; Miao et al., 2018). Cultural differences in rules, beliefs, preferences, codes of communication, and standards of competence have significant implications for the parenting of children (Calzada., 2010).

### **Early Head Start (EHS) Programs**

The FIND intervention is designed specifically for at-risk families, which includes families living in poverty. However, there are also a number of other programs and services that are readily available for this population. Among these services, and perhaps the most well-known of them, are the Early Head Start (EHS) programs. These programs are designed to be flexible in their approach to meeting the needs of their

communities, and specifically, low-income families of children from birth to age three. This approach includes providing support to caregivers and promoting positive child development in areas such as language, literacy, and social and emotional development (Love et al., 2005). To be eligible for EHS programs, families must have an income below the federally set poverty line. Additionally, all children in foster care, homeless children, and children from families receiving public assistance are eligible for EHS services regardless of income.

### **Present Study**

Though past studies have shown that the FIND intervention is effective in improving parent and child outcomes (Giuliani et al., 2019; Liu et al., 2021), none of these studies have explored group intervention differences based on culture or language. The present study offers a novel framework for considering how cultural factors impact the efficacy of clinical interventions applied to those that comprise the majority of families living in poverty. To investigate if the FIND intervention is effective in a Hispanic population, the present study will use the caregivers' preferred administration language to divide the sample into two groups of families. Preferred administration language was chosen as an independent variable because language assimilation is one of the most commonly used and effective measures of acculturation (Kang, 2006; Thomson et al., 2009; Kirkman-Liff, 1991; Lee et al., 2009). Additionally, preliminary analyses ran by Benito-Gomez & Rojas (2021) found evidence of different relationships between parental stress and reciprocity between English-speaking and Spanish-speaking families. The present study will explore if the effectiveness of the FIND intervention on parental sense of competence, parental stress, and parental self-efficacy is influenced by

whether families receiving the intervention considered English or Spanish as their preferred language. We hypothesize that there will be a significant interaction between the preferred administration language of the intervention and the intervention's effects on parental sense of competence, stress, and self-efficacy.

## Methods

### Procedures

The present sample included families recruited from EHS programs in the Denver metropolitan area. Recruitment strategies included a research coordinator speaking with enrolled caregivers about the study opportunity, disseminating recruitment materials, attending parent-focused events, and participants' word-of-mouth referral.

To be eligible for the current study, families needed to (1) be eligible to receive EHS services, (2) have children aged between 4 and 36 months old, and (3) be fluent in English or Spanish. A total of 202 families enrolled for the initial screening, during which additional eligibility criteria were assessed: eligible children (1) must not have any developmental delays and (2) must not regularly use any medications that interfere with cortisol assays.<sup>1</sup> After screening, 138 families were eligible and interested in participating in the study. Eligible families participated in a pre-intervention assessment session in which self-report surveys were used to collect data on specific caregiver and child variables. Caregiver-infant dyads were then randomly assigned into either the EHS-control condition ( $n=50$ ) or the FIND-intervention condition ( $n=88$ ). The uneven sample sizes in the active control and intervention groups were a deliberate design decision to include maximum access to active intervention in these vulnerable populations. Those in the control condition continued receiving EHS services for the

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<sup>1</sup> Data on caregiver cortisol levels was also collected but is not used in the present study.

10-week period. Those in the intervention condition completed a 10-week span of FIND intervention sessions while also having access to EHS services.

After completing the intervention, families were assessed using the same measures a second time (for a full flow-chart of participants, see *Figure 1*). During the study procedure, contact with the families was maintained through weekly meetings with FIND coaches (for intervention group families) or weekly check-in phone calls/texts (for control group families). Families received \$50 incentives per research visit.

### **Participants**

Nearly all caregivers were mothers ( $n = 88$ ), with only one father. The mean age of caregivers was 32.75 years ( $SD = 6.18$ ), and the mean age of children was 23.33 months ( $SD = 9.88$ ). There were 50 male children (56.2%) and 39 female children (43.8%) included in the sample. Most caregivers identified as Hispanic/Latino(a) (78.7%;  $n = 70$ ), and 83.15% of caregivers ( $n = 74$ ) identified their race as Caucasian/White. Caregivers also indicated their preferred language (either English or Spanish). Both assessments and the following intervention sessions were administered using their preferred language. There were 68.5% ( $n = 61$ ) families completing the assessments in Spanish, and the rest in English ( $n = 28$ ). The average annual family income in the sample was \$30,425.65 ( $SD = \$21,947.58$ ).

### **FIND Intervention Implementation**

The FIND intervention spanned 10 weekly home visit meetings that alternated between video recording sessions and coaching sessions. Throughout the 10 weeks,

coaches worked closely with the caregiver to improve on specific aspects of positive parent-child interactions. During filming sessions, coaches recorded a 10-minute film of the caregiver and their infant interacting during routine, everyday activities. Between recording and coaching sessions, videos were edited either by the coach or a trained editor to show brief clips in which the caregiver uses one or more elements of the previously listed five elements. These clips were chosen to facilitate learning and optimize engagement. While watching the clip, the coach provided their analysis and praises for the caregiver. Coaches were trained to maximize the salience of the different elements, reduce the reliance on professional expertise, and facilitate consistent implementation of the elements. The entirety of the recording and review processes were repeated for every element, meaning the coach spent two weeks on each of the five elements. Measures

### ***PSOC***

The PSOC is a self-report scale developed by Gibaud-Wallston and Wandersman (1978) that is commonly used to assess parenting self-esteem (Ohan et al., 2000). The measure divides these items into two scales: *Satisfaction* (liking of the parenting role) and *Efficacy* (perceived competence in the parenting role; Johnston & Mash, 1989). Each item is answered using a six-point Likert-scale that ranges from 1 (strongly agree) to 6 (strongly disagree). Scoring for some items are reversed so that higher scores indicate greater caregiver self-esteem for all items. The reported alpha coefficients for the satisfaction and efficacy scales are .82 and .70, respectively. Six-week test-retest correlations were reported to have ranged from .46 to .82 (Gibaud-Wallston & Wandersman, 1978).



## ***PSI***

The short form of the PSI was used. The PSI short form is a questionnaire derived from the original 120-item PSI measure. Like the long form, the short form PSI is designed to measure stress in the parent-child relationship and identify families that may need further services (Abidin, 1995). These items are divided into three subscales: *Parental Distress* (level of distress related to conflicts with a partner, social support, and stresses resulting from life restrictions due to child rearing), *Parent-Child Dysfunctional Interaction* (dissatisfaction about interaction with their infant and perception of their infant compared to other infants/children), and *Difficult Child* (perception of their infant's self-regulatory abilities such as temperament or defiance; Reitman et al., 2002). Each subscale consists of items that are rated on a five-point Likert-scale from 1 (strongly disagree) to 5 (strongly agree). Higher scores on the scale indicate greater levels of caregiver stress. Abidin (1995) reported alpha coefficients of .91 for the total scale, .87 for the *Parental Distress* subscale, .80 for the *Parent-Child Dysfunctional Interaction* subscale, and .85 for the *Difficult Child* subscale, with tests-retest correlations after 6 months ranging from .68 to .85.

## ***SEPTI-TS***

The SEPTI-TS Short Form is a 26-item questionnaire derived from the original SEPTI that included 53 items. Both measures were designed to assess parental self-efficacy in the caregivers of toddlers (Meunier & Roskam, 2009). These items are divided into four subscales: *Nurturance* (expressing loving and caring feelings towards the child and responding empathically), *Discipline* (setting limits for a child), *Play* (getting involved in child's play), and *Routine* (establishing structure and routine in a

child's daily activities, eating, and sleeping) (Rijen et al., 2013). The items are all rated on a six-point Likert-scale with response categories varying from 1 (strongly disagree) to 6 (strongly agree). Higher scores indicate greater parental self-efficacy. Rijen et al. (2013) reported alpha coefficients of .88 for the total scale, .82 for the *Nurturance* subscale, .79 for the *Discipline* subscale, .80 for the *Play* subscale, and .79 for the *Routine* subscale. Test-retest correlations were not reported in the study.

### **Data Analysis**

Two-way ANOVAs were conducted to examine the pre- and post-intervention differences in caregivers' parenting sense of competence (PSOC), parental stress (PSI), and parental self-efficacy (SEPTI) and if these differences were significantly influenced by the condition (i.e., FIND-intervention or active control) or preferred administration language (i.e., English or Spanish). The two-way ANOVAs were also used to examine if there was a significant interaction between these two variables. Residual analysis was performed to test for the assumptions of the two-way ANOVA. Outliers were assessed by inspection of a boxplot, normality was assessed using Shapiro-Wilk's normality test, and homogeneity of variances was assessed by Levene's test.

## Results

### PSOC Analysis

A two-way ANOVA was conducted to examine the effects of the condition (FIND or control) and primary language spoken in the household (English or Spanish) on the change in PSOC scores from pre- to post-intervention. Figure 2 shows that families in the FIND condition significantly increased PSOC scores across the intervention period compared to control families. The interaction between administration language (English/Spanish) and condition (FIND/control) was not significant. There was one outlier, as assessed as being greater than 3 times the interquartile range from the edge of the box in a boxplot. However, the outlier was not excluded from the analysis as it did not have an effect on the significance of the results. Residuals were normally distributed ( $W = .989, p = .652$ ) and there was homogeneity of variances ( $F(3, 84) = .361, p = .781$ ).

The interaction between the condition and primary language spoken in the household on the change in PSOC scores from pre- to post-intervention was non-significant,  $F(1, 84) = 1.171, p = .282$ , partial  $\eta^2 = .013$  (See *Figure 2*). There was a greater change in PSOC scores from pre- to post-intervention in families in the FIND condition ( $M = 2.04, SD = 4.20$ ) compared to families in the control condition ( $M = .028, SD = 3.97$ ), a statistically significant difference ( $M_{diff} = 1.972, F(1, 84) = 6.22, p = 0.015$ ). However, there was no significant difference in change in PSOC scores for families that primarily spoke English ( $M = .963, SD = 4.31$ ) and families that primarily spoke Spanish ( $M = 1.33, SD = 4.18; M_{diff} = .367, F(1, 84) = 0.34, p = .563$ ).

## PSI Analysis

A two-way ANOVA was conducted to examine the effects of the condition (FIND or control) and primary language spoken in the household (English or Spanish) on the change in PSI scores from pre- to post-intervention. Figure 3 shows that Spanish-speaking families significantly decreased PSI scores across the intervention period compared to English-speaking families, without considering condition. The interaction between administration language (English/Spanish) and condition (FIND/control). There was one outlier, as assessed as being greater than 3 times the interquartile range from the edge of the box in a boxplot. Residuals were normally distributed ( $W = .976, p = .102$ ) and there was homogeneity of variances ( $F(3, 83) = 1.52, p = .216$ ).

The interaction between the condition and primary language spoken in the household on the change in PSI scores from pre- to post-intervention was found to be non-significant,  $F(1, 83) = 2.01, p = .160$ , partial  $\eta^2 = .022$  (See *Table 1*). There was no significant difference in the change in PSI scores from pre- to post-intervention in families in the FIND condition ( $M = -6.39, SD = 15.87$ ) compared to families in the control condition ( $M = -7.82, SD = 16.75; M_{diff} = 1.44, F(1,83) = .953$ ). However, there was a statistically significant difference ( $M_{diff} = -9.50, F(1, 83) = 5.36, p = .023$ ) between the decrease in PSI scores for families that primarily spoke English ( $M = -.786, SD = 13.71$ ) and families that primarily spoke Spanish ( $M = -10.29, SD = 16.65$ ),

## SEPTI-TS Analysis

A two-way ANOVA was conducted to examine the effects of the condition (FIND or EHS-control) and primary language spoken in the household (English or Spanish) on the change in SEPTI-TS scores from pre- to post-intervention. Marginal

means of caregivers' change in PSOC scores are presented in Figure 4. There were no outliers, and all assumptions were met. Residuals were normally distributed ( $W = .99, p = .863$ ) and there was homogeneity of variances ( $F(3, 63) = .85, p = .469$ ).

The interaction between the condition and primary language spoken in the household on the change in SEPTI-TS scores from pre- to post-intervention was found to be non-significant,  $F(1, 63) = 1.43, p = .236$ , partial  $\eta^2 = .022$ . Though this effect was non-significant, it seems that the FIND intervention may have had a different effect on the change in SEPTI-TS scores for English- and Spanish-speaking families in the FIND intervention condition. In this condition, we saw a non-significant but greater increase in SEPTI-TS scores for Spanish-speaking families,  $M = 13.73$ , 95% CI = [6.04,21.42], than English-speaking families,  $M = 2.67$ , 95% CI = [-8.65, 13.98]. See Figure 4.

There was no significant difference in the change in SEPTI-TS scores from pre- to post-intervention in families in the FIND condition ( $M = 10.24, SD = 18.26$ ) compared to families in the control condition ( $M = 6.138, SD = 21.49; M_{diff} = 4.10, F(1,63) = .118, p = .732$ ). There was also no significant difference in change in SEPTI-TS scores for families that primarily spoke English ( $M = 4.57, SD = 18.99$ ) and families that primarily spoke Spanish ( $M = 10.24, SD = 19.93; M_{diff} = 5.67, F(1, 63) = .856, p = .358$ ).

## Discussion

FIND is a brief and strength-based video coaching intervention program designed to promote developmentally supportive caregiving (Fisher et al., 2016). The intervention has previously been found to improve caregiver and child outcomes (Liu et al., 2021; Joseph et al., 2022; Nese et al., 2016), however, no study has examined if these intervention effects are influenced by cultural factors. This study looked to fill this gap by exploring if the effectiveness of the FIND intervention on parental sense of competence, parental stress, and parental self-efficacy is influenced by whether the intervention is administered to Spanish-speaking or English-speaking families.

Contrary to our prediction, analyses showed that FIND did not have a significant main effect on PSI or SEPTI-TS scores, but did have a significant effect on PSOC scores. The increase in PSOC scores from families in the FIND condition was significantly greater compared to families in the control condition. Our findings suggest that the FIND intervention was not as effective in improving all of the target outcomes for this particular sample, especially when compared to what past studies have found. This also could suggest that cultural factors may play an impactful role in the effectiveness of the FIND intervention, and that more work needs to be done to explore this possibility. This finding could be attributed to the predominantly Spanish-speaking and Hispanic sample used in the study. If there are differences in FIND intervention results when using a predominantly Hispanic sample, adjustments must be made to ensure that the FIND intervention is not only effective for White and/or acculturated populations.

Preferred administration language did not have a significant main effect on PSOC or SEPTI-TS scores, but did have a significant effect on PSI scores. The decrease in PSI scores was significantly greater for Spanish-speaking families than English-speaking families. This could suggest that cultural factors play an important role in parental outcomes, but it is also possible that this importance is something we would see with all intervention outcomes. This could mean that any form of services or interventions provided to Hispanic families can drastically improve caregiver stress. This may also just be a result of two effective programs (EHS and FIND) in targeting at-risk families and caregivers.

### **Limitations & Future Directions**

This study had several limitations. First, preferred administration language is not a holistic measure of acculturation, and does not capture all cultural factors that may influence the FIND intervention effects. The present study used existing data that was collected as a part of a larger study that was not focused on cultural factors. Future studies should focus specifically on looking at cultural factors and include more measures of acculturation and cultural differences in Hispanic vs. non-Hispanic families (i.e., Marin & Gamba, 1996). Second, all measures of caregiver outcomes were self-report surveys, which may generate reporter biases. Future studies should use observational measures perhaps in addition to self-report measures on parenting practices. Third, the sample sizes included were unbalanced, with significantly more Spanish-speaking families than English-speaking families participating in the study. Additionally, the sample size for certain groups was small, which may have led to our analyses being underpowered. The present study may not have had enough power to

detect significant effects. Future studies should continue to use randomized controlled trials but with balanced, larger sample sizes. Lastly, the current sample had a relatively high attrition rate. Future studies should try to prevent a high attrition rate perhaps by increasing incentives or reducing the workload of the participants. Additionally, future studies could intentionally collect data on attrition rates and reasons for families dropping out of the intervention. This may also supply insight into whether certain cultural groups respond better to the intervention more than others.

Future studies should also expand to include participants of different cultural minorities that are commonly seen where the FIND intervention would be most readily used. Though there were no significant interactions found in the present study, future studies should use a more robust measure of acculturation or cultural differences to ensure that the FIND intervention is effective for families of any race or culture.

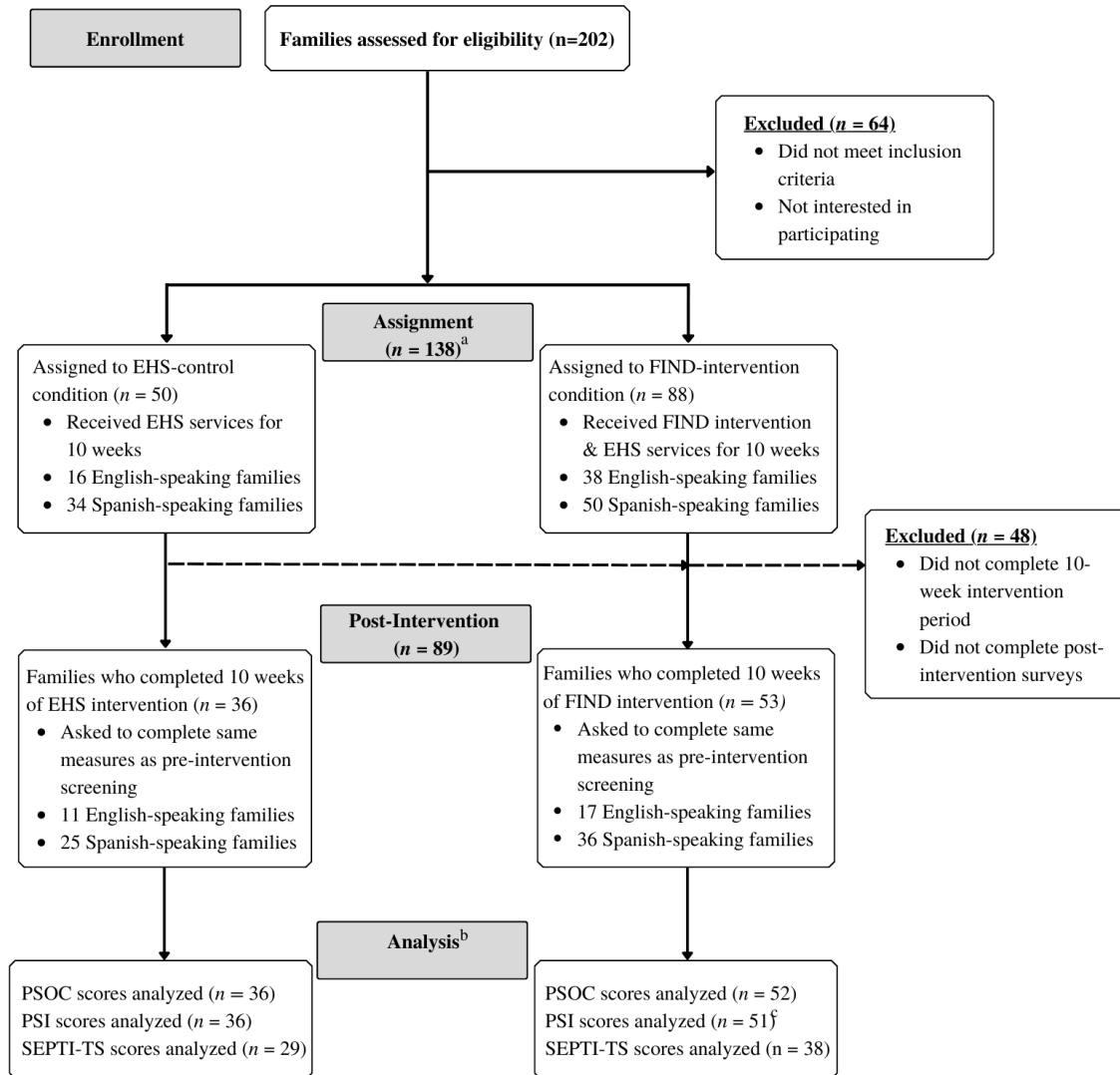
The present study perhaps presents more questions than it answers. Though we did not find what we expected, our findings hint that cultural considerations are important to consider when implementing the FIND intervention. The FIND intervention has already been found to be associated with a variety of positive outcomes. However, it is important that we ensure that families of all cultures would benefit from the implementation of the FIND intervention. As the United States population continues to grow more racially and ethnically diverse (Jensen et al., 2021), it will be more important than ever to better understand the relationship between cultural factors and the FIND intervention's effectiveness.



## List of Figures

**Figure 1**

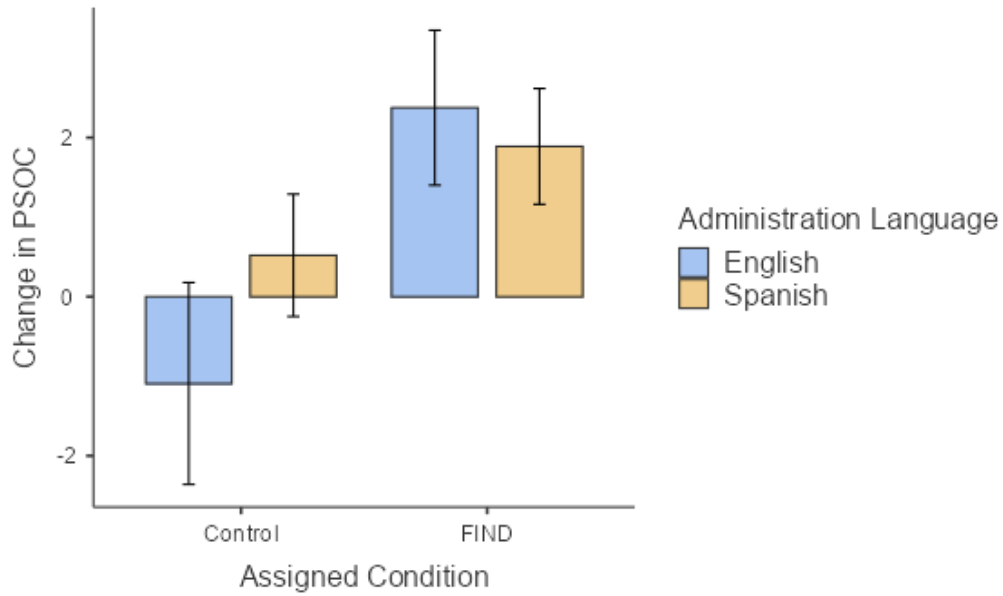
*Flowchart of Participants and Procedures*



*Note.* <sup>a</sup>All participating caregivers completed self-report surveys including the PSOC, PSI, and SEPTI-TS both before allocation and after the ten-week intervention period. <sup>b</sup>One caregiver did not complete the PSI at post-intervention, one caregiver did not complete the PSOC at post-intervention, and twenty-one caregivers did not complete the SEPTI-TS assessment either at screening, post-intervention, or both. <sup>c</sup>One outlier was identified and later removed from the analysis of PSI Scores (see Methods section).

**Figure 2**

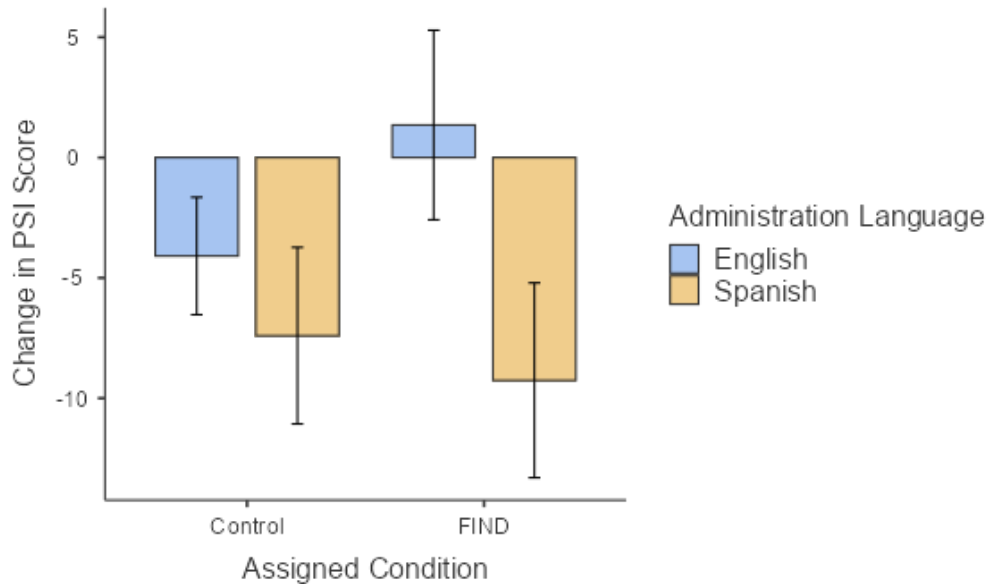
*Estimated Marginal Means of Change in PSOC Scores*



*Note.* Error bars indicate the 95% confidence interval. Among families in the FIND condition (right two bars), analyses showed a significantly greater increase in PSOC scores compared to families in the control condition (left two bars). No significant interaction effect was found.

**Figure 3**

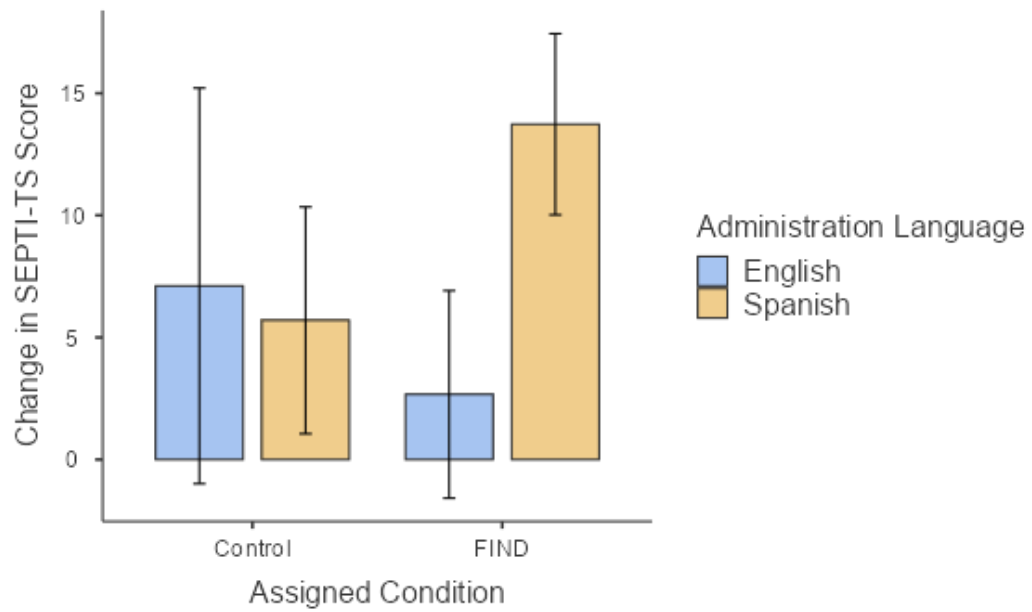
*Estimated Marginal Means of Change in PSI Scores*



*Note.* Error bars indicate the 95% confidence interval. Among Spanish-speaking families (orange bars), analyses showed a significantly greater decrease in PSI scores compared to English-speaking families (blue bars). No significant interaction effect was found.

**Figure 4**

*Estimated Marginal Means of Change in SEPTI-TS Scores*



*Note.* Error bars indicate the 95% confidence interval. No significant main effects or interaction effects were found.

## List of Tables

**Table 1**

*ANOVA Summary Table for Change in PSOC, PSI, and SEPTI-TS Scores*

		<i>df</i> <sub>1</sub>	<i>MS</i>	<i>F</i>	<i>p</i>
		<i>df</i> <sub>2</sub>			
PSOC	Assigned Condition*	1, 84	105.68	6.22	.015
	Administration Language	1, 84	5.72	5.72	.563
	Assigned Condition x Administration Language	1, 84	19.88	1.17	.282
PSI	Assigned Condition	1, 83	0.85	0.00	.953
	Administration Language*	1, 83	1330.24	5.36	.023
	Assigned Condition x Administration Language	1, 83	498.85	2.01	.160
SEPTI-TS	Assigned Condition	1, 63	45.46	0.12	.732
	Administration Language	1, 63	329.37	0.87	.358
	Assigned Condition x Administration Language	1, 63	550.12	1.43	.236

*Note.* MS = mean squares, df = degrees of freedom, \*p < .05.

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