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Maternal regulation speech in conflict situations

Victoria L. Ruggles
San Jose State University

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MATERNAL REGULATION SPEECH IN CONFLICT SITUATIONS

A Thesis

Presented to

The Faculty of the Department of Psychology

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

By

Victoria L. Ruggles

May 2000

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APPROVED FOR THE DEPARTMENT OF PSYCHOLOGY

Mildred Alvarez

Dr. Mildred M. Alvarez, Department of Psychology, Chair

Robert Cooper

Dr. Robert Cooper, Department of Psychology, Member

Arlene H. Asuncion

Dr. Arlene Asuncion, Department of Psychology, Member

APPROVED FOR THE UNIVERSITY

William Fish

ABSTRACT

MATERNAL REGULATION SPEECH IN CONFLICT SITUATIONS

By Victoria L. Ruggles

The purpose of this study was to examine maternal regulation speech in conflict situations as depicted in a wordless picture book. A sub-sample of fifty mother-child dyads from data that is part of a larger project served as participants. Children were between 3 and 6 years old, and approximately equally apportioned by gender. Three conflict scenes were utilized (Car, Sandwich, and Kite). Maternal language was coded for the presence of four different regulation categories (LISTEN, ATTENTION TO SITUATION, REGULATE, and INVOLVEMENT). Relationships between child age, child gender, and maternal regulation were also investigated. This study revealed that differences in maternal emotion and regulation speech are affected by the unique qualities of specific conflict situations. Moreover, mothers tend to focus on negative rather than positive emotions when discussing conflict, and they use more complex regulation speech with their older children and daughters than with their younger children and sons.

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Maternal Regulation Speech in Conflict Situations

Victoria L. Ruggles

San Jose State University

Running head: MATERNAL REGULATION

Abstract

The purpose of this study was to examine maternal regulation speech in conflict situations as depicted in a wordless picture book. A sub-sample of fifty mother-child dyads from a data set that is part of a larger project served as participants. Children were between 3 and 6 years old, and approximately equally apportioned by gender. Three conflict scenes were utilized (Car, Sandwich, and Kite). Maternal language was coded for the presence of four different regulation categories (LISTEN, ATTENTION TO SITUATION, REGULATE, and INVOLVEMENT). Relationships between child age, child gender, and maternal regulation were also investigated. This study revealed that differences in maternal emotion and regulation speech are affected by the unique qualities of specific conflict situations. Moreover, mothers tend to focus on negative rather than positive emotions when discussing conflict, and they use more complex regulation speech with their older children and daughters than with their younger children and sons.

Maternal Regulation Speech in Conflict Situations

Conflict is an inevitable part of daily life; it affects families, individuals, communities, and nations. Commonly, conflict has been equated with aggression and negative affect. As a result, most of society perceives conflict as failed socialization (Grusec & Goodnow, 1994; Shantz & Hobart, 1989). However, recent studies of conflict resolution have found that although conflict can destroy relationships, it can also be a catalyst for personal growth, as well as a way of learning new ways to interact and form relationships (Alexander & McConnell, 1993). Alexander and McConnell highlight two significant considerations. First, aggression is not the only response that occurs during a conflict. Fear, anxiety, and sadness are as likely to appear. Second, positive affect or peace can exist during conflict, but are not necessarily an outcome of it. According to Alexander and McConnell, “peace is not the absence of conflict, but has been defined as an active and creative process involving ways people can act on problems and challenges to resolve conflicts where both sides benefit” (p.107-108). Thus, peace or positive affect can be present during conflict.

Constructive conflict resolution develops from progressive reasoning in moral and prosocial development (Alexander & McConnell, 1993). The more encouragement there is to perceive different ways of evaluating societal norms, values and rules, the more opportunity there is to create alternative ways of resolving conflict. Therefore, examining the socialization processes involved during conflict may help us develop alternative ways of perceiving conflict.

Several studies investigating conflict have developed successful methods for analyzing parental socialization approaches. Among the most significant are those created by Casey and Fuller (1994) and Perlman and Ross (1997).

As participants in conflict, children display a range of understanding about emotions and problem-solving strategies, as well as possible outcomes of conflict. There is evidence to suggest that certain underlying cognitive and moral processes must be addressed when investigating effective or ineffective conflict. Casey and Fuller's (1994) study examined the extent to which mothers regulate their children's cognitive and moral processes. In order to test for maternal regulating strategies, Casey and Fuller utilized vignettes illustrating various social situations that elicited emotions such as sadness, happiness, anger and fear. Maternal responses to these vignettes were then linked to maternal assessment of their children's temperament.

Casey and Fuller (1994) identified two significant findings. First, those mothers who perceived their children to have highly negative temperaments typically expressed a greater degree of involvement for anger situations than other types of emotion situations. One possible explanation for this finding comes from data that suggests parent's methods of socialization work differently for children with different temperaments (Turiel, 1998). For instance, Kochanska (1991) found that the frequency with which parents provide explanations and reasoning in social situations determines the ways in which children will manifest behaviors they have unconsciously or consciously been taught to internalize. Thus, the children of parents who tend to regulate their offspring's

emotional/moral expression through the use of explanations tend to display positive, cooperative behaviors.

Another possible explanation, and one that is similar to Kochanska (1991), comes from research investigating different parenting styles. This research suggests there are two dimensions of parenting: parental warmth (e.g., supportive, affectionate) and parental control (e.g., monitoring, disciplining, regulating) (Vasta, Haith, & Muller, 1995). A combination of these two dimensions produces four types of parenting styles: (1) indifferent (2) permissive, (3) authoritarian, and (4) authoritative (Baumrind, 1971, 1989).

According to Baumrind (1971, 1989), parents who are indifferent are low in both parental warmth and control. Indifferent parents are likely to provide very little emotional support, interest, or attention. Permissive parents are often high in warmth and low in control. They may be encouraging and loving, but their discipline is often inconsistent. Children of both indifferent and permissive parents are more likely to display aggressive behavior and immaturity. Authoritarian parents are high in control and low in warmth. They are demanding, power-assertive, and threatening. Children of authoritarian parents are more likely to be aggressive and moody. Authoritative parents are high in both warmth and control. They tend to be sensitive, reinforcing, and set clear standards. Children of authoritative parents are more likely to be independent, academically successful, and form cooperative relationships.

A significant shortcoming of Casey and Fuller's (1994) study is that they neglect to examine associations between parenting styles and maternal regulation of children's

emotions. Had they done so, they may have had more success at finding significant differences between maternal regulation strategies and predictions of children's emotion behaviors.

Casey and Fuller's (1994) second finding provides evidence that mothers who were able to make predictions about their children's internal feelings were more successful with their older than with their younger children. This finding is significant because it either suggests parents gradually influence their children's ways of perceiving emotion situations so that they are eventually similar to their own (as one might predict from social referencing), or that the parents learn over time about their children's response tendencies. However, data on age effects are limited in the literature on parental intervention, and Casey and Fuller provide little explanation for this finding.

Similarly, while Casey and Fuller (1994) did not elaborate on this finding, individual differences were found in maternal regulation of emotion for gender. Interestingly, mothers tended to regulate their sons' response to the fear vignettes more so than any other emotion. The type of regulation strategies generated for boys suggests mothers do not want their sons to show their fear. Also, mothers were more accurate in predicting the emotional responses of their daughters than the responses of their sons.

According to Grusec and Goodnow (1994) children become increasingly aware of how to both interpret the intentions behind their parent's behavior and respond to these intentions. Thus, it is possible that children consciously manifest certain behaviors in situations they believe their parents would prefer them to assume. Implications that

children become aware of different ways of thinking about social situations are important in understanding the effectiveness of different conflict resolution strategies.

It appears that the way children initially experience conflict is related to the manner in which they are taught how to deal with it. As Perlman and Ross (1997) point out, “[i]t is within the family that children first encounter conflict, and it is in that context that they most frequently face it” (p. 690). Parents, in general, are the first to guide, shape, and instruct their children around conflict situations. Perlman and Ross’ study examines the impact of parental intervention on the quality of children’s conflict behavior. Unlike Casey and Fuller’s (1994) study, Perlman and Ross specifically code for parent intervention in conflict situations. The benefit is that their study is much more focused.

In particular, Perlman and Ross (1997) apply a hierarchical framework for examining children’s behaviors as a function of conflict. For example, they suggest a range of adaptiveness, where ignoring conflict is least adaptive, and other-oriented reasoning is most adaptive. For instance, the least adaptive level is characterized by both physically and verbally aggressive conflict behaviors. Examples of conflicts that are moderately adaptive include crying, complying, and opposing behaviors. The most adaptive level suggests reciprocal and reasoning behaviors. After Perlman and Ross determine the children’s level of adaptiveness, they examine to what degree mothers will intervene in their children’s conflict.

Results from Perlman and Ross’ (1997) study found that parents intervene most frequently when their children display aggressive behaviors. Their data also suggests that

when parents intervene, children's use of aggressive behaviors decline while their reasoning behaviors increase. Like Casey and Fuller's (1994) study, theoretical support for these findings can be extrapolated from Baumrind's (1971, 1989) exploration of different parenting styles. For instance, indifferent/permissive parents would likely ignore a conflict, while authoritative/authoritarian parents would likely intervene. However, an important distinction between authoritative and authoritarian parents is that authoritative parents would be more likely to encourage their children's choice and reasoning skills than authoritarian parents. Authoritarian parents would be more likely to provide their children with statements that contain little explanation or reasoning.

According to Perlman and Ross:

In this sample, other-oriented reasoning was the most frequent intervention strategy for mothers and the second most frequently used strategy for fathers.

Thus, intervening in children's fights, parents' behavior should at the very least facilitate moral internalization and perspective taking (1997, p. 698).

Therefore, the more frequently parents intervene in their children's conflicts using strategies that are authoritative in nature, the more opportunity there is for their children to learn constructive conflict resolution.

The present study examined differences in maternal regulation speech in conflict situations using a wordless picture book. Specifically, three hypotheses were considered. Because many responses can occur when discussing conflict, conflict can potentially be a positive, productive process (Alexander & McConnell, 1993). Some research suggests that parents ultimately attempt to guide their children constructively when in conflict

situations (Kochanska, 1991; Perlman & Ross, 1997). The first hypothesis proposed that there would be differences in the frequency of overall maternal emotion speech and in the use of maternal regulation across the three conflict scenes occurring in the picture book. This hypothesis was proposed based on the assumption that the nature of the conflict depicted in the three separate scenes from the picture book could differentially prompt mothers to produce emotion speech. Furthermore, as suggested by Alexander and McConnell (1993) and Casey and Fuller (1994), some representations of conflict may better provide an opportunity for positive and constructive resolution and regulation language to emerge than other representations of conflict.

According to Casey and Fuller's (1994) investigation of emotion behavior response, mothers regulate anger more than other emotions. However, mothers may choose to regulate anger by appealing to positive rather than negative emotion outcomes, especially if they are attempting to provide their children with conflict regulation and resolution strategies that may be most helpful to them. For example, some researchers (Baumrind, 1971, 1989; Kochanska, 1991) assert that there are certain parental regulation strategies that work more effectively than others. According to their findings, parents who use authoritative socialization approaches (i.e., parents who are warm and affectionate, and set clearly defined limits) will have the most positive effect on their children's socio-emotional competence. Moreover, parents who emphasize emotional experiences such as the need to consider the effect of one's behavior on others and that promote introspection rather than emotional experiences such as expressing anger at another and that are directed at another person, will assist their children in rendering their

emotional experience as meaningful, and improve their emotional communication with others (Turiel, 1998). The second hypothesis, therefore, proposed mothers would be more likely to focus on emotions that promote introspection (inner-evaluative emotions) rather than emotional experiences directed at others (other-directed emotions).

According to the results found in studies addressing maternal socialization strategies (Casey & Fuller, 1994; Perlman & Ross 1997) and theories in constructive conflict resolution (Alexander & McConnell, 1993), child age and gender are associated with differences in parenting styles and practices. Alexander and McConnell's research suggests that mothers may use more complex regulation speech for older rather than younger children because they assume younger children lack the cognitive maturity for complex explanations about conflict. However, mothers may use more regulation speech overall for younger children than older children for the purposes of socializing them early on about conflict (Turiel, 1998). Casey and Fuller's research suggests that mothers view their daughters to be more sophisticated around conflict than their sons. It is possible that mothers assume their sons will choose to be more aggressive around conflict and therefore less likely to resort to constructive resolution strategies than their daughters. In fact, Casey and Fuller found that mothers were more likely to regulate their sons' emotion behaviors when discussing conflict than they were their daughters'.

The third hypothesis, therefore, proposed that there would be significant differences as a function of child age and child gender in maternal regulation speech. Specifically, mothers of younger children would use more overall maternal regulation speech than mothers of older children. Additionally, mothers of sons would use more

regulation speech than mothers of daughters. Furthermore, it was expected that mothers of both older children and daughters would rate more highly in their use of complex regulation than mothers of younger children and sons.

Method

Participants

Participants for this study were randomly chosen from data that is part of a larger project. This sub-sample consisted of fifty mother-child dyads. Children were between the ages of 3 and 6 years, and equally apportioned by gender. The older children ($n = 22$) were between 5 and 6 years ($M = 5.23$, $SD = .43$); the younger children ($n = 28$) were between the ages of 3 and 4 ($M = 3.50$, $SD = .51$).

Materials

The archival data set used in this study were gathered from responses to a 29-page wordless picture book. The responses of interest were emotion speech associated with conflict, as well as discussion about conflict. The book depicted a family (mother, father, brother, sister) who go on a picnic (Greif, Alvarez, & Tone, 1984). There were three specific scenes in the picture book in which conflict between family members occurred. The first scene (Car) was illustrated on three pages. The first and second pages showed an altercation between the brother and sister fighting in the back seat of a car. Specifically, the sister pushes the brother for encroaching on her side of the back seat. The third page involved the parent's reactions and children's responses to the conflict. The second scene (Sandwich) was three pages in length. The first two pages depicted the children's conflict responses to ants on the brother's sandwich. Here, the brother throws

a sandwich at the sister for teasing him about ants being on his sandwich. The last page involved the parent's reactions to the children's responses. The third scene (Kite) was only one page in length. It depicted the two children pulling on the opposite ends of a kite they both want. There was no deliberate act by one of the siblings to harm the other in this scene as in the first two scenes. This scene showed no parental involvement.

An artist was hired to illustrate the story, which consisted of line drawings. The artist was provided with descriptions of various emotions using photographs of facial expressions depicted in the research literature (Ekman & Friesen, 1975).

Procedure

Mothers were asked to spend 10 minutes making up a story together with their child in whatever way they liked. The task was designed to specifically elicit naturally occurring conversations and feelings between mothers and their children. Mothers and children participated at several schools in the San Francisco Bay Area.

Coding

Coding for this sub-sample utilized several methods initiated in the larger project, including audiotaping and transcription of mother-child stories. And, as part of the larger project, each utterance occurring during the three conflict scenes was coded for instances of spontaneous labeling of emotions using a list of "feeling-state labels" which Dunn and her associates (Dunn, Bretherton, & Munn, 1987) suggest represent the emotion words used and understood by young children.

Two emotion speech variables were developed to further examine the use of maternal emotion speech across the three conflict scenes. The emotion labels mothers

emphasized were grouped into either inner-evaluative emotions or other-directed emotions. Where inner-evaluative emotions were felt to promote children's introspection, other-directed emotions emphasized external experiences.

Coding for Conflict Scenes

Maternal language for all three conflict scenes was coded for the types of regulation style categories mothers used during conflict. The regulation categories that were coded were adapted from those created by previous researchers and were based on the review of conflict literature, including the work of Perlman and Ross (1997), Chung and Asher (1996), Casey and Fuller (1994), Tisak and Ford (1986), Mirch-Kretschmann and Alvarez (1995) and Denham and Auerbach (1995). Four different regulation categories were considered: (a) LISTEN, (b) ATTENTION TO SITUATION, (c) REGULATE, and (d) INVOLVEMENT. These are listed in hierarchical order, where LISTEN was considered least complex and INVOLVEMENT most complex.

The first regulation category (LISTEN) describes mothers who primarily listen to their children's language and make no reference about conflict. The second regulation category (ATTENTION TO SITUATION) is somewhat more complex than the first because mothers provide their children with some information about conflict. At this level, however, mothers primarily describe actions that occur in the conflict situation; they do not mention possible strategies for resolution (e.g., "He threw the sandwich at her."). The third regulation category (REGULATE) describes mothers who make some attempt at conflict resolution. At this level, mothers tend to make more matter-of-fact statements, rather than provide explanations for conflict resolution (e.g., "You shouldn't

fight with your brother.”). An additional component of this level involves positive and negative statements. For instance, negative statements often implied “should not, without reasoning” types of instruction (e.g., “Don’t hit your sister.”). Conversely, positive statements often implied “should, without reasoning” instruction (e.g., “Be nice to your friend.”). The fourth regulation category (INVOLVEMENT) is the most complex because mothers provide their children with information about conflict by appealing to choice and reasoning (e.g., “Is it possible for you to share the kite with your brother?”). According to Alexander and McConnell (1993) conflicts involving regulation tactics that reflect sensitivity to another’s needs and/or intentions ultimately are more likely to end with a positive outcome.

There were ten maternal verbal behaviors that formed the four regulation categories. These were *Listen, Physical, Social, Discipline, Direct, Acceptable Behavior, Personal Consequence, Elaborate, Rule, and Other-Oriented Reasoning*. For details, see Appendix A.

In order to rate the degree of intensity with which the four regulation categories were used in each conflict scene, a Likert-type scale ranging from (1) not at all present to (4) very often present was used. The scale was developed by taking the mean number of occurrences for all regulation categories for the entire sub-sample ($M = 5$). This number represented the midpoint of the Likert scale. Specifically, rating category (1) “Not at All Present” indicated zero instances, rating category (2) “Rarely” indicated one to three instances, rating category (3) “Somewhat” indicated four to six instances, and rating category (4) “Very Often Present” indicated seven or more instances.

Reliability was calculated using 20% of the subsample. Specifically, coders were trained on the different maternal regulation categories. Reliability was coded as a consensus between two independent coders for each conflict scene, and was assessed for the percent of agreement over disagreement. Overall reliability was 84%. In the Car, Sandwich and Kite scenes reliability was 85%, 83%, and 88%, respectively. Coders were also trained on the Likert scale that was used to rate the degree of intensity for each of the four regulation categories used in the three conflict scenes. Reliability on this measure was 100%.

Because this study focused on maternal socialization of conflict, only maternal and not children's emotion language and regulation were examined. Language data were converted to proportions to control for word production differences across participants and conflict scene (i.e., emotion word production/overall word production). Emotion language included labeling of emotion words. Conflict language included the verbal behaviors (conflict utterances) that were present in each scene.

Results

Although analysis of the Likert-type scale showed an overall inter-rater reliability of 100%, it provided little insight into the ways in which mothers used the different regulation categories, and was subsequently dropped from this study. For instance, response options skewed toward the bottom half of the scale, and were therefore not an accurate representation of the intended intensity construct.

Many different emotion words were identified by mothers in their storytelling; however, four emotions (and their synonyms) captured the emotion socialization

emphasis of mothers (i.e., sad, happy, anger, and contempt). See Table 1 for details.

These emotions were used to make up the inner-evaluative (sad, happy) and other-directed (anger, contempt) emotion speech variables. The emotions “sad” and “happy” were chosen for the inner-evaluative variable because they warrant children’s sympathetic appraisals. The emotions “anger” and “contempt” were chosen for the other-directed variable because they focus on external events or people at which the emotion is directed. For example, you can be angry at someone for hitting you, but you cannot be sad at them. However, you can feel sad because someone hit you.

Overall maternal emotion speech was analyzed using a within-subjects analysis of variance (ANOVA). Emotion speech was the dependent variable, and the three conflict scenes served as the within-subjects variables. Analysis of the data revealed a significant scene effect for overall emotion speech [$F(2, 96) = 15.31, p < .001$]. Specifically, mothers were likely to produce more emotion speech for the Car ($M = .05, SD = .03$) than the Kite ($M = .02, SD = .05$) scene [$t(48) = 4.07, p < .001$], and more for the Sandwich ($M = .05, SD = .03$) than the Kite ($M = .02, SD = .05$) scene [$t(48) = 4.39, p < .001$]. There was no difference in the production of maternal emotion speech between the Car and Sandwich scene [$t(49) = .60, p > .05$]. These findings reflect the first hypothesis, which proposed different conflict situations influence the way mothers socialize their children about emotion through their speech.

An additional within-subjects ANOVA was used to examine overall maternal regulation across the three conflict scenes. There were no differences in overall maternal regulation as a function of conflict scene [$F(2, 88) = .93, p > .05$]. These findings were

Table 1

Mothers' Emotion Labeling as a Function of Conflict Scene

Conflict scene	Emotion label	<u>M</u>	<u>SD</u>
Car	Sad	2.62	2.59
	Happy	0.66	1.04
	Anger	2.48	2.89
	Contempt	0.00	0.00
Sandwich	Sad	1.38	1.51
	Happy	0.12	0.24
	Anger	1.02	1.42
	Contempt	1.16	1.22
Kite	Sad	0.08	0.34
	Happy	0.12	0.44
	Anger	0.08	0.34
	Contempt	0.00	0.00

Note. Data reflect proportions. Those emotion labels that are in bold represent inner-evaluative emotions and those emotion labels that are not in bold denote other-directed emotions.

not supportive of the first hypothesis, and therefore suggest different conflict situations have no effect on the way in which mothers socialize their children about conflict through their regulation speech. Although the overall production of each of the four regulation categories did not differ as a function of conflict scene, it was considered possible that there would be subtle differences in the use of the four regulation categories within conflict scenes. Post hoc analyses were conducted within each conflict scene to examine these possible differences. For the Car scene, significant differences were found between the regulation categories ATTENTION TO SITUATION and REGULATE [$t(49) = 2.54$, $p < .05$], and ATTENTION TO SITUATION and INVOLVMENT [$t(49) = 3.32$, $p < .01$]. Examination of these mean occurrences (see Table 2) showed mothers were more likely to use ATTENTION TO SITUATION ($M = .47$) than REGULATE ($M = .28$) and INVOLVMENT ($M = .26$). For the Sandwich scene, significant differences were also found between ATTENTION TO SITUATION and REGULATE [$t(48) = 4.18$, $p < .001$], and ATTENTION TO SITUATION and INVOLVMENT [$t(48) = 3.08$, $p < .01$]. Again, mothers were more likely to use ATTENTION TO SITUATION ($M = .49$) than REGULATE ($M = .21$) and INVOLVMENT ($M = .28$). Like the other two scenes, the Kite scene showed significant differences between ATTENTION TO SITUATION and REGULATE [$t(45) = 7.24$, $p < .001$], and ATTENTION TO SITUATION and INVOLVMENT [$t(45) = 2.06$, $p < .05$]. However, significant difference were also found between REGULATE and INVOLVMENT [$t(47) = -3.88$, $p < .001$]. Examination of these mean occurrences (Table 2) again showed that mothers were more likely to use ATTENTION TO SITUATION ($M = .54$) than REGULATE ($M = .06$) and

Table 2

Maternal use of Regulation Categories within Conflict Scene

Conflict scene	Regulation category	<u>M</u>	<u>SD</u>
Car	Listen	0.01	0.07
	Attention to situation	0.46	0.31
	Regulate	0.28	0.27
	Involvement	0.26	0.22
Sandwich	Listen	0.05	0.20
	Attention to situation	0.49	0.31
	Regulate	0.21	0.25
	Involvement	0.28	0.27
Kite	Listen	0.08	0.26
	Attention to situation	0.54	0.40
	Regulate	0.06	0.17
	Involvement	0.32	0.39

INVOLVEMENT ($M = .32$). In addition, mothers were also more likely to use INVOLVEMENT ($M = .32$) than REGULATE ($M = .06$) in the Kite scene. Furthermore, for all three conflict scenes mothers were less likely to use LISTEN than all other categories. For details, refer to Table 2. These findings suggest that the Kite scene prompted mothers to use more complex conflict resolution instruction than the other two scenes, where they tended to use less complex regulation.

Although there were significant differences across some of the conflict scenes for overall maternal emotion speech, analyses revealed no significant differences between inner-evaluative and other-directed emotions across the three conflict scenes [$t(49) = 1.43, p > .05$]. Moreover, there were no significant differences between inner-evaluative and other-directed emotions within the Car [$t(49) = 1.89, p > .05$], Sandwich [$t(49) = -.20, p > .05$] and Kite [$t(49) = .94, p > .05$] scenes. However, Pearson product-moment correlations revealed a significant overall negative relationship for all three conflict scenes between inner-evaluative and other-directed emotion speech [$r(50) = -.57, p < .001$], suggesting that the more mothers used one form of emotion language the less they used the other form in their discussions about conflict occurring across the three conflict scenes. Because it was considered possible that relationships could occur between inner-evaluative and other-directed emotion speech within each scene, additional Pearson product-moment correlations were conducted. Correlational analyses revealed a significant negative relationship for the Car [$r(50) = -.82, p < .01$] and Sandwich [$r(50) = -.48, p < .001$] scenes between inner-evaluative and other-directed emotion speech, suggesting that the more mothers used one form of emotion language the less they used

the other form in their discussions about the different types of conflict occurring in these two scenes. There was no significant correlation between inner-evaluative and other-directed emotions for the Kite scene [$r(50) = .01, p > .05$]. The t-test findings were not supportive of the second hypothesis, which proposed that mothers would be more likely to focus on inner-evaluative rather than other-directed emotions in their discussions about the different conflict scenes. Furthermore, post hoc correlational analyses shed no light into the socio-emotional emphasis of mothers.

A two by two (age by gender) between subjects ANOVA was conducted to examine differences in overall maternal regulation, and revealed no significant interaction [$F(1, 44) = .54, p > .05$], or main effects (gender [$F(1, 44) = 1.12, p > .05$], or age [$F(1, 44) = .06, p > .05$]). Again, although there was an overall lack of significance between these variables across all conflict scenes, it was believed possible that differences could occur within each conflict scene. Therefore, post hoc analyses were conducted within each conflict scene to examine whether or not there would be differences in the use of the four regulation categories as a function of child gender and child age. Correlational analyses produced a positive significant correlation between age and INVOLVEMENT for the Sandwich scene [$r(47) = .31, p < .05$]. This finding suggests mothers use more complex regulation approaches with their older children than with their younger children. No significant correlations were uncovered between age and the four regulation categories for either Car or Kite scenes and no significant correlations were revealed between gender and the four regulation categories within each scene. Separate two by two (age by gender) ANOVA's were conducted to further analyze

possible differences in the use of the four regulation categories within each conflict scene. The data revealed a significant effect for child gender and the regulation category INVOLVEMENT for the Kite scene [$F(1, 45) = 4.62, p < .05$]. Inspection of the cell means indicated that mothers used INVOLVEMENT more often with girls than with boys. There were no other significant gender and age effects between the four regulation categories within the Kite scene, and there were no gender and age effects whatsoever between the four regulation categories within the Car and Sandwich scenes. For more details, refer to Tables 3, 4 and 5. These findings provided some support for the third hypothesis, which proposed mothers of older children and daughters would use complex regulation speech more than mothers of younger children and sons.

Discussion

The purpose of this study was to examine differences in maternal regulation speech in conflict situations using a wordless picture book. Specifically, three hypotheses were proposed: (1) maternal emotion speech and regulation would differ significantly across the three conflict scenes, (2) mothers would be more likely to focus on inner-evaluative rather than other-directed emotions in their discussions about conflict, and (3) significant differences in maternal regulation would occur as a function of child age and/or child gender.

Consistent with the first hypothesis, results revealed that the type of conflict determines the way in which mothers socialize their children about it. These findings suggest that mothers are more likely to use emotion speech for conflicts that involve negative interactions that are not solely focused on disagreements about play with an

Table 3

Analyses of Variance for the Four Regulation Categories within the Car SceneRegulation categoryListen

Source	SS	DF	MS	F-ratio	P-values
Gender	.01	1	.01	.99	.33
Age	.00	1	.00	.78	.38
Interaction	.00	1	.00	.78	.38

Attention to situation

Source	SS	DF	MS	F-ratio	P-values
Gender	.01	1	.01	.08	.78
Age	.00	1	.00	.02	.89
Interaction	.03	1	.03	.25	.62

Regulate

Source	SS	DF	MS	F-ratio	P-values
Gender	.14	1	.14	2.13	.15
Age	.18	1	.18	2.71	.11
Interaction	.05	1	.05	.72	.40

Note. Continued on page 24.

Involvement

Source	SS	DF	MS	F-ratio	P-values
Gender	.07	1	.04	.77	.47
Age	.01	1	.01	.15	.70
Interaction	.02	1	.02	.42	.52

* $p < .05$

Table 4

Analyses of Variance for the Four Regulation Categories within the Sandwich SceneRegulation categoryListen

Source	SS	DF	MS	F-ratio	P-values
Gender	.00	1	.00	.05	.83
Age	.08	1	.08	1.94	.17
Interaction	.00	1	.00	.03	.85

Attention to situation

Source	SS	DF	MS	F-ratio	P-values
Gender	.08	1	.08	.81	.37
Age	.01	1	.01	.07	.80
Interaction	.07	1	.07	.65	.43

Regulate

Source	SS	DF	MS	F-ratio	P-values
Gender	.06	1	.06	.85	.36
Age	.00	1	.00	.00	.99
Interaction	.02	1	.02	.26	.62

Note. Continued on page 26.

Involvement

Source	SS	DF	MS	F-ratio	P-values
Gender	.12	1	.12	1.73	.20
Age	.13	1	.13	1.90	.18
Interaction	.26	1	.26	3.76	.06

$p < .05$

Table 5

Analyses of Variance for the Four Regulation Categories within the Kite SceneRegulation CategoryListen

Source	SS	DF	MS	F-ratio	P-values
Gender	.01	1	.01	.11	.75
Age	.08	1	.08	1.22	.28
Interaction	.05	1	.05	.74	.40

Attention to situation

Source	SS	DF	MS	F-ratio	P-values
Gender	.44	1	.44	2.90	.10
Age	.00	1	.00	.00	.96
Interaction	.32	1	.32	2.06	.16

Regulate

Source	SS	DF	MS	F-ratio	P-values
Gender	.00	1	.00	.06	.81
Age	.00	1	.00	.08	.78
Interaction	.01	1	.01	.40	.53

Note. Continued on page 28.

Involvement

Source	SS	DF	MS	F-ratio	P-values
Gender	.63	1	.63	4.62	.04*
Age	.05	1	.05	.35	.56
Interaction	.46	1	.46	3.33	.08

* $p < .05$

object, but rather disagreements about what they may perceive as attitudes or dispositions of the persons involved in the conflict. For instance, mothers used more emotion words for the Car and Sandwich scenes than they did for the Kite scene. The first two scenes frequently displayed all members in the family, at one time or another, either crying or angry as a result of the conflict. Although emotions were also displayed in the third scene, they were brief and centered on disagreement over possession of an object. Furthermore, there were no crying expressions, and the parents' emotions were not represented in the conflict.

Examination of overall maternal regulation across the three conflict scenes did not provide support for the additional component in the first hypothesis, which proposed different conflict situations would affect mothers' use of constructive resolution language with their children. A possible explanation for this lack of significance may be that the four hierarchical regulation categories were collapsed in order to create one overall regulation variable. By doing this, it is possible that the strength of each individual regulation category was diluted. It was for this reason that post hoc analyses were conducted to investigate subtle differences between the four maternal regulation categories within each conflict scene.

Post hoc analyses showed mothers using regulation approaches that are considered less complex for conflicts where one child intentionally harms another. For instance, in the first two conflict scenes one child pushes or throws something at the other. Both scenes ultimately result in one or both children crying. For these two conflicts, mothers simply described the type of behavior that was being represented.

Perhaps mothers felt that the immediacy of the situation called for a basic, less complex intervention aimed at stopping the conflict. These findings are inconsistent with those found by Perlman and Ross (1997), that suggest mothers are more likely to intervene in conflicts that result in violence between siblings. Although the conflicts in this study were merely representations of fighting between children and not actual fighting, according to Perlman and Ross, mothers should have used regulation speech that attempted to stop or resolve the conflict.

In the third conflict (Kite), data showed mothers using the most complex regulation category (INVOLVEMENT). In this scene, the children are fighting over an object, but the conflict does not escalate into violence. According to Alexander and McConnell (1993) and Casey and Fuller (1994), some representations of conflict may better provide an opportunity for positive and constructive resolution and regulation language to emerge than other representations of conflict. Perhaps mothers are more inclined to use constructive regulation for conflicts where their children are fighting over an object, than for conflicts where they see a need to put an immediate, and perhaps verbally elaborate, end to the conflict. According to Chilamkurti and Milner (1993), it would appear that mothers do use different regulation speech for different kinds of transgression. For instance, their data indicate that mothers use reasons and explanations for transgressions where there was a violation of a social convention (e.g., talking out of turn) and used forceful verbal commands for transgressions that involved high arousal behavior (e.g., out of control or violent behavior). It is possible that mothers, therefore,

interpreted the conflict in the Kite scene as a violation of a social convention and as a result felt compelled to use regulation speech that happens to be complex.

The data collected from this study did not provide support for the second hypothesis, which proposed mothers would be more likely to focus on inner-evaluative rather than other-directed emotions in their instructions about conflict. However, analyses produced a significant relationship between inner-evaluative and other-directed emotions for the Car scene, which depicted one child intentionally pushing the other, and for the Sandwich scene, which showed one child teasing the other, and one child intentionally throwing an object at the other. Interestingly, this relationship suggested that the more mothers use one form of emotion language the less they use of the other form for these two types of conflict situations. Perhaps, as Casey and Fuller's (1994) findings indicate, mothers' verbal commentaries have a tendency to match the emotion that is being represented. In both the Car and Sandwich scenes, there were several representations of other-directed emotions displayed. In the Car scene, for example, the second page showed the sister giving an angry glance at the brother. On the third page, both the mother and father are shown looking at the children with angry facial expressions. In the Sandwich scene, the first page shows the brother upset because the sister is teasing him about ants being on his sandwich. On the second page, the brother looks angrily at the sister while throwing his sandwich at her. On the third page, both the mother and father are shown looking at the children with angry facial expressions. In the Kite scene, other-directed representations of emotions were also displayed. Both children exchanged angry glances at one another while pulling on the kite they both want.

However, this scene was only one page in length and contained less emotional expression than the first two conflict scenes. It is possible, therefore, that mothers had more time to get involved in their discussions about the emotions displayed in the Car and Sandwich scenes, which is why a significant relationship between inner-evaluative and other-directed emotions occurred for these two scenes and not the Kite scene.

For the third hypothesis, there was a lack of significance between overall maternal regulation, child gender, and child age. However, when post hoc analyses were conducted within each conflict scene, results were consistent with the third hypothesis, which proposed that mothers of older children and daughters would use more complex regulation than mothers of younger children and sons. In the Sandwich scene, for example, involving issues around teasing and throwing an object at another person, the older the child, the more likely the mother would use a regulation approach such as INVOLVEMENT, which happens to be a more complex form of regulation. Although there is limited data on age effects in the literature on parental intervention, these findings suggest mothers are more likely to think that their older children would understand complex regulation for certain types of conflict (teasing) than their younger children. It is possible therefore that mothers learn over time about their children's response tendencies. Consequently, mothers may feel more confident about using complex regulation speech for conflict situations they know their children will understand.

In the Kite scene, which involved a transgression between the two children over sharing a kite, mothers of daughters were more likely to use regulation speech that is considered more complex than mothers of sons. The role that gender plays relative to

the ways children have been socialized has important implications (Alexander & McConnell, 1993). According to Casey and Fuller (1994) parents have different expectations in the way boys express their emotions versus the way girls express theirs'. For the most part, mothers expect less emotional expressiveness from boys than from girls. Consequently, there is an additional component to what parents expect from their children while in conflict. It is assumed that boys will be assertive and physically aggressive in conflict, and girls will take on the role of peacemaker (Alexander & McConnell, 1993). In any case, it seems that parents believe girls will be able to resolve conflict more readily than boys. For instance, with girls, perhaps mothers feel they can take their time explaining conflict. With boys, however, because they are often expected to be more aggressive than girls, mothers feel the need to immediately stop a conflict situation before it escalates into violence.

The focus of the larger project was primarily on investigating the emotion socialization process by examining mother-child emotion language, and was not designed specifically to examine maternal regulation in different conflict situations. As a result, there were several limitations to this study. First, the conflict scenes were separated out of a picture book, which was initially generated to elicit specific intended emotions from mother-child dyads, and therefore this study was forced to investigate only those conflicts that were represented. Accordingly, the scenes were not tested with a pilot group to determine the effectiveness of the conflict in eliciting the desired responses from mothers and their children. Therefore, it is possible that one or more of the scenes represented conflicts that were hard to discern. Secondly, the scenes were inconsistent. Two of the

scenes had three pages of content, and one scene had only one page. Although data were converted to proportions to account for this inconsistency, it is possible that mothers had more time to get involved in the emotions displayed in the first two scenes than the last scene simply because there was more content. Furthermore, after each conflict scene, mothers encountered a scene where the family members were happy. This seemed to distract the mothers from their conversation about the conflict. For instance, often mothers were forced to end their discussions so that they could move forward in their conversations about the next page in the picture book.

Overall, the findings in this study indicate that differences in maternal socialization of conflict are most likely determined by the conflict itself. It was the anticipation of this study; however, that mothers would use significantly more complex regulation and positive emotion speech in their discussion about conflict with their children than the data indicated. According to Alexander and McConnell (1993), the more children learn tactics that promote listening, cooperation, and problem solving skills, the more they are capable of “responding to everyday conflicts with an enhanced sense of choice and individuality” (p. 125).

However, this study did produce results that showed mothers choosing to use complex regulation speech over less sophisticated regulation for certain types of conflict. Future studies should consider using conflict scenarios that are independent from a larger project and that have been tested with a pilot group to determine their effectiveness at eliciting the desired response. An advantage to doing this would be to set up scenarios using some kind of experimental format so that more sophisticated analyses could be

conducted than this study was able to perform. For instance, there would be an opportunity to control for both maternal emotion speech and regulation for each of the conflict scenes. Lastly, future studies may want to further examine differences between mother, father, and child regulation speech, as well as account for ethnic and socioeconomic differences.

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Appendix A

Regulation Categories	Verbal Behaviors	Example
LISTEN	Listen	Mothers primarily listen to their children's language and makes no reference about conflict.
This level is considered the least complex. Mothers usually make no mention of conflict.		
ATTENTION TO SITUATION	Physical	Mother provides statements/questions (closed-end) that draw attention to physical conflict (e.g., hitting, pushing, taking).
	Social	Mother provides statements/questions (closed-end) that draw attention to social conflict (e.g., teasing, threats, insults). Usually involves thinking/feeling statements.
This level is considered somewhat complex. Mothers use questions or statements that draw attention to a situation, but make no attempt at resolving the conflict. They merely give an account of what is happening.		
-	Discipline	Mother suggests a form of punishment as a way to resolve conflict, without supplying a reason (e.g., "He can't do that, he should be punished.").
REGULATE	Direct	Mother tells child how to think/feel/behavior around conflict, without supplying a reason (e.g., "Don't fight with your brother.").
+	Acceptable Behavior	Mother tells child what is acceptable, "good" behavior around conflict, without supplying a reason (e.g., "Be nice to your friend.").
	Personal Consequence	Mother tells child to behave a certain way around conflict because it has consequences, without supplying a reason. Usually involves another person, more direct (e.g., "Don't hit your brother, he'll cry.").
This third level is more complex than the first two because mothers provide their children with some information about conflict. This level breaks down statements into negative (Discipline and Direct) and positive descriptions (Acceptable Behavior and Personal		

Consequence). This is the most common method of terminating conflict, but does not often lead to a peaceful exchange where both parties experience a positive outcome.

INVOLVEMENT	Elaborate	Mother asks questions (open-ended) about conflict as a way to encourage involvement/response about the conflict. Includes questions about feeling/thinking states and behavior (e.g., "Why are they fighting?").
	Rule	Mother suggests appropriate behavior around conflict by relying on rules (e.g., "You shouldn't hurt a person, it's not right."). Usually involves general "should" and "ought" explanations.
	Other-Oriented Reasoning	Mother suggests alternative behavior around conflict such as role taking and appealing to fairness (e.g., "Think how he would feel if you shared the kite.").

This fourth level is the most complex. Mothers tend to encourage peaceful conciliatory behaviors, by appealing to choice and reasoning. Conflicts, at this level, ultimately end with a positive outcome.

Appendix B

Car scene – picture 3 of 3

Sandwich scene – picture 2 of 3

Kite scene – picture 1 of 1

Note: Pictures are from "The Family Picnic" (Greif, Alvarez, & Tone, 1994). These pictures were considered most representative of conflict.

Appendix C

San José State
UNIVERSITY

Office of the Academic
Vice President

Associate Vice President
Graduate Studies and Research

One Washington Square
San José, CA 95192-0025
Voice: 408-924-2480

Fax: 408-924-2477

E-mail: gstudies@web.sjsu.edu
<http://www.sjsu.edu>

TO: Victoria L. Ruggles
5035 Via Gatos
Soquel, CA 95073

FROM: Nabil Ibrahim,
AVP, Graduate Studies & Research

DATE: October 8, 1999

The Human Subjects-Institutional Review Board has approved
your request to use human subjects in the study entitled:

...**"Maternal Regulation Styles in Conflict
Situations"**

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research project, and with regard to any and all data that may be collected from the subjects. The Board's approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Nabil Ibrahim, Ph.D., immediately. Injury includes but is not limited to bodily harm, psychological trauma and release of potentially damaging personal information.

Please also be advised that all subjects need to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate, or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted.

If you have any questions, please contact me at
(408) 924-2480.