Marissa N. Schmidt

Family Communication and Children's Emotion Regulation

Oklahoma State University

Family Communication and Children's Emotion Regulation

Could the way a family communicates with one another impact children's emotion regulation? There is literature which indicates that parenting behaviors and parent-child interaction could be a factor in how children regulate their emotions. This appears plausible since children learn about the rules of emotion expression within the family (Shewark & Blandon, 2014). Emotional regulation refers to the processes which allow for a person to manage their emotions and is considered a developmental milestone (Zeman, Shipman, & Penza-Clyve, 2001). Children who have better emotion regulation skills tend to be better behaved and do better educationally (Onchwari & Keengwe, 2011). According to Djambazova-Popordanoska (2016), children's emotion regulation is important for children's school readiness, ability to pay attention, and ability to obey a teacher. Graziano, Reavis, Keane, and Calkins (2007) further supported this in their study linking children's emotion regulation to academic achievement. A new finding even links between poor emotion regulation and unhealthy eating in children (Harrist, Hubbs-Tait, Topham, Shriver, & Page, 2013),

Family Origins of Children's Emotion Regulation

Family relations and emotion regulation. Prior research has suggested that family plays a role in the development of emotional regulatory behaviors in children. Ramsden and Hubbard (2002) conducted a study exploring how family expressiveness and emotion coaching are related to aggression in fourth grade children. They did not find that child aggression was directly linked to negative family expression. However, they did conclude that negative family emotion expression was related to poorer emotion regulation in children and, therefore, indirectly linked to child aggression. Another study with fourth grade children, examined the link between parent interaction style and child social competence and emotion regulation (McDowell, Kim, O'Neil,

CHILDREN'S EMOTION REGULATION

& Parke, 2002). There were several interesting results from the study. First, they indicated that higher level of controlling behaviors in parents, especially mothers, were linked to higher levels of aggression in children. Second, they noted that along with parental control, qualities such as warmth, positive responsiveness, and inductive reasoning impact children's emotion regulation. Shewark and Blandon (2014) further linked parent's responsiveness to children emotion regulation. Their results indicated that when parents negatively respond to their children's positive emotions, it not only teaches children to repress emotions but also results in greater negativity from children. Topham, Hubbs-Tait, Rutledge, Page, (2011) had similar findings in their study of parenting styles in regards to child emotional eating. Data for the study was collected from 1171 children who were interviewed and 494 parents who returned questionnaire packets. The results indicated that children in homes were emotions were more supported, such as authoritative parents, were less likely to engage in emotional eating, which can be conceptualized as a form of poor emotion regulation.

Gunzenhauser and Friedlmeier (2014) conducted a study with 117 mothers, 117 fathers and 118 children to examine parent socialization on children's emotion regulation. In regards to emotion regulation they were specifically considering two factors: reappraisal and response suppression. Their results indicated direct links between parent's emotion socialization and children's emotion regulation. When parents show reappraisal, it helps develop reappraisal in their children but when they show suppression, it helps develop suppression in their children. Lindblom et al. (2016) conducted a study researching how early family relationships impact children's later emotional development. The study consisted of 703 married or cohabiting couples. Their results indicated that families which had high functioning relationships, had children who had better emotion regulation skills. This study also examined how the parent's marriage impacted children's emotion regulation. They found that parental intimacy was not related to children's emotion regulation. Yet marital and parental autonomy did predict children's ability to regulate emotions.

Family Risk and Emotion Regulation

There are also studies examining how family risk and maltreatment have impacted children's emotion regulation. Ellis, Alisic, Reiss, Dishion, and Fisher (2014) suggests that children in higher risk families are more likely to have fewer emotion regulatory abilities. In their study they classified family risk such as maltreatment and family stress. The children in their sample ranged from 6 to 12 years of age. Shipman, Schneider, Fitzgerald, Sims, Swisher, and Edwards (2007) specifically compared maltreating families to non-maltreating families. They also used a sample of children 6 to 12 years old. Likewise, their results indicated that children in maltreating families showed more dysregulation in their emotions. Both studies indicated that mothers in maltreating and high risk families engaged in less emotion coaching and supportive behaviors.

Shaffer, Suveg, Thomassin, and Bradbury (2011) also assessed family risks in regards to children's emotional development. They, however, considered family risks to be parent's education and socioeconomic status, single parenthood, parent's psychological distress, and household size. Their study examined if these family risks resulted in parents practicing more unsupportive behaviors towards their children's negative emotion thus resulting in poorer emotion regulation in the children. The sample for the study included 44 boys and 53 girls, ages 7 to 12, along with their mothers. Broadly, their results indicated that family risk typically does result in parents practicing less supportive parenting which resulted in greater emotion dysregulation in their children. When the five family risks that were examined were separated

out, the results showed that parent's education had the most significant impact on parent's unsupportive behaviors. Overall, family risk and maltreatment influences the relationship parents have with their children and impacts the children's emotional regulatory abilities.

Mother Versus Fathers and Emotion Regulation

Many studies have also focused specifically on the role mothers play in their children's ability to regulate emotions. McDowell, Kim, O'Neil, and Parke (2002) found that mothers may be more of an influence on children's emotion regulation than fathers, presumably because mothers are typically the primary caretaker. Hurrell, Hudson, and Schniering (2015) also had similar results, in that mothers appeared to play a greater role in children's emotion regulation verses fathers. The children in their study ranged from age 7 to 12 years old. Overall, their results indicated that maternal support and use of emotion coaching was linked to better emotion regulation in children. This was also supported by a study done by Frosco and Grych (2012). They found that family cohesion and emotional support as a whole was important for children's emotion regulation. However, when broken down, only mother's warmth and support directly impacted children's emotion regulation when compared to fathers. The researchers believe this may be due to mothers being more likely to spend time with their children and being more available to their children.

Further, a study by Rogers, Halberstadt, Castro, MacCormack, and Garrett-Peters (2016) tested how mothers' beliefs and reactions to their third-grade children's emotions, along with the mothers' own emotion regulation, impacted their children's. The results indicated that mothers who have poorer emotion regulation model these behaviors to their children which, in turn, teaches children poor emotion regulatory skills. Likewise, Are and Shaffer (2015) linked mothers' positive emotion regulation to better emotion regulation in their children, ages 3 to 5.

5

CHILDREN'S EMOTION REGULATION

The researchers believe this is likely due to the mothers' modeling appropriate emotion regulation along with creating a positive environment for children to express their emotions. Likewise, Meyer, Raikes, Virmani, Waters, and Thompson (2014) examined how mother's modeling impacted children's emotion regulation. Their sample included 73 mothers who had pre-school children. Their results showed that mothers who valued accepting emotions and supporting positive emotions were more likely to engage in more positive emotion socialization. They also found that these parents were more likely to help their children in their emotional management and therefore, modeled self-regulatory behaviors to their children. Overall, they found that mothers do impact their children's emotion regulation.

Although there is evidence that mothers may play a more significant role in children's emotion regulation, fathers are not completely relieved of this aspect of socialization. Shewark and Blandon (2014) linked lack of paternal support to children's negative emotions to poorer emotion regulation in the children. McDowell, Kim, O'Neil, and Parke (2002) also suggested that fathers still have a part in their children's ability to regulate emotions, even if it is less than the mothers'. In their study, teachers gave boys who had fathers who displayed positive behaviors more positive scores on the behavior inventory. Boys who were considered avoidant by peers, however, had fathers who displayed less positive behaviors. Also, even though Frosco and Grych (2012) noted a stronger link for mothers with children's emotion regulation, they also found that family sensitivity and positivity to emotions was important. This finding implies that mother's warmth alone cannot build healthy emotion regulation in children. In their literature, the researchers made the suggestion for further research to be done on the role of fathers on children's regulatory abilities. In the current study, family communication will be conceptualized

not as a trait of the mother or father, but as a family-level variable. Mothers' reports will be used to assess family communication patters.

Family Communication and Emotion Regulation

So far, the literature discussed in this review has used broad terms such as "socialization" to refer to parental practices that relate to children's emotion regulation. Fewer studies seemed to take a more direct approach by examining family communication specifically. Schrodt, Witt, and Messersmith (2008) conducted a study evaluating the Family Communication Patterns (FCP) scale in order to synthesize results across studies that have examined various aspects of communication. To do so they, examined literature which used the FCP and analyzed the outcomes from each study. Their results showed that family communication patterns are linked to family member outcomes. Koerner and Fitzpatrick (2002) develops a theory of family communication in their article. They base their family communication model on a general theory of relational schemas. The model suggests that family communication is the outcome of cognitive process affected by family relationship schemas.

The Current Study

From previous research, it is evident that children's emotion regulation is impacted by interaction within the family. Further, emotional regulation is important because it is linked to dysregulated eating and academic success in children. This study intends to examine the link between family communication and children's regulatory abilities. Previous literature appears to broadly examine the scope of the impact of family communication on children's emotion regulation. However, this thesis will take a more in-depth view of the role family communication has on children's regulatory abilities. The Family Assessment Device (FAD) will be used to measure family communication while the Children's Emotion Management Scale (CEMS) to

measure children's emotion regulation. Thus, this project has future potential to further add to the literature on children's emotion regulation.

Methods

Participants

The data for the present study were gathered as part of from the Family and Schools for Health (FiSH) project. The FiSH project has collected data from children in 29 school in 20 rural, Midwestern towns. The schools were rural, with all but two of the 20 towns having a population < 10,000. The average proportion of children on free/reduced price lunch (a proxy for adversity at the school-level) was 65%. One thousand and seventy-one parents of first-grade children were sent questionnaire packets. Of the 1171, 42 percent (494) parents returned the packets. Incomplete packets were disregarded, reducing the sample size to 458 mothers and their first-grade children. The sample used in the current study consisted of 740 children, 46.9% girls and 52.6% boys. Children's race/ethnicity was 61.1% White, 14.5% American Indian, 1.7% Hispanic/Latino, 1.3% African American, and 1.1% multiracial/multiethnic. The mean age of the mothers was 43.3 years and the mean age of the children was 7 years at the beginning of the study. Data was collected from the children from first to fourth grades.

Measures

Family communication. The Family Assessment Device (FAD; Epstein, Baldwin, Bishop, 1983) is a Likert type scale assessing family functioning. The FAD was used to assess family dynamics in Wave 1 (early in children's 1st grade year) and Wave 2 (at the end of the 1st grade) in the current study. Surveys were mailed or hand-delivered to parents, who were financially compensated for completing it. The scale originally consisted of questions and evaluates problem solving, communication, affective responsiveness, affective involvement, and general family functioning. The scale options range from strongly disagree. disagree, agree, and strongly agree, For the purpose of the FiSH study, the FAD was shortened to 36 questions: 6 questions evaluated problem solving, 7 communication, 6 affective responsiveness, 6 affective involvement, and 11 general family functioning. For the sake of this study, communication will be the only subcategory measured. Table 1 lists items for the communication subscale. Note that *higher* scores on the communication subscale indicate *healthier* communication. In the current study, inter-item reliability for the communication subscale is Cronbach's $\alpha = .67$ and .68 for Wave 1 and 2, respectively,

Emotion regulation. The Children's Emotion Management Scale (CEMS) is a Likert type scale assessing children's anger, worry and sadness (Zeman, Shipman, & Penza-Clyve, 2001). The CEMS was used to assess children's emotion regulation in Waves 3 (2^{nd} grade) and Wave 4 (3^{rd} grade). Children were interviewed individually by a research assistant, who read the questions aloud and recorded the child's responses. In the original measure there were 11 questions evaluating anger, 12 questions evaluating sadness, and 10 questions evaluating worry. The scale options range from 1 = hardly ever, 2 = sometimes, and 3 = often. Further, there were three subscales under each category of anger, worry and sadness. These subscales are inhibition, dysregulation, and coping. For the current study, regulation of only two emotions are evaluated: anger and worry. Table 2 lists the items in each of the subscales used. Cronbach's α 's in the current study for Wave 3 and Wave 4, respectively, are .58 and .58 for anger dysregulation, .53 and .59 for anger inhibition, .56 and .54 for worry dysregulation, and .58 and .58 for worry inhibition.

Results

Plan of analysis. Data were analyzed using SPSS. Bivariate correlations were computed for Mother Wave 1 FAD Communication with CEMS Wave 3 and Wave 4, Mother Wave 2

FAD Communication with CEMS Wave 3 and Wave 4, Mother Wave 3 FAD Communication with CEMS Wave 3 and CEMS Wave 4, and Mother Wave 4 FAD with CEMS Wave 4 (see Table 3). Further, bivariate correlations were computed for each of the 7 FAD Communication Questions for Mother CEMS scores. Correlations were not computed for the father reports of family communication due to the small sample size. Tables 4 and 5 show results from the correlations between the communication subscale (FAD) and children's emotion regulation (CEMS) across waves. Seven of the 24 (29%) correlations computed were significant, almost six times more than would be expected by chance. Two additional correlations were marginally significant (i.e., $p \le .10$). Based on correlations between Wave 1 and Wave 2 FAD and the CEMS scores at Wave 3 and Wave 4, several areas of significant relations between the mother's report of family communication with child regulation variables were identified (see Table 3).

In four of the eight analyses involving children's *coping*—a healthy regulation strategy family communication was positively related to it: three times when dealing with anger and once when dealing with worry. The positive correlations suggest that the better the family communication patterns, the more the child used coping to deal with anger and worry. *Dysregulation* was significantly or marginally related to family communication three times. In every case, the correlation coefficient was negative, suggesting that the better the family communication patterns, the less the child became dysregulated when dealing with anger and worry. Finally, *inhibition* as a regulation strategy was significantly or marginally related to family communication in two instances, once in relation to regulation of worry (FAD Wave 1 predicting CEMS Wave 3) and once in relation to regulation of anger (FAD Wave 2 predicting CEMS Wave 4). Interestingly, both correlations were in the positive direction, suggesting children who inhibit their emotions are more likely to come from families with better communication than children who do not inhibit their emotions as a means of coping. Taken together, the hypothesis that healthy family communication produces good emotion regulation skill in children was partly supported by the findings.

Next, to further examine the data, correlations were computed for each of the FAD Communication questions (see Table 1) with the CEMS variables. We used the individual items from Mother Wave 1 and Wave 2 FAD with CEMS Wave 3 and Wave 4. As reported in Table 4 and Table 5, several of the FAD Wave 1 and Wave 2 questions showed significant correlations with the CEMS variables. Further, a few of the individual items significantly correlated across waves with the CEMS variables. For example, Question 03 (When someone is upset, the others know why.) showed significance with Anger Coping and Worry Coping in both Wave 1 and Wave 2. Thus, knowing why someone in the family is upset is an important factor for children to effectively cope with worry and anger.

Discussion

This study specifically observed how family communication impacts children's emotion regulation. The McMaster Family Assessment Device was used to gather mother's report of family communication and the Children's Emotion Management Scale was used to evaluate children's emotion regulation. Results partly supported our hypothesis that good family communication would lead to better regulatory abilities in children. For example, in both Wave 1 and Wave 2 children's ability to use healthy anger coping was correlated to mother's reports of good family communication. When examining individual items, knowing why other family members were upset, coming right out to say things instead of hinting, not avoiding each other when angry and telling another family member that you did not like what they had done were all associated with more positive emotion regulation in children. Overall, we can infer from the results that family communication is linked to anger and worry regulation in children.

The current study examined several areas of emotion regulation. Two of the CEMS variables included anger and worry coping. For both, results indicated that good family communication produced more anger and worry coping. These findings are similar to those by Gentzler, Contreras-Grau, and Weimer (2005), who conducted a study examining how mother's and father's open communication impacted 5th grade children's emotion coping. Their study was unique because they used both questionnaires and observation. Their results suggest that parent's open communication with children was linked to more positive child emotion coping. Overall, through our study and other literature, there appears to be an importance to family interactions and communication on the development of positive emotion regulation in children. This study did not examine if there were sex or age differences. Therefore, future research could examine if there are differences in how parents communicate with their different gendered children and if so how this impacts emotion regulation.

Strengths

There were several strengths to the study. One strength is the large sample size. Further, data from the FiSH Study was collected longitudinally from children's first to fourth grades. Also, two informants were used, mothers and the children themselves.

Limitations

There were also limitations to the study. First, although the study had a relatively large sample size, the sample was taken only from rural, Midwestern towns. Results would be more generalizable if the sample had included children and mothers from cities and also places outside the Midwest. Internal consistency for the scales used in the current study was not high.

Cronbach's α for the emotional regulations scales was in the mid- to high .50s, and for the communication scales was in the high .60s. Because reliability did not reach .80, results should be interpreted with caution.

Conclusion

The current study examined the impact family communication had on children's emotion regulation. From our results, we can begin to suggest that positive family communication produces more positive emotion regulation in children. However, our results should be interpreted carefully and further research should be conducted on the topic.

References

- Are, F., & Shaffer, A. (2015). Family emotion expressiveness mediates the relations between maternal emotion regulation and child emotion regulation. *Child Psychiatry & Human Development*, 47, 708-715. doi:10.1007/s10578-015-0605-4
- Djambazova-Popordanoska, S. (2016). Implications of emotion regulation on young children's emotional wellbeing and educational achievement. *Educational Review*, 49, 1-19. doi:10.1080/00131911.2016.1144559
- Ellis, B., Alisic, E., Reiss, A., Dishion, T., & Fisher, P. (2014). Emotion regulation among preschoolers on a continuum of risk: The role of maternal emotion coaching. *Journal of Child and Family Studies, 23*, 965-974. doi:10.1007/s10826-013-9752-z
- Epstein, N. B., Baldwin, L. M., Bishop, D. S. (1983). The McMaster Family Assessment Device. Journal of Marital and Family Therapy, 9, 171-180. doi: 10.1111/j.1752-0606.1983.tb01497.x
- Fosco, G. M., & Grych, J. H. (2012). Capturing the family context of emotion regulation. *Journal of Family Issues, 34*, 557-578. doi:10.1177/0192513X12445889
- Gentzler, A. L., Contreras-Grau, Kerns, & Weimer. (2005). Parent-Child emotional communication and children's coping in middle childhood. *Social Development*, *14*, 591-611. doi: 10.1111/j.1467-9507.2005.00319.x
- Graziano, P. A., Reavis, R. D., Keane, S. P., & Calkins, S. D. (2007). The role of emotion regulation in children's early academic success. *Journal of School Psychology*, 45, 3-19. doi:10.1016/j.jsp.2006.09.002

- Gunzenhauser, C., & Friedlmeier, W. (2014). Face it or hide it: Parental socialization of reappraisal and response suppression. *Frontiers in Psychology*, *4*, 1-14. doi:10.3389/fpsyg.2013.00992
- Harrist, A., Hubbs-Tait, L., Topham, G., Shriver, L. H., & Page, M. (2013). Emotion regulation is related to children's emotional and external eating. *Journal of Developmental and Behavioral Pediatrics*, 34, 557-565. doi:10.1097/DBP.0b013e3182a5095f
- Hurrell, K. E., Hudson, J. L., & Schniering C. A. (2015). Parental reactions to children's negative emotions: Relationships with emotion regulation in children with an anxiety disorder. *Journal of Anxiety Disorders*, 29, 72-82. doi:10.1016/j.janxdis.2014.10.008
- Koerner, A. F., & Fitzpatrick, M. A. (2002). Toward a theory of family communication. *Communication Theory*, *12*, 70-91. doi:10.1111/j.1468-2885.2002.tb00260.x
- Lindblom, J., Punamaki, R. L., Flykt, M., Vanska, M., Nummi, T., Sinkkonen, J., . .. Tulpala, M. (2016). Early family relationships predict children's emotion regulation and defense mechanisms. SAGE Open, 6, doi:10.1177/2158244016681393
- McDowell, D., Kim, M., O'neil, R., & Parke, R. D. (2002) Children's emotional regulation and social competence in middle childhood, *Marriage & Family Review*, 34, 345-364, doi:10.1300/J002v34n03_07
- Meyer, S., Raikes, H. A., Virmani, E. A., Waters, S., & Thompson, R. A. (2014). Parent emotion representations and the socialization of emotion regulation in the family. *International Journal of Behavioral Development, 38, 164-173.* doi:10.1177/0165025413519014
- Onchwari, G., & Keengwe, J. (2011). Examining the relationship of children's behavior to emotion regulation ability. *Early Childhood Education Journal*, *39*, 279-284. doi:10.1007/s10643-011-0466-9

- Ramsden, S,. & Hubbard, J. (2002). Family expressiveness and parental emotion coaching: Their role in children's emotion regulation and aggression. *Journal of Abnormal Child Psychology, 30*, 657-667. doi:10.1023/A:1020819915881
- Rogers, M. L., Halberstadt, A. G., Castro, V. L., MacCormack, J. K., & Garrett-Peters, P. (2016).
 Maternal emotion socialization differentially predicts third-grade children's emotion
 regulation and lability. *Emotion*, *16*, 280-291. doi:10.1037/emo0000142
- Schrodt, P., Witt, P. L., & Messersmith, A. S. (2008). A meta-analytical review of family communication patterns and their associations with information processing, behavioral, and psychosocial outcomes. *Communication Monographs*, 75, 248-269. doi:10.1080/03637750802256318
- Shaffer, A. Suveg, C., Thomassin, K., & Bradbury, L. L. (2011). Emotional socialization in the context of family risks: Links to child emotion regulation. *Journal of Child and Family Studies*, 6, 917-924. doi: 10.1007/s10826-011-9551-3
- Shewark, E. A., & Blandon, A. Y. (2015). Mothers and fathers' emotion socialization and children's emotion regulation: A within-family model. *Social Development*, 24, 266-284. doi:10.1111/sode.12095
- Shipman, K. L., Schneider, R., Fitzgerald, M. M., Sims, C., Swisher, L., & Edwards, A. (2007). Maternal emotion socialization in maltreating and non-maltreating families: Implications for children's emotion regulation. *Social Development*, 16, 268-285. doi:10.1111/j.1467-9507.2007.00384.x

- Topham, G. L., Hubbs-Tait, L., Rutledge, J. M., Page, M. C., Kennedy, T. S., Shriver, L. H., Harrist, A. W. (2011). Parenting styles, parental response to child emotion, and family emotional responsiveness are related to child emotional eating. *Appetite*, 56, 261-264. doi: 10.1016/j.appet.2011.01.007
- Zeman, J. Shipman, K., & Penza-Clyve, S. (2001). Development and initial validation of the children's sadness management scale. *Journal of Nonverbal Behavior*, 25, 187-205.

FAD Communication Questions

Number	Question
Question 03	When someone is upset, the others know why.
Question 08*	You can't tell how a person is feeling from what they are saying.
Question 13	People come right out and say things instead of hinting at them.
Question 19	We are frank with each other.
Question 21	We talk to people directly rather than through go-betweens.
Question 23*	We don't talk to each other when we are angry.
Question 28	When we don't like what someone has done, we tell them.

Note. Higher score represents healthier communication patterns. *Reverse coded question

CHILDREN'S EMOTION REGULATION

Table 2

Items for Emotion Regulation Subscales

Anger Regulation

Coping

When I am feeling mad, I control my temper.

I stay calm and keep my cool when I am feeling mad.

I can stop myself from losing my temper.

I try to calmly deal with what is making me feel mad.

Dysregulation

I do things like slam doors when I am mad.

I attack whatever it is that makes me mad.

I say mean things to others when I am mad.

Inhibition

I'm afraid to show my anger.

I hold my anger in.

I hide my anger.

I get mad inside but I don't show it.

Worry Regulation

Coping

I talk to someone until I feel better when I'm worried.

I try to calmly settle the problem when I feel worried.

Dysregulation

I do things like cry and carry on when I'm worried.

I keep whining about how worried I am.

I can't stop myself from acting really worried.

Inhibition

I hold my worried feelings in.

I hide my worried feelings.

I get worried inside but don't show it.

Measures	FAD Wave 1	FAD Wave 2	
CEMS Wave 3	<i>n</i> = 365	<i>n</i> = 365	
Anger Regulation			
Coping	.119*	.123**	
Dysregulation	058	088*	
Inhibition	.011	$.072^{\dagger}$	
Worry Regulation			
Coping	.061	.010	
Dysregulation	042	059	
Inhibition	.000	.047	
CEMS Wave 4	<i>n</i> = 313	<i>n</i> = 314	
Anger Regulation			
Coping	.060	.100*	
Dysregulation	.010	042	
Inhibition	.063	.022	
Worry Regulation			
Coping	.065	.111*	
Dysregulation	086^{\dagger}	109*	
Inhibition	.108*	008	

Pearson Correlations Between Family Communication Subscale and Child Emotion Regulation

4

Note. Higher score on FAD subscales indicates healthier communication patterns. $**p \le .01, *p \le .05, ^{\dagger}p \le .10$

Measures	FAD W1 Question	FAD W1 Question	FAD W1 Question	FAD W1 Question	FAD W1 Question 21	FAD W1 Question 23	FAD W1 Question 28
CEMS Wave 3	03	00	13	17	<u>~ 1</u>	23	20
Anger Regulation							
Coping	.134*** n = 366*	$.071^{\dagger}$ $n = 366$	$.067^{\dagger}$ $n = 367$	017 n = 366	.034 n = 365	.108* n = 365	.041 n = 364
Dysregulation	012 n = 365	001 n = 366	071^{\dagger} n = 367	104* n = 366	069^{\dagger} $n = 365$	009 n = 365	043 n = 364
Inhibition	.050 n = 365	.026 n = 366	.040 , <i>n</i> = 367	043 n = 366	010 n = 365	020 n = 365	.00 5n = 364
Worry Regulation							
Coping	.134** n = 365	.013 n = 366	.035 n = 367	.044 n = 366	.019 n = 365	.007 n = 365	.011 n = 364
Dysregulation	.042 n = 365	080^{\dagger} $n = 366$.009 n = 367	068^{\dagger} $n = 366$	020 n = 365	109* n = 365	.064 n = 364
Inhibition	.008 n = 365	03 n = 366	.019 n = 367	020 n = 366	.013 n = 365	.018 n = 365	.005 n = 364
CEMS Wave 4							
Anger Regulation							
Coping	.093* n = 314	$.078^{\dagger}$ $n = 315$.044 n = 316	.005 n = 315	n = 315	.014 n = 315	014 n = 313
Dysregulation	.031 n = 314	068 n = 315	.028 n = 316	.007 n = 315	051 n = 315	.051 n = 315	015 n = 313
Inhibition	.068 n = 314	.048 n = 315	015 n = 316	023 n = 315	.023 n = 315	.031 $n = 315$.011 $n = 313$
Worry Regulation							
Coping	.131** n = 314	.031 n = 315	.029 n = 316	.040 n = 315	017 n = 315	043 n = 315	.031 n = 313
Dysregulation	011 n = 315	068 n = 315	091* n = 316	062 n = 315	065 n = 315	044 n = 315	101* n = 313
Inhibition	$.069^{**}$ $n = 315^{*}$.131** n = 315	.016 n = 316	.061 , <i>n</i> = 315	$.080^{\dagger}$ $n = 315$.004 n = 315	.006 n = 313

Pearson Correlations Between Family Communication (Items) and Child Emotion Regulation

Note. Higher score on FAD item indicates healthier communication patterns. **** $p \le .001$, *** $p \le .005$, ** $p \le .01$, * $p \le .05$, † $p \le .10$

Pearson Correlations Between FAD Variables at Wave 2 and CEMS Variables at Waves 3 and 4

Measures	FAD W2 Question 03	FAD W2 Question 08	FAD W2 Question 13	FAD W2 Question 19	FAD W2 Question 21	FAD W2 Question 23	FAD W2 Question 28
CEMS Wave 3				-/			
Anger Regulation							
Coping	.140* n = 212	.082 n = 212	-131* n = 210	$.086^{\dagger}$ $n = 210$.079 n = 212	.117* n = 212	.110* n = 211
Dysregulation	240**** n = 212	045 n = 212	078 n = 210	.113* n = 210	157** n = 212	169** n = 212	083 n = 211
Inhibition	117* n = 212	019 n = 212	.015 n = 210	001 n = 210	026 n = 212	070 n = 212	.046 n = 211
Worry Regulation							
Coping	.031 n = 212	.003 , <i>n</i> = 212	009 n = 210	.024 , <i>n</i> = 210	.030 n = 212	$.099^{\dagger}$ $n = 212$.044 n = 211
Dysregulation	.013, $n = 212$	081 n = 212	016 n = 210	.117* n = 210	-085 n = 212	077 n = 212	016 n = 211
Inhibition	.040 n = 212	-\.057 $n = 212$.022 n = 210	040 n = 210	052 n = 212	061 n = 212	$.096^{\dagger}$ $n = 211$
CEMS Wave 4							
Anger Regulation							
Coping	.158** n = 178	.063 n = 178	.017 n = 176	.090 n = 177	$.102^{\dagger}$ $n = 177$	090 n = 176	.200*** n = 177
Dysregulation	090 n = 178	.156** n = 178	.142* n = 176	.051 n = 177	160** n = 177	113^{\dagger} $n = 176$	067 n = 177
Inhibition	.061 n = 178	032 n = 178	.085 n = 176	.086 n = 177	.000 n = 177	.043 n = 176	.093 n = 177
Worry Regulation							
Coping	.273**** n = 178	.047 n = 178	.144* n = 176	$.113^{\dagger}$ $n = 177$,263**** n = 177*	131* n = 176	168* n = 177
Dysregulation	037 n = 178	.000 n = 178	.059 n = 176	.040 n = 177	036 n = 177	089 n = 176	026 n = 177
Inhibition	130* n = 178	087 n = 178	075 n = 176	012 n = 177	019 n = 177	046 n = 176	012 n = 177

Note. Higher score on FAD item indicates healthier communication patterns.

**** $p \le .001, ***p \le .005, **p \le .01, *p \le .05, ^{\dagger}p \le .10$