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The validity of observational measures in detecting optimal maternal communication styles:

Evidence from European Americans and Latinos

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Abstract

This study examined the sensitivity of an observational coding system for assessing positive and negative maternal behaviors of Latino and European American mothers towards their adolescent children. Ninety Latino (54 Spanish speaking and 35 English speaking) and 20 European American mother-adolescent dyads participated in an observational study of conversations about sexuality, AIDS and conflicts. Associations were examined between observed maternal positive and negative behaviors and adolescent-reported relationship quality. Results indicated that maternal negative responsiveness was negatively associated with relationship quality for all ethnic/language groups. However, maternal positive responsiveness was related to relationship quality for European Americans but not for Latinos. These findings suggest a need for a broader definition of positive parenting in Latino families.

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Theories of positive youth development suggest that family support and positive familial communication are safeguards that increase the likelihood that adolescents will engage in positive health-related behaviors (Jessor, 1993). Indeed, open, supportive communication styles, as perceived by adolescents, are associated with increased family satisfaction, emotional disclosure, self-protective sexual behaviors, and decreased deviant behavior (e.g., Kotchick, Dorsey, Miller, & Forehand, 1999; Marta, 1997; Papini, Farmer, Clark, Micka, & et al., 1990). Conversely, parental criticism and negative affect are related to adverse adolescent outcomes (Harris & Howard, 1984; Montemayor, Eberly, & Flannery, 1993; Rosenthal, Efklides, & Demetriou, 1988; Scaramella, Conger, & Simons, 1999). Because responsive parenting is central to adolescent functioning, it is crucial to develop effective interventions to help parents increase positive interaction and reduce negative communication styles.

An important consideration is whether intervention program guidelines, and measures used to evaluate program effectiveness, are appropriate across cultures. There is a tendency in the literature to define optimal communication styles by middle-class, European American standards (e.g., praise, mutual exchange in dialogue) and to generate parenting measures that reflect these values. Not surprisingly then, European American families often score higher than Latinos on self-report measures related to warmth and acceptance (e.g., Freeman & Newland, 2002; Toth & Xu, 1999) and lower on measures of hostile control (Hill, Bush, & Roosa, 2003). While these findings suggest deficits in Latino parents' interaction styles, it may be the case that such measures lack sensitivity in their ability to validly detect optimal parenting in Latino

culture. This study aims to explore this very issue in relation to observed parent-adolescent interaction in Latino families.

There is a growing body of literature suggesting that researchers need a broader definition of positive parenting in Latino families. Studies show that European American mothers and Latino mothers of young children tend to emphasize different childrearing goals (Harwood, Schoelmerich, Schulze, & Gonzalez, 1999; Melzi, 2000), which has cultural implications for how mothers conceptualize good parenting. For example, Latino parents report (Toth & Xu, 1999) and have been observed (Laosa, 1981; Toth & Xu, 1999) to give less individual praise to their children than do European American parents, a parenting orientation that is consistent with a collectivistic orientation in which family members are taught not to put themselves ahead of others (e.g., Fuligni, 1998). Latino parents engage in less egalitarian parent-adolescent exchange than European American mothers (Lefkowitz, Romo, Corona, Au, & Sigman, 2000) and reportedly exhibited higher levels of child-reported controlling behaviors (Gonzales, Pitts, Hill, & Roosa, 2000), perhaps because of their beliefs in the importance of instilling moral values and teaching proper demeanor (Harwood et al., 1999; Leyendecker, Harwood, Lamb, & Schoelmerich, 2002). Values of respect may underlie low levels of mutual conversational exchange if Latino adolescents believe that that they should be mindful of parental opinions. In contrast, European American adolescents are accustomed to receiving positive parental encouragement to be forthright in expressing their beliefs. Together, these studies suggest that self-report measures of parenting based on the socialization goals of European American parents may be omitting key behaviors that are central to the definition of optimal parenting in Latino culture.

Observational coding systems of parent-adolescent interaction are similarly vulnerable to measurement sensitivity limitations, although the validity of coding systems across ethnic groups has yet to be studied. Through analyses of maternal behavior during videotaped mother-adolescent discussions about dating and sexuality (Lefkowitz et al., 2000), we found that Latino and European American mothers differed in levels of coded positive behaviors, but not in negative behaviors, such that European American mothers appeared "more positive" than Latino mothers. The definition of positive maternal behavior was based on the literature suggesting that parents' active listening, praise, and encouragement of adolescent opinion expression characterize an open parent-adolescent relationship (Allen, Hauser, Bell, & O'Connor, 1994; Paley, Conger, & Harold, 2000). Yet, the discrepancy between the Latino and European American mothers in the prevalence of maternal positive behavior in these videotaped discussions has since raised questions about whether these observed behaviors are meaningful to Latino families.

In the present study, we rely on adolescents' perceptions of relationship quality as a frame of reference to determine whether these coded behaviors have the same implications for European Americans, English-speaking Latinos, and Spanish-speaking Latinos. Our approach was to compare how the prevalence of coded maternal positive and negative behaviors across three different conversations (i.e., AIDS and conflict, in addition to dating and sexuality) related to scores on other measures of theoretically related constructs (Knight & Hill, 1998), namely, three commonly-used measures that capture different dimensions of family relationship quality: the CRPBI acceptance subscale, (Schuldermann & Schuldermann, 1988); the PAC openness and the PAC problems in communication subscales, (Barnes & Olson, 1986). The cross-ethnic scalar and conceptual equivalence of these self-report measures has already been verified for Latino

and European American samples (Knight, Tein, Shell, & Roosa, 1992), implying that the scales are valid tools for measuring relationship quality across these groups. In addition to ethnicity, maternal language use was included as a moderator in these analyses, because interpretation of optimal parenting behaviors may differ as a function of immigrant status (Delgado-Gaitan, 1994). We expected to find that higher levels of coded positive behaviors, and lower levels of coded negative behaviors, would be associated with European American adolescents' positive perceptions of relationship quality, but it may not be so for Latino adolescents. If the relations are similar, then we could reasonably assume that the prevalence of the different maternal behaviors are capturing true levels of positive and negative parenting styles across groups. If this is not the case, it suggests a need to consider alternate conceptions of observational positive or negative parenting measures for Latino families.

Method

Participants

Participants were 131 European American and Latino mother-adolescent dyads. Families were recruited via flyers at local schools and community centers, and were reimbursed \$25 for participating. At the appointment, interviewers reviewed the consent form with the family and allowed them time to review it themselves and voice questions and concerns before signing it.

Due to random equipment failure, data for at least one of the conversations was uncodeable for 21 dyads, leaving a sample of 90 Latino (54 Spanish-speaking, 36 English-speaking) and 20 European American dyads. The remaining sample included 66 girls and 44 boys ranging in age from 10.60 to 15.82 years old, ($M = 13.19$). Mothers' ages ranged from 26 to 50 years old ($M = 30.03$). The majority (74%) of the Latino mothers were born outside the United States. Of the foreign-born mothers, 56 (84%) were born in Mexico, while the remaining

34 (16%) were born in Central America. Five European American mothers were foreign-born. All of the Spanish-speaking mothers were born outside the United States compared to 13 (36%) of the English-speaking mothers. The families' annual household income ranged from under \$10,000 to over \$100,000 per year, with a median income between \$20,000 and \$30,000.

Procedures

Research sessions lasted about 2 hours and were conducted at either one of 2 local community centers. A few families elected to come to the university research lab. Bilingual interviewers conducted the sessions in the family's preferred language. They began by explaining the day's activities and the fact that the conversations would be videotaped and audiotaped. Each dyad then participated in a warm-up activity in which they described characteristics that made up an "ideal person." For the next portion of the session, the dyad was asked to discuss three topics for 7 minutes each: dating and sexuality, conflict, and AIDS. The order of the conversations was counterbalanced across dyads. The experimenter introduced each topic by saying, for instance "For the next 7 minutes, I would like you to talk about dating and sexuality." The dyad was then asked if they had any questions, which the experimenter addressed before leaving the room. This procedure was repeated for each topic. After the conversations, mothers and adolescents were separated to fill out a series of questionnaires. Of the Latino families, 47% of mothers and 9% of adolescents completed these forms in Spanish.

Measures

Observational Coding of Maternal Behaviors

All three conversations were coded and analyzed using a coding system that was first used by (Lefkowitz et al., 2000) on a portion of this data. Bilingual coders, who were blind to

the study hypotheses, observed each 7-minute conversation in its entirety. Conversations were coded for the prevalence of four types of behaviors:

Positive responsiveness. (1) Acceptance of adolescent opinion expression: agreeing with the child's statement or opinion, encouraging discussion through nodding or verbal reinforcement (e.g., "uh-huh", "right", "I see"), responding playfully (e.g., laughing appropriately at the child's joke, teasing in fun); (2) Reassurance: touching the child when speaking to him/her, comforting the child by addressing a concern s/he might have, and making complimentary statements (e.g., "you are a good friend to others", "I like it when you...").

Negative Responsiveness. (3) Disagreeing with the adolescent's opinion, ("No, I think...", "That's wrong"). This subcategory excludes factual disagreement or instances when a mother responds "no" to a request; and (4) Rejection: harsh criticism or sarcasm (e.g., "That's a stupid reason..."), verbal and nonverbal expressions of disgust.

Each time one of these behaviors was observed, the coders recorded its occurrence, and then tallied how many times the behaviors occurred during each 7-minute time period. The coders coded 18 conversations together for training purposes and another 24 were coded separately in order to establish reliability. Intraclass correlations for all possible pairs of coders ranged from .90 to .98 for positive responsiveness and .88 to .97 for negative responsiveness.

Questionnaires

Demographics. Adolescents and their mothers completed questionnaires about their family information, including questions about age, ethnicity, preferred language, church attendance, birthplace, family income, and educational background (number of years of education). Household income was reported by checking predetermined income range categories

ranked from 1 to 8. The lowest income category was 10,000 and below and the highest was 100,000 and above.

Adolescent-reported open communication and problems in communication. Adolescents' perceptions of open communication and problems in communication were measured using subscales from the Parent-Adolescent Communication Scale (PAC) (Barnes & Olson, 1986). The 10-item open communication subscale assesses the extent to which adolescents feel that their mother is open. Participants answered each question on a 5-point Likert scale ranging from 1, "strongly disagree" to 5, "strongly agree." Examples of items making up the open communication subscale include, "I find it easy to discuss problems with my mother," "My mother understands my point of view," and, "When I ask questions, I get honest answers from my mother."

The 6-item problems in communication subscale assesses the extent to which adolescent feel hesitant to share or perceive negativity in communication their mother. Participants answered each question on a 5-point Likert scale ranging from 1, "strongly disagree" to 5, "strongly agree." Examples include "My mother insults me when she is angry with me," and "I have trouble believing everything my mother tells me." In the current study, alphas for the open communication subscale were .83 for European Americans, .84 for English-speaking Latinos, and .86 for Spanish-speaking Latinos. Alphas for the problems in communication subscale were .73 for European Americans, .70 for English-speaking Latinos, and .70 for Spanish-speaking Latinos.

Adolescent-report acceptance. Adolescents completed the acceptance/rejection scale of the Children's Report on Parent Behavior Inventory-30 (Schuldermann & Schuldermann, 1988). The acceptance/rejection scale consists of 7 items taken from the CRBPI-30, a shortened version

of the CRBPI-108, which are averaged to get a final score for the scale. The scale operates on a continuum, where a low score indicates rejection and a high score indicates acceptance.

Adolescents responded to each statement on the questionnaire by indicating whether it is “not like your parent,” “somewhat like your parent,” or “a lot like your parent.” Examples of items include, “My mother is a person who makes me feel better after talking my worries over with her,” “My mother is a person who is able to make me feel better when I am upset,” and, “My mother is a person who cheers me up when I am sad.” Alphas for the acceptance scale were .87 for European Americans, .90 for English-speaking Latinos, and .84 for Spanish-speaking Latinos.

Results

Demographic and Descriptive Information

Ethnic and language group comparison information is provided in Table 1. A series of 3×2 (ethnic-language group \times adolescent gender) ANOVAs revealed that European Americans reported higher incomes, and higher levels of formal education than both English- and Spanish-speaking Latino mothers, p s $< .05$. English-speaking Latino mothers came from higher income and educational backgrounds than the Spanish-speaking mothers and were younger than both Spanish-speaking Latinos and European Americans. Family income and maternal education were positively correlated, $r(110) = .55$, $p < .001$. There was a significant difference in religious affiliation with the majority of both Latino groups being Catholic and the majority of European American mothers being non-Catholic, $X^2 = 41.87$. There were no adolescent gender differences among any of the demographic variables. Nor were there any differences in the number of boys and girls, or marital status by ethnic group.

With regard to adolescent reported relationship quality, there were no ethnic or language group differences in levels of open communication, problems in communication, and feelings of acceptance. In addition, there were no significant gender effects, or any gender-by-group (ethnicity or language) interaction effects. We included adolescent age as a covariate in all analyses because correlations conducted between adolescent age and the relationship-quality measures revealed that older adolescents reported lower feelings of acceptance than younger adolescents, $r(129) = -.17$. Trends in the same direction were evident for open communication and problems in communication.

Observed Maternal Behaviors across Ethnic and Language Groups

Composite positive and negative scores were created by summing the number of relevant maternal behaviors across the three discussion topics due to the consistency of behaviors across conversations ($r_s(110) = .37$ to $.54$, $p_s < .001$ for positive responsiveness; $r_s(110) = .31$ to $.32$., $p_s < .001$ for negative responsiveness). Table 1 shows the mean levels of coded positive and negative behaviors by ethnicity and language group. To test for ethnic-language group differences, we conducted a series of 3×2 (language group \times adolescent gender) ANCOVAs controlling for adolescent age. Group differences were explored using post hoc Tukey tests. The European American mothers displayed higher levels of coded positive behaviors than both English- and Spanish-speaking Latino mothers, $p_s < .001$, $\eta^2 = .13$. There were no language group differences in positive responsiveness between the two groups of Latino mothers. In terms of maternal negative responsiveness, European American and Latino mothers displayed similar levels of coded negative behaviors toward their adolescents. However, English-speaking Latino mothers exhibited more negative behaviors than did the Spanish-speaking mothers, $p < .05$, $\eta^2 = .08$. They also showed more negative responsiveness than European American but this

difference was not statistically significant. There were no differences in maternal positive and negative responsiveness by adolescent gender, or any gender-by-group (ethnicity or language) interaction effects.

Observed Maternal Behaviors and Adolescent Self-reported Relationship Quality

To examine ethnic and language group differences and similarities we tested whether or not ethnic-language group had a moderating impact on the relation between maternal responsiveness and adolescent self-reported relationship quality through a series of hierarchical regressions. In the first step, we entered adolescent age and ethnicity-language (orthogonal contrasts were used, one comparing both English-speaking Latinos (*1*) and Spanish-speaking Latinos (*1*) together to European Americans (*-2*), and the other comparing language groups, i.e., English-speaking Latinos (*1*), Spanish-speaking Latinos (*-1*), and European Americans (*0*)); in step 2, we added the maternal responsiveness variable of interest (positive or negative). Adolescent age was included as a covariate because it was correlated with relationship quality measures and the coded maternal responsiveness, and did not interact with the independent variables of interest. In step 3, the interaction terms were entered.

Table 2 shows the results of the hierarchical regression predicting adolescent reported open communication, problems in communication, and feelings of acceptance from coded maternal positive responsiveness. The pattern of findings is quite similar across adolescent self-report measures. At Step 3, for each dependent variable we found an interaction between the contrast comparing European Americans to the combined groups of Latinos suggesting that the regression coefficients are different across ethnic groups. The Figure provides scatter plots representing the regression equations for each group and relationship quality measure. The plots show that high maternal positive responsiveness was associated with increased open

communication and acceptance and decreased problems in communication for European American adolescents only.

Table 3 shows the results of the hierarchical regression predicting adolescent reported open communication, problems in communication, and feelings of acceptance from coded negative responsiveness. Maternal negative responsiveness accounted for a significant amount of the variance in adolescent reported open communication, problems in communication, and feelings of acceptance. Mothers who exhibited more negative responsiveness had adolescents who reported less open communication and acceptance and more problems in communication. Adding the interaction term at Step 3 did not produce a significant interaction, either in terms of the individual predictors or the overall effect of ethnic-language group. Analyses conducted without controlling for age were conducted for both positive and negative maternal responsiveness and produced similar results.

Discussion

Consistent with previous findings on Latino parents (Laosa, 1981; Toth and Xu, 1999), and first reported in a related study by Lefkowitz et al., (2000), we found that the Latino mothers engaged in lower levels of praise and encouragement than the European American mothers did. Moreover, high levels of these maternal behaviors predicted higher levels of reported open communication and acceptance and lower levels of reported problems in communication among European American adolescents. Although our sample size was small, this trend replicates several other observational studies demonstrating moderate to strong correlations ($r_s = .20$ -.53) between similar measures of positive maternal interaction and adolescent-reported relationship quality in European American families (Flannery, Montemayor, Eberly, & Torquati, 1993; Flannery, Montemayor, & Eberly, 1994; Paley et al., 2000). Importantly, these relations were

weak or nonexistent for the Latino dyads in this study, suggesting that the low occurrence of these parenting behaviors is not perceived negatively by Latino adolescents as it seemingly does for European American adolescents. Latino mothers may have engaged in praise and encouraging types of behaviors less frequently and with less variability than the European American mothers perhaps because it was not meaningful to their socialization goals in relation to these topics or to their adolescents' feelings about the relationship. These findings highlight the need for research that operationalizes positive parenting in the context of the cultural values of the families under study. It is also interesting that there was no interaction showing that Spanish and English-speaking Latino families differed from each other, suggesting similar conceptualizations of positive parenting despite potential differences in acculturation status.

With regards to negative responsiveness, it is intriguing that a common set of negative behaviors functioned similarly across ethnic groups, in this case, for European American and Latinos, as well as across language groups. Adolescents whose mothers exhibited more disagreement and criticism felt more negative about the quality of their relationship regardless of ethnic or language background. That stated, it is critical to highlight that Latino and European American mothers in this study did not differ in their levels of negativity. All mothers engaged in low levels of conflictive and critical interactions with their children, in contrast to findings from self-report studies suggesting that Latino parents interact in a manner that is more hostile than European American parents (e.g., Hill, Bush, & Roosa, 2003). Because negative behaviors have similar implications across ethnic and language groups, it may be useful for parenting intervention programs for Latinos to focus on reducing negative parenting styles and keep an open mind about increasing "positive" behaviors that may not be in sync with parents' socialization goals or their adolescents' subjective appraisals of relationship quality.

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Table 1

Sample Characteristics

Characteristic	European- Americans (<i>n</i> = 20) <i>M</i> (<i>SD</i>)	English- speaking Latinos (<i>n</i> = 36) <i>M</i> (<i>SD</i>)	Spanish- speaking Latinos (<i>n</i> = 54) <i>M</i> (<i>SD</i>)	Test Statistic <i>F</i>
Adolescent age	13.08 (1.37)	13.19 (1.59)	13.20 (1.38)	0.05
Mother age	41.6 (5.88)	36.81 (5.55)	40.22 (5.69)	5.82** ^a
Years of education	15.25 (2.47)	13.06 (1.76)	7.41 (4.35)	52.30*** ^b
Family Income (scale 1-9)	5.90 (1.74)	4.91 (1.90)	2.71 (1.60)	30.40*** ^b
Median Income	\$40,000- 60,000	\$30,000-40,000	\$10,000-15,000	
<u>Adolescent report of relationship quality</u>				
Open Communication	37.34 (7.50)	37.38 (7.22)	36.74 (8.24)	.13
Problem Communication	28.98 (5.69)	29.33 (6.84)	29.68 (7.01)	.15
Acceptance	25.54 (4.71)	25.13 (4.38)	24.14 (3.93)	.38
<u>Observed maternal behavior</u>				
Maternal positive responsiveness	45.97 (21.75)	27.73 (16.56)	21.69 (17.60)	20.54*** ^c
Maternal negative responsiveness	5.50 (5.24)	7.31 (6.67)	4.27 (5.40)	3.39* ^d

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

^a English-speaking Latinos differ significantly from European Americans and Spanish-speakers

^b All three language groups differ significantly from each other

^c European Americans differ significantly from both Latino groups

^d English-speaking Latinos differ significantly from Spanish-speaking Latinos

Table 2

*Regressions Predicting Adolescent-Reported Relationship Quality from Maternal Positive**Responsiveness (Pos. respons.)*

	<u>Open Communication</u>				<u>Problems in Communication</u>				<u>Acceptance</u>			
	<i>B</i>	<i>SE B</i>	β	ΔR^2	<i>B</i>	<i>SE B</i>	β	ΔR^2	<i>B</i>	<i>SE B</i>	β	ΔR^2
<u>Step 1</u>												
Adolescent age	-.85	.52	-.19*	.07*	.50	.42	.10	.02	-.71	.28	-.23*	.06
Contrast 1: Latinos vs. European Americans	-.49	.65	-.02		-.21	.57	-.03		-.19	.39	-.05	
Contrast 2: English-speaking Latinos vs, Spanish-speaking	-.42	.84	-.13		.96	.77	.07		-.22	.52	-.04	
<u>Step 2</u>												
Adolescent age	-.83	.51	-.16	.03	.41	.43	.10	.03*	-.68	.28	-.22*	.04*
Contrast 1	.40	.73	.06		-.08	.56	-.04		.04	.37	.01	
Contrast 2	-1.26	.96	-.14		.67	.70	.09		.05	.47	-.01	
Pos. repons.	.08	.04	.18		-.05	.04	-.14		.05	.02	.20*	
<u>Step 3</u>												
Adolescent age	-.90	.46	-.15	.05*	.49	.42	.11	.06*	-.83	.28	-.27**	.05*
Contrast 1	3.65	1.58	.47*		-2.75	1.26	-.51		2.39	.85	.63*	
Contrast 2	-1.78	1.62	-.13		.64	1.25	.10		-.44	.83	-.09	
Pos. repons.	.12	.05	.32*		-.08	.04	-.24*		.06	.03	.25**	
Contrast 1 \times pos.	-.09	.04	-.50*		.07	.03	.52*		-.05	.02	-.56*	
Contrast 2 \times pos.	.02	.05	.07		-.01	.04	-.02		.03	.03	.02	

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.Open Communication: Final model, $F(7, 102) = 2.90$, $p < .05$, $R^2 = .15$. Problems in Communication: Final model, $F(7, 102) = 3.01$, $p < .05$; $R^2 = .11$. Acceptance: Final model, $F(7, 102) = 3.30$, $p < .05$; $R^2 = .15$.

Table 3

Regressions Predicting Adolescent-Reported Relationship Quality from Maternal Negative Responsiveness (Neg. repons.)

	<u>Open Communication</u>				<u>Problems in Communication</u>				<u>Acceptance</u>			
	<i>B</i>	<i>SE B</i>	β	ΔR^2	<i>B</i>	<i>SE B</i>	β	ΔR^2	<i>B</i>	<i>SE B</i>	β	ΔR^2
<u>Step 1</u>												
Adolescent age	-.79	.52	-.15	.02	.44	.43	.10	.03	-.71	.29	-.23*	.06*
Contrast 1: Latinos vs. European Americans	-.49	.65	-.07		.16	.53	.03		-.19	.36	-.05	
Contrast 2: English-speaking Latinos vs, Spanish-speaking	-.43	.84	-.05		.50	.70	.07		.22	.47	.04	
<u>Step 2</u>												
Adolescent age	-.57	.51	-.12	.05*	.37	.43	.11	.04*	-.57	.28	-.19*	.07**
Contrast 1	-.52	.63	-.08		.17	.53	.03		-.21	.35	-.06	
Contrast 2	.14	.86	.02		.30	.72	.07		.59	.47	.12	
Neg. repons.	-.31	.13	-.24*		.11	.11	.26*		-.20	.07	-.27**	
<u>Step 3</u>												
Adolescent age	-.55	.51	-.10	.04*	.38	.43	.08	.03	-.57	.29	-.19*	.02
Contrast 1	-1.53	.96	-.23		1.43	.80	.26		-.63	.53	-.17	
Contrast 2	-.77	1.18	-.09		.43	.99	.06		.65	.66	.13	
Neg. repons.	-.39	.14	-.31**		.21	.10	.32*		-.24	.08	-.32**	
Contrast 1 \times neg.	.15	.12	.19		.22	.12	.20		.07	.06	.16	
Contrast 2 \times neg.	.13	.14	.13		.01	.12	.01		-.02	.08	-.03	

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

Open Communication: Final model, $F(7, 102) = 2.82$, $p < .11$, $R^2 = .21$. Problems in Communication: Final model, $F(7, 102) = 2.73$, $p < .05$; $R^2 = .10$. Acceptance: Final model, $F(7, 102) = 3.36$, $p < .01$; $R^2 = .15$.

Figure Caption

Figure. Interactions between Maternal Positive Responsiveness and Ethnic Group