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Parental emotional competence and parenting in low-income families with adolescents

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Abstract

Ample research has demonstrated that alexithymia, which is characterized by difficulty processing emotions, is associated with disruptions in parenting infants and toddlers. Individuals suffering from alexithymia have among other negative outcomes difficulty building and maintaining interpersonal relationships. Research on emotional expression and recognition has documented the importance of these competencies for the quality of the parent-child relationship and for skills critical for parents of adolescents, such as effective monitoring. However, literature linking parental alexithymia to parenting behaviors and related constructs during adolescents is lacking. The present study closes this gap by examining how mothers' (M age = 39.42 yrs, SD = 7.62; Range = 23–67) alexithymia affects parent-reported behaviors of solicitation and control, as well as youths' (53.6% female; M age = 12.13 yrs, SD = 1.62; Range = 9–16) reported disclosure and felt acceptance by their mothers among a sample of 358 primarily urban, African American families. Structural Equation Models revealed that mothers' alexithymia was prospectively related to less parental solicitation two years later for both males and females, and to lower levels of felt acceptance for males. Multiple group analyses revealed that these models fits equally well for younger and older youth. Contrary to hypotheses, alexithymia was not related to control or to disclosure. Taken together, these findings indicate that parents' difficulty in processing emotions contributes to parenting beyond early childhood.

Keywords

alexithymia; parenting; solicitation; control; disclosure; felt acceptance; adolescents; low-income

Parenting during adolescence is influenced by a variety of factors including the past parent-child relationship (Loeber et al., 2000; Putnick et al., 2010); the cognitive, social, and biological development of the adolescent (Hill, Bromell, Tyson & Flint, 2007); and the adjustment of the parent (Isakson & Jarvis, 1998). Alexithymia, a “personality trait characterized by difficulties in the experience and cognitive processing of emotions” (van der Velde et al., 2013), is one aspect of parental adjustment that has the potential to affect

parenting – specifically the ability to connect with and effectively monitor their children (Ross, 2000; Wandersman & Nation, 1998). In the present study we extend prior work on associations of alexithymia and parent-child interaction with young children to parents of adolescents. We prospectively examine associations between alexithymia and changes in parental reports of control and solicitation as well as changes in youth's reports of their disclosure to parents and felt acceptance by parents. Our models account for the contribution of parental education and depressive symptoms to alexithymia, and control for adolescent age and gender, concurrent parental depressive symptoms, and prior levels of the outcome variable in predicting parenting, disclosure, and felt acceptance.

Alexithymia and Parenting Behavior

As noted above, emotional processing deficits are the hallmark of alexithymia (Taylor, Bagby, & Parker, 1991; van der Velde et al., 2013). Characteristics of this relatively stable construct include a higher than average rate of negative emotions, lack of imagination, and the feeling of emptiness inside (Honkalampi et al., 2000; Loiselle & Dawson, 1988; Taylor et al., 1991). As much as 16% of the general population is estimated to have alexithymia, making it a fairly common trait (Todarello, Taylor, Parker & Fanelli, 1995).

Individuals with alexithymia have difficulty identifying and describing feelings (Honkalampi et al., 2000; Loiselle & Dawson, 1988; Taylor et al., 1991). They display externally oriented thinking, instead of an internally focused understanding of emotions, which interferes with their ability to understand and relate to others, leading to less empathy and appreciation shown to those around them (De Panfilis, Ossola, Tonna, Catania, & Marchesi, 2015; Schechter et al., 2014). Consequently, these individuals have difficulty building and maintaining interpersonal relationships, have lower levels of social support, reduced social skills, and impaired mental and physical health. Although it is difficult for individuals with alexithymia to process emotions, they are not blind to the effect this deficit has on their life. Studies have shown that individuals identified as alexithymic express lower levels of life satisfaction, which is subsequently associated with lower rates of social support (Dawson, 1988; Honkalampi et al., 2000; Loiselle & Taylor et al., 1991).

Parental Emotional Competence and Child Outcomes

Research examining parental emotion socialization, expression, and competence has led to interesting findings on the effects of these skills on parenting and child outcomes. For instance, toddlers' compliance has been linked to parental emotional availability, with infant effortful attention mediating the association (Volling, McElwain, Notaro, & Herrera, 2002). Poor development of emotion regulation skills in young children can lead to a number of negative social, emotional, and behavioral outcomes, and parents are key contributors to this development. Parental emotion expression and recognition is critical in teaching emotion regulation in infants and young children (Denham, Mitchell-Copeland, Strandberg, Auerbach, & Blair, 1997; Liang, Zhang, Chen, & Zhang, 2012). Children who are not exposed to emotion modeling from parents have poorer emotional competence, as well as worse overall social competence (Denham et al., 1997). Furthermore, negative emotional

expressivity and poor emotion coaching from maternal caregivers is negatively associated with children's social competence (Liang et al., 2012).

While parental emotional competence and expression are important contributors to child development, few studies have identified ways in which parental alexithymia, specifically, influences parenting behaviors and child outcomes. Research linking alexithymia and parenting primarily has addressed parenting practices leading to alexithymia in children, such as parental overprotectiveness and levels of perceived parental care (Thorberg, Young, Sullivan, & Lyvers, 2011). Far fewer studies have looked at this personality construct in parents.

Existing research linking parental alexithymia to parenting behaviors has looked almost exclusively at children during infancy and early childhood (Gianesini, 2012; Schechter et al., 2014). Research indicates that maternal alexithymia interferes with a mother's ability to engage in and teach emotional regulation to her infant (Schechter et al., 2014). Studies also have found that mothers with alexithymia are more limited in their ability to share positive emotions with their children (Yürümez, Akça, Ugur, Uslu, & Kiliç, 2014). Likewise, children raised by alexithymic parents are more likely to show delays in language development, have difficulty developing positive social skills, and exhibit slower mental development (Yürümez et al., 2014).

Given their emotion regulation difficulties, alexithymic individuals struggle to up-regulate positive emotions and down-regulate negative emotions, elements thought to intensify risk for depression (Cole, Michel, & Teti, 1994). Indeed, there is evidence that supports the links between alexithymia and a variety of psychopathologies, including depression. The difficulties with identifying and communicating one's feelings characteristic of alexithymic individuals have been linked to greater depressive symptomatology among the general population and among outpatients with major depression (Honkalampi, Hintikka, Laukkanen, Lehtonen, & Viinamäki, 2001; Saarijärvi, Salminen, & Toikka, 2006). However, although depression and anxiety often are found in people with this trait, the negative consequences of parenting with alexithymia are still present when controlling for levels of anxiety and depression, so developmental consequences seen in children are not a result of underlying psychopathology (Yürümez et al., 2014). Given the stable nature of alexithymia, it seems likely that the influence on parenting behavior would extend across a child's lifespan; not just in infancy or early childhood. The present study focused on the association between parental alexithymia and parent-child interactions during adolescence.

Parental Emotional Competence and Parental Monitoring

Parents' ability to adequately monitor their children's activities and whereabouts has been identified by Kerr and Stattin (2000) as a key protective factor that relates to better youth adjustment. As explained by Stattin and Kerr (2000) adequate parental monitoring entails more than control of children's whereabouts and activities; parental solicitation of information as well as voluntary child disclosure of information are key factors that contribute to the degree of parental knowledge of their child's activities and whereabouts. In their landmark article describing their new measure of parenting practices, Stattin and Kerr

(2000) present an instrument with four subscales: parental knowledge, parental control, parental solicitation, and child disclosure. In their validation work they argue and present evidence for the notion that child disclosure, parental solicitation, and parental control each contribute to parental knowledge (Kerr & Stattin, 2000; Stattin & Kerr, 2000). However, during adolescence by far the biggest source of parental knowledge – and the factor most strongly linked to youth adjustment – is what the child discloses to the parent. Further, there is strong evidence that parents who are warm, responsive, and accepting have children who voluntarily disclose more information to them (Blodgett-Salafia, Gondoli, & Grundy, 2009; Smetana, Metzger, Gettman, & Campione-Barr, 2006) relative to less affectively responsive parents.

To our knowledge, no study to date has explored how the emotion processing difficulties associated with alexithymia impact parent and child behaviors that contribute to parental knowledge of adolescent's activities and whereabouts. Rather, the extant research on parental alexithymia focuses on developmental stages prior to adolescence, neglecting the parent-child relationship during this important life stage. We chose to focus on constructs that are strongly empirically associated with parental knowledge, which is a protective factor related to better youth adjustment. In this longitudinal study spanning two years we prospectively examine associations between mother's alexithymia at baseline and parent-reported solicitation and control and youth-reported disclosure and felt acceptance two years later among a sample of primarily urban, African American families. We chose to use parent reports of solicitation and control because we believe that parents are more accurate reporters than adolescents of their attempts to solicit information from their children and the boundaries they place on their adolescents' behavior. Similarly, we chose to use youth reports of their disclosure and felt acceptance because we believe they would have the most accurate information about what they are or are not disclosing to their parents, and because felt acceptance is a subjective assessment of the quality of their relationship with their parent. As alexithymia is a stable trait, we chose to examine these constructs over a two-year period, for two reasons. First, at baseline, youth participants in our study were in the 5th or 8th grade. Thus, in order to minimize the potential influence of a school transition, we chose to examine these outcomes two years later – allowing the adolescents and their parents to adjust to the transition to middle or high school, respectively. In addition, our goal was to examine the impact of alexithymia on adolescence, as previous studies have focused on childhood. As adolescents age, parents typically adjust their parenting behaviors and allow their adolescent increased autonomy. Thus, examining these constructs over two years allowed us to minimize the influence of school transition and capture the increasing autonomy that accompanies adolescent development.

We controlled for the contributions of caregiver education and depressive symptoms on alexithymia and adolescent age, gender, concurrent parental depressive symptoms, and prior levels of the dependent measure in our analyses. We hypothesized that higher levels of alexithymia would be linked to less control and solicitation, less child disclosure, and lower levels of felt acceptance.

Methods

Participants

Participants were 358 female caregivers (M age = 39.42 yrs, SD = 7.62; Range = 23–67) and one of their children (53.6% female; M age = 12.13 yrs, SD = 1.62; Range = 9–16) enrolled in a longitudinal study of the effects of violence and associated stressors on youth development. Most caregivers (86.3%) were the child's biological mother, but grandmothers (7.0%), adopted mothers (2.0%), stepmothers (0.8%) and other female caregivers (e.g., fathers' girlfriends, aunts; 3.9%) also participated. (The term mothers will be used henceforth to refer to the sample.) The majority of the sample (91.9%) identified as African American / black. A significant percentage of the mothers (40.6%) had never married. A third of the mothers (31.9%) were married or cohabitating, 14.3% was separated, 11.2% was divorced, and 2% was widowed. Median household income was \$401–500 per week. Maternal education level was diverse, but a significant percentage of mothers (23.0%) had less than a high school education. Close to a third of the mothers had completed high school or earned a general education degree (GED) (31.2%), another 36.5% completed some college, or earned an associate's or vocational degree, and 9.3% earned a bachelor's degree or higher.

Measures

Parent emotional competence—Parental emotional competence was indexed by maternal self-reports of their symptoms of alexithymia, assessed at baseline using the Toronto Alexithymia Scale-20 (TAS-20; Bagby, Parker, Taylor, 1994a). The TAS-20 asks respondents to rate their agreement with a series of statements on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Items are summed to create 3 subscales: Difficulty Identifying Feelings (e.g., "I am often confused about what emotion I am feeling"), Difficulty Describing Feelings (e.g., "It is difficult for me to find the right words for my feelings"), and Externally Oriented Thinking (e.g., "I prefer to just let things happen rather than to understand why they turned out that way"). The Difficulty Identifying Feelings (7 items)(Cronbach alpha = .88) and Difficulty Describing Feelings subscales (5 items)(Cronbach alpha = .74) were used as manifest indicators of a latent construct of alexithymia in our Structural Equation models.

The TAS-20 has undergone extensive psychometric analysis. Bagby et al. (1994a) presented strong evidence for the reliability and factor structure of the measure. In a companion article, Bagby et al. (1994b) presented evidence for the convergent, discriminant, and concurrent validity of the measure. In the two decades since this data on the TAS-20 was published, the measure has been used in hundred of studies, and the TAS-20 consistently is one of the most valid and reliable ways to assess alexithymia in community samples.

Parenting behavior—At baseline and Wave 3 (2 years later) mothers reported on their parenting behavior using Kerr and Stattin's (2000) *Parenting Practices Scale*. In a series of studies (Kerr & Stattin, 2000; Stattin & Kerr, 2000) Kerr and Stattin demonstrated strong predictive validity for the measure. Response options on this 5-point scale differ by item (e.g., a lot to almost never for some questions; several times a week to not at all this month

for others; never to almost always for others). The 5-item solicitation (e.g., “In the last month, how many times have you talked with the parents of (*child’s*) friends?”), and 5-item control scales (e.g., “Does (*child*) need to have your permission to stay out late on a weekday evening?”) were used in the study. Parental solicitation represents parents’ attempts to actively seek information about their adolescent by asking them directly, or by asking their adolescents’ friends or peers. Parental control represents parents’ regulation of behavior and demands for information regarding activities, especially with regard to interactions in the evenings and weekends. For both subscales items were reverse coded so that higher values indicated greater solicitation or control. Cronbach alphas were .66 for solicitation at baseline and at W3, and .80 for control at baseline and at W3.

Child disclosure—At baseline and Wave 3 youth reported on their disclosure to parents using the disclosure subscale of Kerr and Stattin’s (2000) *Parenting Practices Scale*. Response options on this 5-point scale differ by item (e.g., a lot to almost never for some questions; never to almost always for others). Example items include, “Do you usually tell your parents how school was when you get home (how you did on different exams, your relationships with teachers, etc.?)” and “Do you hide a lot from your parents about what you do during nights and weekends?” In contrast to the solicitation and control scales, this scale reflects spontaneous disclosure of information to parents. Cronbach alphas were .75 at baseline and .78 W3.

Felt acceptance from parents—Adolescents reported on the extent to which they felt accepted by their mothers at baseline and Wave 3 using the 20-item parental acceptance-rejection subscale of the *Child Report of Parent Behavior Inventory* (CRPBI; Schaefer, 1965). The CRPBI has good discriminate validity (Schaefer, 1965), distinguishing between delinquent and non-delinquent youth. Using a 3-point Likert scale, adolescents rated the extent to which they felt the statements were representative of their mother, from 1 (like my mother) to 3 (not like my mother). Sample items include “understands your problems and worries” and “enjoys doing things with you.” Items were reverse coded so that higher scores indicated greater felt acceptance. Cronbach alphas in the current study were .89 at baseline and at W3.

Control variables—Researchers have documented a strong association between depression and alexithymia (Honkalampi et al., 2000), but also have determined that these constructs are empirically distinct (Parker, Bagby, & Taylor, 1991). Further, education is a known correlate of alexithymia, with lower levels of education associated with higher levels of alexithymia (e.g., Pasini, delle Chiaie, Seripa, & Ciani, 1992). In order to account for the contributions of alexithymia on our outcome variables independent of these influences, we controlled for baseline maternal depressive symptoms and maternal education. To account for the contributions of concurrent depressive symptomatology on our outcome variables, we also controlled for maternal depressive symptoms at Wave 3. Depressive symptoms were assessed with the 6-item subscale from Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983). Items were rated on a 5-point scale from 1 (not at all) to 5 (extremely) with higher scale scores indicating higher symptom levels. The BSI, a brief form of the Symptom Checklist (SCL-90), is a valid and reliable measure of symptomatology (Derogatis

& Melisaratos, 1983). Cronbach alpha in the current sample was .86 at both baseline and W3. Education was reported by mothers in response to the question, “What is the highest grade in school or degree that you have completed?” Response options were: no diploma; high school diploma; General Education Degree (GED); some college, no degree; Associate’s degree; Vocational degree; Bachelor’s degree; Master’s degree; and Advanced degree.

We also controlled for adolescent age and gender in the analyses.

Procedure

Participants were recruited from neighborhoods within Richmond, VA and the neighboring counties with high levels of violence and/or poverty according to police statistics and 2000 census data. The study was advertised through community agencies and events, and by canvassing qualifying neighborhoods via flyers posted door-to-door. Families were eligible if they spoke English, had a fifth or an eighth grader, and if the primary caregiver could be present for the interview. Sixty-three percent of eligible participants agreed to be in the study, which is consistent with studies using similar designs and populations. It was never the case than more than one child in the household was eligible to participate in the study, thus parents always reported on the child participating in the study. Interviews were conducted annually for four waves, primarily in participants’ homes, by trained research staff. Only data two waves are reported in the current paper – from Wave 1 and 2 years later, from Wave 3. Interviewers thoroughly reviewed the parent consent forms with the family prior to separating parents and children and conducting a separate assent procedure with the child. A Certificate of Confidentiality was obtained from the National Institutes of Health (NIH) to protect families’ responses.

Interviewer training took place over a course of four weeks. Interviewers completed training on research protocols and interview techniques, and also completed practice sessions, paperwork, and related assignments. Research staff trained and gave feedback to the interviewers before they could start the actual interview process. Feedback also was obtained from a subsample of families who were interviewed by phone within two weeks of completing their interview to make sure that the research staff were professional and adhered to the protocol throughout the study. Interviewers typically had Bachelor’s degrees or Master’s degrees, although a small percentage had not yet completed a degree. Interviewers ranged in age from 20 to 55, and included both men and women. Approximately half of the interviewing staff was African American. Tests for the effects of interviewer race and sex revealed no systematic biases, $ps > .10$. Interviews lasted approximately 2.5 h and participants received \$50 in gift cards per family at each wave.

Statistical Analyses

Longitudinal path models were run using Mplus 7.2 (Muthen & Muthen, 2014), which allowed missing data to be handled with full information maximum likelihood (FIML). FIML uses all information in the data for analyses, allows for less biased estimates, and is an efficient missing data technique. Maximum Likelihood estimation was used in the models. Separate models were constructed for each of the four outcomes. These models assessed the

extent to which maternal alexithymia, assessed at baseline, predicted maternal solicitation, maternal control, child disclosure, and felt acceptance at Wave 3, two years later, controlling for baseline levels of these constructs, adolescent age and gender, and concurrent maternal depressive symptoms. Maternal education and depressive symptoms were included as covariates of alexithymia at baseline. The extent to which patterns of association between maternal alexithymia and changes in maternal solicitation, maternal control, child disclosure, and felt acceptance varied as a function of adolescent age and adolescent gender was tested using multiple group analyses. Specifically, an unconstrained model where the path coefficients were allowed to vary by age group or gender was compared to a constrained model where path coefficients were set to be equal across age group or gender. The fit of the models were assessed using the χ^2 value, the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). Values of 0.90 or above for the CFI (Bentler, 1992) and 0.08 or below for the RMSEA (Browne & Cudeck, 1993) indicated that the model adequately fit the data. The fit of the unconstrained and constrained models were compared by examining differences in the CFI, RMSEA, χ^2 difference test, and the Bayesian Information Criterion (BIC).

Results

Attrition Analyses

Families who participated in Waves 1 and 3 of the study ($N = 271$) were compared with families who only participated in Wave 1 ($N = 87$) on all baseline measures using Chi-squares and t -tests as appropriate. There were no gender differences in attrition, $\chi^2(1) = 0.39$, $p > .10$, or differences in adolescent age, parental solicitation or control, child disclosure, or child reports of parental acceptance, $t_s < 1.35$, $p_s > .10$. However, families who dropped out of the study had parents with less education than those who completed Waves 1 and 3, $\chi^2(8) = 25.60$, $p < .001$.

Descriptive Statistics

Means and standard deviations of study variables, and correlations among study constructions by gender are presented in table 1. As seen in the table, mothers with lower levels of education and mothers who reported more depressive symptoms also reported more difficulty identifying and describing their feelings. In these zero-order analyses, dimensions of alexithymia were associated with lower levels of parental solicitation to some degree for both males and females and with lower levels of felt acceptance among males, but not females.

Relations between Alexithymia and Outcomes

Parental solicitation—For the model predicting parental solicitation, the constrained model for age group fit the data well, $\chi^2(28, N = 266) = 25.49$, $p > .10$, CFI = 1.00, RMSEA = 0, and was supported based on the non-significant χ^2 difference test and improvement in the BIC values (4393.22 versus 4420.75). Similarly, the constrained model for gender fit the data well, $\chi^2(28, N = 266) = 37.48$, $p > .10$, CFI = .97, RMSEA = .05, and was supported based on the nonsignificant χ^2 difference test and improvement in the BIC values (4396.66 versus 4420.90). These analyses indicated that there were no overall model differences

across age group or gender. Based on these results, a final model was run using the full sample (see Figure 1). This model fit the data well, $\chi^2 (12, N = 266) = 14.88, p > .10, CFI = .99, RMSEA = .03 (CI = 0, 0.073)$. As seen in Figure 1, baseline levels of alexithymia were associated with less parenting solicitation two years later ($\beta = -.12, p < .05$) after accounting for prior parenting solicitation, concurrent maternal depressive symptoms, adolescent age and gender, and controlling for the contributions of maternal education and depressive symptoms to alexithymia.

Parental control—For the model predicting parental control, the constrained model for age group once again fit the data well, $\chi^2 (28, N = 266) = 15.25, p > .10, CFI = 1.00, RMSEA = 0$, and was supported based on the non-significant χ^2 difference test and improvement in the BIC values (3917.98 versus 3948.75). However, the unconstrained model was a better fit for gender, $\chi^2 (22, N = 266) = 19.40, p > .10, CFI = 1.00, RMSEA = 0$, and was supported based on the nonsignificant χ^2 difference test and higher BIC values (3863.98 versus 3937.23). This suggested there were differences in the path coefficients for males and females. Thus, Figure 2 presents data from the unconstrained model by gender. As seen in Figure 2, baseline levels of alexithymia were not associated with less parental control two years later for either males ($\beta = -.05, p > .10$) or females ($\beta = .01, p > .10$) after accounting for prior parental control, concurrent maternal depressive symptoms, and adolescent age, and controlling for the contributions of maternal education and depressive symptoms to alexithymia. However, parents reported exerting less control over older females ($\beta = -.24, p < .01$) but not males ($\beta = 0, p > .10$) in this model.

Child disclosure—For the model predicting child disclosure, the constrained model for age group fit the data well, $\chi^2 (28, N = 266) = 19.94, p > .10, CFI = 1.00, RMSEA = 0$, and was supported based on the non-significant χ^2 difference test and improvement in the BIC values (4491.66 versus 4515.02). Similarly, the constrained model for gender fit the data well, $\chi^2 (28, N = 266) = 30.92, p > .10, CFI = .99, RMSEA = .03$, and was supported based on the nonsignificant χ^2 difference test and improvement in the BIC values (4496.17 versus 4520.90). These analyses indicated that there were no overall model differences across age group or gender. Based on these results, a final model was run using the full sample (see Figure 3). This model fit the data well, $\chi^2 (12, N = 266) = 7.39, p > .10, CFI = 1.0, RMSEA = 0 (CI = 0, 0.038)$. As seen in Figure 3, baseline levels of alexithymia were not associated with child disclosure two years later ($\beta = -.03, p > .10$) after accounting for prior child disclosure, concurrent maternal depressive symptoms, adolescent age and gender, and controlling for the contributions of maternal education and depressive symptoms to alexithymia.

Felt acceptance from parents—For the final model predicting felt acceptance from parents, the constrained model for age group fit the data well, $\chi^2 (28) = 24.30, p > .10, CFI = 1.0, RMSEA = 0$, and was supported based on the non-significant χ^2 difference test and improvement in the BIC values (4747.28 versus 4778.77). However, several fit indices suggested that the unconstrained model for gender was a better fit to the data. Although BIC values were lower in the constrained model (4751.50 vs 4768.24), the RMSEA was lower in the unconstrained model versus the constrained model (.038 vs .064) and the CFI indicated a

better fit (.988 vs .957). Further, the χ^2 difference test, $\chi^2(6) = 16.73, p < .05$. This suggested there were differences in the path coefficients for males and females. Thus, Figure 4 presents data from the unconstrained model by gender. As seen in Figure 4, baseline alexithymia was associated with lower levels of felt acceptance two years later for males ($\beta = -.22, p < .05$), but not for females ($\beta = -.01, p > .10$), after accounting for prior parental acceptance and adolescent age, and controlling for the contributions of maternal education and depressive symptoms to alexithymia.

Discussion

This study expands the literature on parental emotional competence and parenting behavior during adolescence by examining mothers' alexithymia and specific parent and child behaviors that contribute to parental knowledge among a sample of primarily urban, African American families. Further, differences in these relations by adolescent age group and gender were investigated. Our primary hypothesis that higher levels of alexithymia would be related to lower levels of behaviors that contribute to parental knowledge was partially supported. In line with our hypotheses, mothers' alexithymia at baseline was prospectively related to less parent solicitation two years later for both males and females. Alexithymia also was related to less felt acceptance two years later. However, subgroup analyses indicated that this finding held only for males. Interestingly, and contrary to our hypotheses, alexithymia was not prospectively related to parental control or to child disclosure for either males or females.

Emotional Competence and Parenting Practices

In this study, mothers with lower emotional competence showed less solicitation of their child's activities two years later. Mothers' emotional competence was unrelated to parental control. The relationship between emotional competence and parental solicitation can be better understood by examining the characteristics of low emotional competence. Individuals with alexithymia have difficulties building and maintaining interpersonal relationships and have reduced social skills. Due to this, it may be the case that parental alexithymia impacts parents' ability to build and maintain a relationship with their adolescent children. This creates an atmosphere that is not conducive to parent-child interactions that favor parental control or solicitation of information. Solicitation is positively correlated with perceived levels of parental trust (Bumpus & Rodgers, 2009). If a trusting relationship has not been established, lower levels of solicitation will be seen. Adolescent perceptions of solicitation attempts predict successfulness of the attempt, such that when adolescents feel the solicitation is overly intrusive, they are less likely to disclose information (Bumpus & Rodgers, 2009). This leads to the subsequent reduction in solicitation attempts (Bumpus & Rodgers, 2009). These findings show how poor parent-child relationships with a lack of trust established can lead to future difficulties with parental control or solicitation. Different family characteristics such as expressiveness, responsiveness, shared decision making, and general functioning also influence parental solicitation (Padilla-Walker, Harper & Bean, 2011). If parents are unable to be expressive or responsive with their children, they also are less likely to initiate solicitation. Furthermore, given that alexithymia is a relatively stable personality trait, it is also likely that parent-child

interactions have been impacted by alexithymia early on, compromising the feelings of trust and closeness needed to encourage children's disclosure of information (Gianesini, 2012; Scott et al., 2011).

Contrary to our expectations, mothers' emotional competence was unrelated to parental control. Most mothers in our sample reported high levels of parental control; thus, little variability existed in this scale, potentially limiting its predictive value. The lack of a connection between parental alexithymia and control may thus reflect the influence of the environment in which these mothers and their adolescents live. Parent-adolescent dyads in this sample were recruited from neighborhoods characterized by high levels of crime and violence. Given this environment, controlling adolescents' whereabouts may be essential, and thus less easily influenced by a mother's emotional competence and ability to build a strong relationship with her adolescent. The risk inherent in the environment may force parents to engage in higher levels of control regardless of their emotional knowledge or relationship with their adolescent. Additionally, parental control can also be understood as enforcement of rules around an adolescent's behavior. As such, mothers may be able to convey and enforce rules for their adolescents' behavior regardless of their ability to identify and express their emotional reasons for such expectations.

Emotional Competence, Child Disclosure, and Felt Acceptance

Our hypothesis predicting poorer emotional competence to be related to less felt acceptance was supported by our findings. However, in our study, alexithymia was related to less felt acceptance only for boys. This may be indicative of differences in mother-daughter and mother-son relationships. Perhaps daughters, as same-sex offspring, are better able to identify with their mothers' female experiences of emotion; thus, daughters may naturally compensate for their mothers' emotional competence deficits, buffering this from influencing the relationship. Conversely, sons may be less adept at understanding their mothers' experiences of emotion and thus, more influenced by their mothers' poorer emotion competence. Some recent research supports this idea, with one study finding evidence of more mutual concern responsiveness within mother-daughter dyads than mother-son dyads (Butler & Shalit-Naggar, 2008).

Our hypothesis that parental emotional competence would be related to child disclosure of information two years later was not supported. As with parental control, the absence of this relation also may reflect the influence of the environment on the specific sample. Growing up in a high-risk neighborhood may necessitate a certain level of disclosure purely for adolescent safety. Adolescents also may have established a certain level of trust and a pattern of information disclosure much earlier on in childhood. Alexithymia is a relatively stable personality trait, and it is likely that parent-child interactions have been impacted by alexithymia early on, compromising the feelings of trust and closeness needed to encourage children's disclosure of information (Gianesini, 2012; Scott et al., 2011). It is thus possible that parent alexithymia influences the development of this relationship, but that when controlling for past disclosure level, effects are not seen over the small, two year time-span.

Strengths and Limitations

This study has several strengths. We used a prospective design, examining how mothers' emotional competence influenced changes in parenting across two years of data collection. We included an often understudied sample – primarily African American mother-adolescent dyads from neighborhoods characterized by high violence and lower resources. We expanded the literature on mothers' emotional competence and how that relates to parenting by investigating this construct during adolescence. We are aware of no other studies to date that have examined these constructs during this important developmental period. In addition, we used standardized measures and controlled for several confounders in our analyses, including adolescent age and gender, parental education, depressive symptoms, and baseline levels of parenting. Further, we conducted multiple group analyses to investigate differences by adolescent gender and age group.

Despite these strengths, there are several limitations to the study. First, although we had some cross-reporter effects, they were limited. The fact that cross-reporter effects were present for the analyses predicting changes in felt acceptance by parents, however, suggests that source alone does not account for our findings. Given that we studied an urban, primarily African American sample of adolescents and their mothers, these results may not be generalizable to other racial groups or to families living in rural or suburban populations. Targeting this highly specific sample may have influenced the internal validity of the present study. It has previously been mentioned that observed parenting practices present in the sample may have been due to the dangerous environment families were living in. This confounding variable may have influenced the nature of the relationship between alexithymia symptoms and parenting practices.

Implications for Intervention

These results suggest important avenues for possible intervention with parents who display symptoms of alexithymia. For instance, assisting parents in their understanding of the connection between emotional competence and parenting behavior might help children by making parents more aware of how their own identification and description of feelings can impact their ability to adequately monitor their children's activities and whereabouts; a well-known key protective factor that relates to better youth adjustment (Kerr & Stattin, 2000). Studies have begun to show efficacy in alexithymia reduction treatment utilizing psychoeducational and psychiatric treatment methods (Fukunishi, Kikuchi, & Takubo, 1997; Levant, Halter, Hayden, & Williams, 2009). Implementing these interventions early on with parents could reduce the negative influence alexithymia has on parenting practices. Future studies should evaluate whether reduction in alexithymic symptoms still has a meaningful influence on parenting practices, and subsequent youth adjustment, even after a history of parenting with alexithymia has been present in a family.

It should also be noted that alexithymia has the potential to interfere with typical intervention outcomes. Some studies have shown that patients receiving psychotherapeutic interventions for depression, substance use, and grief who have alexithymia respond more slowly to treatment, especially when interventions are insight-oriented (Porcelli & Todarello, 2008). However, other studies have found that patients with alexithymia respond

equally well to group cognitive behavioral therapy (CBT) (Rufer et al., 2010). Future studies should thus examine the influence of alexithymic symptoms on parent training outcomes. If therapists begin parent training interventions to address parenting practice differences in alexithymic parents, they must remain conscious of the fact that positive outcomes will likely take longer to manifest compared to typical parent populations. Additionally, therapists could work to adapt materials away from insight-oriented strategies.

Finally, future research may want to explore potential moderating and/or mediating effects of known factors related to parenting behavior (e.g. network of social support available, mental health) and to the parent–child interaction (e.g., family cohesion, family communication) as possible additional avenues of intervention.

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Figure 1.

Model of alexithymia predicting parental solicitation. Model fit: χ^2 (12, $N = 266$) = 14.88, $p > .10$, CFI = .99, RMSEA = .03 CI [0, 0.073]. Standardized beta weights are presented in the figure.

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

Figure 2.

Unconstrained model of alexithymia predicting parental control by gender. Results from males on left, results from females on right. Model fit: $\chi^2 (22, N = 262) = 19.40, p > .10$, CFI = 1.00, RMSEA = 0 CI [0, 0.063]. Standardized beta weights are presented in the figure.

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

Figure 3.

Model of alexithymia predicting child disclosure. Model fit: $\chi^2 (12, N = 264) = 7.39, p > .10$, CFI = 1.0, RMSEA = 0 CI [0, 0.038]. Standardized beta weights are presented in the figure.

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

Figure 4.

Unconstrained model of alexithymia predicting felt acceptance by gender. Results from males on left, results from females on right. Model fit: $\chi^2 (22, N = 265) = 26.26, p > .10$, CFI = .99, RMSEA = .04 CI [0, 0.086]. Standardized beta weights are presented in the figure.

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

Table 1
Descriptive information on and correlations among study variables by adolescent gender

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Difficulty identifying feelings	--	.47***	-.03	-.08	-.11	-.14	.56***	-.23***	.14	-.08	-.21*	.35***	-.24***	.08
2 Difficulty describing feelings	.67***	--	-.03	0	0	.05	.30***	-.14	-.10	-.04	-.21*	-.12	-.29***	.04
3 SOLIC (W1)	-.05	-.09	--	.34***	.22**	.18*	-.04	.42***	.02	.16	.11	-.06	.06	-.14
4 Control (W1)	-.02	-.03	.17*	--	.17*	.15	-.11	.10	.28**	0	.02	-.28***	.15	.06
5 DISCL (W1)	.01	-.01	.15*	-.02	--	.46***	.03	.16	.10	.49***	.26**	.05	.05	-.24**
6 ACCEPT (W1)	-.07	-.12	.16*	-.07	.49***	--	-.10	.06	.03	.27**	.36***	-.13	.14	-.15
7 BSI (W1)	.67***	.53***	-.05	-.09	.08	-.11	--	-.13	-.17	-.05	-.19*	.53***	-.17*	-.04
8 SOLIC (W3)	.15	-.17*	.48***	.14	.27	.18*	.04	--	.25**	.15	.11	-.13	.01	-.25**
9 Control (W3)	0	-.07	.04	.19*	.15	-.01	.06	.21**	--	.03	-.11	-.25***	.02	-.03
10 DISCL (W3)	0	0	.07	-.04	.39***	.38***	.01	.29***	.10	--	.43***	0	.10	-.15
11 ACCEPT (W3)	.02	-.14	.13	-.09	.43***	.54***	-.14	.20*	.06	.58***	--	-.11	.15	-.14
12 BSI (W3)	.44***	.43***	-.09	-.20**	-.09	-.18*	.57***	-.10	-.01	.01	.12	--	-.09	.08
13 Parent Education	-.14	-.13	-.08	.02	.01	-.02	.03	.08	.07	-.14	-.03	-.03	--	-.03
14 Adol Age	.03	.01	-.09	-.08	-.33***	-.12	-.02	-.18*	-.25**	.26***	-.18*	-.02	-.02	--
Sample	11.81	11.00	19.17	24.67	19.71	50.08	9.69	19.84	24.57	19.29	50.36	8.72	Mdn = high school	12.13
Mean SD	5.62	4.50	3.93	1.10	4.54	6.91	4.60	3.56	1.49	4.35	7.22	3.83		1.62

Note. Correlations for males are on top of the diagonal; correlations for females are below the diagonal.

* $p < .05$;

** $p < .01$;

*** $p < .001$.

SOLIC = Solicitation; ACCEPT = Acceptance; DISCL = Disclosure; BSI = Depressive symptoms.