THE STUDY OF RELATIONSHIP BETWEEN MATERNAL "EMOTION SOCIALIZATION" AND CHILDREN'S SOCIAL COMPETENCE: THE ROLE OF CHILD TEMPERAMENT

Yu Yu Khaing[1] and Nilar Kyu[2]

Abstract

The present study were to describe and provide initial support for the validity of the Future Scenarios Questionnaire (FSQ) based on a translation of the Lundell's (2008) original instrument, a new self-report questionnaire designed to measure parental responding to anticipated children's negative emotions; and to examine how maternal responses on the FSQ related to young children's aggressive, asocial, and prosocial behaviors with peers. Further, this study examined whether the temperamental trait of negative affect moderated the relation between maternal responses on the FSQ and children's social adjustment outcomes. Participants were 107 mothers of preschool-age children. Mothers were requested to provide ratings on the FSQ and child temperament ratings on the Child Behavior Questionnaire (CBQ; Rothbart, Ahadi, & Hershey, 1994). They also completed a range of measures which were designed to assess the construct validity of the FSQ. These included measures of attachment representations, maternal mind-mindedness, perceived control, and alexithymia. Thirty-two teachers provided ratings on the Child Behavior Scale (CBS; Ladd & Profilet, 1996) for children's aggressive, asocial, and prosocial behaviors in the peer context. Factor analysis of the FSQ revealed two subscales: Encourage Emotion Expression (EEE) and Discourage Emotion Expression (DEE). Further, the results of the moderation analyses showed that maternal responding on the FSQ interacts with negative affect in the prediction of child behaviors, but not in the hypothesized ways. In particular, discouraging emotion expression significantly predicted less asocial behavior and more prosocial behavior (approached significance), but only for children rated high in negative affect. None of these relations was significant for children rated low in negative affect. The theoretical and practical implications of these findings are discussed in terms of the importance of child temperament in emotion socialization processes.

Keywords: emotion socialization, social competence, construct validity

Introduction

Emotion socialization is one of the most important in processes of socialization tasks. It involves the processes by which socialization agents (parents, family members, teachers, and caregivers) impart to their children various ways of expressing emotion and effective ways of responding in events or situations when they or others as emotionally aroused. Their characteristics also have emerged as indicators of how a child comes to understand his or her own emotional life and social competence.

Parents play a primary role in emotion socialization. So while acknowledging the impact of siblings, peers, and teachers among others, it is the parental socialization of emotion that is the focus of this research. And although it is recognized that both mothers and fathers are important socializers in related and distinct ways, we focused on maternal socialization of emotion. Mothers have different ideas and feelings, both explicit and implicit, about children's emotional lives, likely resulting from their own socialization experiences and attachment histories. Not all

[1] Dr, Lecturer, Department of Psychology, University of Mandalay
[2] Dr, Professor and Head, Department of Psychology, University of Yangon

of these ideas translate into socialization strategies that are adaptive with respect to children's social and emotional outcomes.

In particular, we examined one empirically neglected emotion socialization mechanism, that is, the ways in which mothers anticipate and verbally address future-oriented emotional events with their children, and how these ways might be related to children's social adjustment. We focused on emotion socialization in the preschool years because this is a time when emotionally-laden events are quite frequent, and because, during this time, parents are usually the foremost socializers of their children's emotional lives (Denham, 1998). Moreover, the role of child temperament was considered a potentially influential factor in the socialization process.

The purpose of the present study was twofold. Its primary purpose was to examine the role of child temperament in the link between maternal emotion socialization and children's social competence. Second, it was intended to develop a self-report measure of emotion socialization, the FSQ, which assesses how mothers respond to their anticipated children's negative emotions. This measure was validated with additional maternal self-report questionnaires and interviews. Child outcomes were measured with teacher reports of children's social behaviors with their peers. Child temperament was measured by mother report. On the basis of the available literature, the hypotheses of this study were formulated as follow:

H1: Mothers who encourage the expression of their anticipated children's negative emotions would have children who would be rated as less aggressive, less asocial, and more prosocial with peers. Similarly, mothers who discourage the expression of their children's emotions would have children who would be rated as more aggressive, more asocial, and less prosocial with peers.

H2: The relation between the FSQ and children's adjustment would be moderated by children's negative affect. In other words, it was predicted that the hypothesized relations described above would be stronger for children (or significant) rated high in negative affect than for those children rated low in negative affect.

H3: Maternal styles of responding on the FSQ would be significantly correlated with maternal responses on the CCNES, such that mothers with higher scores on the supportive scales of the CCNES would be more likely to encourage the expression of their children's emotions and mothers with higher scores on the non-supportive scales of the CCNES would be more likely to discourage the expression of their children's emotions.

H4: Maternal styles of responding on the FSQ would be significantly correlated with maternal attachments representations, such that more "secure" mothers would be more likely to encourage the expression of their children's emotions and less "secure" mothers would be more likely to discourage the expression of their children's emotions.

H5: Maternal styles of responding on the FSQ would be correlated with maternal mind-mindedness, such that mothers with higher mind-mindedness scores would be more likely to encourage the expression of their children's emotions and mothers with lower mind-mindedness would be more likely to discourage the expression of their children's emotions.

H6: Maternal styles of responding on the FSQ would be significantly correlated with maternal perceptions of control, such that "high control" mothers would be more likely to encourage the expression of their children's emotions and "low-control" mothers would be more likely to discourage the expression of their children's emotions.

H7: Maternal styles of responding on the FSQ would be significantly correlated with maternal alexithymia, such that mothers with lower levels of alexithymia would be more likely to encourage the expression of their children's emotions and mothers with higher levels of alexithymia would be more likely to discourage the expression of their children's emotions.

Method

Participants

Participants were a group of 107 mothers of preschool-age children (57 boys and 50 girls) used for the multiple regression analysis under study included Shwebo Preschool, Meikthilar Preschool and Preschools from Mandalay. In addition, child outcomes were measured with teacher (32 teachers) reports of children's social behavior with their peer.

Procedures

Recruitment and Mother Package. Potential participant mothers were contacted and were given a brief explanation of what the study entailed. Upon agreeing to participate, arrangements were made to send a questionnaire package home or school that was to be completed by mothers and returned to the researcher. A date for the interview was also scheduled at that time. This package included the Children's Behavior Questionnaire (CBQ), the Toronto Alexithymia Scale (TAS-20), the Coping with Children's Negative Emotion Scale (CCNES), and the Parent Attribution Test (PAT) as well as detailed instructions for completion of these questionnaires.

Interview. There were five interviewers. All of whom were thoroughly trained by the researcher. Mothers were administered the Secure Base Scripts task (SBS) and the Maternal Mind-Mindedness Interview (MMM), both of which were audio-recorded. Finally, mothers were asked to complete an additional questionnaire package, which included the Future Scenarios Questionnaire (FSQ).

Teacher package. Shortly after the interview, questionnaire packages were sent to the teachers of the children whose mothers had given permission to do so. This package included the Child Behavior Scale (CBS) and instructions on completion in a cover letter.

Measures

Future Scenarios Questionnaire (FSQ). The Future Scenarios Questionnaire (FSQ) is a self-report questionnaire that was developed by Lundell (2008). It includes nine future-oriented scenarios: Acceptance, Mastery, Abstraction, Encourage Expression, Shaming, Minimizing, Distortion, Contingencies, Maternal Distress and Avoidance in which mothers anticipate that their child will experience a negative emotion. Mothers were asked to read each of the scenarios and indicate the likelihood from 1 (not at all likely) to 7 (very likely). Internal consistencies for the different subscales were acceptable with Cronbach's alphas ranging from .57 (Contingencies) to .84 (Encourage Expression).

Coping with Children's Negative Emotions Scale (CCNES). Maternal responding to children's negative emotions was measured with the Coping with Children's Negative Emotions Scale (CCNES; Fabes et al.,1990). This is a parent-report questionnaire that outlines 12 scenarios in which children are likely to display distress and negative affect. For each situation, mothers were asked to rate, on 7-point scale, the likelihood that they would respond in each of the following six ways. The alphas for non-supportive and supportive subscales were found to be .71 and .73 respectively.

Secure Base Scripts Task. Maternal cognitive representations of attachment were measured with the Secure Base Scripts Task which assesses both the content and quality of a "secure base script" (Waters and Waters, 2006). Mothers were presented with a series of six word-prompt outlines that were designed to elicit a sense of a story. Mothers were asked to read down each column from left to right and to use the prompts to tell a story. They were told that the stories would be audio-taped and should they choose to stop and start the story again, they were permitted to do so. Two coders read each story and rated it for secure base scriptedness using a 7-point scale with higher numbers indicating higher scriptedness. Percent agreement between the two coders for the story was 76% (Baby's Morning).

Maternal Mind-Mindedness Interview (MMM). Maternal mind-mindedness was measured with a single-question interview that was developed by Meins et al. (1998). Mothers were asked "Can you describe [their child's name] for me?" Mothers were told that there were no right or wrong answers and they were free to talk about any of their child's characteristics for as little or as long as they wished. Mothers' responses were audio-taped and transcribed verbatim prior to coding. All transcripts were coded by one primary coder and a second coder. The percent agreement between the two coders was 77%.

*Maternal Perceived Control (PAT).*To measure maternal perceived control, we developed with Bugental and coworkers' (1989) the Parent Attribution Test (PAT). Respondents were asked to rate the importance she or he attributes to potential causes of caregiving success and failure, in order to ascertain the perceived balance of control between caregiver and child. Mothers were asked to read a hypothetical babysitting scenario in which the interaction did not go well. Mothers were then asked to rate each of 12 factors (on a 7-point scale from "not at all important" to "very important") as possible reasons for such an experience. The alphas for child-attributed reasons and caregiver attributed subscales were found to be .41 and .55 respectively.

Maternal Alexithymia Scale (TAS). To measure mothers' emotional functioning, we also attempted to develop the Toronto Alexithymia Scale (TAS-20) based on the Bagby and coworkers' (1994) original instrument. It is a self-report instrument designed and to measure difficulties in identifying and describing emotions. The TAS-20 is assumed to measure three facets of emotional functioning: Mothers were presented with 20 statements and were asked to rate on a 5-point scale from 1 (Strongly Disagree) to 5 (Strongly Agree) how much they agreed/disagreed with each of them. The alpha of this scale was .73.

Child Behavior Questionnaire (CBQ). In order to measure child's dispositional negativity, we developed the Myanmar version of the Child Behavior Questionnaire (Very Short Form) (CBQ) based on the Rothbart and his coworkers (1994, 2001) original instrument. This is a well-established parent-report measure of three aspects of temperament (Negative Affect, Surgency/ Extroversion, and Effortful Control). Mothers were presented with 36 statements. Ratings were made on a 7-point scale from 1 (extremely untrue) to 7 (extremely true). Only the

Negative Affect subscale was used in this study. The reliability coefficients of the Children's Behavior Questionnaire were found to be .48 for Surgency, .49 for Negative Affectivity and. 60 for Effortful Control.

Child Behavior Scale (CBS). Teachers completed the Child Behavior Scale (CBS; Ladd & Profilet, 1996) which assesses the behavior of young children in peer contexts. The CBS is comprised of three subscales (aggressive, asocial and prosocial). Teachers were asked to rate each listed behavior in terms of how characteristic or applicable it is for the child using a scale ranging from 1 (does not apply to the child) to 3 (certainly applies to the child). The reliability coefficients of the Child Behavior Scale were found to be .74 for Aggressive, .72 for Prosoical and .76 for Asocial.

Results

Overview of Analysis

Data screening. Ranges, means, and standard deviations for all of the measures included in the study are presented in Table 1.

Table 1 Descriptive Statistics of All Variables in the Study

Measure	N	Min	Max	Mean	SD
Mother Variables					
FSQ-Encourage Expression (EEE)	107	1.69	6.36	4.89	.67
FSQ-Discourage Expression (DEE)	107	1.75	5.89	4.58	.70
CCNES- Supportive Responses	107	3.64	6.72	5.54	.64
CCNES- Non-supportive Responses	107	1.61	5.19	3.52	.83
Secure Base Scripts (SBS)	105	1.00	5.00	1.44	.77
Maternal Mind-Mindedness (MMM)	106	.00	3.00	1.54	.72
Perceived Control over Failure (PCF)	107	-2.50	5.00	.72	1.19
Maternal Alexithymia (TAS)	107	15.00	51.00	31.50	7.27
Child Variables					
CBQ- Negative Affect (mother report)	107	1.67	6.44	3.90	.96
CBS- Aggression (teacher report)	107	1.00	2.22	1.31	.27
CBS- Prosoical (teacher report)	107	1.50	3.00	2.37	.33
CBS- Asocial (teacher report)	107	1.00	2.83	1.41	.41

***Note:** FSQ-EEE and FSQ-DEE are summary score means that were derived in the way described below.

Psychometric Properties of the Future Scenarios Questionnaire

Factor analysis. The FSQ originally consisted of ten subscales which were previously described in the Method section. The Avoidance subscale was not used in the calculation of the final score because of a significantly skewed distribution and restricted range of endorsement. The remaining nine subscales were then subjected to a principal components analysis with Varimax rotation. Eight of the nine subscales clearly loaded on one of two factors, however one subscale, Distortion, cross-loaded positively on both factors. These two indications suggested that Distortion, as measured in this sample, is likely not a single construct, thus a decision was made to drop this subscale from all further analyses. The remaining eight subscales were then subjected to another principal components analysis with Varimax rotation and the results

indicated a clear two-factor solution (i.e. two factors with Eigenvalues greater than 1.0). Cumulatively, these two factors accounted for 63.88% of the variance. The factor loadings for each subscale are shown in Table 2.

Table 2 Factor Loadings and Cronbach's Alphas for the Two-Factor Solution to the Future Scenarios Questionnaire

FSQ Subscale	Cronbach's Alpha		Factor Loading
	I	II	A
Discourage Expression of Emotion (DEE)			
Shaming	.66		.86
Minimizing	.64		.79
Contingencies	.57		.77
Maternal Distress	.65		.71
Encourage Emotion Expression (EEE)			
Encourage Expression		.84	.81
Mastery		.70	.78
Acceptance		.59	.73
Abstraction		.65	.69

Table 3 Correlations between the FSQ and Maternal and Child Demographics

	FSQ Encourage Expression (EEE)	FSQ Discourage Emotion (DEE)
Maternal Age	.06(107)	.09(107)
Maternal Education	.06(104)	-.09(104)
Child Age	-.06(107)	-.13(107)
Child Sex	-.07(107)	.12(107)
Marital Status	-.24*(103)	-.18(103)
Number of Children	-.08(106)	.13(106)

N's vary due to missing data and are in brackets. *p< .05, **p< .01

Table 4 Intercorrelations among Mother Variables

	FSQ-EEE	FSQ-DEE	CCNES- Support	CCNES-Nonsup	SBS	MMM	PCF
FSQ-EEE	-						
FSQ-DEE	.48**	-					
CCNES- Support	.18*	-.02	-				
CCNES-Nonsupport	-.17*	.26**	.09	-			
SBS	.18*	.03	.17*	-.04	-		
MMM	.02	.06	.12	-.24**	.20*	-	
PCF	-.01	-.23**	.12	-.14	.07	.00	-
TAS	-.01	.25**	.01	.45**	-.09	-.05	-.13

*p <.05, **p <.01

Relation of the FSQ to mother and child demographics. To examine whether the two factors of the FSQ (EEE and DEE) related to mother and child demographics, correlations were

conducted with maternal age, maternal education, child age, child sex, marital status and number of children in the family. These correlations can be seen in Table 3.

Relation of the FSQ to additional maternal characteristics. Additional maternal characteristics that were measured were: CCNES (Supportive and Non-supportive), Secure Base Scripts (SBS), Maternal Mind-Mindedness (MMM), Perceived Control over Failure (PCF), and Maternal Alexithymia (TAS). Intercorrelations among these variables are presented in Table 4.

Relation of negative affect and child adjustment variables to maternal and child demographics. Correlations were conducted to examine whether any of the maternal or child demographic variables was related to the measures of negative affect, aggression, prosocial behavior, and asocial behavior. These correlations can be seen in Table 5.

Relation of the FSQ to child temperament and child adjustment variables. Correlations between the EEE and DEE subscales of the FSQ, and child negative affect, aggression, prosocial behavior, and asocial behavior are shown in Table 6. Correlations are presented separately for boys and girls, and also for the total sample.

Table 5 Correlations between CBQ, CBS and Maternal and Child Demographics

	CBQ - Negative Affect	**CBS - Aggression**	**CBS-Prosocial Behavior**	**CBS - Asocial Behavior**
Child Age	.03	.20*	.22*	-.22*
Child Sex	.14	.20*	-.15†	.05
Maternal Age	-.17*	.12	.10	.09
Maternal Education	-.03	-.16†	.02	.13

† p <.10, * p <.05, N=107

Table 6 Correlations between the FSQ and Child Variables for Boys, Girls, and Total Sample

	FSQ- Encourage Emotion Expression			**FSQ- Discourage Emotion Expression**		
	Boys	**Girls**	**Total**	**Boys**	**Girls**	**Total**
CBQ- Negative Affect	.01 (57)	-.15 (50)	-.07 (107)	.10 (57)	.14 (50)	.13 (107)
CBS- Aggression Behavior	.03 (57)	.10 (50)	.03 (107)	.07 (57)	.03 (50)	.07 (107)
CBS- Prosocial Behavior	.06 (57)	-.10 (50)	-.00 (107)	.06 (57)	.12 (50)	.08 (107)
CBS- Asocial Behavior	.05 (57)	-.16 (50)	-.05 (107)	.02 (57)	-.24* (50)	-.11 (107)

* p <.05

Table 7 Results of Logistic Regression Analyses Predicting Aggression Behavior

Variables	β	Std. Error	Wald	Exp(B)
Control Variables				
Child Sex	1.07	.50	4.57*	2.91
Child age	1.45	.47	9.45**	4.28
Mother age	.04	.06	.49	1.04
Mother education	-.50	.25	4.12*	.61
Number of children	.30	.40	.56	1.35
Predictor				
Discourage Expression of Emotion	1.72	1.12	2.37	5.56
Moderator				
Negative Affect	4.34	3.60	1.45	76.29
Interaction				
DEE × NA	-.98	.78	1.61	.37

$\chi^2(8) = 6.21$, Nagelkerke$R^2 = .27$, -2 log likelihood = 118.66

Variables	β	Std. Error	Wald	Exp (B)
Control Variables				
Child Sex	1.06	.50	4.47*	2.89
Child age	1.33	.45	8.65**	3.78
Mother age	.03	.06	.27	1.03
Mother education	-.48	.24	3.92*	.62
Number of children	.50	.39	1.69	1.65
Predictor				
Encourage Emotion Expression	.11	1.01	.01	1.11
Moderator				
Negative Affect	-.23	3.46	.00	.80
Interaction				
EEE × NA	.02	.71	.00	1.02

$\chi^2(8) = 12.22$, Nagelkerke$R^2 = .24$, -2 log likelihood = 121.59

*p <.05 **p <.01

Moderation Model of Emotion Socialization. To test this hypothesized model, a series of hierarchical regression analyses was conducted (see Aiken & West, 1991).

In all cases, the predictor, moderator, and outcome variables were standardized prior to being entered into the regression equations. The control variables were entered first and consisted of child sex, child age, maternal education, maternal age and number of children. The predictor variable (either EEE or DEE) was entered in the second step and the moderator variable, Negative Affect (NA), was entered in the third step. In the final step, the two-way interaction terms were entered which were represented by the products of EEE × NA and DEE × NA. The results of each of the regressions can be seen in Tables 7, 8, and 9. The β's presented are from the final step (step 4) of each of the regressions.

Table 8 Results of Logistic Regression Analyses Predicting Asocial Behavior

Variables	β	Std. Error	Wald	Exp (B)
Control Variables				
Child Sex	-.25	.49	.26	.78
Child age	-1.29	.45	8.43**	.28
Mother age	.14	.06	5.33*	1.15
Mother education	.31	.25	1.61	1.37
Number of children	-1.09	.45	5.93*	.34
Predictor				
Discourage Expression of Emotion	1.58	1.12	2.02	4.87
Moderator				
Negative Affect	9.06	3.77	5.79*	.19
Interaction				
DEE × NA	-1.71	.81	4.48*	.18
$\chi^2(8) = 12.94$, Nagelkerke$R^2 = .29$, -2 log likelihood = 115.96				

Variables	β	Std. Error	Wald	Exp (B)
Control Variables				
Child Sex	-.38	.47	.64	.69
Child age	-1.12	.42	6.96**	.33
Mother age	.11	.06	3.87*	1.12
Mother education	.38	.24	2.50	1.46
Number of children	-.81	.39	4.27*	.44
Predictor				
Encourage Emotion Expression	.60	1.12	.28	1.81
Moderator				
Negative Affect	3.30	3.70	.80	27.14
Interaction				
EEE × NA	-.46	.75	.38	.63
$\chi^2(8) = 5.60$, Nagelkerke$R^2 = .20$, -2 log likelihood = 124.32				

*p <.05 **p <.01

Table 9 Results of Regression Analyses Predicting Prosocial Behavior

Variables	*B*	Std. Error	Beta	T	ΔR^2
Control Variables					
Child Sex	-.10	.07	-.14	-1.40	.05
Child age	.12	.06	.20	1.96†	
Mother age	.02	.03	.06	.56	
Mother education	.00	.01	.01	.09	
Number of children	.07	.06	.14	1.16	
Predictor					
Discourage Expression of Emotion	-.23	.15	-.47	-1.53	
Moderator					
Negative Affect	-1.01	.49	-1.52	-2.04*	
Interaction					
DEE × NA	.21	.11	1.64	1.99†	
Control Variables					
Child Sex	-.08	.07	-.13	-1.19	.01
Child age	.11	.06	.19	1.80†	
Mother age	.01	.04	.03	.32	
Mother education	.00	.01	.04	.32	
Number of children	.04	.06	.09	.75	
Predictor					
Encourage Emotion Expression	-.10	.15	-.20	-.66	
Moderator					
Negative Affect	-.40	.53	-.61	-.76	
Interaction					
EEE × NA	.08	.11	.60	.71	

† p <.10 * p <.05 ** p <.01

Discussion and Conclusion

The present study was attempted to examine the role of child temperament in the link between maternal emotion socialization and children's social competence. It was also intended to develop and provided initial support for the validity of a Myanmar version of a new self-report measure of emotion socialization, the Future Scenarios Questionnaire (FSQ), which assesses how mothers respond to their anticipated children's negative emotion. In addition, this study looked at whether the temperamental trait of negative affect moderated the relation between maternal responses on the FSQ and children's social adjustment outcomes.

In doing so, firstly we accepted Lundell's (2008) general emphasis in drawing up the initial Myanmar version of the Future Scenarios Questionnaire, which consisted of 90 items from Lundell. The descriptions were translated into Myanmar by the author and checked by the supervisor against the original version to ensure the conceptual equivalence of the Myanmar version to the original version.

To produce final version of the scale, the data were analyzed using principle components factor analysis program. The results indicated a clear two factor solution an accounted for 63.88% of the variance. The first factor had an Eigenvalue of 2.64 and accounted for 33.05% of

the variance. This factor was labeled Discourage Emotion Expression (DEE) and consisted of Minimizing, Shaming, Contingencies, and Maternal Distress. Cronbach's alpha for this subscale was .83. The second factor had an Eigenvalue of 2.47 and accounted for 30.83% of the variance. This factor was labeled Encourage Emotion Expression and consisted of Acceptance, Mastery, Abstraction, and Encourage Expression. Cronbach's alpha for this subscale was .79. Cronbach's alphas for the final eight subscales of the FSQ are ranged in .60 to .85 and indicate good internal consistency. The patterns of correlations among the two factors of the FSQ and the several additional mother measures demonstrated some construct validity. These included measure of attachment representation, maternal mind-mindedness, maternal perceptions of control and maternal alexithymia.

With respect to attachment representations, mothers who were rated as more "secure" were more likely to report encouraging their children's expression of negative emotions on the FSQ. This is consistent with prior attachment-related research that has shown that secure or autonomous mothers are more open and willing to approach and discuss negative emotions than mothers who are more "insecure" (see Laible & Panfile, in press). Unexpectedly however, mothers' security (as assessed by the SBS measure) was unrelated to the DEE subscale of the FSQ. This suggests that perhaps the relation between a mother's security and the extent to which she might either encourage or discourage emotion expression is not so straightforward, and that additional factors, such as individual differences in children, might need to be considered. This suggestion is also somewhat in accordance with Berlin and Cassidy's (2003) conclusion that mothers of secure children neither heighten nor suppress children's negativity, but rather accept and are moderately controlling of it.

Additionally, and consistent with predictions, mothers who perceived themselves as having more control relative to a child in difficult caregiving situations were less likely to discourage children's expression of negative emotions in anticipation of stressful events. This is likely due to these mothers being more confident and efficacious in their ability to tolerate and deal with negative emotions in their children, and perhaps being less likely to become dysregulated themselves in the face of a perceived power imbalance.

There was one maternal mindset we assessed, maternal mind-mindedness, that contrary to prediction, did not correlate with either factor of the FSQ. One possible explanation for this finding is that the mind-mindedness interview involved asking a mother to produce a narrative about her child as opposed to endorsing how she would respond directly to her child in a particular circumstance. One difference between the mind-mindedness measure and the other two measures included to assess maternal schemas (i.e. the SBS and the PAT) is that the mind-mindedness measure requires that a mother still keep her particular child in mind, rather than generating fictional stories based on word-prompts (e.g. SBS) or giving likely reasons for a difficult encounter with an imaginary or hypothetical child (e.g. PAT).

For these latter two tasks, a mother's responses might be more removed from her actual past experiences and relationship with her own child, so thus might be more "projective" or more representative of qualities within herself, independent of qualities in her particular child. And indeed it was found that these maternal qualities did relate to the subscales of the FSQ in anticipated and meaningful ways.

The mind-mindedness construct, on the other hand, although functioning at a level of mind states, might be quite distinct from the actual maternal behaviors or strategies which are

accessed by the FSQ. In other words, there might be a difference between what a mother carries in her head about her child, assessed through an analysis of maternal language (i.e. MMM interview), versus how she interacts with her child, as assessed by the FSQ (Meins, et al., 2001).

We also examined the relation between the FSQ and the personality trait of alexithymia, and found that as predicted, mothers who rated themselves as more alexithymia were more likely to report strategies that disavowed or discouraged their children's expressions of negative emotions. This is consistent with the idea that these mothers have inherent difficulties understanding, processing, and in particular, communicating about emotions in general.

In addition, the CCNES was also included in the battery of validation measures in order to ascertain the overlap in responding between these two related emotional socialization measures. The construct validity of the FSQ, as well as review the patterns of association with child outcome measures of the Child Behavior Scale (CBS; Ladd & Profilet, 1996) for aggressive, asocial, and prosocial behavior provided ratings by thirty-two teachers in the peer context.

According to results, we found that the FSQ did not directly relate to child outcomes, however, when a model that included child negative affect as a moderator was tested, relations between the FSQ and child outcomes were revealed. Further, the results of the moderation analyses showed that maternal responding on the FSQ interacts with negative affect in the prediction of child behaviors, however not in the hypothesized ways. In particular, discouraging emotion expression significantly related less asocial behavior and more prosocial behavior, but only for children rated high in negative affect. None of these relations was significant for children rated low in negative affect.

In conclusion, this study provided some preliminary support for the FSQ as a valid, new instrument for assessing the ways by which mothers respond to their children's negative emotions when faced with upcoming stressful situation. Findings from this study suggested that maternal emotion socialization was a mechanism by which children's social withdrawal was influenced. Specifically, discourage emotion expression of mother associated less asocial behavior and more prosocial behavior, but only for children rated high in negative affect.

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.

Bagby, R.M., Taylor, G. J., & Parker, J.D.A (1994). The twenty-item Toronto Alexithymia Scale: II. Convergent, discriminant, and concurrent validity. *Journal of Psychosomatic Research, 38,* 33-40.

Bugental, D. B., Blue, J., & Cruzcosa, M. (1989). Perceived control over caregiving outcomes: Implications for child abuse. *Developmental Psychology, 25,* 532-539.

Denham, S. A. (1986). Social cognition, prosocial behavior, and emotion in preschoolers: Contextual validation. *Social Development, 57,* 194-201.

Denham, S. A. (1998). *Emotional development in young children.* New York: Guilford.

Denham, S. A., Bassett, H. H., & Wyatt, T. (2007). The socialization of emotional competence. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization*: *Theory and research* (pp. 614-637). New York: Guilford.

Eisenberg, N., & Fabes, R. A. (2006). Emotion regulation and children's socioemotional competence. In L. Balter & C. S. Tamis-LeMonda (Eds.), *Child psychology: A handbook of contemporary issues (2nd ed.)* (pp. 357-381). New York: Psychology Press.

Fabes, R. A., Eisenberg, N., & Bernzweing, J. (1990). The Coping with Childrens' Negative Emotions Scale: Description and Scoring. *Unpublished Scale, Department of Family Resources and Human Development,* Arizona State University.

Ladd, G. W., & Profilet, S. M. (1996). The child behavior scale: A teacher-report measure of young children's aggressive, withdrawn, and prosocial behaviors. *Developmental Psychology, 32,* 1008-1024.

Lundell, L. J. (2008). The Future Scenarios Questionnaire (FSQ): Maternal responses to anticipated children's negative emotions and social adjustment in early childhood.

Meins, E., Fernyhough, C., Russell, J., & Clark-Carter, D. (1998). Security of attachment as a predictor of symbolic and mentalising abilities: A longitudinal study. *Social Development, 7,* 1-24.

Reese, E., & Fivush, R. (1993). Parental styles of talking about the past. *Developmental Psychology, 29,* 596-606.

Rothbart, M. K., Ahadi, S. A., & Hershey, K. L. (1994). Temperament and social behavior in childhood. *Merrill-Palmer Quarterly, 40,* 21-39.

Rothbart, M.K., Ahadi, S. A., Hersey, K.L., & Fisher, P. (2001). Investigations of temperament at three to seven years: The Children's Behavior Questionnaire. *Child Development, 72,* 1394-1408.

Rothbart, M. K., & Bates, J. E. (1998). Temperament. In W. Damon & N. Eisenberg (Eds.) *Handbook of child psychology, 5th ed.: Vol 3. Social, emotional, and personality development* (pp. 105-176). Hoboken, NJ: Wiley.

Stright, A. D., Gallagher, K. C., & Kelley, K. (2008). Infant temperament moderates relations between maternal parenting in early childhood and children's adjustment in first grade. *Child Development, 79,* 186-200.

Thompson, R. A., Laible, D. J., & Ontai, L.L. (2003). Early understandings of emotion, morality, and self: Developing a working model. In R. V. Kail (Ed.), *Advances in child development and behavior, Vol. 31,* (pp. 137-171). San Diego, CA: Academic Press.

Waters, H. S., & Waters, E. (2006). The attachment working models concept*:* Among other things, we build script-like representations of secure base experiences. *Attachment & Human Development, 8,* 185-197.

Winsler, A., & Wallace, G. L. (2002). Behavior problems and social skills in preschool children: Parent-teacher agreement and relations with classroom observations. *Early Education and Development, 13,* 41-58.