



# Overparenting and Emerging Adults' Mental Health: The Mediating Role of Emotional Distress Tolerance

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## Abstract

**Objectives** Overparenting is a type of parental control that involves high levels of age-inappropriate intrusiveness, which may hinder the development autonomous behavior in emerging adulthood. Overparenting has been linked to poor mental health in emerging adult college students. However, little is known about the mechanisms involved in this relationship. Emotional distress tolerance (i.e., ability to withstand negative emotional states) has been inversely associated with a number of mental health concerns and has not yet been examined in relation to overparenting. We proposed that emotional distress tolerance may be one mechanism by which overparenting is associated with poor mental health among emerging adults. We examined the direct role of overparenting in relation to mental health symptoms and predicted that emotional distress tolerance would mediate this relationship.

**Methods** College student volunteers ( $N = 360$ ) completed measures of perceived overparenting, emotional distress, and emotional distress tolerance.

**Results** When controlling for race and living situation, emotional distress tolerance mediated the relationship between overparenting and emotional distress among college students.

**Conclusions** Findings from this study help to explain the possible impact of overparenting behaviors on mental health and provide an intervention point for students struggling with exercising autonomous behaviors during the transition to college.

**Keywords** Distress Tolerance · Overparenting · Emotional Distress · Helicopter Parenting · College students

Overparenting (OP), popularized as helicopter parenting, has been characterized by parents' intrusive control and restriction of age-appropriate autonomous behaviors (Segrin et al. 2012). Research focusing on OP and its correlates has steadily increased over the previous decade (LeMoyné and Buchanan 2011; Nelson 2010; Scharf et al. 2017; Schiffrin et al. 2014; Segrin et al. 2012) and relationships between OP, anxiety, and depression have been documented during emerging adulthood (Schiffrin et al. 2014), which has been described as a time of identity exploration and autonomy development (Arnett 2014) among individuals between the

ages of 18 and 29. The mechanisms involved in the relationship between OP and mental health concerns are receiving increasing attention. Emotional distress tolerance (EDT) has been characterized as an individual's capacity to tolerate negative psychological and emotional states (Hawkins et al. 2013). Deficits in EDT have been associated with a greater incidence of mental health problems including depression (Meaney-Tavares and Hasking 2013), anxiety (MacDonald et al. 2015), and substance abuse (Buckner et al. 2007) among emerging adults.

Researchers (Darlow et al. 2017; Kouros et al. 2017; Reed et al. 2016; Rousseau and Scharf 2015; Scharf et al. 2017; Schiffrin et al. 2014) have recently conceptualized the relationships between OP and college students' well-being using the framework of self-determination theory (SDT; Deci and Ryan 2000). SDT suggests that both the person and the environment affect behavioral and emotional outcomes (Deci and Ryan 2000). Researchers have highlighted that SDT has three basic needs including autonomy, competence, and relatedness are likely to be either supported or limited by environmental factors (Ryan and Deci 2002).

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Autonomy, competence, and relatedness are future-connected to well-being, such that these constructs form the foundation for the experience of well-being and an inability to meet these basic needs may result in emotional distress (Reis et al. 2000). Using the SDT model, it is suggested that overparenting may result in fewer opportunities to develop autonomy and competence (characterized in this study as EDT) and therefore, may impact the experience of emotional distress (i.e., diminished well-being; Rousseau and Scharf 2015).

Until recently, OP was considered a style of parental behavior that shared traits with both psychological control (i.e., parental attempts to coerce children into thinking, feeling, withdrawal of affection, guilt, intrusiveness, and invalidation; Bebes et al. 2015) and behavioral control (i.e., parental regulation of children's behavior) to regulate children's behavior (Li et al. 2013; Padilla-Walker and Nelson 2012). More recent research has suggested that OP is better conceptualized as a unique style of parenting, distinct from psychological and behavioral control, by nature of the level of parental involvement (Locke et al. 2012; Padilla-Walker and Nelson 2012; Segrin et al. 2015). Specifically, OP has been distinguished from behavioral and psychological control by excessive levels of warmth and responsiveness, as well as a well-intentioned approach to utilizing OP behavior(s) (Padilla-Walker and Nelson 2012). While parental involvement has been seen as optimal for well-being and development in childhood, it may be less beneficial at greater levels during the transition from adolescence into emerging adulthood (Locke et al. 2016).

In studies of emerging adults, OP has been associated with a variety of mental health concerns (LeMoyne and Buchanan 2011; Odenweller et al. 2014; Padilla-Walker and Nelson 2012; Schiffrin et al. 2014; Segrin et al. 2015), including ineffective coping skills (i.e., internalizing, distancing), narcissism (Winner and Nicholson 2018), and anxiety, stress, and depression (LeMoyne and Buchanan 2011; Segrin et al. 2013; Schiffrin et al. 2014). Particularly, the overprotectiveness aspect of OP associated with parents' fear of child failure has appeared relevant to increased distress in emerging adults (Sideridis and Kafetsios 2008). OP has also been linked to a higher risk of negative mental and physical health concerns, such as substance abuse (Needham and Austin 2010; Odenweller et al. 2014) and being prescribed antidepressant medication more often (Odenweller et al. 2014) when compared to those who did not report experiences of OP. Further, OP, but not parental involvement, has been linked with poor self-efficacy (Bradley-Geist & Olson-Buchanan 2014), which may play a role in understanding the links between OP and mental health concerns.

Preliminary evidence has suggested that OP may predict emotional distress among emerging adults; however, the

etiology of mental health problems involves factors beyond parenting. Researchers have encouraged the examination of mechanisms underlying OP and its relation to mental health in emerging adulthood (Kouros et al. 2017). EDT, defined as the ability to maintain goal-directed behavior while enduring physical or psychological distress (Daughters et al. 2014), has been considered one important mechanism influencing mental health symptoms (Gaher et al. 2013; Lejuez et al. 2013). Researchers have distinguished between coping, characterized by actions aimed to decrease emotional distress (Parrott 1999), and EDT, described as a tendency to pursue goals despite affective discomfort (Brown et al. 2005). Mental health professionals have considered EDT to comprise the capability to tolerate negative internal states such as negative emotions, ambiguity, uncertainty, frustration, and physical discomfort (Leyro et al. 2010). The prevailing theory is that those with a lesser tolerance for distress (i.e., lower EDT) will be more likely to report symptoms of depression and anxiety when faced with stress (Ellis et al. 2010, 2013; Huang et al. 2009; Kaiser et al. 2012; Keough et al. 2010; Lejuez et al. 2013). By contrast, those able to navigate distressing situations adaptively will be less likely to report experiencing depression and anxiety (Simons and Gaher 2005). The indirect effects of EDT have also been examined in relation to mental health concerns and substance abuse. EDT has been found to mediate the relationships between impulsivity and alcohol use coping motives (i.e., drinking to cope with emotions; Marshall-Berenz et al. 2011), posttraumatic stress and marijuana use coping motives (Potter et al. 2011), as well as anxiety sensitivity and bulimia (Anestis et al. 2007).

The development of EDT in emerging adults has been thought to be partially influenced by both individual characteristics (e.g., personality) and contextual factors (e.g., parenting) (Ehrlich et al. 2013). While not directly connected to OP, mothers' intrusive parenting behaviors were risk factors for the early onset of clinical anxiety in middle-childhood (Hudson and Dodd 2012). It has been suggested that child and adolescent EDT are regulated through the observation of emotion-relevant parenting practices and the family emotional climate (Morris et al. 2007). Further, high levels of parental control have been found to predict emotion dysregulation in adolescents and emerging adults (Manzeske and Stright 2009; McDowell et al. 2002; Moilanen 2007; Strayer and Roberts 2004). Excessive parental control may inhibit age-appropriate autonomy development in emerging adulthood, which may be related to emotion dysregulation. Thus, it has been suggested that parents' efforts to control their offspring's emotions may be associated with poor EDT (Manzeske and Stright 2009).

The current study examined EDT as one possible mechanism influencing the relationship between OP and emotional distress in a sample of emerging adults. We

hypothesized that OP would be negatively associated with EDT and positively associated with emotional distress. Furthermore, we proposed that EDT would mediate the relationship between OP and emotional distress.

## Method

### Participants

Four hundred sixty-seven undergraduate psychology students at a mid-sized university in the southeastern United States completed this cross-sectional study in exchange for class credit. Following suggestions for quality assurance (Sechrest 1987), careless responding was assessed through inclusion of two directed response items within the questionnaires (e.g., Answer “not at all” to this question). Twenty-nine participants who answered either of these items incorrectly were removed from analyses. Similarly, the amount of time spent on each questionnaire was assessed (Huang et al. 2012) and 30 participants who failed to take sufficient time to complete the survey were also removed from the study. Lastly, 45 participants who did not fall within the required 18–25 age range and three who completed less than 75% of the study measures were removed from the study.

The final sample included 360 (16.4% male and 83.6% female) participants, ranging in age from 18 to 25 years ( $M = 19.93$ ;  $SD = 1.64$ ). Two hundred twenty-six identified themselves as White/non-Hispanic (62.8%), 114 (31.7%) as Black/African-American, eight (2.2%) as Asian-American, one (0.3%) as Native American, and 11 (3.1%) as “Other.” Furthermore, 145 (40.3%) of participants identified as freshman, 81 (22.5%) sophomores, 71 (19.7%) juniors, 62 (17.2%) seniors, and one (0.3%) “Other” in college. Additionally, 159 (44.2%) participants reported living on campus with roommates, 101 (28.1%) off-campus without parent or primary caregiver, (with roommate), 39 (10.8%) on-campus (without roommate), 33 (9.2%) off-campus with parent or primary caregiver, 27 (7.5%) off-campus without parent or primary caregiver (without roommate), and one (0.3%) “Other.” Lastly, 249 (69.2%) respondents identified their mother as primary caregiver, 74 (20.6%) identified a father, four (1.1%) identified grandfather or other male family member, 14 (3.9%) identified grandmother or other female family member, one (0.3%) identified stepmother, one (0.3%) identified stepfather, and 17 (4.7%) identified “Other.”

### Procedure

Following approval by the Institutional Review Board, informed consent was obtained from all individual

participants included in the study. Participants were recruited through a research scheduling program and completed measures online through a secure online survey system.

## Measures

### Demographic Questionnaire

A demographic questionnaire was utilized to collect information regarding participants’ age, gender, college status, race, ethnicity, estimated family income, and primary caregiver identified as the person considered to provide the most support in life. Participants were also asked to rank their current levels of satisfaction with the parent-child relationship on a scale from 1 to 10 (1 = Completely unsatisfied and 10 = Completely satisfied).

### Helicopter Parenting Instrument

OP was examined using the 14-item Helicopter Parenting Instrument (HPI; Odenweller et al. 2014), which measures emerging adults’ perceptions of their parents’ frequency of current OP behaviors. Items were assessed using a 7-point Likert scale (1 = Very strongly disagree and 7 = Very strongly agree), with higher scores indicating greater degree of perceived parental involvement. Items include phrases such as, “My parent tries to make all of my major decisions,” and “My parent overreacts when I encounter a negative experience.” Scores are found by summing items and deriving the mean. The HPI displayed an overall alpha of 0.76 in a college student sample (Odenweller et al. 2014). Other research has produced the HPI total score reliability coefficients of 0.83 (Kelly et al. 2017).

### Distress Tolerance Scale

EDT was assessed using the Distress Tolerance Scale (DTS; Simons and Gaher 2005). The 15-item DTS was designed to measure perceived tolerance of negative emotion, participants’ appraisal of distress, attention gained from negative emotions, and regulatory efforts towards alleviating distress. Items were rated using a 5-point Likert scale (1 = Strongly Agree and 5 = Strongly Disagree), with higher scores indicating higher levels of distress tolerance. Items include, “I can’t handle feeling distressed or upset” and “I’ll do anything to avoid feeling distressed or upset.” The DTS consists of four subscales (i.e., Tolerance, Absorption, Appraisal, Regulation). Total scores were derived by summing and averaging subscale scores and used as the mediating variable. The DTS has displayed good test-retest reliability between reports of men and women over a 6-month period ( $r = 0.61$ ) (Simons and Gaher 2005). The

DTS subscales for tolerance, appraisal, absorption, and regulation, derived alpha coefficients of 0.85, 0.82, 0.85, and 0.72, respectively, while an average score alpha of 0.89 was derived within the same sample (Simons and Gaher 2005). Supportive evidence has also been found for internal consistency of the DTS, with a total score alpha of 0.91 (Leyro et al. 2011). Only the total score was used in the current study.

### Depression, Anxiety, Stress Scales-21

The Depression Anxiety Stress Scales-21 (DASS-21; Lovibond and Lovibond 1995) was administered to assess participants' levels of emotional distress. Participants reported the severity of symptoms experienced of the course of the previous week. DASS-21 items were rated on a 4-point Likert scale (0 = Did not apply to me at all and 3 = Applied to me very much, or most of the time). Subscale scores (i.e., depression, anxiety, stress) are found by calculating the total score of seven individual items, with subscale scores ranging from 0 to 21. Higher scores are indicative of greater endorsement of that specific symptom set. Items include "I found myself getting agitated," "I felt that life was meaningless," and "I was aware of the action of my heart in the absence of physical exertion." Norms have previously been derived by administering the DASS-21 to a college student sample and found sufficient internal consistency, as subscale alpha coefficients ranged from 0.81 to 0.88 (Osman et al. 2012). Supportive concurrent validity evidence was found, given high correlations with scores on the Beck Depression Inventory-II (BDI-II; Beck et al. 1996), the Beck Anxiety Inventory (BAI; Beck and Steer 1990), and the Perceived Stress Scale (PSS; Cohen et al. 1983). Consistent with previous research (Winner 2016), a total score was used for our analyses.

### Data Analyses

PROCESS macro (Hayes 2013) software for SPSS was used to conduct the study's mediation analyses, with covariates

being included in the first-step of regression. The mediation analysis utilized 10,000 bootstrapped samples to estimate 95% bias-corrected confidence intervals (CI) so that the significance of direct, indirect, and total effects within the mediation models could be assessed. Missing data were handled using linear trend-at-point imputation (5.4% missing for OP, 1.9% missing for DASS-21, and 1.9% missing for EDT). The strength of relationships among study variables was tested using bivariate correlation analyses to derive Pearson coefficients. One-way ANOVAS were conducted to test for mean differences within the variables of participants' reported race, gender, and current living situation as covariates across the measures used within this study. The independent variable of OP, as well as the mediating variable of EDT, were centered for standardization.

### Results

Alpha coefficients, means, standard deviations, and bivariate correlations for the full sample were reported in Table 1. As predicted, OP was significantly associated with EDT and emotional distress (see Table 1). Race, gender, and current living situation were examined as possible covariates. Using a one-way ANOVA, gender did not display significant differences across measures of OP ( $F(1, 358) = 1.290, p = 0.257$ ), DTS ( $F(1, 358) = 2.021, p = 0.156$ ) or emotional distress ( $F(1, 358) = 1.727, p = 0.190$ ), ( $p > 0.05$ ). Race, when recoded (i.e., White = 1 and non-White = 0), displayed significant differences in reports of emotional distress,  $F(1, 358) = 7.91, p < 0.01$ , between White ( $M = 15.24; SD = 12.72$ ), versus non-White ( $M = 11.57; SD = 10.60$ ). Additionally, participants' current living situation reflected significant differences across reports of OP ( $F(1, 358) = 2.363, p < 0.05$ ) between individuals who reported living on campus with roommates ( $M = 3.64; SD = 0.84$ ), versus other reported living situations ( $M = 3.54; SD = 0.98$ ). Thus, the effects of participants' race and current living situation were accounted for within the subsequent analyses.

**Table 1** Means, Standard Deviations, Reliability Coefficients, and Correlations for Study Measures

Measure	<i>M</i>	<i>SD</i>	$\alpha$	1	2	3	4	5	6
1. OP	3.60	0.91	0.80	–	–0.24**	0.13**	–0.10	–0.10	0.02
2. EDT	3.30	0.89	0.93	–	–	–0.57**	0.20**	–0.003	–0.01
3. Emotional Distress	13.90	12.17	0.95	–	–	–	–0.33**	0.15**	–0.02
4. Satisfaction	8.63	2.00	–	–	–	–	–	–0.09	0.02
5. Race	–	–	–	–	–	–	–	–	0.02
6. Living Situation	–	–	–	–	–	–	–	–	–

OP = Helicopter Parenting Instrument; EDT = Distress Tolerance Scale; DASS-21 = Depression, Anxiety, Stress Scales—21 Item Version; Satisfaction = Parent-Child Relationship Satisfaction; Race = Participants' identified ethnic composition; Living Situation = Participants' current living situation

\*\* $p < 0.01$

Using PROCESS for SPSS, a series of regression analyses were used to test the hypothesis that EDT would mediate the relationship between OP and emotional distress when accounting for the effects of race and current living situation. As expected, OP ( $\beta = 0.15$ , 95% CI [0.22, 0.25]) and EDT ( $\beta = -0.56$ , 95% CI [-0.64, -0.49]) predicted emotional distress. Additionally, OP predicted the mediating variable of EDT ( $\beta = -0.24$ , 95% CI [-0.35, -0.11]). The addition of EDT as a mediator resulted in a significant indirect effect ( $\beta = 0.13$ , 95% CI [0.06, 0.20]) indicating that EDT partially mediated the relationship between OP and emotional distress when accounting for race and current living situation. The R-squared effect size was 0.35.

## Discussion

We examined the relationship between OP and EDT, as well as the mediating role of EDT between OP and emotional distress among emerging adults. In support of our hypotheses, we found that OP was negatively associated with EDT and positively associated with emotional distress. Additionally, our hypothesis that EDT would mediate the relationship between OP and emotional distress was supported, when accounting for the effects of participants' race and current living situation. These findings are generally consistent with research involving the associations between OP and poor mental health outcomes in emerging adults (LeMoyne and Buchanan 2011; Padilla-Walker and Nelson 2012; Schiffrin et al. 2014; Segrin et al. 2015).

When accounting for race and living situation, OP was positively associated with emotional distress, which provides further support for the negative implications associated with these parenting behaviors found in previous studies (e.g., Padilla-Walker and Nelson 2012) and suggests that OP seems to be associated with poor outcomes, rather than protecting against distress, as intended. We also found a negative relationship between OP and EDT, suggesting that high levels of intrusive parenting behaviors are associated with reductions in emerging adults' ability to tolerate emotional distress. This is the first evidence of this relationship and it is important to highlight here, given the widespread effects of low EDT on college student mental health acknowledged in the literature (Peterson et al. 2014).

We posited that EDT may be one mechanism by which OP predicts emotional distress. When accounting for participants' race and current living situation, EDT mediated the relationship between OP and emotional distress. Consistent with SDT, which suggested that environmental factors limiting autonomy development and competence may affect well-being (Deci and Ryan 2000), results show that OP may be one predictor of deficits in EDT and emotional

distress. OP may inhibit the development of behavioral and emotional effectiveness in emerging adults (LeMoyne and Buchanan 2011; Padilla-Walker and Nelson 2012; Schiffrin et al. 2014; Segrin et al. 2012, 2013, 2015) and therefore, may limit the basic needs of competence and autonomy, resulting in increased emotional distress.

While prevention of OP may be one application of these findings, practitioners may find that EDT is most amenable to treatment for college students. EDT is the focus of interventions such as Dialectical Behavior Therapy (DBT; Linehan 1993), which has been effectively utilized with college students (Meaney-Tavares and Hasking 2013; Pistorello et al. 2012; Rizvi and Steffel 2014; Uliaszek et al. 2016). Particularly, DBT skills training has been shown to increase emotion regulation (Rizvi and Steffel 2014), adaptive coping skills, personal problem solving (Meaney-Tavares and Hasking 2013), and social adjustment (Pistorello et al. 2012) within demographics comparable to this sample. Given the present findings, clinicians working with college students may consider implementing DBT-related skills training to increase behaviorally and emotionally autonomous skills in college students who may have had less opportunity to develop such adaptive techniques in the presence of OP.

Broadly, researchers have prompted clinicians working with emerging adult college students to develop an understanding of the family context for the clarification of issues in the parent-child dyad that may impede upon mental health (Hunt and Eisenberg 2010). Studies have suggested the construction and validation of programming for parents to help identify overly-involved behavior and develop developmentally-appropriate parenting skills with emerging adult children (Reed et al. 2016). Researchers have also encouraged college institutions to implement programming to help college students develop adaptive communication skills and address autonomy with respective parents (van Ingen et al. 2015). While there is currently an absence of empirically-supported treatments targeting OP behaviors, research in this area would benefit from randomized clinical trials aimed to create such interventions.

## Limitations and Future Research Directions

Limitations of the present study include the retrospective nature of the self-report measure of parenting, as well as shared method variance. Another limitation of this study was the uneven distribution of gender (i.e., majority female), race (i.e., majority White/non-Hispanic), and identified primary caregiver (i.e., majority mother) within the sample. Given the racial differences found in the current study and the lack of information related to race, culture and



OP, future studies will need to account for these differences with more careful examination of the specific factors which may be unique to various cultural and racial groups. Similarly, because the sample was predominately female, we are unable to confidently generalize these findings to male college students, however would wonder whether the parent–child dyad may be differentially affected with mother–son and father–daughter dyads are considered in emerging adulthood (Barton and Kirtley 2012). Furthermore, the causal ordering of variables inherent in a mediational model cannot be definitely established through cross sectional data.

Future researchers may examine models which better consider the dynamic ways in which parenting plays a role in the development and maintenance of both EDT and mental health concerns by examining the ways in which OP may be a reaction to young adult distress (Ungar 2009). It is important here to consider the possible bi-directionality of the relationship between environmental factors (in this case, OP) and distress in young adults. It could be that distress in young adults elicits over-involvement in parents. The directionality of these relationships should be considered in future studies. Longitudinal designs may be able to tease apart the directionality of these relationships and may help shed light on the question of whether OP is a reaction to, or a cause of emotional distress in young adults. Further, while the relationship between emotional distress and EDT was significant (and the single strongest relationship in the model), one could argue that EDT and emotional distress are dependent on one another; therefore, other mediators may prove informative, such as coping. For example, OP behaviors have been correlated with dysfunctional emotion-focused coping strategies (Uehara et al. 1999), so future investigations may tease apart the similarities and differences in these mediators. Also, interestingly, we found that students of color were less likely to report distress and therefore, race was included as a covariate in our analyses. Race, however, did not appear to impact reports of OP.

All procedures performed in studies involving human participants were in accordance with the ethical standards of the University of Southern Mississippi institutional and/or research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

**Author Contributions** CP: designed and executed the study, conducted data analyses, and wrote the paper. BN: assisted with statistical interpretations, document editing, and assisted with preparation and revision of the manuscript. ED: collaborated with each author to provide literature review and feedback on cultural considerations. ML: contributed to the manuscript editing process and statistical interpretations. BN, ED, and ML: served as members on the primary author's original graduate research project and provided ongoing feedback regarding the study's development from the initial to final phase.

## Compliance with ethical standards

**Conflict of Interest** The authors declare that they have no conflicts of interest.

**Informed Consent** Informed consent was obtained from all subjects included in the study.

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