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# Profiles of Emotion Socialization Across Development and Longitudinal Associations with Youth Psychopathology

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## Abstract

Although there is relative consensus in the literature regarding associations between certain emotion socialization (ES) strategies and youth behavioral health, there is very limited research from a person-centered perspective. To address this gap, the current study examined patterns of ES strategies in families and explored predictors and youth outcomes associated with those patterns. An economically-diverse sample of 229 predominately White mothers and fathers of youth aged 3–12 years was recruited online for a longitudinal study. Latent profile analysis was used to determine the optimal number of family clusters with similar ES profiles. Model fit supported a four-class model, which consisted of an Emotion Coaching profile, characterized by the lowest levels of putatively labeled unsupportive ES practices and the highest levels of putatively labeled supportive ES practices, a Moderate profile characterized by moderate levels of both unsupportive and supportive ES practices, a Limited Engagement profile characterized by low levels of both unsupportive and supportive ES practices, and an Emotion Dismissing profile characterized by the highest levels of unsupportive ES practices and the lowest levels of supportive ES practices. Cross-sectional and longitudinal differences were observed across the ES profiles with regard to demographic and parent emotional competence predictors and youth outcomes. The current study extends the literature on ES by providing evidence on how distinct ES profiles differentially predict youth behavioral health outcomes. Findings also underscore the importance of examining parent emotional competence as a catalyst for adaptive change in the family system.

### Keywords

emotion socialization; youth psychopathology; latent profile analysis; emotion regulation; parenting



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The dynamic relationship between parents and their children is the primary training ground for youth as they develop emotional awareness and regulation skills. Work from numerous sub-disciplines, ranging from studies of attachment to vagal tone, has converged over the past half century to document how parent-child interactions unfold over time and are linked with youth emotion regulation (ER), and, in turn, adaptive functioning as well as psychopathology (Eisenberg et al., 2010). In the last twenty years, there has been a surge of interest specifically in emotion socialization (ES), a term encompassing how parents teach youth, directly and indirectly, to identify, regulate, and express emotions across contexts. In their influential heuristic model, Eisenberg et al. (1998) emphasized (1) three emotion-related parenting practices (i.e., how parents model and discuss emotion; how they react to their children's emotions), (2) factors that influence such practices (i.e., child and parent characteristics, cultural and contextual factors), and (3) potential moderators (e.g., youth developmental stage) of the relations between these practices and youth outcomes. Gottman et al. (1996) also proposed what has become a prominent theoretical model of ES in which they explored meta-emotion philosophy, which centers on parents' attitudes and approaches to their own and their children's emotions. In both Eisenberg et al.'s and Gottman et al.'s ES frameworks, youth ER, and in turn, indices of social-emotional competence are purportedly impacted by emotion-related parenting practices.

In the literature that operationalizes ES as parental responses to youth emotion, specifically, some consensus has emerged regarding which strategies are considered supportive (e.g., problem-solving or encouraging reactions) versus unsupportive (e.g., punitive, neglectful, or minimizing reactions), with supportive or coaching strategies validating the child's emotional experience as well as providing guidance on how to deal with the emotion, and unsupportive or dismissive strategies potentially undermining the child's emotional experience by invalidating or punishing the expressed emotion (Eisenberg et al., 1998; Gottman et al., 1996). In fact, there is increasing evidence demonstrating positive associations between supportive ES practices and youth adaptive regulation and behavioral health, and between unsupportive ES practices and maladaptive regulation and psychopathology (Eisenberg et al., 2010; Katz et al., 2012). For example, in an ethnically and economically diverse sample of families, Lunkenheimer et al. (2007) showed that when parents responded to elementary-aged children's negative emotion with invalidation, criticism, avoidance, or distraction, youth evidenced poorer ER skills as well as higher levels of internalizing and externalizing problems. In another study comparing ES practices in families of 7 to 15 year-old youth with and without anxiety, maternal emotion coaching (i.e., engaging with youth emotion with interest, support, and problem solving) was positively correlated with youth ER and negatively correlated with negativity and lability, while dismissive responses were negatively correlated with youth adaptive regulation and positively correlated with negativity and lability. Furthermore, parents of anxiety-disordered children and adolescents were less likely to engage with child emotion in a supportive way and more likely to be dismissive, relative to parents of non-disordered youth (Hurrell et al., 2017). These studies represent only a sampling from a much larger literature suggesting that supportive ES strategies are associated with higher levels of youth emotional competence and lower levels of psychopathology from toddlerhood through middle childhood (see Morris et al., 2017, for a review; Cunningham et al., 2009; Fainsilber Katz et al., 2016;

Thompson et al., 2020), with the opposite being true for unsupportive strategies (e.g., Garside & Klimes-Dougan, 2002; O'Leary et al., 2019; O'Neal & Magai, 2005; Perry et al., 2020). Despite these trends, important development and contextual variables can influence trajectories or outcomes associated with ES strategies, particularly those putatively labeled as unsupportive. For example, some evidence suggests that so-called unsupportive ES strategies can be innocuous or even adaptive depending on cultural context (e.g., Dunbar et al., 2021; Lugo-Candelas et al., 2015), while the positive influence of supportive ES responses may be limited to early childhood (e.g., Mirabile et al., 2018).

Taken as a whole, ES serves as an important contributor to the development of children's emotional competence and psychopathology from toddlerhood through young adulthood (e.g., Calkins & Bell, 1999; Eisenberg et al., 1998; Spinrad et al., 2020). It is important to note, however, that the literature on ES has produced some mixed findings due to variability in ES responses across and within parents, and as a result of family demographics and contexts. For example, although supportive ES strategies are generally thought of as being beneficial to youth, there is cross-sectional and longitudinal support for a divergence model of ES in which low support from one parent may be mitigated by high support from the other, and may even optimize children's emotional understanding given exposure to more diverse emotional expressions, specifically in early (3–6) and middle childhood (8–12; McElwain et al., 2007; Miller-Slough et al., 2017). Very little research, however, has examined the diversity of strategies parents use and/or the ways in which distinct within-parent ES strategies cluster or how they interact to amplify or buffer the impact of other strategies. Data from a few notable exceptions (e.g., Garside & Klimes-Dougan, 2002; Lunkenheimer et al., 2007; O'Leary, 2020; O'Leary et al., 2019) suggest that parents employ a variety of ES strategies with children. In one study, one-third of parents engaged in both supportive *and* unsupportive strategies with their elementary-aged children; additionally, coaching and dismissing responses interacted such that coaching, in the context of dismissing, was related to lower levels of child internalizing symptoms and emotional lability/negativity (Lunkenheimer et al., 2007).

## A Person-Centered Approach to Emotion Socialization and Associations with Youth Outcomes

Taking a person-centered approach may be a promising way of navigating variability in ES strategies. While a variable-centered approach examines relationships between variables (e.g., how supportive and unsupportive ES strategies relate to child psychopathology), a person-centered approach demonstrates how individuals cluster together according to such variables (e.g., parents high in supportive ES and low in unsupportive ES versus parents low in supportive ES and high in unsupportive ES). In two studies that take such an approach, clusters typified by high levels of *both* supportive and unsupportive ES responses were predictive of positive change in effortful control for children 15 months to 5 years old (Miller et al., 2015) and lower internalizing symptoms in youth 8 to 12 years old (Miller-Slough et al., 2017) relative to other patterns of ES responses. Consistent with suggestions that youth emotional competence is enhanced by access to both positive and low/moderate levels of negative emotional expression in the household (Morris et al., 2007),

perhaps exposure to multiple, divergent socialization strategies increases youth's flexibility and facility with coping.

Results from other person-centered studies, however, have mimicked trends from variable-centered analyses. For example, in a family reminiscence study, parents in the cluster typified by an emphasis on coaching both positive and negative emotion, with low levels of unsupportive responses (i.e., dismissing), reported fewer internalizing symptoms in their preschoolers compared to parents in either the low emotion discourse cluster or the elaboration/negative emotion emphasis cluster (Hernandez et al., 2019). Similarly, in their latent profile analysis of parents of 8–12 year olds, Hernandez-Sona et al. (2020) reported that parent membership in either the supportive profile or the teach and problem-focused profile was associated with superior youth emotion regulation and less psychopathology. In a study of 10–18 year old Chinese youth, those who reported the most adaptive emotion regulation had fathers classified as supportive responders to youth negative emotion. Finally, in a study of urban families with youth ages 10–15 years old, caregiver membership in an ES profile characterized by primarily rewarding responses (coupled with some overriding responses) was linked to more positive youth mental health outcomes, but power limitations necessitate replication (O'Leary, 2020).

This small, but significant, body of work suggests the importance of moving beyond a variable-centered approach to both (1) explore the ways parents combine ES strategies and (2) determine which patterns are linked with optimal or deleterious outcomes for youth across development. The current study builds from this base, taking a person-centered approach to identify profiles of ES strategies in families of 3 to 12 year olds using latent profile analysis, and then using those profiles to predict youth outcomes. This method allows for consideration of the diversity of socialization messages children receive and how different combinations of responses are associated with youth ER and internalizing and externalizing symptoms. In addition, the current study provides novel contributions to the literature by testing predictors of group membership in the empirically-derived profiles and examining differences in ES strategies across child age. In considering potential predictors, there were two areas that stood out as being ripe for study based on theoretical models and the inherently developmental nature of ES as well as preliminary data (Eisenberg et al., 1998; Morris et al., 2007) – namely, family demographics (i.e., youth age, parent and youth sex; parent race/ethnicity; family income; parent education) and indices of parent emotional competence (i.e., ER; mindfulness).

## Demographic Predictors of Class Membership and Age as a Moderator

The broader parenting literature has demonstrated that socialization is dynamic (Zheng et al., 2017). Although parenting attitudes and goals (i.e., I wish for my child to be healthy and happy) may be relatively consistent regardless of child age, the combination of parenting strategies and behaviors deployed shifts across time. For example, in one nationally representative sample of families of 10–18 year olds, parents of older children were less likely to engage in the cluster of behaviors that typified harsh/disengaged caregivers (Mumford et al., 2015). Youth developmental stage also impacts the influence of socialization strategies (e.g., the association between maternal religiosity and adolescent

internalizing symptoms is dependent on youth age; Faro et al., 2019). However, given that most ES studies to date have been cross-sectional or have spanned only several years (see Perry et al., 2020, for a recent notable exception), the field lacks a guiding developmental model of ES (Katz et al., 2012). It remains a question as to whether and how parents use different combinations of strategies differently based on child age; as such, we examine in the current study whether child age predicts profile membership. Based on the general parenting and ES literatures, we hypothesize that parents of older youth are more likely to report using less supportive or coaching ES strategies and more dismissing or punitive responses to their child's displays of emotion (e.g., Klimes-Dougan & Zeman, 2007; O'Neal & Magai, 2005), while recognizing data to the contrary (Mumford et al., 2015). A second question is also relevant; does the impact of a particular ES strategy depend on youth age (a proxy for stage-salient tasks, which Calkins and Bell (1999) suggest as a way to organize ES). To answer this question, we consider child age as a moderator of the relations among profile membership and youth outcomes. Comparing across studies of children at different ages suggests that supportive strategies linked with adaptive outcomes for younger children may be less adaptive for older youth (e.g., Castro et al., 2018). The general parenting literature also suggests that harsh or negative parenting may be more detrimental as youth age (e.g., Gershoff, 2002). We consider both potential trends (i.e., profiles typified by high levels of supportive strategies are less adaptive as youth age and those including high levels of unsupportive strategies may be more detrimental as youth age) as well as more nuanced possibilities by using age as a moderator. Finally, Bower et al., (2014) note that parenting typologies such as Baumrind's that are acontextual, are "unlikely to characterize parents' functioning across time (e.g., consider the demands on a parent by unruly, disobedient behaviors from a 2-year old vs from a 14-year old)" (p. 898). They recommend parent-child research "include measures of parenting that index youth–parent relationships across several key contexts such as family, peers, and school and at different time points" (p.898). In keeping with this suggestion, our measure of ES is one that indexes a parent's response to youth negative emotion in numerous settings including the home, with peers, and during a performance, among others.

With regard to other family demographics as predictors of profile membership, a number of prior studies have suggested that mothers and fathers tend to use different socialization strategies, with fathers more likely, on average, to use more unsupportive strategies and mothers more likely to use supportive strategies (e.g., Baker et al., 2011; O'Leary et al., 2019). Child sex also appears to impact socialization messages (Cassano et al., 2007; O'Leary et al., 2019) as do race and ethnicity (e.g., Nelson et al., 2012, 2013). Finally, several studies of ES suggest that low family income and less parent education are related to putatively labeled unsupportive reactions to youth negative emotion (Lugo-Candelas et al., 2015; Shaffer et al., 2012). Undoubtedly, emerging evidence suggests the importance of considering how relevant demographic variables relate to ES practices and whether age moderates the influence of ES practices on youth outcomes.

## Parent Emotion Skills as Predictors of Class Membership

In addition to demographics, a burgeoning literature is demonstrating how parent emotional competence impacts ES practices. A small body of work examining parental

psychopathology suggests that parents suffering from both Axis I and II disorders are more likely to use unsupportive strategies with their children (e.g., Breaux et al., 2016; Faro et al., 2019; Shaffer et al., 2012). Moving beyond associations between specific diagnoses and ES, it may prove beneficial to take a trans-diagnostic approach by examining, for instance, parent ER and mindfulness skills. Although these factors have been understudied as they relate to ES, a handful of parent training programs have augmented a traditional focus solely on behavioral principles to incorporate modules designed to enhance these parent resources (Maliken & Katz, 2013, for a review; see also Coatsworth et al., 2015; Luby et al., 2018). Furthermore, patterns linking parent ER and mindfulness to adaptive parenting practices have broad support in the general parenting literature, with both parent ER (e.g., Saritas et al., 2013) and mindfulness (e.g., Parent et al., 2017) associated with more positive and less negative parenting practices. In addition, several studies focused specifically on ES have indicated that parent emotion dysregulation is related to higher levels of unsupportive practices and lower levels of supportive practices (Buckholdt et al., 2014; McKee et al., 2015; Morelen et al., 2016; Oddo et al., 2020), while mindful parenting is concurrently and longitudinally related to higher levels of supportive and lower levels of unsupportive ES responses (McKee et al., 2018). Additional data exploring predictors of ES behaviors are needed, as this information would enhance our understanding of what factors are most pertinent to parents' ES patterns and the ways in which these strategies influence youths' socioemotional functioning and later behavioral health.

In sum, although there is relative consensus in the literature regarding associations between certain ES responses and youth behavioral health, much of the work on ES to date has relied on aggregating data across parenting strategies and respondents, making it difficult to detect distinct patterns at the individual level. Furthermore, ES research has traditionally focused on processes in early or middle childhood, without attempting to distinguish whether ES responses are uniformly adaptive across ages or are sensitive to the changing demands of youth. To add to the extant literature and address the aforementioned limitations, the current study examined patterns of ES responses in families of 3 to 12 year olds and explored predictors and youth outcomes associated with those patterns, as well as youth age as a potential moderator of latent class and youth psychopathology/ER. Although we did not have specific hypotheses for the number of ES profiles we would observe, we did hypothesize that we would find patterns typified by (1) high levels of supportive and low levels of unsupportive ES similar to emotion coaching styles, (2) low levels of supportive and high levels of unsupportive responses similar to dismissive ES styles, and (3) high levels of both supportive and unsupportive responses, or a divergence pattern (Lunkenheimer et al., 2007; Miller-Slough et al., 2015, 2017). With regard to ES profile predictors, we hypothesized that mothers and parents with more emotional competence (as indicated by adaptive ER and higher dispositional mindfulness) would be associated with patterns of ES most similar to emotion coaching. Other demographic predictors were more exploratory in nature, given scant or discrepant past findings. Furthermore, based on the findings from variable-centered analyses, we expected that ES patterns most resembling emotion coaching would be predictive of higher levels of youth adaptive ER and lower levels of internalizing and externalizing symptoms and negativity/lability.

## Method

### Participants

A sample of 229 parents ($M_{parentage}$= 34.14, SD = 6.42, range = 20–56; 37.1% fathers) of youth aged 3 to 12 ($M_{childage}$ = 7.15; SD = 2.83; 51.1% female) from a larger study on the assessment of parenting recruited through Amazon's Mechanical Turk (MTurk) was used for the current study. The larger study included data from 564 parents of children between the ages of 3 and 17 across four waves of data collection (e.g., baseline, 4-month, 8-month, and 12-month follow-ups) that passed quality and consistency checks. Quality checks included passing at least 8 out of 10 attention check items (e.g., "Please select the Almost Never response option"). Consistency checks involved identifying the occurrence of two or more mismatched or inconsistent responses to child demographic questions administered across time points (e.g., date of birth). Although this represents a strict criterion for inclusion, it was deemed necessary, given that in-person laboratory visits were not possible. Therefore, the final sample of 229 parents included those who passed both the quality and consistency checks.

For the current study, only participants with data at the third and fourth waves were included because the ES measure was first introduced at this wave. Further, the current study used the childhood-version of the Coping with Children's Negative Emotions Scale; as such only children 12 and under were included in the current analyses. For the analysis sub-sample of 229 families, the majority (83.8%) of parents identified as White, with 7.0% identifying as Black, 0.4% as American Indian/Alaskan Native, 3.1% as Asian, and 5.7% as Hispanic. Approximately 60% of parents had at least a college education, 80.8% of families endorsed at least one co-parent, and 85.5% reported cohabitating with a partner or being married. Further, 22.7% reported currently being unemployed, 49.4% reported an annual income of at least $50,000, with an average of 1.79 (SD=.88; range of 1– 5) children per family (see Table S1 for complete details). Sixteen percent of the youth had borderline or clinically significant problem behaviors in either internalizing or externalizing domains based on parent report.

### Procedure

Parents were recruited in 2015 via MTurk, a crowdsourcing application in the social sciences that has been demonstrated to be as reliable as traditional methods of data collection (Buhrmester et al., 2011), including with data on youth psychopathology (Parent et al., 2017). To participate, parents had to be a resident of the United States and have a task approval rating of 95% or higher on MTurk. These criteria ensured a high-quality participant pool as workers with better reputations (i.e., approval rating) with more tasks tend to pass attention checks at a high rate, respond with less socially desirable answers, show less midpoint bias in scale responses, and, overall, provide responses to questionnaires that match the reliability of traditional samples (Hauser & Schwarz, 2016; Peer et al., 2014). Procedures were approved by the University of Vermont IRB. Participants provided online consent and received $4.00 and $8.00 as compensation for their time and effort upon completion of the 8- and 12-month surveys (waves three and four), respectively. One child was randomly selected by a computer algorithm for parents who reported having multiple

children in the desired age range; parents based survey responses on the randomly selected child across all waves of the study. The n of 229 parents represents the final sample that passed attention and consistency checks.

## Measures

**Demographic Information.—**Parents reported on their own demographics as well as those of their child (e.g., sex, age) and overall family (e.g., household income, family size). Family poverty status was defined as being within 150% of the federal poverty line based on income and family size. Approximately 34% of families reported incomes within 150% of the poverty line.

**Emotion Socialization Strategies.—**The Coping with Children's Negative Emotions Scale (CCNES; Fabes et al., 1990) is a self-report measure that gauges how parents respond to children's negative emotions in distressing situations. Parents respond to 12 hypothetical parent-child scenarios by indicating how likely, from 1 "very unlikely" to 7 "very likely", they would be to engage in 6 different response options (representing the 6 subscales) in each situation (e.g., their child is angry that he/she could not attend a friend's birthday party due to being sick or hurt). The CCNES is comprised of six subscales assessing different parental reactions: (1) emotion-focused reactions (e.g., "I would soothe my child and do something fun with him/her to make him/her feel better about missing the party"), (2) problem-focused reactions (e.g., "I would help my child think about ways that he/she can still be with friends"), (3) expressive encouragement (e.g., "I would encourage my child to express his/her feelings of anger and frustration"), (4) distress reactions (e.g., "I would get angry at my child"), (5) punitive reactions (e.g., "I would send my child to his/her room to cool off"), and (6) minimization reactions (e.g., "I would tell my child not to make a big deal out of missing the party"). Mean scores for each subscale range from 1–7, with higher scores indicative of the reaction being more normative of the parent. In addition, responses are often grouped into the two broader domains of supportive (i.e., emotion- and problem-focused reactions, expressive encouragement) and unsupportive ES practices (i.e., minimization, distress and punitive reactions) (Leerkes et al., 2014). The CCNES has demonstrated good internal reliability and has been shown to be sensitive to change over time (e.g., Denham & Kochanoff, 2002; Herbert et al., 2013) as well as strong psychometric properties with parents of preschoolers (Fabes et al., 2001) and school-aged (e.g., Jones et al., 2002) children. The omega coefficients at wave three were .76 for dismissing reactions, .77 for punitive reactions, .82 for minimizing reactions, .92 for expressive encouragement, .85 emotion-focused reactions, and .87 for problem-focused reactions.

**Parent Emotion Regulation.—**The Brief Difficulties with Emotion Regulation Scale (DERS-18; Victor & Klonsky, 2016) is an 18-item measure that assesses parents' abilities to identify, express and regulate their emotions. Parents provide responses using a 5-point Likert scale (1 = *almost never*, 5 = *almost always*) indicating how often each item applies to them (e.g., "When I'm upset, I have difficulty focusing on other things"). Higher scores indicate poorer emotion regulation. The DERS-18 reflects the factor structure of the DERS, has high internal consistency and strong concurrent validity with the original DERS as well

as predictive validity relative to self-reported positive and negative emotions in adult and adolescent samples (Victor & Klonsky, 2016). The omega coefficient at wave three was .93.

**Parent Mindfulness.—**The Mindfulness Attention and Awareness Scale (MAAS; Brown & Ryan, 2003) is a 15-item assessment of parents' dispositional mindfulness. Parents provide responses using a 6-point Likert scale (1 = *almost always*, 6 = *almost never*), indicating how frequently they experienced each statement (e.g., "I find it difficult to stay focused on what's happening in the present"). Higher scores reflect higher levels of mindfulness. The MAAS has demonstrated good internal consistency ($\alpha$ = .80-.90) as well as convergent and discriminant validity in samples of university students and community adults (Brown & Ryan, 2003). The omega coefficient at wave three was .93.

**Youth Emotion Regulation.—**The Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997) is a 24-item assessment of the intensity, lability, flexibility, and appropriateness of a child's emotions. Parents indicate how often their child exhibits each behavior (e.g., "can recover quickly from episodes of upset or distress") using a 4-point Likert scale (1 = *never*, 4 = *almost always*). Two subscales, negativity/lability (e.g., "Is prone to angry outbursts/tantrums easily") and emotion regulation (e.g., "Can say when s/he is feeling sad, angry or mad, fearful or afraid") are calculated with sum scores, and higher values indicate higher negativity and competence, respectively. The ERC has strong psychometric properties for parents of school-aged (e.g., Shields & Cicchetti, 1997) and preschool (e.g., Shields et al., 2001) children. The omega coefficients for the ER and negativity/lability subscales at waves three and four ranged from .77–.82 and .86–.87, respectively.

**Youth Psychopathology.—**Indicators of youth internalizing and externalizing problems were drawn from the Brief Problem Monitor (BPM; Achenbach et al., 2011). For internalizing and externalizing problems, 12 items were rated on a 3-point scale (0 = *not true*, 1 = *somewhat true*, or 2 = *very true*). Research supports the reliability and validity of test scores, including large correlations with corresponding longer scales (e.g., Child Behavior Checklist) as well as with diagnoses obtained from a structured diagnostic interview (Achenbach et al., 2011; Chorpita et al., 2010). Further, nearly all of the items overlap from the original CBCL preschool and school-aged forms. Internal consistency for subscales at waves three and four ranged from .82 to .88.

## Data Analytic Plan

The current study employed latent profile analyses (LPA) to identify constellations or profiles of ES strategies and their associations with covariates or predictors and with distal child psychopathology outcomes. LPA analyses allow variables that have similar indicator means and variances to cluster so that group patterns can be more easily identified.

**Profile Enumeration.—**To determine the optimal number of profiles, we used the Lo-Mendel-Ruben adjusted likelihood ratio test (LMR-A; Lo et al., 2001), the bootstrap likelihood ratio test (BLRT), the Bayesian Information Criterion (BIC), the Akaike Information Criteria (AIC), and entropy to select the best fitting model. Specifically, the

LMR-A indicates statistically significant improvements ($p$-value < .05) in a model in comparison to the model with one fewer profile. Similarly, a statistically significant BLRT indicates superiority in a model when compared to the model with one fewer profile. The AIC and BIC aid in determining model fit, with lower values on each index indicating better relative fit. Further, entropy determines the accuracy of classifying individuals into the profiles identified in each model, with values closer to 1 indicating more certainty in group division. Profile indicators were CCNES subscale scores.

**Profile Predictors and Outcomes.—**For the current study, we employed Vermunt's three-step approach (Vermunt, 2010) in Mplus for examining predictors. Specifically, once profiles were determined, cases were assigned to these profiles based on posterior probabilities. Following that, parent and youth covariates were introduced as predictors of the categorical latent class variable without needing to hard-classify nor resulting in distortion of profiles.

Regarding prediction of distal child outcomes, we used a three-step approach (Bakk et al., 2013) to examine the cross-sectional and longitudinal impact of latent parenting profiles on youth psychopathology and ER. Specifically, youth psychopathology and ER at waves three and four, and the stability of youth psychopathology and ER across time were included at the latent class level so that estimates were unbiased by classification inaccuracy and without distorting class solution. Two separate models were tested – first with child internalizing and externalizing problems and second with child emotional negativity and ER. Each model held the covariances between outcomes to be equal across profiles. Finally, child age was introduced as a moderator of the association between ES profile and child psychopathology and ER outcomes.

## Results

### Latent Profiles

Latent profile analyses (LPA) were conducted using *Mplus* version 8.3 (Muthén & Muthén, 2017) to determine the optimal number of clusters of families with similar ES profiles. Missing data on key variables ranged from 0–3.5% at wave three and between 8.7% and 14% at wave four. The mechanisms of missingness was treated as missing completely at random (MCAR), Little's MCAR test $\chi^2 = 248.50$, $p = .772$, and full information maximum likelihood estimation was used for inclusion of all participants. See Table 1 for means, SDs, ranges, and correlations between all study variables. ES subscale scores were entered into the LPA models, which ranged from one to seven profiles and were run with a minimum of 200 random starts. Fit indices for the profiles are presented in Table 2. All models demonstrated entropy above .80. Additionally, AIC and BLRT continued to support models with more classes. The BIC supported the four, five, and six class models as having a similar fit, with the five-class model the best fitting. However, upon examination of the 4 through 7 class models, it was clear that there was a limited separation between several classes in the more complex models (see Supplemental Figures S1-3 for complete details). Further, after the introduction of profile covariates, described in more detail below, the five and six-class models shifted considerably to have classes with fewer than 5% of the sample. Finally, based

on fit, ease of interpretation, and robustness to covariates, we decided that the four-class model was the most theoretically and empirically defensible (see Figure 1). The best log likelihood value for the four-class model was replicated over a dozen times.

An Emotion Coaching profile (28%) was defined by the lowest levels of unsupportive ES and the highest levels of supportive ES. An Emotion Dismissing profile (16%) was defined by having the highest levels of unsupportive and the lowest levels of supportive ES practices. A Moderate profile (31%) exhibited moderate levels of both supportive and unsupportive ES with relatively low levels of emotion encouragement but relatively high levels of problem-focused reactions. A Limited Engagement profile (25%) demonstrated low levels of both supportive and unsupportive ES. In other words, the Limited profile reported similar levels of unsupportive ES as the Emotion Coaching profile, but this was paired with levels of supportive ES that were similar to the Emotion Dismissing profile (save for clear separation for problem-focused reactions).

## Profile Predictors

Following profile enumeration, we explored family demographic (i.e., parent and child sex, child age, parent education, family income) and parent emotional competence (i.e., mindfulness and ER) indicators as simultaneous predictors of ES profile membership using multinomial logistic regression via Vermunt's three-step approach (see Table 3). Lack of sample diversity with regard to race/ethnicity (i.e., majority White) precluded analyses examining race and ethnicity. For predictor analyses, the Dismissing profile served as the reference group for comparisons. Regarding family demographic predictors, parent sex was a statistically significant predictor of ES profile membership. Specifically, although mothers and fathers had similar probabilities of being in the Limited profile (24% and 27%, respectively), fathers had a higher likelihood of being in the Dismissing profile compared to mothers (26% compared to 10%). Mothers had a higher probability of being in the Moderate (34% compared to 25%) and Coaching (31% compared to 22%) profiles. Additionally, child age was associated with profile membership: the probability of being in the Dismissing profile increased with child age (e.g., 10% for 4-year-olds, 15% for 7-year-olds, and 22% for 10-year-olds). The likelihood of being in the Coaching profile decreased with child age (e.g., 35% for age 4, 28% for 7, and 21% for 10). We also explored child sex as a predictor and found that parents of boys and girls were equally represented across the profiles.

Regarding family SES, family poverty status (i.e., being within 150% of the federal poverty line based on income and family size = 1, above 150% = 0) was a statistically significant predictor of ES parenting profile membership. Specifically, higher-income families had a lower likelihood of being in the Dismissing profile compared to low-income families (13% compared to 23%) as well as an increased probability of being in the Limited profile compared to low-income families (30% compared to 15%). Further, low-income families were more likely to be in the Coaching profile (35% compared to 25%) and a similar likelihood of being in the Moderate profile as higher-income families (27% compared to 32%). Parent education, an additional indicator of family SES, was also associated with ES profile such that parents with a college education were more likely to be in the Moderate

profile (34% compared to 26%) and less likely to be in the Coaching profile (22% compared to 37%).

Finally, concerning parental emotional competence, the probability of being in the Emotion Coaching profile dramatically increased with higher levels of parental dispositional mindfulness (see Figure 2a). For probing effects, we used +/− 1SD from the mean of mindfulness or emotion dysregulation. Specifically, parents with low levels of mindfulness had a 7% probability of being in the Emotion Coaching profile, whereas parents with high levels had a 51% probability. The increase in the probability of being in the Emotion Coaching profile as parental mindfulness increased was paired with a decrease in the probability of being in the Moderate profile. In contrast, with respect to parent ER, the probability of being in the Emotion Dismissing profile substantially increased for parents with high levels of emotional dysregulation (see Figure 2b). For example, the likelihood of a parent being in the Dismissing profile was 3% for low, 11% for average, and 30% for high emotion dysregulation.

## Distal Child Psychopathology Outcomes

Longitudinal associations between wave 3 ES profile and wave 4 child outcomes (e.g., internalizing, externalizing, ER and negativity/lability) were explored with all models accounting for initial wave 3 levels of child outcomes. Table 4 includes the Wald's chi-square tests of parameter equality results for all outcomes. Significant Wald's chi-square tests represent a difference in a specific parameter across profiles. Table 5 includes complete model results for paths estimated within each class. Overall, ES profile was associated with child emotional negativity, and both child internalizing and externalizing problems. The Dismissing profile was associated with the highest levels of child psychopathology and emotional negativity, while the Emotion Coaching profile was associated with the lowest levels. The Moderate and Limited profiles evidenced similar child outcomes, with child psychopathology levels falling in-between the Emotion Coaching and Dismissing profiles. Cross-sectional associations showed similar patterns of results and included child ER as an additional significant outcome. Figure 3 depicts mean Z-scores for child outcomes for each profile.

**Developmental moderation.—**Lastly, we explored if youth age moderated the association between ES profile and youth outcomes. For this analysis, we hard-classified families based on their most likely profile and tested linear regression moderation models in R using Jamovi. For these models, wave three of each outcome served as the covariate; the interaction between profile and child age was of primary interest. Associations between ES profile and child internalizing and externalizing problems were not moderated by child age, as evidenced by equivalent results across developmental stages (see Supplemental Tables S2-4). However, the association between ES profile and youth emotional negativity was moderated by child age (see Table 6), such that the association between the Dismissing profile and youth emotional negativity became stronger as child age increased (see Supplemental Figure S4).

## Discussion

The current study utilized a person-centered approach to examine patterns of ES in families and explore predictors and youth outcomes associated with those patterns. Although we did not have specific hypotheses related to the number of ES profiles that would be observed, we did expect to see patterns roughly consistent with emotion coaching, emotion dismissing, and a divergence model. These expectations were partially supported with findings revealing four distinct ES profiles: an Emotion Coaching profile characterized by parents who exhibited the lowest levels of unsupportive ES and the highest levels of supportive ES; a Moderate profile characterized by parents who exhibited moderate levels of both supportive and unsupportive ES practices; a Limited Engagement profile characterized by parents who exhibited low levels of both supportive and unsupportive ES; and finally, an Emotion Dismissing profile characterized by parents who exhibited the highest levels of unsupportive ES and the lowest levels of supportive ES. Several of our profiles are consistent with those reported by Miller et al. (2015) in their study of parents of primarily White 15 month to 5 year olds, by Miller-Slough et al. (2017) and Sosa-Hernandez et al. (2020) in their studies of primarily White mothers' and fathers' ES responses with 8 to 12 year olds, and with Wang et al. (2019) in their study of Chinese fathers of 10 to 18 year olds. Namely, our Emotion Coaching profile was similar to Miller-Slough et al.'s, Sosa-Hernandez et al.'s, and Wang et al.'s Supportive profiles (all three sets had higher levels of supportive strategies like expressive encouragement and problem solving and lower levels of unsupportive strategies such as dismissal and punishment), our Moderate profile mimicked Sosa-Hernandez et al.'s and Wang et al.'s Balanced profiles (all three profiles were typified by moderate levels of supportive and unsupportive strategies), our Emotion Dismissing profile was similar to Miller-Slough et al.'s and Wang et al.'s Harsh profile (high levels of unsupportive and low levels of supportive responses), and finally our Limited profile was similar to Miller et al.'s Low Involvement cluster and Wang et al.'s Disengaged profile (low levels of all strategies). Although very few studies, to date, have utilized a person-centered approach to evaluating parental ES, the corroboration of several profiles from prior work suggests a robustness of the current findings. We also examined predictors of ES profiles related to family demographics and parent emotional competence. Mothers were less likely to be in the Emotion Dismissing profile compared to fathers and more likely to be in the Emotion Coaching profile, consistent with previous research showing that mothers tend to utilize more supportive ES strategies. Similar to findings of Hernandez et al. (2018), child sex did not predict class membership in the current study. Nonetheless, more research is needed to clarify how parent-child ES dynamics develop differently based on parents' sex, as well as when and how parent ES strategies vary by child sex (i.e., O'Leary et al., 2019). In addition, child age was explored as a potential predictor. Findings revealed that parents of younger children were more likely to be in the Emotion Coaching profile, while parents of older children were more likely to be in the Emotion Dismissing profile. This is in line with past work showing that "unsupportive" ES responses increase with child age (Klimes-Dougan & Zeman, 2007; Labella, 2018). It has been suggested that this pattern may be the result of increases in parents' perceived danger of emotional expression as youth get older (Labella, 2018) or expectations that older youth should be more competent at regulating emotion.

Interestingly, families of higher SES were less likely to be in the Emotion Dismissing profile but more likely to be in the Limited Engagement profile, potentially suggesting a "hands off" parenting approach around emotion. It is possible that our findings related to SES are tied to the resources these families have available to them. For example, high SES families may have more external supports from which they can draw upon for assistance, such as non-family caregivers (e.g., babysitters, extended family) or increased access to daycare or after-school programs for their children. Such external supports may decrease parents' caregiving demands and related parenting stress, lending to the lower likelihood of being in the Emotion Dismissing profile, but may also consequently decrease parents' involvement as primary socializers in their children's lives (i.e., Luthar, 2003). Additional findings pertaining to family economics revealed that parents of families living within 150% of the federal poverty line had a higher likelihood of being in the Emotion Coaching profile. Although contrary to some literature (e.g., Shaffer et al., 2012), other studies indicate equivalent levels of emotional closeness across affluent and economically disadvantaged families (e.g., Luthar & Latendresse, 2005). The final demographic predictor examined in the study was parent educational attainment, with data suggesting that higher attainment was associated with a higher likelihood of being in the Moderate profile and a lower likelihood of being in the Emotion Coaching profile. This pattern of findings was unexpected given data from variable-centered approaches noting associations between higher income and/or education and use of supportive ES strategies (Lugo-Candelas et al., 2015; Shaffer et al., 2012). It will be important in future research to (1) examine how education, income, and race/ethnicity interact to create socialization standards and expectations for emotion display and (2) explore adaptive patterns of strategies in diverse families.

Of particular importance were our findings related to parent emotional competence. Specifically, we found that parents who reported high levels of mindfulness had a significantly higher probability of being in the Emotion Coaching profile, which is consistent with findings from a prior longitudinal investigation conducted by McKee et al. (2018). As mindfulness is characterized by nonjudgmental awareness and acceptance of present experiences, it is plausible that a mindful disposition may be more broadly indicative of a parent's psychological resources, with mindful parents having a greater capacity to attend and be open to children's emotional experiences. We also found that the probability of being in the Emotion Dismissing profile substantially increased for parents with high levels of emotion dysregulation. Sosa-Hernandez et al. (2020) also noted parent ER as a significant predictor of profile membership, with dysregulation associated with greater odds of being in their Balanced and Hyper-engaged profiles relative to the Supportive one. This, too, is logical, as dysregulated parents may be less likely to have the "emotional bandwidth" to engage in problem solving with the child, encourage the child to express emotion, or to have the resources to provide soothing, while also refraining from dismissive or punitive responses. While perhaps not surprising, these findings underscore the importance of parent emotional competence and its influence on parent-child interactions (Hajal & Paley, 2020) and child behavioral health, given the link between parenting stress and child behavior problems (Barroso et al., 2018). Current findings suggest that adaptive changes in ES within a family may be unlikely to occur unless efforts are made to support parents in strengthening psychological resources from which they can draw upon, particularly in

difficult emotional interactions with their children. Fortunately, parent training programming with modules focused on parental well-being, mindfulness, and/or emotion coaching are on the rise (Coatsworth et al., 2014, 2015; see also England-Mason & Gonzalez, 2020; Havighurst & Kehoe, 2017, for reviews).

Finally, we examined longitudinal relationships between profiles of parental ES strategies and child outcomes. Analyses revealed that the Emotion Dismissing profile was associated with the highest levels of child internalizing and externalizing problems and emotional negativity, while the Emotion Coaching profile was associated with the lowest levels of these outcomes. These findings are largely in line with prior research demonstrating the effect of supportive and unsupportive ES on youth psychosocial adjustment in both variable-centered approaches (e.g., Katz et al., 2012; Miller-Slough & Dunsmore, 2016) and emerging person-centered approaches (e.g., Hernandez et al., 2018). We also examined child age as a moderator of these relationships. In this respect, the associations between ES profile and child internalizing and externalizing problems were not moderated by child age, suggesting that the implications of ES for psychopathology are consistent across development. In contrast, the link between ES profile and child ER was moderated by child age. Specifically, the association between the Emotion Dismissing profile and child emotion dysregulation became stronger as youth age increased, becoming particularly pronounced during the early adolescence developmental period. Sample size for moderation analyses was low, so although the interaction was significant, caution is warranted and replication with a larger sample is needed. While we note the need for replication, theory and extensive research have demonstrated how developmental shifts around the onset of puberty (i.e., age 9–14) have been associated with increased vigilance towards socially affective information (e.g., unsupportive ES), resulting in states of emotional arousal and dysregulation in youth that likely contribute to trajectories of risk (Nelson et al., 2005). As such, our findings underscore the importance of identifying opportunities for early intervention, as the more exposure children have to maladaptive interactions with parents, the more likely they may be to exhibit emotional difficulties that could develop into entrenched psychopathology. Parent training programs with integrated parental wellbeing and ES components may be particularly beneficial to fathers and low income parents, given that (1) greater parental dysregulation predicted membership in the Emotion Dismissing profile, (2) fathers and low income parents were more likely to be in this profile, and (3) this profile, in turn, predicted the highest levels of child psychopathology and dysregulation. Engaging families of older children at risk for membership in the Dismissing profile may also be particularly important, given that the relation between said profile and youth negativity.

It is important to note that there remains much to learn about ES, particularly when it comes to qualifying strategies as “supportive” or “unsupportive”, given previous research demonstrating less adaptive outcomes for traditionally-defined “supportive” strategies and more adaptive outcomes for so called “unsupportive” strategies in families of varying backgrounds (e.g., Castro et al., 2018; Lugo-Candelas et al., 2015). Previous research, for example, suggests that some racial and ethnic minority families, relative to European American families, may be more likely to use unsupportive responses to their children’s negative emotions (e.g., Nelson et al., 2012), which notably, might be adaptive in the contexts of discrimination, racism, and prejudice (Dunbar et al., 2017; Dunbar et al., 2021),

depending on other contextual risks (e.g., Zeman et al., 2016). Furthermore, O'Leary's (2020) person-centered approach suggests that racial/ethnic differences may play a role in the way that caregivers utilize combinations of socialization strategies. A major limitation of the current study is the restricted sample diversity, which precluded examining race/ethnicity as a demographic predictor of group membership or considering how it might interact with other demographic contexts. As such, more research is needed to answer questions about ES strategies and youth outcomes like "supportive for whom, and in what contexts?" as well as to explore the strength of associations and explanatory mechanisms. Relatedly, the use of MTurk to recruit study participants might have limited the demographic and clinical diversity within the study sample. In turn, identified parenting profiles may be characterized differently in more diverse samples. Future research should examine whether the current findings generalize to clinical samples as well as to families from underrepresented racial and ethnic minority backgrounds.

Although the current investigation expands our understanding of parental ES, it is important to note that the study has limitations that dampen confidence in findings and require replication. For example, data were from a single informant, increasing the risk of shared method bias. Despite this limitation, online recruitment through MTurk did enable the research team to obtain a greater representation of fathers in the sample – a demographic that has been historically more difficult to recruit in child psychopathology research (Parent et al., 2017) – and a large enough sample to examine effects of moderation by age. A second limitation of the study, as noted, was the lack of diversity in the sample which prevented us from evaluating racial and ethnic differences across families. Additionally, only a small percentage of our sample met criteria for borderline or clinical psychopathology (Parent & Forehand, 2017). Future work should enhance recruitment to allow for examinations of more representative samples as well as those at-risk of clinically significant symptomatology. Future studies could also explore the potential impact of diversity in family composition, such as presence of siblings (e.g., Shewark & Blandon, 2015) and single-parent households (e.g., McKee et al., 2015). It is possible that moderation analyses, while significant, may be underpowered given the extent of our analyses. Further, it is important to note that the BPM was not targeted towards children below the age of 6 nor was the present version of the CCNES designed for adolescents. Lastly, as shown in Table 1, all primary constructs are highly correlated, which may suggest significant overlap in the observed behaviors. These last three points, in particular, require the reader to interpret the respective findings with caution.

The study benefited from its inclusion of multiple child age groups and person-centered approach –both of which allowed us to examine patterns in ES that would be important to our interpretation, especially for findings related to child outcomes. In addition, previous literature has largely failed to explore predictors of ES strategies between and within parents. Our exploration of family demographics and parent emotional competence therefore provides an important foundation on which future work can continue to expand, particularly given the highlighted variability in how some predictors relate to child outcomes. Lastly, it is important that future studies evaluate ES over longer spans of time, as our data points were only 4 months apart. Nonetheless, given that a majority of the research on ES is cross-sectional, we view the longitudinal design of our study as a strength.

Additionally, shorter assessment waves may be well-suited to capture month-to-month changes that are characteristic of slow drift toward coercive family processes or an overall pattern of maladaptive cascading effects (e.g., increases in child internalizing problems).Overall, our findings provide support for parental ES as an important process that promotes children's socioemotional functioning and also highlight the importance of parental emotional competence in the types of ES strategies utilized within families. Our person-centered approach suggests that meaningful change in a family exhibiting maladaptive patterns of ES is unlikely without first strengthening parents' emotional resources. Further, our identification of parent ES profiles and their respective associations with youth psychopathology provides a clearer picture of which families are more likely to be in need of intervention services, enhancing our ability to improve the trajectories of such families. However, more research is needed that provides an in-depth exploration of determinants of parental ES strategies to better identify targets for prevention and intervention. Only by doing so will we be able to distinguish how to best guide parents in building an emotionally supportive family environment that fosters the adaptive development of youth.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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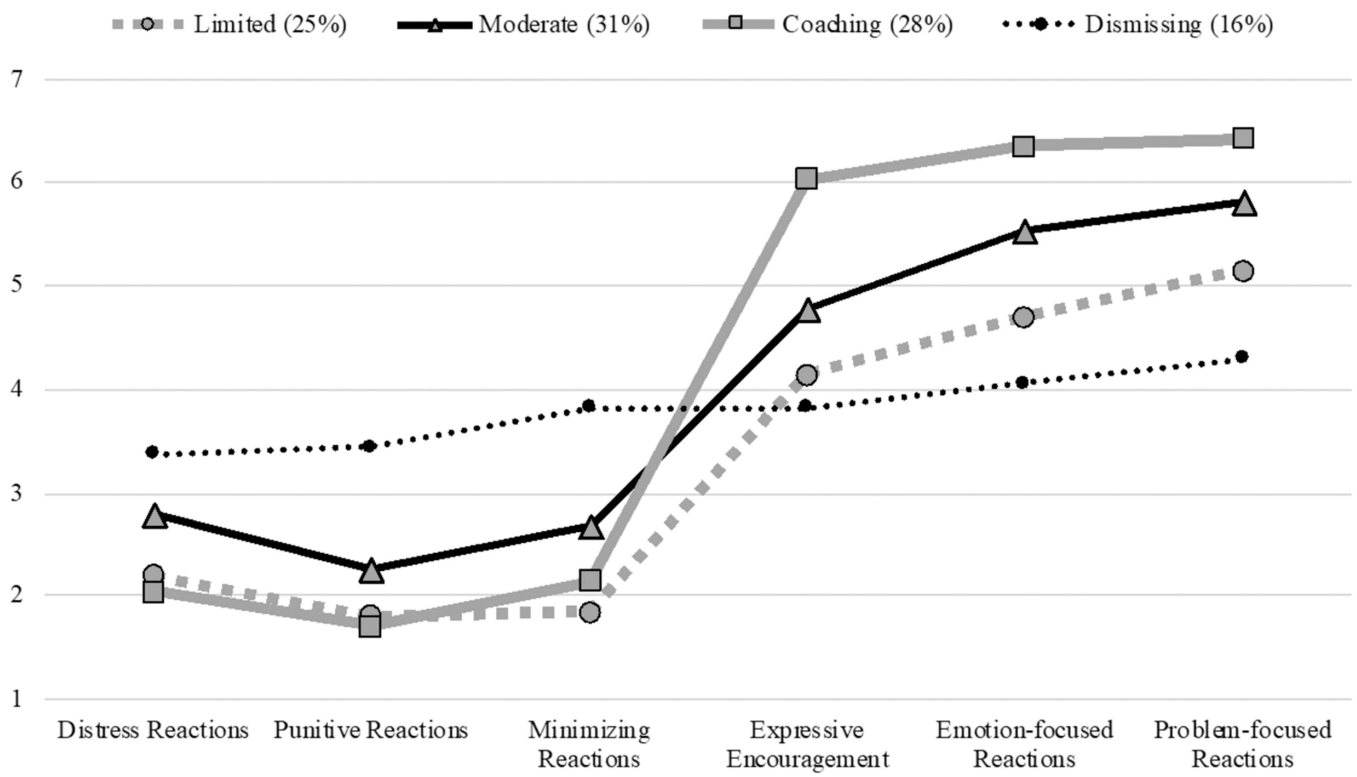


**Figure 1.**
Latent profile subscale means.

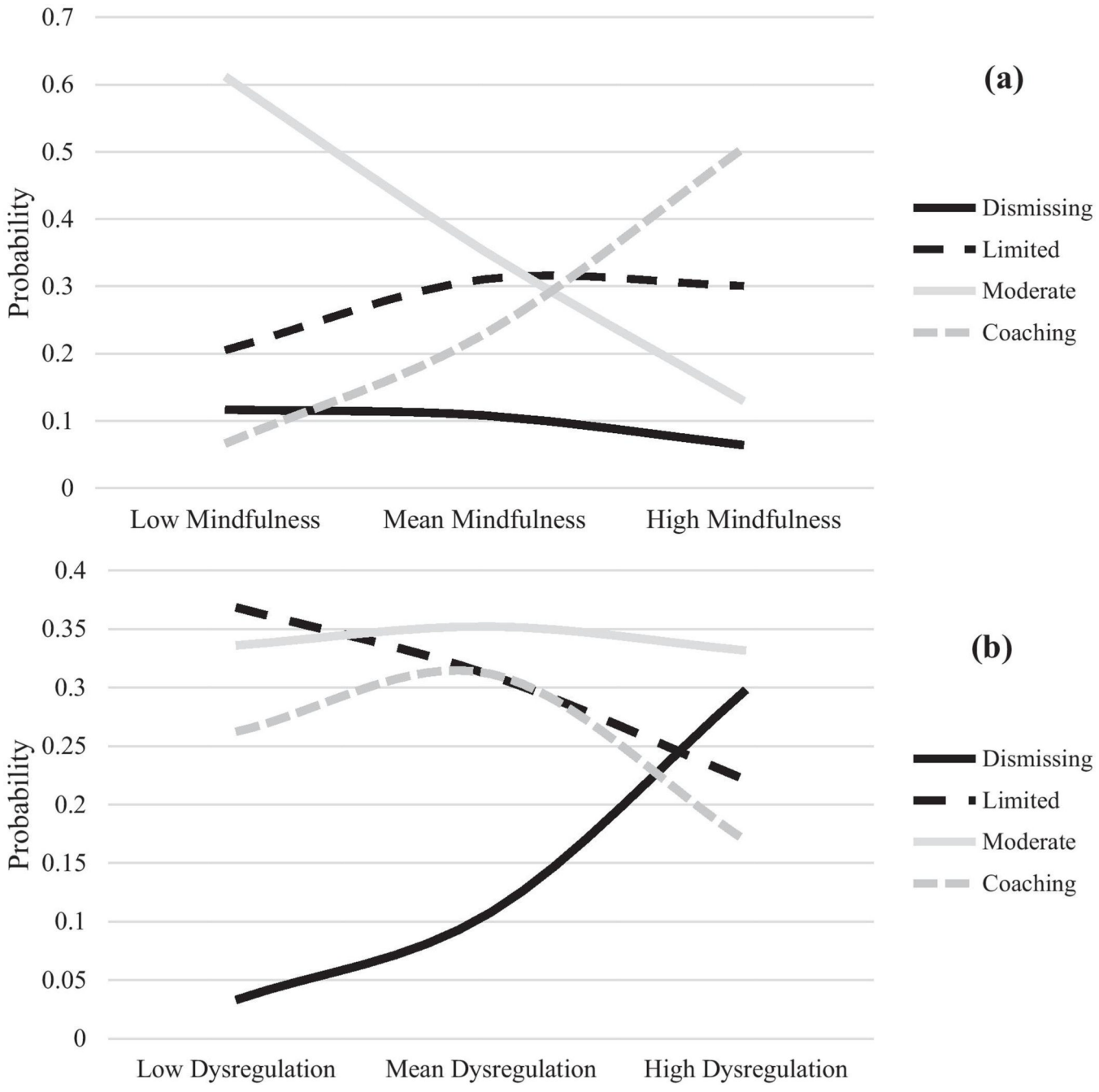


**Figure 2. Latent profile predicators: Parent mindfulness and emotional dysregulation.**
*Note*. High or Low Mindfulness/Dysregulation represented +/− 1 SD

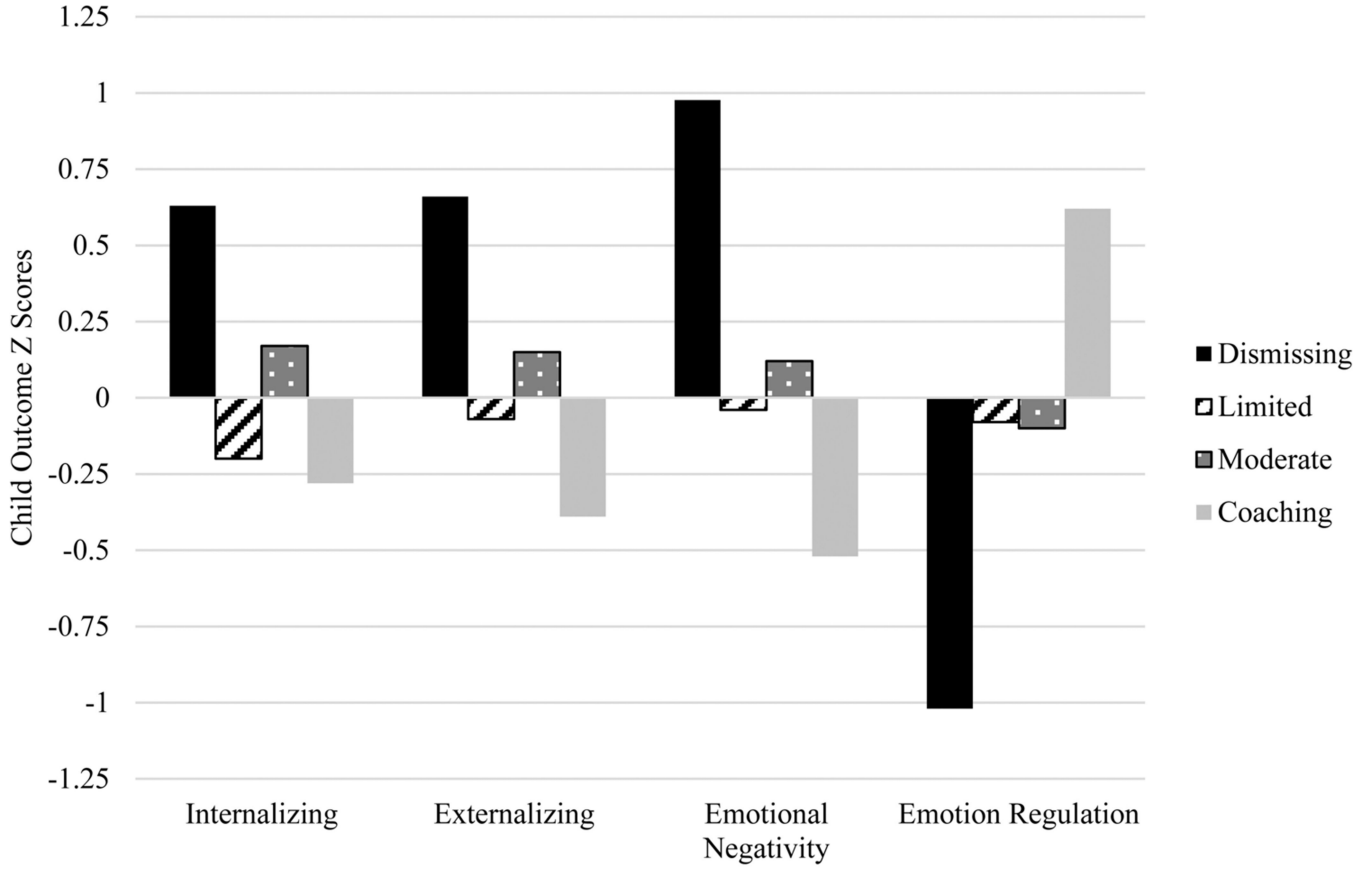


**Figure 3.**
Mean Z-scores on child outcomes for each ES profile.

**Table 1.**

Means, SDs, and Correlations for Main Study Variables.

| | M | SD | Range | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Distress Reactions W3 | 2.52 | 0.73 | 1 – 5.6 | 1 | | | | | | | | | | | | | | |
| 2. Punitive Reactions W3 | 2.18 | 0.76 | 1 – 4.9 | .62* | 1 | | | | | | | | | | | | | |
| 3. Expressive Encourage W3 | 4.78 | 1.25 | 1.9 – 7 | −.35* | −.41* | 1 | | | | | | | | | | | | |
| 4. Emotion-Focused React W3 | 5.28 | 0.99 | 2.2 – 7 | −.37* | −.41* | .63* | 1 | | | | | | | | | | | |
| 5. Problem-Focused React W3 | 5.57 | 0.94 | 3 – 7 | −.42* | −.51* | .64* | .81* | | | | | | | | | | | |
| 6. Minimization Reactions W3 | 2.50 | 0.89 | 1 – 5.7 | .49* | .71* | −.26* | −.22* | −.30* | | | | | | | | | | |
| 7. Parent Mindfulness W3 | 68.2 | 13.3 | 33 – 90 | −.52* | −.36* | .29* | .24* | .28* | −.24* | 1 | | | | | | | | |
| 8. DERS Total W3 | 4.74 | 2.25 | 3 – 13 | .51* | .47* | −.26* | −.30* | −.38* | .32* | −.61* | 1 | | | | | | | |
| 9. Internalizing W3 | 1.33 | 1.97 | 0 – 10 | .29* | .21* | −.02 | −.10 | −.05 | .22* | −.24* | .21* | 1 | | | | | | |
| 10. Externalizing 3 | 1.94 | 2.56 | 0 – 14 | .31* | .32* | −.20* | −.18* | −.19* | .18* | −.29* | .25* | .45* | 1 | | | | | |
| 11. ERC Negativity W3 | 25.4 | 6.28 | 15 – 45 | .36* | .33* | −.26* | −.25* | −.30* | .19* | −.49* | .43* | .40* | .71* | 1 | | | | |
| 12. ERC Emo Regulation W3 | 26.4 | 3.82 | 14 – 32 | −.35* | −.46* | .37* | .48* | .57* | −.33* | .36* | −.41* | −.34* | −.41* | −.58* | 1 | | | |
| 13. Internalizing W4 | 1.56 | 2.10 | 0 – 12 | .39* | .32* | −.13 | −.22* | −.17* | .24* | −.32* | .33* | .72* | .39* | .41* | −.34* | 1 | | |
| 14. Externalizing W4 | 2.07 | 2.71 | 0 – 13 | .41* | .38* | −.25* | −.21* | −.28* | .19* | −.32* | .43* | .30* | .71* | .66* | −.40* | .42* | 1 | |
| 15. ERC Negativity W4 | 25.1 | 6.55 | 15 – 50 | .41* | .39* | −.29* | −.31* | −.37* | .23* | −.47* | .45* | .28* | .61* | .82* | −.52* | .39* | .74* | 1 |
| 16. ERC Emo Regulation W4 | 26.7 | 3.90 | 15 – 32 | −.39* | −.42* | .39* | .44* | .54* | −.32* | .42* | −.46* | −.33* | −.44* | −.56* | .76* | −.34* | −.53* | −.63* |

Note.

* = $p < .05$, W3 = 8-month, W4 = 12-month, DERS is the parent emotion dysregulation measure, ERC = emotion regulation checklist, 9–16 are child outcomes

**Table 2.**

LPA Model Fit Indices.

| | | Parsimony Criteria | | LRT p Value | |
|---|---|---|---|---|---|
| **Profiles** | **Entropy** | **AIC** | **BIC** | **LMRa** | **BLRT** |
| 1 | -- | 5399 | 5445 | -- | -- |
| 2 | .86 | 4730 | 4826 | .000 | .000 |
| 3 | .85 | 4520 | 4666 | .002 | .000 |
| 4 | .83 | 4418 | 4613 | .347 | .000 |
| 5 | .86 | 4340 | 4594 | .020 | .000 |
| 6 | .88 | 4311 | 4605 | .072 | .000 |
| 7 | .87 | 4280 | 4624 | .558 | .040 |
| 8 | .88 | 4254 | 4648 | .232 | .667 |

**Table 3.**

Predictors of profile membership.

| Effect | Estimate | SE | OR | *p* Value |
|---|---|---|---|---|
| *Limited vs. Emotion Dismissing* | | | | |
| Parent Sex | −2.17 | .696 | .114 | .002 |
| Child Age | −.234 | .112 | .791 | .036 |
| Parent Emotion Dysregulation | −.731 | .182 | .481 | .000 |
| Parent Mindfulness | .044 | .035 | 1.04 | .211 |
| Parent Education | 2.07 | .794 | 7.88 | .009 |
| Family Poverty Status | −2.58 | .742 | .076 | .001 |
| *Moderate vs. Emotion Dismissing* | | | | |
| Parent Sex | −2.28 | .732 | .102 | .002 |
| Child Age | −.119 | .098 | .887 | .222 |
| Parent Emotion Dysregulation | −.612 | .162 | .542 | .000 |
| Parent Mindfulness | −.018 | .029 | .982 | .541 |
| Parent Education | 1.35 | .661 | 3.85 | .042 |
| Family Poverty Status | −1.92 | .690 | .147 | .005 |
| *Emotion Coaching vs. Emotion Dismissing* | | | | |
| Parent Sex | −2.69 | .726 | .068 | .000 |
| Child Age | −.301 | .106 | .740 | .004 |
| Parent Emotion Dysregulation | −.744 | .198 | .475 | .000 |
| Parent Mindfulness | .107 | .033 | 1.11 | .001 |
| Parent Education | 2.23 | .793 | 9.33 | .005 |
| Family Poverty Status | −1.77 | .778 | .170 | .023 |

**Table 4.**

Distal child psychopathology outcomes

| Effect | Wald $\chi^2$ | df | *p* Value |
|---|---|---|---|
| *Cross-sectional* | | | |
| Emotional negativity | 33.86 | 3 | .000 |
| Emotion regulation | 65.53 | 3 | .000 |
| Internalizing | 25.36 | 3 | .000 |
| Externalizing | 34.54 | 3 | .000 |
| *Longitudinal* | | | |
| Emotional negativity | 12.27 | 3 | .007 |
| Emotion regulation | 4.74 | 3 | .192 |
| Internalizing | 31.44 | 3 | .000 |
| Externalizing | 18.29 | 3 | .001 |
| *Stability* | | | |
| Emotional negativity | 6.86 | 3 | .077 |
| Emotion regulation | .571 | 3 | .903 |
| Internalizing | 74.76 | 3 | .000 |
| Externalizing | 27.18 | 3 | .000 |

*Note*. Cross-sectional refers to the mean differences at wave three (8-month). Longitudinal refers to mean differences at wave four (12-month). Stability refers to differences in the association between waves three and four across groups.

**Table 5.**

Detailed results for distal child outcomes.

| | *Limited* | | | *Moderate* | | | *Emotion Coaching* | | | *Emotion Dismissing* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Effect** | **Estimate** | **SE** | ***P*** | **Estimate** | **SE** | ***P*** | **Estimate** | **SE** | ***P*** | **Estimate** | **SE** | ***P*** |
| INT8 → INT 12 | .222 | .036 | .000 | .670 | .096 | .000 | −.016 | .044 | .711 | .977 | .184 | .000 |
| EXT_8 → EXT_12 | .151 | .096 | .117 | .724 | .094 | .000 | .444 | .045 | .000 | .916 | .229 | .000 |
| Mean INT 8 | .603 | .207 | .003 | 1.81 | .235 | .000 | .623 | .163 | .000 | 1.93 | .427 | .000 |
| Mean EXT_8 | 1.31 | .269 | .000 | 2.49 | .286 | .000 | .658 | .219 | .003 | 3.03 | .599 | .000 |
| Intercept INT_12 | .121 | .090 | .180 | 1.34 | .304 | .000 | .236 | .093 | .011 | .806 | .468 | .085 |
| Intercept EXT 12 | .752 | .197 | .000 | 1.07 | .393 | .007 | .040 | .110 | .690 | 1.14 | 1.11 | .305 |
| Resid. Variance INT_12 | .143 | .057 | .012 | 1.95 | .406 | .000 | .175 | .048 | .000 | 2.98 | 1.21 | .014 |
| Resid. Variance EXT 12 | .908 | .303 | .003 | 3.24 | 1.19 | .007 | .143 | .103 | .165 | 8.44 | 3.46 | .015 |
| NEG 8 → NEG 12 | .917 | .076 | .000 | .694 | .129 | .000 | .661 | .070 | .000 | .899 | .161 | .000 |
| ER_8 → ER_12 | .747 | .116 | .000 | .669 | .166 | .000 | .678 | .230 | .003 | .592 | .171 | .001 |
| Mean NEG 8 | 24.45 | .914 | .000 | 27.18 | .845 | .000 | 22.01 | .831 | .000 | 29.48 | 1.07 | .000 |
| Mean ER_8 | 26.04 | .503 | .000 | 26.15 | .439 | .000 | 29.04 | .437 | .000 | 22.51 | .700 | .000 |
| Intercept NEG_12 | 1.96 | 1.57 | .211 | 7.43 | 3.28 | .000 | 6.80 | 1.64 | .000 | 4.41 | 4.90 | .369 |
| Intercept ER 12 | 6.92 | 3.13 | .027 | 8.72 | 4.48 | .000 | 9.70 | 6.92 | .161 | 9.57 | 4.17 | .022 |
| Resid. Variance NEG_12 | 4.83 | 1.49 | .001 | 16.52 | 2.98 | .000 | 9.62 | 1.80 | .000 | 22.99 | 7.09 | .001 |
| Resid. Variance ER 12 | 5.06 | 1.40 | .000 | 6.31 | 1.14 | .000 | 3.65 | .810 | .000 | 12.19 | 3.90 | .002 |

*Note*. INT = internalizing, EXT = externalizing, NEG = emotional negativity, ER = emotion regulation → regression, Resid. = Residual.

**Table 6.**

Interaction between child age and emotion socialization profile

| | | | | | 95% CI | |
|---|---|---|---|---|---|---|
| **DV: 12-Month Emotion Negativity** | **Estimate** | **SE** | ***P*** | **Stand.Estimate** | **Lower** | **Upper** |
| Intercept [a] | 1.922 | 2.742 | 0.484 | | | |
| Profile: | | | | | | |
| Limited – Emotion Dismissing | 4.353 | 2.696 | 0.108 | −0.268 | −0.551 | 0.015 |
| Moderate – Emotion Dismissing | 4.911 | 2.729 | 0.074 | −0.335 | −0.607 | −0.064 |
| Emotion Coaching – Emotion Dismissing | 3.489 | 2.656 | | −0.470 | −0.759 | −0.180 |
| 8-Month Emotional Negativity | 0.773 | 0.047 | < .001 | 0.733 | 0.644 | 0.821 |
| Child Age | 0.777 | | 0.006 | 0.339 | 0.096 | 0.582 |
| Child Age * Profile: | | | | | | |
| Child Age * (Limited – Emotion Dismissing) | −0.869 | 0.331 | 0.009 | −0.379 | −0.663 | −0.095 |
| Child Age * (Moderate – Emotion Dismissing) | −1.011 | 0.333 | 0.003 | −0.441 | −0.727 | −0.155 |
| Child Age * (Emotion Coaching – Emotion Dismissing) | −0.934 | 0.327 | 0.005 | −0.408 | −0.689 | −0.126 |

Note.

[a] = Emotion Dismissing reference