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Parent Emotion Socialization and Emerging Adult Internalizing Symptoms: Differences and Moderation by Rurality

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ABSTRACT

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Emerging adulthood is a unique developmental period from late adolescence to late 20s during

which individuals experience a multitude of developmental transitions and are at an increased

risk for internalizing symptoms. Parent emotion socialization in childhood can also contribute to

risk for internalizing symptoms and is shaped by parent gender and sociocultural context.

Rurality is a sociocultural context that has implications for parenting, but less research has

explored how parent emotion socialization varies by rurality. The present study examined

maternal and paternal emotion socialization in relation to rurality and emerging adult

internalizing symptoms. Participants were 270 emerging adults (18-29 years old; 65.6% female)

from a regional university who completed several self-report measures. Maternal and paternal

emotion socialization responses did not differ by rurality but evidenced unique associations with

emerging adult internalizing symptoms. Rurality did not moderate these associations. Clinical

implications and future directions are discussed.

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Chapter 1. Introduction

Emerging Adulthood

Emerging adulthood is a unique developmental period characterized by the time between late adolescence and late twenties, which is a growing topic of study in the realm of developmental and clinical psychology (Arnett, 2000). As emerging adults transition from adolescence to adulthood, they gain increased responsibility, take on social and emotional roles of adulthood, and have increased independence and exploration (Arnett, 2000). Rather than being universally similar across cultures, emerging adulthood is thought to be a consequence of changing historical and cultural conditions (Arnett, 2002) and is influenced by socioeconomic factors, social context, and changes in social roles (Arnett, 2006; Arnett et al., 2014; Mayer, 2009). Though it holds opportunity to explore one's identity and possibilities for the future, emerging adulthood is also characterized by instability and feeling in-between, which can confer risk for poorer mental health outcomes (Arnett, 2000).

Increased attention is being paid to emerging adulthood as a time of higher risk for developing internalizing symptoms when compared to other developmental stages. Internalizing symptoms are broadly categorized and defined as mood disruptions marked by increased levels of sadness, fear, anxiety, and distress, and are often a broad categorization of symptoms of anxiety and depression (Achenbach, 1991; Levesque, 2011). In a sample of college students, 40% of students reported mild to extremely severe symptoms of anxiety and 33% reported mild to extremely severe symptoms of depression (Beiter et al., 2015). Additionally, for individuals aged 18 to 24, the total incidence of depression was 28% (Rohde et al., 2013). Anxiety is one of the most common concerns for which college students seek mental health services (Reetz et al., 2013), with approximately 11.7 – 14.7% of college students meeting criteria for an anxiety

disorder (Auerbach et al., 2016). Given that this developmental period holds increased risk for anxiety and depression, understanding possible protective and risk factors for internalizing symptoms in emerging adults is important from a prevention and intervention standpoint. Specifically, understanding the role emotion socialization in childhood plays in development is important to further knowledge concerning protective and risk factors for emerging adults' mental health.

Emotion Socialization

Emotion socialization is an interactive process through which children learn about how to express and regulate their emotions by interacting with parents, teachers, and peers (Eisenberg et al., 1998). One way that parents teach their children about emotions is by responding to their children's emotional displays (Eisenberg et al., 1998). Parent's reactions serve as feedback that children use to attribute meaning to their emotions and shapes future emotional displays (Eisenberg et al., 1998; Morris et al., 2007). Parents respond to their child's negative emotions in a variety of different and specific ways, and these responses have been categorized as *reward, override, magnify, punish,* and *neglect* responses (Magai & O'Neal, 1997). *Reward* responses encompass behaviors by the parent with the goal of comforting, empathizing, and assisting their child in working through the root of the negative emotion. *Override* responses consist of behaviors intended to suppress negative emotion by means of distraction or having the child change the negative emotion into a positive emotion. *Magnifying* responses refer to when parents mirror their child's emotion by expressing the same negative emotion. Parents *punish* expression of emotions by means of expressing disapproval and labeling the inappropriateness of the emotion and behavior. Lastly, *neglect* responses are those where parents ignore their child's emotional display. Extant literature on adolescents has largely categorized reward and override

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responses as supportive responses, whereas magnify, punish, and neglect responses are thought to be unsupportive (Klimes-Dougan et al., 2007; 2014; O'Neal & Magai, 2015).

The ways in which parents respond to their children's negative emotions have implications for their child's psychosocial and emotional adjustment (Faro, 2019). Much of the extant literature examining links between emotion socialization and internalizing symptoms has focused on early and middle childhood (McKee, 2013; Zimmerman & Iwanski, 2014). However, research on this process in emerging adults has been gaining traction, focusing on emerging adults' perceptions of emotion socialization in childhood and links with internalizing symptoms. Emerging adults' perceptions of parents' supportive responses have been linked to lower levels of internalizing symptoms (Faro et al., 2019). Additionally, specific response types (e.g., reward, magnify, override) have been examined in relation to internalizing and externalizing symptomology. Parents' reward of negative emotion in childhood and emerging adulthood have typically been predictive of healthier development and lower levels of internalizing symptoms (Garside & Klimes-Dougan, 2002; Klimes Dougan et al., 2007). In emerging adulthood, there are mixed findings regarding whether override responses operate as a supportive or unsupportive response. Override responses have been associated with lower rates of self-harm (Buckholdt et al., 2009) while also being associated with psychological distress (Garside & Klimes-Dougan, 2002) in emerging adults.

On the other hand, emerging adults' perceptions of unsupportive responses from parents have been linked to higher levels of current psychological distress (Garside & Klimes-Dougan, 2002) and have been predictive of depression in college students (Boucher et al., 2003). More specifically, parents' magnification of negative emotion during childhood and emerging adulthood has been linked to higher rates of internalizing symptoms and psychological distress,

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in both child and emerging adult samples (Eisenberg et al., 1998; Garside & Klimes-Dougan, 2002; Silk et al., 2011). Parents neglect and punitive responses to their children's negative emotions also have predicted higher rates of internalizing symptoms in both childhood and emerging adulthood (Garside & Klimes-Dougan, 2002; Klimes-Dougan et al., 2007). It is important to note that though some of these studies may focus on emotion socialization in adolescence, internalizing symptoms in adolescence are largely predictive of psychological adjustment in adulthood (Colman et al., 2007).

Historically, extant literature on emotion socialization has largely focused on mother-child relationships, with little attention being paid to fathers (Morris et al., 2007). There is research on the different ways that mothers and fathers engage in emotion socialization practices, though this research pertains mostly to adolescence with a few studies on emerging adults. In adolescence, mothers have been found to be more involved in their child's emotional life than were fathers (Klimes-Dougan et al., 2007). Mothers more often rewarded and magnified their child's negative emotions, whereas fathers were more likely to punish or neglect these emotions (Klimes-Dougan et al., 2007). These findings similarly extend into emerging adulthood, as emerging adults' perceptions of emotion socialization in childhood reveal mothers as the more active socializing agent with higher rates of rewarding, overriding, punishing, and magnifying responses and fathers displaying more neglecting responses (Garside & Klimes-Dougan, 2002). Despite the limited research, there is evidence to suggest that fathers' socialization responses are important for their children's psychosocial adjustment. Emerging adults' perceptions of maternal and paternal reward responses were related to lower levels of internalizing symptoms when mediated by mindfulness (McKee et al., 2021). Further research is needed to understand

differences in emerging adults' perceptions of both maternal and paternal emotion socialization practices and their relations to psychosocial adjustment.

Emotion Socialization as Shaped by the Family System

Parenting values and beliefs are shaped by sociocultural context (Coleman et al., 1989). Not only can parents hold firm cultural attitudes related to parenting and raising children, but personal beliefs and values also play a vital role in the way a parent chooses to raise their child. These parenting beliefs shape parenting behaviors (Luster et al., 1989). Rurality is one sociocultural context that can shape family life and parenting behaviors. Families living in rural communities report a strong sense of pride, social cohesions, and social capital (Hege et al., 2018). In rural Appalachia, parents tend to place heavier emphasis on obedience and discipline (Manoogian et al., 2015; Peterson & Peters, 1985; RAYFC, 1996) in hopes to raise more responsible children and to prevent other community members from holding negative views of their children's behavior (RAYFC, 1996).

Rural communities throughout the United States also face challenges such as socioeconomic stress and limited resources that shape family life. Communities in which parents experience higher levels of socioeconomic stress are more likely to have higher rates of reported adverse childhood experiences (ACEs; Bruner, 2017; Crouch et al., 2019), which increases risk for limited educational attainment and unemployment (Metzler et al., 2017). Rural settings also differ from urban settings in access to health resources (Gilbert et al., 2018; Singh & Kapush, 2014; Zeng et al., 2015) and rural communities in southeastern region of the United States are more likely to have poor health outcomes (Anderson et al., 2015; James, 2014). As a result of barriers faced by individuals living in rural settings (e.g., low SES, less access to resources), it is possible that parents in rural communities can be subject to higher levels of stress. For parents,

these stressors can contribute to harsher parenting behaviors or disciplinary practices with their children (Crnic & Low, 2002; Pinderhughes et al., 2000), and possibly impact how parents socialize their child's emotions.

There is little research on differences in emotion socialization practices across rural and urban communities, though there has been some research on emotion socialization interventions in rural communities. Tuning into Kids (TiK; Havighurst et al., 2009) is a parenting education program designed to promote adaptive parent emotion socialization practices and, in turn, improve children's behavioral and emotional competence. Hernandez and colleagues (2020) examined the TiK program in a rural Appalachian community, specifically with respect to how participants engaged in session and responded to the intervention. Findings demonstrated that parenting values and behaviors shaped parents' reactions to this program. Specifically, parents voiced concern how to implement TiK's central concepts of reflecting and listening to children's emotions, as it appeared to conflict with their values of obedience and implementing consequences for misbehavior (Hernandez et al., 2020). This is consistent with prior literature regarding strong parenting values of obedience in rural communities (Manoogian et al., 2015; Peterson & Peters, 1985; RAYFC, 1996). Taken together, rurality is one sociocultural context that shapes parenting values and behaviors, including ways in which parents socialize their child's emotions.

The Present Study

Given that rurality can shape parents' attitudes, beliefs, and perceptions on raising children, it's important to understand if rurality impacts the way parents socialize their children's emotions and associations with their later psychosocial adjustment. The current study will build upon the literature by examining rurality in relation to maternal and paternal emotion

socialization and its impact on emerging adult adjustment. Specifically, this study aims to examine emerging adults' perceptions of their parents' emotion socialization practices in relation to the area they grew up in (i.e., rural vs. non-rural) and parent gender. Based on prior literature providing evidence for parents of rural communities emphasizing values of obedience and discipline (Manoogian et al., 2015; Peterson & Peters, 1985; RAYFC, 1996), reward, neglect, and punish emotion socialization responses will be examined. Additionally, the present study will examine maternal and paternal emotion socialization in relation to emerging adult internalizing symptoms and whether rurality moderates this link.

The following hypotheses are offered based on the literature review above. Regarding emerging adults' perceptions of parent emotion socialization in childhood, it is expected that maternal and paternal emotion socialization will vary by individuals from rural vs. non-rural areas. Specifically, emerging adults from rural areas will report higher rates of punish (H_{1a}) and neglect (H_{1b}) responses and lower rates of reward responses (H_{1c}) than those from non-rural areas. Regarding associations with emerging adults' internalizing symptoms, it is expected that mothers' reward responses, but not fathers', will be negatively linked to emerging adults' internalizing symptoms regardless of rurality (H_2). Additionally, it is expected that perceptions of mothers' and fathers' punish and neglect responses will positively be associated with emerging adults' internalizing symptoms regardless of rurality (H_{3a}). Rurality is expected to moderate the association between parents' punish and neglect responses with emerging adults internalizing symptoms. Specifically, parents' punish and neglect responses will predict higher rates of internalizing symptoms for emerging adults in rural areas compared to those from non-rural areas (H_{3b}). These moderation effects are expected across mothers' and fathers' responses.

Chapter 2. Methods

Participants

Participants were a community sample of 270 college students (65.6% female) at regional university in northeast Tennessee aged 18 – 29 ($M = 20.12 =$ years, $SD = 2.42$ years). Participants were examined as part of a larger study that recruited 346 college students, with participants aged 30 years and older excluded from the present analysis given the focus on the emerging adult period. Participants identified primarily as White (78.5%), with 7.4% identifying as African American, 2.6% Hispanic or Latino, 2.2% Biracial, 1.9% Native American, .7% Asian American, and 5.2% identifying as other.

Procedure

All participants were recruited using SONA research software and were asked to complete various measures using this online survey system. Upon completion, participants were granted credit to apply to coursework. Study procedures were approved by the university Institutional Review Board. Informed consent was obtained by the participants prior to data collection.

Measures

Emotion Socialization

Emotions as a Child Scale (EAC; Magai & O'Neal, 1997). The EAC is a measure of parental emotion socialization responses during childhood. Participants were asked to report how often their parent responded in different ways when they were upset (a broad, negative emotion encompassing feelings of anger, worry, and sadness) as a child. Participants rate items on a 5-point Likert-style scale (1 = *never*, 5 = *very often*). The EAC assesses five types of perceived parental responses to negative emotion as a child (i.e., reward, magnify, neglect, punish,

override). For the purposes of the current study, only reward, punish, and neglect responses were examined. Examples of reward responses include "My mother responded to my emotions" and "My mother comforted me." Examples of punish responses include "My mother told me to stop being upset" and "My mother told me that I was acting younger than my age." An example of a neglect response is "My mother did not pay attention to my feelings." Participants reported emotion socialization by mothers and fathers separately. Prior studies (Silk et al., 2011) indicates the measure to be internally consistent ($\alpha = .65-.88$). Internal consistency in the current study for the subscales of the mother rating forms was adequate ($\alpha = .67-.93$). For the father rating forms, all subscales are adequate ($\alpha = .75-.93$) excluding the neglect subscale ($\alpha = .52$).

Internalizing Symptoms

Internalizing symptoms were measured as a composite score of the Generalized Anxiety Disorder Questionnaire and Patient Health Questionnaire, in which higher scores relate to higher rates of internalizing symptoms. These measures highly correlated between symptoms of anxiety and depression ($r = .77$), supporting the use of this composite score.

Generalized Anxiety Disorder Questionnaire (GAD-7; Spitzer et al., 2006). The GAD-7 is a 7-item screening instrument used to assess the presence and severity of anxiety symptoms in the past two weeks. Items are rated on a 3-point Likert scale (1 = *not at all* to 3 = *nearly every day*). The GAD-7 has shown to have adequate reliability and validity (Spitzer et al., 2006). In the present study, the GAD-7 has adequate internal consistency ($\alpha = .91$). Example items include "feeling nervous, anxious, or on edge" and "worrying too much about different things." Items are summed into a total score, with higher scores indicating of higher levels of anxiety.

Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001). The PHQ-9 is a 9-item

screening instrument used to assess presence and severity of depression symptoms in the past

two weeks. Items are rated on a 4-point Likert scale (0 = *not at all* to 3 = *nearly every day*). The

PHQ-9 has been shown to have adequate reliability and validity (Kroenke et al., 2001). In the

present study, the PHQ-9 has adequate internal consistency (α = .91). Example items include

"feeling down, depressed, or hopeless" and "feeling tired or having little energy." As with the

GAD-7, items are summed into a total score, with higher scores indicating higher levels of

depression.

Rurality

Rurality was measured by participants indicating the type of area they grew up in.

Participants were asked "how would you describe the area you grew up in" and response options

included rural (n = 112), urban (n = 27) and suburban (n = 141). This variable was transformed

to indicate those from rural (n = 112) vs. non rural areas (n = 168), in which those who reported

being from urban and suburban areas were classified as "non-rural."

Chapter 3. Results

Data Analytic Plan

For hypotheses testing, the following analyses were conducted. An independent t-test was conducted to examine group differences on perceptions of parent reward, punish, and neglect responses by the area an individual grew up in (i.e., rural vs. non-rural; H_1). Stepwise regressions were conducted to determine if the relationship between parent emotion socialization and internalizing symptoms was moderated by rurality and how that varies by parent gender (H_2; H_{3ab}). Specifically, two regression models were conducted in which covariates (i.e., gender and maternal education) were entered in step 1, the predictor variables (i.e., punish and neglect responses by mother and father) and the moderator (rurality) were entered in step 2. Interaction terms of predictor variables and the moderator were entered in step 3. A third regression model was conducted containing covariates in step 1 and maternal and paternal reward responses in step 2 to examine differences in maternal and paternal emotion reward responses in relation to internalizing symptoms. Internalizing symptoms were entered as the outcome variable for each model. Models were run separately by socialization response (reward, punish, neglect), resulting in three models in total. *A-priori* power analyses were conducted using G*Power to determine the sample size needed to have enough power to detect an effect. To detect a large effect using independent samples *t*-tests (H_1), a sample size of 53 in group one and 35 in group two was needed. To detect a medium effect, a sample size of 133 in group one and 87 in group two was needed to be adequately powered. For the regression analyses (H_{2-3}), a sample size of 32 was needed to detect a large effect, a sample size of 46 to detect a medium effect, and a sample size of 105 to detect a small effect. Thus, the present study was adequately powered for the proposed analyses.

Data Preparation and Preliminary Analyses

Mother and father emotion socialization response types were standardized and multiplied by rurality to form the interaction terms. Skewness and kurtosis statistics for the study variables were examined to determine the presence of any outliers or needed transformations. Analyses suggested that no variables were skewed or kurtotic (see Table 1). Additionally, bivariate correlations were conducted to assess for multicollinearity and results suggested that no predictor variables were too highly correlated to have impact on analyses (Table 2). However, symptoms of anxiety and depression were highly correlated ($r = .77$) and were subsequently summed into a single composite variable of internalizing symptoms, in which higher scores pertain to higher levels of internalizing symptoms.

Table 1

Descriptive Statistics

	M	*SD*	Range	Skewness	Kurtosis
Maternal Reward Responses	3.52	1.15	1 - 5	-0.50	-0.76
Maternal Punish Responses	2.34	1.07	1 - 5	0.79	-0.26
Maternal Neglect Responses	2.31	1.15	1 - 5	0.63	-0.63
Paternal Reward Responses	2.84	1.16	1 - 5	0.03	-1.06
Paternal Punish Responses	2.24	1.15	1 - 5	0.87	-0.13
Paternal Neglect Responses	2.69	1.05	1 - 5	0.20	-0.39
Rurality	1.6	0.49	1 - 2	-0.42	-0.63
Internalizing Symptoms	17.88	11.54	0 - 46	0.38	-0.80

Table 2

Correlations of Study Variables

	1	2	3	4	5	6	7	8
1. Maternal Reward Response	1							
2. Maternal Punish Responses	-.43**	1						
3. Maternal Neglect Responses	-.85**	.55**	1					
4. Paternal Reward Responses	.35**	-.08	-.24**	1				
5. Paternal Punish Responses	-.01	.28**	.13*	.03	1			
6. Paternal Neglect Responses	-.22**	.11	.26**	-.75**	.3**	1		
7. Rurality	-.06	-.07	.02	-.02	-.07	.02	1	
8. Internalizing Symptoms	-.24**	.33**	.32**	-.22**	.12*	.27**	.01	1

*Note: *$p < .05$, **$p < .001$*

Study variables were also examined for demographic differences (i.e., participant gender, race/ethnicity, parent education) prior to hypothesis testing to determine potential covariates. Independent samples *t*-tests revealed that participants whose mothers had no college degree reported higher rates of internalizing symptoms ($M = 20.54$, $SD = 10.97$) than did participants

whose mothers had a college degree ($M = 16$, $SD = 11.46$). Additionally, cisgender females reported higher rates of internalizing symptoms ($M = 20.16$, $SD = 11.37$) than did cisgender males ($M = 13.09$, $SD = 10.1$; See Table 3 for a summary of results). As such, these two variables were included as covariates for subsequent analyses. There were no significant group differences in study variables by participants' fathers' education or participant race/ethnicity.

Table 3

Demographic Differences in Internalizing Symptoms

	Cisgender Male		Cisgender Female			
	M	*SD*	*M*	*SD*	*t*	*p*
Internalizing Symptoms	13.09	10.1	20.16	11.37	5.03	.000**
	Mothers without college education		Mothers with college education			
	M	*SD*	*M*	*SD*	*t*	*p*
Internalizing Symptoms	20.54	10.97	16.01	11.46	3.35	.001**

Note: *p < .05, p < .001**

Hypothesis Testing

Regarding differences in parent emotion socialization responses based on rurality, it was expected that emerging adults from rural communities would perceive higher rates of punish (H$_{1a}$) and neglect (H$_{1b}$) responses from mothers and fathers than emerging adults from non-rural communities. It was also expected that emerging adults from rural communities would perceive less reward responses (H$_{1c}$) from mothers and fathers than those from non-rural communities. These hypotheses were not supported, as independent samples *t*-tests revealed no significant

differences in emerging adults' perceptions of punish, neglect, or reward responses by rurality ($ps > .05$), for mothers or fathers (see Table 4 for a summary of results).

Table 4

Rurality Differences in Parent Emotion Socialization

	Rural		Non-Rural			
	M	SD	M	SD	t	p
Maternal Reward	3.61	1.17	3.49	1.14	.88	.411
Paternal Reward	2.84	1.24	2.8	1.14	.26	.793
Maternal Punish	2.43	1.08	2.3	1.06	.61	.324
Paternal Punish	2.34	1.2	2.15	1.12	.16	.198
Maternal Neglect	2.29	1.15	2.32	1.16	.82	.82
Paternal Neglect	2.66	1.07	2.69	1.03	.55	.828

Note: *p < .05, p < .001**

Regarding associations between parent emotional socialization practices and emerging adult internalizing symptoms, it was expected that only perceptions of mothers' reward responses would be negatively associated emerging adults' internalizing symptoms (H_2). The overall model was significant at both steps (Table 5). In the first step of the model, mother education ($B = -.21$, $p = .001$) and participant gender ($B = -.13$, $p = .03$) were related to internalizing symptoms, consistent with preliminary analyses. These covariates remained significant in the second. Maternal ($B = -.13$, $p = .03$) and paternal ($B = -.16$, $p = .01$) reward responses were also negatively associated with emerging adults' internalizing symptoms. This

indicates that when mothers and fathers were attentive and supportive of their children's negative

emotions in childhood, these individuals had lower internalizing symptoms as emerging adults.

Table 5

Regression Analyses of Parent Reward and Internalizing Symptoms

	B	F	R^2
Step 1		.86**	.06
Mother Education	-0.21**		
Gender	-0.13*		
Step 2		6.90**	.05
Mother Education	-0.15*		
Gender	-0.14*		
Maternal Reward	-0.13**		
Paternal Reward	-0.16**		

Note: *$p < .05$, **$p < .001$

It was expected that perceptions of mothers' and fathers' punish and neglect responses

will positively be associated with internalizing symptoms (H3a). For the model that tested

perceptions of neglect responses, maternal ($B = .26$, $p = .001$) and paternal ($B = .19$, $p = .001$)

neglect responses were positively associated with emerging adults' internalizing symptoms

(Table 6). The overall model for neglect responses was also significant at all three steps. Mother

education (B = -.2, $p = .001$) and participant gender (B = -.13, $p = .03$) were significant in step 1

and remained significant throughout each step. For the model that tested perceptions of punish

responses, each of the three steps were significant. Only maternal punish responses ($B = .3$, $p =$

.001) were positively associated with emerging adults' internalizing symptoms. As consistent with reward and neglect models, mother education (B = -.19, p = .001) and participant gender (B = -.12, p = .04) were significant in step 1 and retained significance.

Regarding moderation by rurality, it was hypothesized that perceptions of parents' punish and neglect responses would more strongly predict internalizing symptoms for emerging adults raised in rural communities than emerging adults from non-rural areas (H_{3b}). These moderation effects were expected for both maternal and paternal responses. For the model examining maternal and paternal neglect responses (Table 6), step 3 of this model was significant and contained a main effect of mother education and participant gender on emerging adult internalizing symptoms. The interaction term of mother neglect and rurality was not significant, nor was the interaction term for father neglect and rurality (ps >.05). Additionally, for the model examining maternal and paternal punish responses (Table 7) step 3 was significant. However, neither the interaction term for mother punish and rurality nor the interaction term for father punish and rurality were significant (ps > .05). The model did contain a main effect of mother education and participant gender on internalizing symptoms. These results indicate that rurality did not moderate the relation between either parents' punitive or parents' neglect responses and emerging adults' internalizing symptoms.

Table 6

Regression Analyses of Parent Neglect Responses and Internalizing

Symptoms by Rurality

	B	F	R^2
Step 1		8.21**	0.06
Mother Education	-0.2**		
Gender	-0.13*		
Step 2		11.17**	0.12
Mother Education	-0.11*		
Gender	-0.14*		
Maternal Neglect	0.26**		
Paternal Neglect	0.19**		
Rurality	-0.001		
Step 3		7.92**	0.001
Mother Education	-0.11*		
Gender	-0.14*		
Maternal Neglect	0.27		
Paternal Neglect	0.16		
Rurality	0.001		
Neglect (M) x Rurality	-0.01		
Neglect (P) x Rurality	0.04		

Note: *$p < .05$, **$p < .001$; M = Maternal, P = Paternal

Table 7

Regression Analyses of Parent Punish Responses and Internalizing

Symptoms by Rurality

	B	F	R^2
Step 1		7.50**	0.05
Mother Education	-0.19**		
Gender	-0.12*		
Step 2		10.89**	0.12
Mother Education	-0.15*		
Gender	-0.16*		
Maternal Punish	0.3**		
Paternal Punish	0.12*		
Rurality	0.02		
Step 3		7.81**	0.001
Mother Education	-0.15*		
Gender	-0.15*		
Maternal Punish	0.22		
Paternal Punish	0.22		
Rurality	0.02		
Punish (M) x Rurality	0.09		
Punish (P) x Rurality	-0.12		

Note: *$p < .05$, **$p < .001$; M = Maternal, P = Paternal

Chapter 4. Discussion

Research on emotion socialization in emerging adulthood has been receiving more attention as of late. However, it is less understood how the process of emotion socialization is shaped by sociocultural context, such as rurality. Additionally, less is known about paternal emotion socialization and its link to psychosocial adjustment in emerging adulthood. The findings of the current study indicate that emerging adults' perceptions of maternal and paternal emotion socialization did not vary by individuals who grew up in rural or non-rural areas but were associated with emerging adult internalizing symptoms. These effects were also not moderated by rurality. These findings have important implications for clinical practice as they demonstrate the role parent gender has on emotion socialization practices and examines an associated clinical outcome (i.e., internalizing symptoms).

Emotion Socialization and Rural and Non-Rural Communities

It was hypothesized that emerging adults from rural communities would report higher rates of punish (H_{1a}) and neglect (H_{1b}) responses from mothers and fathers and lower rates of reward responses (H_{1c}) compared to emerging adults from non-rural communities. These hypotheses were not supported as there were no significant differences in emotional socialization responses based on the area an emerging adult grew up in. It's important to note that participants were all recruited at a university in northeast Tennessee. Despite these participants identifying whether they grew up in a rural, urban, or suburban area, it is possible that participants are embedded in a similar cultural system within the southern United States in which parents may hold or experience similar values or cultural norms for parenting. Thus, there may not be substantial differences in the ways parents socialize their child's emotions based on the rurality of the area they grew up in.

Emotion Socialization, Internalizing Symptoms, and Parent Gender

Consistent with study hypotheses, both maternal and paternal emotion socialization responses were significantly associated with rates of internalizing symptoms. Specifically, it was expected that mothers', but not fathers' reward responses would be negatively associated with internalizing symptoms in both rural and non-rural areas (H_2). This hypothesis was somewhat supported as higher rates of emerging adults' perceptions of maternal reward responses was linked to lower rates of internalizing symptoms. Additionally, it was found that paternal reward responses were negatively associated with internalizing symptoms. These results with both mothers and fathers are somewhat consistent with prior literature finding that paternal reward responses are associated with lower rates of internalizing symptoms when mediated by mindfulness and lower levels of psychological distress in emerging adults (Garside & Klimes-Dougan, 2002; McKee et al., 2021). When parents employ reward responses, it could be that they are encouraging the healthy expression of emotion. These responses may also send the message to children that expressing negative emotion is appropriate and can help children cope with negative emotions in the moment. Items on the *Reward* subscale of the EAC may also be capturing various aspects of attachment and measuring ways in which caregivers are emotionally available to their children. Over time, these types of reward responses may serve as a protective factor for emerging adult mental health outcomes as it may encourage future expression and regulation of negative emotions. These findings also showcase a similar impact of mother and father emotion socialization on emerging adults' current internalizing symptoms. This highlights the notion that reward responses from both mothers and fathers are relevant in the emotional world of their children and related outcomes.

Additionally, it was hypothesized that perceptions of maternal neglect and punish responses would be associated with higher rates of internalizing symptoms (H_{3a}). Consistent with study hypotheses, perceptions of mothers' punish and neglect responses were associated with higher rates of internalizing symptoms. Regarding paternal emotion socialization, it was expected that perceptions of paternal neglect and punish responses (H_{3a}) would also be positively associated with internalizing symptoms. Study hypotheses were somewhat supported, such that only perceptions of neglect responses were positively associated with internalizing symptoms. Overall, these findings are somewhat consistent with past literature in which punish and neglect responses were associated with more psychological distress in emerging adults (Garside & Klimes-Dougan, 2002). The manners in which parents respond to their children's emotions has implications for how children build an understanding of different emotions and the acceptability of having those emotions. When parents employ more punish or neglect responses, perhaps kids learn to suppress their emotions which has been found to be associated with emerging adult internalizing symptoms (Zahniser & Conley, 2018). Additionally, since children expressing negative emotions are already experiencing significant levels of distress, being punitive or neglectful of their emotions could further increase distress and the internalization of those emotions. Surprisingly, emerging adult perceptions of paternal punish responses were not linked to internalizing symptoms. Fathers typically employ more punitive responses than mothers in adolescence (Klimes-Dougan et al., 2007). Thus, punitive responses from fathers may not be as salient as it fits within a gendered schema of how fathers respond to emotions. In relation to maternal responses, mothers are usually the more active socializing agent and tend to employ punish responses less than fathers (Klimes-Dougan et al., 2007). As a result, perhaps punitive

responses from mothers tend to be more impactful or salient for children than they would be for fathers.

Emotion Socialization and Internalizing Symptoms as Moderated by Rurality

It was also expected that the rurality of the area an individual grew up in would moderate the relationship between parental punish and neglect responses and internalizing symptoms (H3b). This hypothesis was also not supported as the relationships between reward, punish, and neglect responses and internalizing symptoms were not moderated by the rurality of the area an individual grew up in. For similar reasons as noted earlier, perhaps the participants in the sample are all embedded within a similar cultural system explaining why the relationship between emotion socialization and internalizing symptoms was not moderated by rurality. Additionally, measuring the rurality of an area may not measure sociocultural aspects of rural and non-rural areas, such as parent values and the degree to which families identify with their cultural identity and heritage. Perhaps by measuring aspects of families in rural and non-rural areas such as the length of time a family has lived there, generational status, and parenting values and behaviors might provide more insight into cultural practices of rural and non-rural areas. Additionally, given the unique aspects of rurality (and more specifically, Rural Appalachia) perhaps parenting stress or ACEs may prove to be better methodology in measuring emotion socialization in these types of communities.

Strengths, Limitations, and Future Directions

The present study focused on differences in emotion socialization in various sociocultural contexts, and its link to emerging adult internalizing symptoms. One benefit of the present study is that it examines emotion socialization in relation to a clinical outcome focusing on distinct sociocultural contexts. More specifically, interventions utilizing the emotion socialization

literature have been developed, implemented, and adapted for rural areas (e.g., rural Appalachia; Hernandez et al., 2020) and showcase differences in parenting values in these types of communities. Though hypotheses related to the association between emerging adult outcomes and rurality were not supported, it is possible that constraints related to aspects of measurement for rurality play a role in the lack of findings. Perhaps measuring other aspects or rural communities such as ACEs, parenting values, or socioeconomic stress may provide more insight into the relationship between rural communities and emerging adult outcomes. Additionally, this study added to the literature in examining distinct roles of maternal and paternal emotion socialization, as prior literature has mostly examined the role of maternal emotion socialization in relation to emerging adult outcomes. This study also had a relatively large sample size for which statistical analyses were adequately powered.

There were several limitations in the present study. The sample was largely homogenous in terms of participant gender and race/ethnicity. Extant literature provides evidence of differences in emotion socialization and related outcomes based on race/ethnic background (Lugo-Candelas et al., 2016; Leerkes et al., 2014; Perry et al., 2017) and participant gender (Guo et al., 2019; Perry et al., 2015). This limitation makes it difficult for results to be generalizable to a more diverse population. Regarding methodological concerns, the Neglect subscale of the EAC had a low internal consistency ($\alpha = .52$), putting constraints on the ability to detect an effect in this particular domain. This study also utilized a cross-sectional design, making it difficult to detect causal effects. Having a longitudinal study design would have enabled the ability to view the effects of emotion socialization on internalizing symptoms over time. Additionally, this studied relied on a self-report measure assessing perceptions of parent emotion socialization as a child. It would have been more advantageous to have multiple reports (e.g., maternal and

paternal reports of emotion socialization in childhood) as well as utilizing behavioral observations. There may be several limitations in relation to the *Emotions as a Child Scale*. The EAC assesses perceptions of emotion socialization over a broad developmental period by asking participants to rate how often their parents responded in several ways when they were upset as a child. Perhaps individuals may recall different developmental periods when responding to items. Additionally, there is evidence that one's memories can be affected by current affective states or appraisals (Levine et al., 2001) suggesting that participants with higher rates of internalizing symptoms may recall parent emotion socialization differently than those with lower rates of internalizing symptoms. Despite this, understanding how an individual's perception of past events has implications in working with those who report higher rates of symptoms of anxiety and depression. It should also be noted that the effects of maternal and paternal emotion socialization responses became nonsignificant when interaction terms were added into the models (i.e., step 3). As the interaction terms are highly correlated with maternal and paternal emotion socialization responses, perhaps introducing these variables into the models may serve to suppress the effects of these emotion socialization responses and explain the lack of findings. Lastly, some studies examining emotion socialization with clinical outcomes include mediators within their analyses (see Faro et al., 2019; McKee et al., 2021). Perhaps this study could have benefited from examining mediating effects as well (e.g., examining emotion regulation as a variable mediating the relationship between parent emotion socialization and internalizing symptoms).

Future research should recruit a more diverse sample in terms of gender and race/ethnicity. Though there were no group differences in internalizing symptoms based on participant race/ethnicity, there were significant differences in participant gender on internalizing

symptoms, suggesting the need to further analyze the relationship between participant gender, emotion socialization, and internalizing symptoms. Relatedly, future research should expand the sample in terms of including rural and non-rural areas from across the nation rather than examining a subset of communities across the southeast. As the EAC used only asked the participant to think of a time when they were "upset" (a broad negative emotion), it may be useful to examine more discrete negative emotions (e.g., sadness, worry, anger), expanding the literature in understanding whether unique, negative emotions are associated with various outcomes. Future studies should also attempt to examine emotion socialization across multiple time points to have a better understanding of the course and outcomes related to emotion socialization. Additionally, studies of emotion socialization mainly focus on the socialization of negative emotions. Perhaps future research should expand the literature in terms of examining the socialization of positive emotions as well as negative emotions.

Conclusions

Taken together, these results suggest that both mothers and fathers are important socializers and are related to emerging adult psychosocial adjustment. Both mother's and father's reward and neglect responses were associated with current levels of emerging adult internalizing symptoms whereas only mother's punish responses were associated with internalizing symptoms. These results have important implications for clinical practice in which understanding the ways parents respond to displays of negative emotion from their children and related emerging adult adjustment can aid clinicians in identifying maladaptive family communication surrounding emotions and promote more adaptive communication processes. There were no differences in parent emotion socialization in rural and non-rural areas and rurality did not moderate the relationship between emotion socialization and internalizing symptoms. As a result,

the present study illustrates a need to examine sociocultural aspects of families in rural areas in a

comprehensive manner.

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APPENDICES

Appendix A: Emotions as a Child Scale: Mother

Think of a few times when you felt upset (angry, sad, worried) **as a child.** When you were upset, how often would your **MOTHER** respond in these ways?

	Never	Not Very Often	Sometimes	Often	Very Often
1. When I was upset, my mother responded to my emotions.	1	2	3	4	5
2. When I was upset, my mother told me to stop being upset.	1	2	3	4	5
3. When I was upset, my mother helped me deal with the issue that made me feel that way.	1	2	3	4	5
4. When I was upset, my mother got very upset.	1	2	3	4	5
5. When I was upset, my mother told me that I was acting younger than my age.	1	2	3	4	5
6. When I was upset, my mother asked me what made me feel that way.	1	2	3	4	5
7. When I was upset, my mother told me not to worry.	1	2	3	4	5
8. When I was upset, my mother expressed that he was very upset.	1	2	3	4	5
9. When I was upset, my mother let me know he did not approve of me being upset.	1	2	3	4	5
10. When I was upset, my mother bought me something I liked.	1	2	3	4	5
11. When I was upset, my mother told me to cheer up.	1	2	3	4	5
12. When I was upset, my mother took time to focus on me.	1	2	3	4	5
13. When I was upset, my mother got very upset.	1	2	3	4	5
14. When I was upset, my mother did not pay attention to my feelings.	1	2	3	4	5
15. When I was upset, my mother comforted me.	1	2	3	4	5

Appendix B: Emotions as a Child Scale: Father

Think of a few times when you felt upset (angry, sad, worried) **as a child**. When you were upset, how often would your **FATHER** respond in these ways?

	Never	Not Very Often	Sometimes	Often	Very Often
1. When I was upset, my father responded to my emotions.	1	2	3	4	5
2. When I was upset, my father told me to stop being upset.	1	2	3	4	5
3. When I was upset, my father helped me deal with the issue that made me feel that way.	1	2	3	4	5
4. When I was upset, my father got very upset.	1	2	3	4	5
5. When I was upset, my father told me that I was acting younger than my age.	1	2	3	4	5
6. When I was upset, my father asked me what made me feel that way.	1	2	3	4	5
7. When I was upset, my father told me not to worry.	1	2	3	4	5
8. When I was upset, my father expressed that he was very upset.	1	2	3	4	5
9. When I was upset, my father let me know he did not approve of me being upset.	1	2	3	4	5
10. When I was upset, my father bought me something I liked.	1	2	3	4	5
11. When I was upset, my father told me to cheer up.	1	2	3	4	5
12. When I was upset, my father took time to focus on me.	1	2	3	4	5
13. When I was upset, my father got very upset.	1	2	3	4	5
14. When I was upset, my father did not pay attention to my feelings.	1	2	3	4	5
15. When I was upset, my father comforted me.	1	2	3	4	5

Appendix C: Generalized Anxiety Disorder Questionnaire (GAD-7)

Over the last 2 weeks, how often have you been bothered by the following problems?	Not at all sure	Several days	Over half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it's hard to sit still	0	1	2	3
6. Becoming Easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3
Add score for each column	+	+	+	
Total score (*add your column scores*) =				

Appendix D: Patient Health Questionnaire (PHQ-9)

ID #: _____   DATE:_____

Over the last *2 weeks*, how often have you been bothered by any of the following problems?
(use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite — being so figety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3

add columns   [____] + [____] + [____]

(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card).   TOTAL: [_____]

10. If you checked off *any problems*, how *difficult* have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all _____
	Somewhat difficult _____
	Very difficult _____
	Extremely difficult _____

Note: Item 9 was omitted from the present study.

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