8-2016

Perceived Emotional Invalidation in a Developmental Context: Does Gender Matter?

Brian B. Johnson

Perceived Emotional Invalidation in a Developmental Context: Does Gender Matter?

A Thesis

Presented to

The Faculty of the Department of Psychology

University of South Carolina Aiken

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science

By

Brian B. Johnson

August 2016

Abstract

Emotional invalidation is the dismissal, minimization, or punishment of an individual's emotional experience (Linehan, 1993). Although it has been sparsely studied, the research that has been conducted indicates that it is likely implicated in a multitude of psychopathology and adjustment issues. The current study had three main objectives. The first of these was to investigate the current perceptions of emotional invalidation in a peer interaction for emerging adults and how that is predicted by gender, perceptions of childhood emotional invalidation via caregivers, and gender of the caregivers. The second objective of this study was to investigate the propagation of emotionally invalidating behaviors into emerging adulthood and the roles that gender and perceived emotional invalidation via caregivers in childhood play within it. A final aim of the current study was to examine perceived emotional invalidation and emotionally invalidating behaviors and their ability to predict negative affect. Surprisingly, perceptions of childhood emotional invalidation and the gender of the adult providing the emotional invalidation during childhood did not predict current perceptions of emotional invalidation or the current use of emotionally invalidating behaviors. Limitations and implications of these findings are discussed below.

Introduction

The study of the epistemology of psychopathology has long been the focus of much psychological research. Original research argued whether psychopathology was a result of biology and genetic disposition or a consequence of experience and the environment. Current research indicates that the most appropriate model for the development of psychopathology is an interaction model in which the environment acts on genetic predispositions to produce personality and psychopathology (Linehan 1993; Slavich & Cole, 2013). Of these environmental factors that may influence psychopathology, the immediate environment that an individual is exposed to throughout childhood has been found to predict multiple forms of psychopathology and dysfunction. This paper seeks to investigate the concept of invalidating environments in childhood and how these environments may effect perceptions of the individual's peer environment during emerging adulthood.

Emotional Invalidation

An important part of an individual's childhood environment is the emotional climate, which includes the levels of emotional invalidation. Emotional invalidation is defined as the minimization, punishment, or ignoring of an individual's emotional experience (Linehan, 1993). Linehan (1993) describes that there are two core attributions that may result from emotional invalidation. The first is that it may lead to the individual interpreting his or her experience as incorrect. It may also lead to the individual attributing these experiences to a stable characteristic of himself or herself that is socially unacceptable. Chronically emotionally invalidating environments, in which a child's caregiver intentionally or unintentionally consistently ignores or undermines the child's emotional experiences, are related to the

development of several forms of psychopathology (Krause, Mendelson, & Lynch, 2003; Linehan 1993).

Linehan (1993) identifies three types of invalidating environments. The first of these is the chaotic family. It is characterized by sporadic responses to experiences and emotions and may include inconsistent contact with caregivers. Chaotic families may consist of drug addiction and abuse resulting in neglect, which is invalidating to the child. The second type of invalidating environment is labeled the perfect family. The perfect family consists of an environment in which negative affect cannot be tolerated. This stifling of negative emotion teaches the child that such emotions are invalid and should not be expressed. The final type of invalidating environment is the typical family. The typical family emphasizes the importance of controlling one's emotions. In doing so, the typical family may ignore any difficulties that a child may have in regulating emotion and thus invalidate their experience of those emotions or their lack of ability to regulate them (Linehan, 1993).

Exposure to the aforementioned emotionally invalidating environments in childhood has been implicated in the inability to regulate emotion (Buckholdt, Parra, & Jobe-Shields, 2014; Luebbe, Bump, Fussner, and Rulon, 2014). Linehan (1993) outlined four ways in which these childhood environments potentially lead to emotional dysregulation. The first way in which emotional dysregulation develops is through the absence of learning about how to label one's own emotion that occurs within these environments. Their emotions are never validated or acknowledged and therefore never labeled. The second way that Linehan (1993) explains the relationship between emotional invalidation and emotional dysregulation is that the child never learns to tolerate distress. The emotions that the child feels are never accepted or acknowledged and therefore the teaching of how to accept those feelings never occurs. Third, these emotionally

invalidating environments may sporadically reinforce extreme expressions of emotion while ignoring milder, more appropriate forms of emotional expression. This may teach the child that extreme expressions of emotion are required to elicit a response, thus increasing the likelihood that an extreme response is used. The final method through which these environments may lead to emotional dysregulation is through the environments' proclivity to teach that the child cannot trust their own emotional and cognitive responses (Linehan, 1993).

The origin of emotional invalidation research can be traced to the development of the Biosocial Theory of Borderline Personality Disorder (BPD) (Linehan, 1993). BPD has been defined as a pervasive pattern of overall instability encompassing interpersonal relationships, marked impulsivity, self-image, and affect (American Psychiatric Association, 2013). The occurrence of BPD comes at a high cost as up to 10% of those with BPD complete suicide and suicide attempts and self-mutilation are common (American Psychiatric Association, 2013). The American Psychiatric Association (2013) cites that the overall prevalence of BPD may be as high as 5.9% with 75% of these being women, however, numerous studies have failed to find such marked gender differences in the community (Lenzenweger, Lane, Loranger, & Kessler, 2007; Oltmanns, Rodrigues, Weinstein, & Gleason, 2014; Torgerson, Kringlen, & Cramer, 2001).

Linehan (1993) proposed that, in conjunction with invalidating environments, emotional vulnerability, a biological vulnerability to high emotional reactivity, could potentially lead to the development of BPD. Linehan (1993) proposed that individuals that are raised in invalidating environments fail to learn how to appropriately recognize and label their own emotions as well as the emotions of others. Further, individuals exposed to invalidating environments also never acquire the skills to regulate their emotions, as they have not learned to identify them, only to deny them. In order for individuals who are consistently invalidated to attain the desired

reactions from emotions, they may develop emotional responses that are more extreme. Linehan (1993) also proposed that individuals who experienced these chronically invalidating environments internalized these invalidations and learned that their emotions could not be trusted and their inappropriate emotional response was due to something inherently wrong within themselves leading to self-invalidation. This self-invalidation leads to the aforementioned alternations between extremes of idealization and devaluation (Linehan, 1993).

Emotional invalidation and its contribution to the development of BPD and BPD-like symptoms has not been heavily investigated. Most existing evidence, however, does indicate that emotional invalidation has a significant effect on the development of the personality disorder (Robertson, Kimbrel, & Nelson-Gray, 2013; Sturrock, Francis, & Carr, 2009). Gill and Warburton (2014) found that emotional invalidation independently predicted symptoms of BPD, but it did not interact with emotional vulnerability, which may underline a particular importance for further research on emotional invalidation. Contrary to other studies, Reeves, James, Pizzarello, and Taylor (2010), found that emotional invalidation did not significantly predict BPD symptomology. It is important to note that this study, however, did not examine the perceived emotional invalidation, but rather specific parenting behaviors, which may account for differential findings as perceptions of the same behavior may differ among different individuals.

Physical and sexual abuse have also been found to precede a significant number of BPD diagnoses with as many as 75% of individuals diagnosed with BPD reporting having experienced childhood sexual trauma (Linehan, 1993). Further research on the subject indicates that the environment surrounding the abuse, sexual or otherwise, may be the more telling factor in the development of BPD (Bandelow et al., 2005). Research has indicated that in the environments in which childhood sexual abuse and physical abuse occur, they are commonly accompanied by

lower family stability, lower warmth, lower parental relationship quality, as well as other quality of life factors (Bradley, Jenei, & Westen, 2005). Responses to the disclosure of abuse may include disbelief, telling the child to remain silent, and emotionally invalidating responses from the abuser, the caregivers, or authorities in which the victim confides. All of these responses to reported sexual abuse effectively invalidate the child's experience and emotions. It is plausible that this invalidation of the child's emotional experience may explain the high overlap between childhood sexual trauma and BPD development (Feiring, Taska, & Lewis, 2002; Paine & Hansen, 2002).

While a large portion of the existing emotional invalidation research focuses on its relation to BPD, a large amount is also dedicated to its relation with eating disorders (Haslam, Arcelus, Farrow, & Meyer, 2012; Haslam, Mountford, Meyer, & Waller, 2008; Mountford, Corstorphine, Tomlinson, & Waller, 2007). Of particular interest is the findings of Haslam, et al. (2008) in which they found differences in the types of eating disorders related to emotional invalidation dependent upon which parent was invalidating. Paternal emotional invalidation was related to the development of bingeing symptoms while maternal invalidation was related to restrictive type symptoms. Mountford, et al. (2007) posit that the emotional invalidation experienced lead to emotional dysregulation and emotional avoidance expressing itself through eating behavior. This may further be supported by research by Hughes-Scalise and Connell (2014), which found a significant relationship between fear of angry faces, parental responses to sadness, and eating disorders.

A common diagnosis found to be comorbid with BPD is depression (American Psychiatric Association, 2013), therefore, it should come as little surprise that research has also found the effects of emotional invalidation to be related to the development of depression,

independent of BPD (Katz, et al., 2014; Sanders, 2015). Specifically research has found that emotional invalidation was related to the symptoms of depression (Katz et al., 2014; Short et al., 2015; Yap, Allen, & Landouceur, 2008). Relatedly, research has also found that the relationship between childhood trauma and later depression is moderated by the existence of emotional invalidation from parents through the development of alexithymia, or the inability to recognize emotions (Thomas, DiLillo, Walsh, & Polusny, 2011).

Anxiety disorders have also found to be related to incidents of emotional invalidation and associated difficulties (Hudson, Comer, & Kendall, 2008; Luebbe, et al., 2014). Luebbe et al. (2014) found that emotional invalidation was related to the development of emotion dysregulation of negative emotions and anxiety disorders. This appears to be the only research examining the direct link between emotional invalidation and anxiety, however, there is a plethora of research implicating traits consistent with Linehan's (1993) "perfect family" and "typical family" in the development of anxiety disorders (Hudson et al., 2008; Spokas & Heimburg, 2009; Wijsbroek, Hale III, Raaijmakers, & Meeus, 2011). Similarly, Kashdan and Farmer (2014) found that individuals with Social Anxiety Disorder showed deficits in identifying negative emotions when compared to non-clinical individuals. Similarly, individuals with Social Anxiety Disorder were found to differ in their beliefs regarding their emotions versus emotions in general (De Castella et al., 2014). This is consistent with research regarding individuals who have experienced one of the aforementioned invalidating environments. Lastly, individuals diagnosed with social anxiety disorder were also found to have deficits in emotion regulation (Aldao, Jazaieri, Goldin, & Gross, 2014), which is also considered a result of being exposed to invalidating environments according to Linehan (1993).

Emotional invalidation has also been implicated in a multitude of problems throughout childhood (Buckholdt, et al., 2014; Hastings & De, 2008; Hersh & Hussong, 2009). Research indicates that, similar to the aforementioned disorders, the problems seen in childhood are related to the development of emotional dysregulation (Luebbe, Bump, Fussner, & Rulon, 2014). This emotional dysregulation may manifest itself in areas such as increased aggression (Ramsden & Hubbard, 2002), disruptive behavior (Duncombe, 2012), and overall psychological adjustment (Tao, Zhou, & Wang, 2010). All of the aforementioned problems related to emotional dysregulation underline the importance of further investigating emotional invalidation as a determinant for such outcomes as well as for treatment purposes.

Parenting

Caregivers are the primary external contributors to the establishment of an individual's childhood environment. Theories regarding the impact of parenting can be traced back to Psychoanalytic theory, though it only mentions them in context to their conflict with biology (Freud, 1933). Parenting became a large part of psychological examination following Baumrind's (1971) development of parenting style and its potential impact on children. However, much of this research examined only maternal parenting styles and influences (McKinney & Renk, 2008). This specific examination of only the mother was supported by theories such as Psychoanalytical theory, which only referred to the father figure by his absence. Similarly, Bem's (1974) sex role theory hypothesized that traits such as emotional expressivity and compassion are associated with femininity, while the traits of instrumentality and assertiveness are associated with masculinity. Therefore, sex role theory explains some of the differences that can readily be found in parenting, as the feminine mothers are more warm and compassionate while the masculine fathers are more goal-directed. Bem (1974), however, also

points out that there are likely many people who do not fall solely into these sexual dichotomies and were more androgynous.

Hosley and Montemayor (1997) proposed an update to sex role theory. Hosley and Montemayor's (1997) role theory posits that parenting roles have been socialized from earlier definitions. For example, the mother role was traditionally defined as caring, warm, and nurturing, so women were socialized to fill this role. Similarly, the father role was traditionally defined as the disciplinarian and provider, so men were socialized to fill this role. These socialized roles for mothers and fathers may account for differences in recent research findings describing the parenting practices of mothers and fathers (Gryczkowski, Jordan, & Mercer, 2010; McKinney & Renk, 2008). It is important to note that research has indicated a trend, consistent with role theory, that fathers are spending more time with their children and taking on more of the caretaking responsibilities than in recent history (Craig, Powell, & Smyth, 2014; Yueng, Sandberg, Davies-Kean, & Hofferth, 2001). Renk et al. (2003) found that although the mother still primarily completed the caregiving activities, the time spent with the children was not significantly different when compared to fathers.

Not only has research found differences in the style of parenting that mothers and fathers adopt, it has also found that the effect of particular parenting styles and behaviors differ based on the parent's gender (McKinney & Renk, 2008; Renk, McKinney, Klein, & Oliveros, 2006). Budd et al. (2012) found that the parenting practices endorsed as acceptable and most important varied significantly based on gender. Similarly, Albritton, Angley, Grandelski, Hansen, and Kershaw (2014) found that parents expressed differences in challenges, values, and needs of parenting based on gender. Outcomes have also been found to differ depending on which parent utilizes which parenting style (McKinney & Renk, 2008; Renk, et al., 2006). McKinney & Renk

(2008) found that outcomes related to parenting style in emerging adults were not consistent across gender dyads. Renk et al. (2006) found that the effects of different discipline styles varied for emerging adult girls based on which parent provided the particular style of discipline. In this study, findings indicated that paternal discipline was directly related to levels of depression symptoms, while maternal discipline was related to depression symptoms, anxiety, and self-esteem in a more complex manner. It is these nuances regarding parenting that accentuates the importance of examining parent gender in context of effects.

Role theory may also explain differences that have been found in the parenting of different genders (McKinney & Renk, 2008). The first significant exposure to society for children is through their caregivers and according to role theory the differences in appropriate behavior are learned from society. Research by Conrade and Ho (2001) as well as McKinney and Renk (2008) found that overall parenting styles differed based on the gender of the child. McKinney and Renk (2008) also investigated these differences based on the parent's gender as well, creating parent-child dyads. They found that these gender dyads were significantly different from each other. This fits role theory, as parents would treat sons and daughters differently due to societal expectations. These differences in societal expectation may have particular implications on the expression of emotions, and highlight the importance of examining both maternal and paternal behaviors in the context of an individual's emotional development.

The majority of the existing research regarding invalidating environments focuses either on overall experienced emotional invalidation or the effects of maternal emotional invalidation. This practice is generally defended with the logic that the mother is the primary caregiver and the source of emotional guidance in the traditional household (Luebbe, et al. 2014). However, the argument for investigating the emotional responses of both parents individually is a strong one as

much prior research on parenting style and discipline has rendered noteworthy and differential parenting behaviors and outcomes based on parent gender (Bögels, Stevens, & Majdandžić, 2011; Gryczkowski, et al., 2010; McKinney & Renk, 2008). The aforementioned research by Renk et al. (2003) also indicates that fathers are spending equal amounts of time with the children as the mothers, therefore the opportunity to validate and invalidate emotions should be near equal.

When considering the aforementioned research on parenting differences between fathers and mothers, it should not be surprising that emotional responding also differs between parents. Nelson, O'Brien, Blankson, Calkins, and Keane (2009) found that parents differ in emotional responding as well as how stressful events spill over into emotional validation and invalidation. This finding is further supported by research by Hastings and De (2008) and Klimes-Dougan et al. (2007), which identified that mothers were more likely to provide warm and supportive responses, whereas fathers were more likely to ignore or, in the case of negative emotions, punish them. Notably, Hastings and De (2008) also found that both maternal and paternal emotional responses were important for adjustment, the responses that resulted in maladjustment differed for parent gender. Maternal neglect and paternal over-involvement, which was used to describe situations in which the child was not granted autonomy, were related to issues with competence, and maternal failure to notice negative emotions was related to more internalizing problems. Similarly, Haslam, et al. (2008) found that being invalidated primarily by the father was more related to binge eating while maternal invalidation was more highly related to restricting eating disorders. Likewise, Short et al. (2015) and Katz et al. (2014) found that boys diagnosed with depression experienced more punitive responses to sadness from paternal sources compared to maternal sources. This finding may not be specific to the emotional experience of

sadness, as Zeman and Shipman (1997) found that children expected more punitive responses to anger from fathers than from mothers or peers. Shewark and Blandon (2015) also found that maternal and paternal emotional invalidation was related to differential adjustment. Maternal and paternal invalidation of positive emotions were associated with increased negativity, however, only paternal emotional invalidation was related to differential emotional regulation in older siblings. These findings indicate that paternal validation and invalidation may be key to the development of emotion regulation as children age. Taken together, these findings illustrate the importance of understanding parenting practices by not only the mother, but the father as well.

Research regarding differences in parental emotional responding based on child gender has found that parents, particularly fathers, respond differently to their sons and daughters (Chaplin, Cole, & Zahn-Waxler, 2005; Katz et al., 2014; Klimes-Dougan et al., 2007; Short et al., 2015). This research consistently indicates that fathers were more punitive toward expressions of anger, particularly in their sons, and ignored more emotions such as sadness and anxiety (Chaplin et al., 2005; Klimes-Dougan e al., 2007). Interestingly, Katz et al. (2014) found that validating and providing encouragement for positive emotion in boys was related to increased depression as compared to adolescent boys without depression and adolescent girls with or without depression. This may be explained by the encouragement of positive affect, which may result in the invalidation of negative affect, possibly perpetuating the depressive symptoms.

Peer Emotional Invalidation

It is important to note that the invalidating environments described by Linehan (1993) include peers as well as parents; however, there is a paucity of research regarding peer emotional

invalidation (Klimes-Dougan et al., 2014). Peer relationships are a prominent factor in development, especially throughout adolescence (Caldwell, Rudolph, Troop-Gordon, Kim, 2004; Klimes-Dougan et al., 2014). During adolescence, parents' influence on social and emotional development shifts to make room for the increased importance in peer relationships (Rubin, Bukowski, & Parker, 2006). Zeman and Shipman (1997) found that children expected their best friends to respond to their emotions with more negative responses than their parents, indicating that they may expect a certain level of emotional invalidation from peers while expecting more validation from parents. They also found that these expectations of invalidation from peers became more prominent as the child progressed through adolescence.

Klimes-Dougan et al. (2014) found that there were marked differences in the expectations of responses to emotions based on the gender of the individual. They found that adolescent boys were more likely to expect punitive responses to their emotions from peers while girls were more likely to expect supportive responses from peers. They proposed that these differences were related to the aforementioned gender roles and that expression of emotion from males is less accepted than that of females, therefore it might be expected to be met with negative consequences. Similarly Foltz, Barber, Weinryb, Morse, and Chittams (1999) found that individuals seek out and perceive peer relationships by referencing their relationships with caregivers. While no studies examine the peer response expectations of individuals with emotion dysregulation difficulties, it is well documented that emotion dysregulation is related to peer rejection (Shields, Ryan, & Cicchetti, 2001). Thus, individuals with higher levels of emotional dysregulation would likely expect invalidating responses more than individuals who do not experience emotion dysregulation. Similarly, Klimes-Dougan (2014) found that emotional

invalidation from peers, was related to behavior problems and suggested that it is likely related to the development of psychopathology in adolescents.

Current Study

The existing research examines childhood emotionally invalidating environments and the impact of these environments on peer interactions and emotional adjustment. In doing so, previous research focuses almost exclusively on interactions between a parent, most commonly the mother, and a child, either through retrospective questionnaire or through observations of an actual interaction. By ignoring the paternal contributions to the child's development, past research has been overlooking a vital source of socialization. There is currently a paucity of research regarding differentially perceived emotional invalidation based on child and parent gender. Lastly, prior research has looked exclusively at perceptions of emotional invalidation or actual occurrences of emotional invalidation. At this time, no research has examined these two items simultaneously to determine any differences in perceptions versus actual occurrences between individuals.

The current study attempted to further the current knowledge of emotional invalidation. There is currently no research available regarding the propagation of perceptions of emotional invalidation from childhood to young adulthood, therefore, the first aim of the current study is to explore the potential differences in the contribution of perceived childhood emotional invalidation from both maternal and paternal figures in the perception of emotional invalidation during a peer interaction between two emerging adults. The second aim of the current study is to explore the potential differences in the contribution of childhood emotional invalidation from both maternal and paternal figures in the use of emotionally invalidating behaviors by emerging

adults in a peer interaction. A final aim of the current study is to examine perceived emotional invalidation and emotionally invalidating behaviors and their ability to predict negative affect.

Hypotheses

Hypothesis 1a. Past research has indicated that exposure to environments containing high incidences of emotional invalidation is implicated in the development of psychological disorders such as BPD and depression (Robertson, et al., 2013; Sturrock, et al., 2009). A common feature that can be found in both of these disorders is an increased perception of emotional invalidation (American Psychiatric Association, 2013). Based on this research, it is hypothesized that perceived childhood emotional invalidation would positively predict current perceptions of emotional invalidation.

Hypothesis 1b. Prevalence rates of the disorders most highly related to emotional invalidation are significantly higher for females than for males with 75% of BPD diagnoses being female and depression, eating disorders, and anxiety also being predominately diagnosed for females (American Psychiatric Association, 2013). It is possible that males are under-diagnosed in these categories for several reasons. It is also possible that disorders that are more typically diagnosed for males are also related and have yet to be explored. However, the aforementioned research from Klimes-Dougan et al. (2014) indicated that females expect lower levels of emotional invalidation from peers in comparison to males. Based on this research it is expected that emotional invalidation in an interaction may be more salient for females as it violates expectations, while males will expect and potentially disregard it. Therefore, it is hypothesized that gender will predict current perceptions of emotional invalidation in an interaction such that females will perceive more emotional invalidation.

Hypothesis 1c. Foltz, et al. (1999) found that childhood relationships with caregivers inform the perceptions and expectations that individuals have for peer interactions. Therefore, it is hypothesized that the perceived childhood emotional invalidation received via the opposite sex caregiver will positively predict the current perception of emotional invalidation in an interaction with an opposite sex peer.

Hypothesis 2a. Buckholdt et al. (2014) found that parental emotion dysregulation is related to emotionally invalidating behaviors. In return these emotionally invalidating behaviors by the parents were related to higher levels of emotion dysregulation. Considering this research, it is hypothesized that perceived emotional invalidation in childhood will positively predict the engagement of emotionally invalidating behaviors in which individuals engage in during an interaction.

Hypothesis 2b. Klimes-Dougan et al. (2014) indicated that males expect more emotional invalidation in peer relationships. This finding, paired with research regarding the emotional socialization of mothers versus fathers indicates that males are more likely to ignore most emotional expressions and respond punitively to others (Chaplin, Cole, & Zahn-Waxler, 2005; Katz et al., 2014; Klimes-Dougan et al., 2007; Short et al., 2015). Based on these findings, it is hypothesized that gender will predict engagement in emotionally invalidating behaviors such that males will engage in more emotionally invalidating behaviors than females.

Hypothesis 2c. Yan, Han, and Li (2015) found that paternal parenting styles were passed down from father to son, including emotion socialization. This would indicate that emotion responding behaviors are learned primarily from the same sex parent. Therefore, it is hypothesized that there is an interaction of participant gender and caregiver gender on engagement of invalidating behaviors. As such, perceived emotional invalidation via parents of

the same gender will be more predictive of the engagement of emotionally invalidating behaviors than opposite sex caregivers.

Exploratory Analysis. There is currently a gap in the research regarding the differential effects of perceptions of emotional invalidation versus the observable behavior of being emotionally invalidated. Past research has been split on utilizing objective observer ratings of interactions or self-report measures regarding past emotionally invalidating environments (Buckholdt, et al., 2014; Krause, et al., 2003). This study is the first to simultaneously examine emotionally invalidating behaviors in a semi-naturalistic observation with perceptions of emotional invalidation. As such, it affords the opportunity to compare the predictive power of these two components of emotional invalidation in the context of emotional reactivity. It is hypothesized that perceptions of emotional invalidation will be more predictive of negative affect than actual received emotional invalidation.

Method

Participants

This study recruited a sample of 86 individuals from the University of South Carolina – Aiken. Students enrolled in an undergraduate introductory psychology course were offered class credit that was applicable to their experimental participation requirement through participation in this study. Participants enrolled utilizing the SONA system and were asked to bring an opposite sex friend, acquaintance, or significant other to participate with them. Participants who are not enrolled in SONA were entered into a drawing for one of two $25 cash cards. Participants enrolled in SONA had the choice between class credit or entered into the drawing. Upon arrival, all participants were provided with written informed consent outlining the risks and benefits of participating in the study as well as the study's procedure.

Data from 12 participants was omitted from all analyses due to technical difficulties that prohibited coding the interaction. The remaining 74 participants ranged from 18 to 25 years of age (M = 19.22, SD = 1.36). Of these participants; 38 (51.4%) identified as Caucasian, 26 (35.1%) African American, 2 (2.7%) Hispanic, 1 (1.4%) Asian, 6 (8.1%) multiple races, and 1 (1.3%) identified as other. Participants' reported length of relationship with the individual with which they participated in the study indicated 36 (48.6%) had known each other for less than one year, 14 (18.9%) for one to three years, and 24 (32.4%) for more than three years. Relatedly, 48 (64.9%) of participants reported that the individual with whom they participated in the study was a friend, 20 (27.0%) were in a dating relationship, 2 (2.7%) were married, 2 (2.7%) were classmates, and 2 (2.7%) were family members. Participants were asked to identify significant male and female figures during their childhood. Fifty-six (75.7%) of participants identified their father, 8 (10.8%) identified their grandfather, and 10 (13.5%) reported another significant male figure. Participants reported significant female figures as mother (68), grandmother (5), and aunt (1). Further details regarding demographic variables can be found in Table 1.

Measures

The goal of this study was to assess the differences in emerging adults' perceptions of emotional invalidation and in rates of emotionally invalidating behaviors in an interaction with an opposite sex peer. Current levels of emotional invalidation as well as the level of emotionally invalidating behaviors that each individual engaged in were measured by the observation and scoring of an interpersonal interaction utilizing the Invalidation subscale of the System for Coding Interactions and Family Functioning (SCIFF; Lindahl & Malik, 2001). The participant's perception of the experienced emotional invalidation was then measured utilizing the Perceptions of Emotional Invalidation Inventory (PEII). The participants' perceptions of childhood

emotional invalidation via male and female primary caregivers was measured utilizing the Invalidating Childhood Environment Scale (ICES; Mountford et al., 2007). Participants' emotional state was measured at two time points before and after the dyadic interaction using the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegan, 1988).

Demographics Questionnaire (See Appendix A). Each participant was asked to provide his or her gender, age, race, and childhood living arrangement throughout childhood as well as identify their primary male and female figures in childhood. Participants were asked to identify gender, as it was a variable in the current study. Participants were asked to identify age in an attempt to control for age outliers. Childhood living arrangement was included to provide further insight into the home environment that the participant was exposed to as well as to control for any variation that this may lead to. The participant was then be asked to provide the nature of their relationship with the opposite sex individual that accompanies them as well as how long they have known each other.

Invalidating Childhood Environment Scale (ICES: Mountford et al., 2007; See Appendix B). The ICES is a self-report measure of perceived emotional invalidation of childhood environments prior to the age of 18. It consists of 18-items and is divided into two subsections. The first subsection is 14-items concerning the perceived relationship between the participant and their parents. For the current study, participants were asked to identify their most influential male and female figure during their childhood as this is not always a biological mother and father. Participant responses to this identification process can be seen above in the participants subsection.

Each of the ICES' 14-items is rated twice, once for each parental figure, and is rated on a 5-point Likert scale ranging from 1 ("*Never"*) to 5 ("*All of the time"*). The final 4items address

Linehan's four family types. The current study did directly examine these items. The current study utilized a composite score calculated by summing the total sum for each primary figure to achieve a "primary female invalidation" score and a "primary male invalidation" score. The current study found the first 14-items to show good levels of internal consistency both for paternal invalidation ($\alpha = 0.73$) and maternal invalidation ($\alpha = 0.79$).

System for Coding Interactions and Family Functioning (SCIFF: Lindahl & Malik, 2001, See Appendix C). The SCIFF is an observational rating system devised to assess the interaction between family members. The SCIFF was utilized to evaluate the global level of emotional invalidation being experienced by each participant individually during a dyadic interaction. The SCIFF contains a global rating for rejection and emotional invalidation of 1 (very low emotional invalidation) to 5 (very high in emotional invalidation) for a parent and child interaction but has been modified for the purposes of this study to reflect a peer dyadic interaction. A score of 1(very low) indicates that the individual was not invalidated in any way throughout the course of the interaction. A score of 2 (low) indicates that there were one or two instances in which the participant experienced mild emotional invalidation such that comments are regarding an individual's behavior and not their personality. Remarks earning a score of 2 will contain a "bite" or "edge" without being overtly aggressive. A score of 3 (moderate) indicates mild emotional invalidation occurring 3 times. The interactions earning a score of 3 will be same in intensity and tone as those earning a score of 2 but with more frequency. A score of 4 (moderately high) indicates that on one or two occasions the participant experienced moderately intense emotionally invalidating responses such as insults and put-downs regarding their emotional experience with an attacking, disgusting, mocking, and/or hostile tone.

Interactions receiving a score of 5 (high) indicate that the participant experienced three or more of the aforementioned moderately intense emotionally invalidating responses.

In an attempt to increase the robustness of the observational data, the SCIFF was used in conjunction with an invalidating behaviors checklist (See Appendix D) created from Linehan's (1993) definition of emotional invalidation. Some items included on the behavioral checklist were: "rolling eyes, sigh, or snort" and "talking over other person". Coders kept a count of each item for each set of questions from the interaction. Each item was then summed together for a total number of behaviors for each set. The set totals were then summed to create a total number of behaviors for the whole interaction.

Perceptions of Emotional Invalidation Inventory (PEII, Elzy, 2014), See Appendix E). The PEII is a self-report measure of perceived emotional invalidation in an interaction. It consists of 10-items, which were identified by topic experts as displaying content validity for measure an individual's perception of experiencing emotional invalidation in an interaction. Each of the 10-items is rated on a 5-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The current study utilized a composite score for each individual by summing the total sum of each individual's responses to achieve a "perceived invalidation" score. In previous research, the PEII demonstrated high reliability (Chronbach's alpha = .94; Elzy, 2014). The current study found the PEII to contain good internal consistency ($\alpha = .95$).

Positive And Negative Affect Schedule (PANAS; Watsonet al, 1988; see Appendix F). The PANAS is a 20-item self-report measure comprised of two mood scales: positive affect (PA) and negative affect (NA). The scale utilizes a 5-point Likert scale to differentiate levels of affect. The scale ranges from 1 ("*very slightly or not at all"*) to 5 ("*extremely"*). The PA and NA scales can be used to measure affect for the current moment, today, the past few days, the

past week, the past few weeks, the past year, and generally (Watson et al., 1988). The current study utilized the PANAS to indicate current affect. The correlation between the PA and NA scales is invariably low, which indicates independence. The 10-item scales have excellent convergent and discriminant correlations with other measures that assess mood factors such as distress and psychopathology. The PANAS PA scale for the current study resulted in a Cronbach's alpha of .86 and a Chronbach's alpha of .90 for the PANAS NA scale.

Filler Questionnaires (see Appendices H & I)**.** This study also included the use of two filler questionnaires in an attempt to buffer carryover effects from answering questions regarding childhood emotional invalidation. These filler questionnaires involved questions about the participants' television viewing habits and the viewing habits of the partner with whom they arrived. Items were answered on a 5-point Likert scale ranging from "Strongly Agree" to Strongly Disagree". Some items included on said questionnaires were "My favorite type of TV show is action/adventure" for the "self" questionnaire and "Their favorite type of TV show is action/adventure" for the partner questionnaire.

Procedure

Participants arrived at the university research laboratory in opposite sex pairs. Participants were seated in front of two computers. A researcher attained informed consent from the participants after explaining the procedure and answering any questions from the participants. Participants were then directed to attend to the computers, read the instructions, and complete the Demographics Questionnaire, ICES, filler questions, and PANAS.

Upon completion of the questionnaires, each participant was redirected via the survey to watch a brief video clip from the television show "Boy Meets World". The clip depicted an

interaction involving an opposite sex dyad. The video clip interaction highlighted a disagreement between a man and a woman regarding typical relationship problems. This interaction was chosen due to its ability to prompt conversation with multiple perspectives between a male and female participant. At the end of the video clip, the participants were asked to indicate how strongly they related to each of the characters in the clip. Upon completion of these questions the researcher directed each participant to a small table. The participants were seated on each side of the table facing each other with two wall-mounted cameras directed to capture facial expressions of each participant.

When both participants were seated, the researcher provided the participants with a list of discussion questions related to the video clip (Appendix E) and instructions. The participants were instructed to discuss the provided questions for approximately 3 to 5 minutes, at which time the researcher would return with another set of questions. There were four sets of questions with three questions in each set. Once the participants indicated that they understood the task, the researcher exited the room and entered an adjacent room to observe the interaction through a two-way mirror. Upon completion of the final set of discussion questions, the researcher directed the participants back to their respective computers where they read the instructions and completed the PEII and the PANAS. Upon completion of the PEII, each participant was given a debriefing form and dismissed.

Behavioral Coding: For the coding procedure, four research assistants were trained on the SCIFF rating manual as well as an invalidating behaviors checklist. This training consisted of two sessions in which research assistants viewed videos of interactions between two individuals and were asked to provide their ratings. They recorded their responses on the invalidating behaviors checklist, which included an area for SCIFF ratings. Their responses were then

reviewed and discussed with the researcher and faculty research supervisor. The initial session involved two videos from YouTube portraying a disagreement and all raters were present. The second training session involved reviewing participant videos as a pair with the researcher present and reviewing their responses. Each pair then officially rated the videos on which the other pair had been trained to eliminate any bias from the researcher. They were then given brief videos to rate independently. For the final data set, two raters scored approximately 50% of the peer interactions, while one rater scored the remaining 50%. The interrater reliability for the items that were coded by both participants was found to be fair, κ=.25, p<.001.

Results

Preliminary Analyses and Descriptive Statistics

Table 2 provides a summary of descriptive statistics for the study variables. As expected, scores from the ICES for female caregivers (M=27.32, SD=7.61) were positively correlated with scores on the ICES for male caregivers (M=27.34, SD=6.87), r=.44, p<.01, as well as the total score on the ICES (M=54.66, SD=12.30), r=.87, p<.01. The scores for male caregivers on the ICES were also positively correlated with the total ICES scores, r=.83, p<.01. Interestingly, the PEII (M = 15.51, SD=6.72) was not correlated with any of the scores from the ICES. It was, however, positively correlated with post-test negative affect, r=.35, p<.05. The SCIFF (M=1.09, SD=0.32) was used to measure emotionally invalidating behaviors which the individual engaged in as well as emotionally invalidating behaviors that the individual was exposed to. The SCIFF score for individuals behavior was found to be positively correlated with the SCIFF score measuring the behavior the individual was exposed to, r=.51, p<.01.

Demographic differences were also investigated in relation to the primary study variables. An analysis of variance (ANOVA) investigating possible age differences in the PEII was not significant, $F(6, 67) = 0.62$, $p = .72$. Similarly, an ANOVA investigating racial differences in PEII scores was not significant as well, $F(4, 68) = 1.17$, $p = .33$. An independent-samples t-test conducted to investigate gender differences in the PEII indicated that males (M=17.08, SD=7.39) reported perceiving significantly more emotional invalidation than females (M=13.95, SD=5.65), $t(72)$=2.05, p=.04. As gender was a primary variable of investigation in this study, it was included in the regression analyses described below.

Data Preparation

Prior to conducting the regression analyses, data were screened for multicollinearity, missing values, and outliers. The primary study variables were assessed for meeting assumptions. The SCIFF alone was found to violate assumptions as it was found to be positively skewed and highly kurtotic. Similarly, the PEII was found to violate homogeneity. Due to the nature of the measures, researchers were concerned that a logarithmic transformation would give an inaccurate representation of the data (Erceg-Hurn & Mirosevich, 2008), therefore, all data remained in raw form.

Correlation statistics for all major study variables can be found in Table 3. High levels of correlations prompted investigation of multicollinearity effects on the multiple regression analyses. An examination of tolerance statistics indicated that perceived childhood paternal emotional invalidation, as measured by the "ICES Father" scale, violated multicollinearity with the total perceived childhood emotional invalidation scale (ICES Total), and as such, "ICES Total" was omitted from regressions also containing the "ICES Father" scale. Additionally, in

order to increase the ability to interpret findings from multiple regressions, the ICES Mother, ICES Father, and ICES Total scales were centered on their means.

Regression Analyses Predicting Current Perceived Emotional Invalidation

Hypotheses 1a, 1b, and 1c involved the ability of gender, perceptions of maternal and paternal emotional invalidation in childhood separately, the total amount of perceived childhood emotional invalidation, and the interaction of participant gender and perceptions of childhood emotional invalidation from either maternal or paternal sources to predict perceptions of emotional invalidation in a current interaction while controlling for the emotionally invalidating behaviors experienced. To explore these hypotheses, two hierarchical regressions were conducted. Invalidating behaviors that were experienced as rated by the SCIFF were entered into the first model of the first hierarchical regression. This model was found to be a good fit for the data, $F(72) = 5.30$, $p=.02$, $R^2=.07$. The second model, which included scores from the SCIFF, gender, maternal scores from the ICES, and the interaction of gender and emotional invalidation from the significant female caregiver trended toward being a good fit to the data, $F(69) = 2.28$, $p=.07$, $R^2=.12$, and accounted for an additional 6% of the variance (R^2 *change =.06)* (see Table 4). Similar to the previous regression, the second regression contained the SCIFF in the first model and the second model approached statistical significance ($F(69) = 2.44$, $p=.06$, $R^2=.12$), accounting for an additional 6% of the variance (R^2*change*=.06). The second model of this regression included scores from the SCIFF, gender, paternal scores from the ICES, and the interaction of gender and emotional invalidation from the significant male caregiver (see Table 5). Individual predictor variables are discussed below in context to the related hypotheses.

Hypothesis 1a. It was hypothesized that perceived childhood emotional invalidation would positively predict current perceptions of emotional invalidation. Due to the

multicollinearity found between perceived paternal emotional invalidation and total perceived emotional invalidation, these two statistics could not be included together in the regression analysis. As such, only total perceived emotional invalidation from the PEII was included. Contrary to the hypothesis, perceptions of childhood emotional invalidation did not significantly predict current perceptions of emotional invalidation (β=.28, p=.42).

Hypothesis 1b. It was hypothesized that gender would predict current perceptions of emotional invalidation in an interaction such that females will perceive more emotional invalidation. Results from both hierarchical regressions indicated that the ability of gender to predict perceptions of emotional invalidation approached statistical significance (β=-.21, p=.07; β=-.20, p=.08). These results indicate that the hypothesis was partially supported, as a gender difference likely exists, but in the opposing direction with males (M=17.08, SD=7.39) perceiving more emotional invalidation than females (M=13.95, SD=3.65).

Hypothesis 1c. It was hypothesized that the perceived childhood emotional invalidation received via the opposite sex caregiver would positively predict the current perception of emotional invalidation in an interaction with an opposite sex peer. Contrary to the hypothesis, results of the aforementioned hierarchical regressions indicated that neither the interaction of participant gender and the maternal sources of perceived emotional invalidation in childhood (β=-.19, p=.61), nor the interaction of participant gender and paternal sources of perceived emotional invalidation in childhood (β=-.20, p=.56) predicted current perceptions of emotional invalidation.

Regression Analyses Predicting Current Emotionally Invalidating Behaviors

Hypotheses 2a, 2b, and 2c involved the ability of perceptions of childhood emotional invalidation, gender, and the interaction of participant gender and the gender of the source of

childhood emotional invalidation to predict the emotionally invalidating behavior an individual engages in. To explore these hypotheses, two linear regressions were conducted with emotionally invalidating behaviors as the outcome variable. The first regression included gender, maternal scores from the ICES, and the interaction of gender and emotional invalidation from the significant female caregiver. This model did not provide a good fit to the data, $F(70) = 7.15$, $p=.55$, $R^2=.03$ (see Table 6). The second linear regression included gender, paternal scores from the ICES, and the interaction of participant gender and perceived paternal emotional invalidation. Similar to the previous regression, the second regression indicated that this model was not a good fit for the data, $F(70) = .73$, $p=.54$, $R^2=.03$ (see Table 7). Individual predictor variables are discussed below in context to the related hypotheses.

Hypothesis 2a. It was hypothesized that perceived emotional invalidation in childhood would positively predict the engagement of emotionally invalidating behaviors in which individuals engage in during an interaction. Due to the perfect multicollinearity between paternal emotional invalidation and the total childhood emotional invalidation, these statistics are interchangeable. Contrary to predictions, the linear regression indicated that perceptions of childhood emotional invalidation did not significantly predict the current engagement of an individual in emotionally invalidating behaviors ($\beta=.34$, $p=.35$).

Hypothesis 2b. It was hypothesized that gender would predict engagement in emotionally invalidating behaviors. The aforementioned linear regressions did not support this hypothesis ($\beta=.11$, $p=.36$; $\beta=.10$, $p=.42$).

Hypothesis 2c. It was hypothesized that there would be an interaction of participant gender and caregiver gender on engagement of invalidating behaviors such that perceived emotional invalidation via parents of the same gender would be more predictive of the

engagement of emotionally invalidating behaviors than opposite sex caregivers. The aforementioned linear regressions indicated that neither the interaction of gender and perceptions of maternal emotional invalidation (β=-.23, p=.55), nor the interaction of gender and perceptions of paternal emotional invalidation (β=-.40, p=.27) significantly predicted the use of emotionally invalidating behaviors.

Exploratory Analyses. It was hypothesized that perceptions of emotional invalidation would be more predictive of negative affect as measured by the PEII, than actual received emotional invalidation as measured by the SCIFF. Two linear regressions were conducted to investigate the relationship of emotionally invalidating behaviors received and perceived emotional invalidation and their differential effects on affect. The first of these regressions indicated that the inclusion of both measures to predict change in positive affect was not a good fit for the data, $F(71) = 1.19$, p=.31, R^2=.03. Expectedly, neither perceptions of emotional invalidation (β=.13, p=.30) nor invalidating behaviors (β=.09, p=.41) predicted changes in positive affect (see Table 8). Similarly, a linear regression investigating negative affect indicated that the inclusion of both measures was also not a good fit for the data, $F(71) = .36$, p=.70, R^2=.01. Contrary to the hypothesis, neither the PEII (β=-.03, p=.41) nor the SCIFF ratings of the individuals' partners (β=-.09, p=.47) significantly predicted changes in negative affect (see Table 9).

Findings regarding current perceptions of emotional invalidation prompted additional exploratory analysis to further understand the relationship of gender and perceptions of emotional invalidation. Due to the small number of participants identifying as ethnicities other than Caucasian and African American, a 2x2 analysis of variance (ANOVA) was implemented to examine any racial differences for perceptions that may be found in the current sample. There

was no main effect found for race ($F(1, 60)=2.14$, $p=.15$, $\eta^2 partial=.03$) and the main effect for gender was approaching significance ($F(1, 60)=3.23$, $p=.08$, $\eta^2 partial=.05$). The interaction between race and gender was approaching clinical significance and demonstrated a medium effect size ($F(1, 60)=2.89$, $p=.09$, $\eta^2 partial=.05$). As such, a series of independent samples t-tests were run to investigate potential differences based on gender and race. This relationship can be seen in Figure 1.

Independent samples t-tests revealed significant differences between African American males ($M=19.75$, $SD=6.97$) and Caucasian Males ($M=14.22$, $SD=6.51$), $t(28)=-2.22$, p=.04 in the perception of emotional invalidation. No significant differences were found between African American males and African American females ($M=14.33$, $SD=7.71$) ($t(19)=1.69$, p=.11) or African American males and Caucasian females ($M=15.48$, $SD=7.22$)($t(31)=1.66$, p=.11). Similarly, no significant differences were found between Caucasian males and African American females ($t(25)=-0.04$, p=.97) or between Caucasian males and Caucasian females ($t(37)=-0.57$, p=.58). Similarly, there was no significant difference found between African American females and Caucasian females, $t(28)=-0.39$, p=.70.

Results of an independent samples t-test indicated that Caucasian individuals ($M=51.13$, $SD=11.83$) reported less total childhood emotional invalidation than African American individuals ($M=58.46$, $SD=11.608$), $t(62)=-2.45$, p=.02. Specifically, independent samples t-tests indicated African Americans ($M=29.08$, $SD=6.41$) reported more paternal emotional invalidation than Caucasian individuals ($M=25.50$, $SD=6.46$), $t(62)=-2.18$, p=.03. Similar findings approaching significance were found such that African Americans reported higher levels of maternal childhood emotional invalidation ($M=29.38$, $SD=7.70$) than did Caucasians ($M=25.63$, $SD=7.44$), $t(62)=1.96$, p=.06. Further scores can be found in Table 10.

Discussion

Since the conceptualization of emotional invalidation by Linehan (1993), there has been a growing base of research linking emotional invalidation and various psychopathological disturbances, most notably borderline personality disorder (BPD) (Roberson, et al 2013; Sturrock, et al, 2009). Linehan (1993) proposed that the development of psychopathology related to emotional invalidation was a result of the internalization of the chronic emotional invalidation such that individuals would begin invalidating their own emotional experiences. While researchers have empirically investigated many aspects of Linehan's (1993) Biosocial Theory, this assumption remains largely untested. In addition, there has is a paucity of research available which investigates gender differences in childhood emotional invalidation as well as current emotional invalidation despite disparate prevalence rates in disorders which have historically been associated with emotional invalidation (BPD, depression, eating disorders)(American Psychiatric Association, 2013). Similarly, past research regarding emotional invalidation has focused solely on maternal sources of emotional invalidation, disregarding the potentially protective or deleterious effects of paternal levels of emotional invalidation.

The current study was designed to investigate the relationships of gender, the gender of the source of emotional invalidation, current perceptions of emotional invalidation, and the propensity to engage in emotionally invalidating behaviors. The term "emotional invalidation" in previous research has been used to describe both emotionally invalidating behavior as well as perceived emotional invalidation. As such, the current study also sought to investigate potential

discrepancies in perceptions of emotional invalidation and experienced emotional invalidation and their differential effects on affect.

It was hypothesized that gender, childhood emotional invalidation, and the reported emotional invalidation from the caregiver of the opposite gender would predict current perceptions of emotional invalidation in an interaction with an opposite gender individual. The current study found no evidence to support the contribution of childhood emotional invalidation to current perceptions of emotional invalidation. This is contrary to the proposal of Linehan (1993) of childhood invalidating environments contributing to the development of a sensitivity in perception of emotional invalidation. Sauer and Baer (2010) found that childhood emotional invalidation was related to current symptoms associated with BPD, which includes sensitivity to and volatility regarding responses to an individual's emotions. Perhaps the finding in the current study using a nonclinical sample highlights that this sensitivity to invalidation is a unique manifestation of BPD rather than a typical reaction from childhood experiences of emotional invalidation.

Conversely, Reeves, et al (2010) found no relationship between emotional invalidation and BPD symptoms. Similarly, Selby, Braithwaite, Joiner, and Fincham, (2008) found that perceptions of childhood emotional invalidation was related to BPD symptoms in that it partially moderated the relationship of those symptoms with relationship dysfunction. Of the dysfunctional aspects of relationships that childhood emotional invalidation may be associated with, is a possible belief that communicating problems within an intimate relationship is not acceptable. This would explain the current findings as the partner with which individuals interacted was someone with which they had a relationship.

While the current study attempted to ensure that the participants in each interaction possessed some type of existing relationship, it was noted by coders that approximately 19 percent of participants indicated that they either did not know, or only vaguely knew the person with whom they arrived. This may have led to lower levels of emotional expression as well as more controlled responses to emotions.

Additionally, there was also no evidence of reported childhood emotional invalidation from the opposite gender caregiver predicting current perceptions. More interestingly, within this finding, there is also no evidence that one gender caregiver holds a more important or predictive role in emotional invalidation than the other, which has implications for future research in this area regarding the caregiver examined.

Interestingly, gender's ability to predict current perceptions of emotional invalidation was found to be trending toward significance, warranting further investigation. The current study hypothesized that this relationship would exist such that females would report more perceived emotional invalidation in an interaction than males while controlling for the emotionally invalidating behaviors received. The findings from the current study indicated that it was the males, in fact, who tended to report higher levels of perceived emotional invalidation. These findings are particularly notable considering there were no significant differences of reported childhood emotional invalidation between males and females.

Upon further investigation of these variables, the significant gender difference in current perceptions of emotional invalidation were limited by race with African American males reporting significantly more perceived emotional invalidation than Caucasian Males and the other races included in the study. The difference between African American males and Caucasian females and African American females approached significance, likely only missing

significance due to low power. These findings complicate the current study considerably, indicating that African American males are more likely to perceive emotional invalidation than Caucasian males and females of other races. However, further investigation revealed that African American males also reported significantly higher levels of perceived emotional invalidation in childhood than Caucasian males, potentially indicating a gendered vulnerability to childhood emotional invalidation. Unfortunately, the current study did not possess enough power to investigate the predictive ability of childhood emotional invalidation for each gender and race separately. These findings indicate that the current model proposed by Linehan (1993) may be more salient for some genders and races than others. Similarly, as there is a large gender disparity in the diagnosis of BPD (American Psychiatric Association, 2013), these findings may suggest that the tendency to perceive high levels of invalidation may be a core feature of the disorder rather than being based on actual invalidation during childhood. In other words, perceptions of emotional invalidation in a non-clinical population may be more dependent upon the exposure to emotionally invalidating behaviors than those in a clinical population. This would support Linehan's idea of biological emotional vulnerability that is more of a trait feature than an environmental outcome.

There are a number of potential explanations for such findings. One such explanation for the findings is that males are more sensitive to emotional invalidation than females. This is congruent with findings from Leong, Cano, and Johansen (2011) in which invalidating behavior led to more pain and marriage dissatisfaction in male pain patients than in female patients. This unexpected gender difference may also be attributed to the gender of the other person in the interaction. Findings from Klimes-Dougan et al. (2014) indicated that adolescent boys were more likely to expect punitive responses to their emotions from peers while girls were more

likely to expect supportive responses from peers. These findings may indicate that males are indeed sensitive to emotional invalidation as they expect it. It may also be that these findings are limited to perceptions of individuals' own gender and females' expectations for males are similar to males' expectations.

The second objective of this study focused on the investigation of predictors of the implementation of emotionally invalidating behaviors. It was hypothesized that perceived childhood emotional invalidation would predict the use of emotionally invalidating behaviors. The current study found no evidence to support this hypothesis. Relatedly, the current data provided no support for the hypothesis that emotionally invalidating behaviors would be predicted by the emotional invalidation received from caregivers of the same gender through modeling. These findings are especially surprising given the findings of Reinelt et al. (2013) in which mothers with BPD engaged in maternal over-control, rejection, and high discrepancies regarding internalizing problems (emotional invalidation) predicted the intergenerational transmission of BPD. Similarly, Buckholdt, et al (2014) found that emotion dysregulation in parents was related to childhood emotion dysregulation through emotionally invalidating behaviors. There are a number of limitations in the current study discussed below to which these differences may be attributed.

It was also hypothesized that gender would significantly predict emotionally invalidating behaviors such that males would engage in more emotionally invalidating behaviors. The current study found no evidence to support this hypothesis. This is contradictory to findings by Klimes-Dougan et al. (2014) in which there are gender differences in the expectations of relationships. The findings of the current study may indicate that these findings do not cross gender such that while males may expect more negative responses to emotion from other males

and may indeed engage in more negative responses to emotions with males, they may not engage in the same behaviors with females. There are also a number of study limitations that may influence these findings and explain differences from expectations.

The current study also included and exploratory hypothesis in which it was predicted that perceptions of emotional invalidation would be more predictive of changes in affect than the presence of emotionally invalidating behaviors. Results from the current study did not support this hypothesis. Interestingly, results from this study indicate that emotional invalidation was unrelated to changes in affect regardless of if perceived or actual. This finding is consistent with findings by Elzy (2014) who found no relationship between perceived emotional invalidation and emotional distress. However, it is contrary to research by Yap, et al (2008) who found the relationship between emotional invalidation and emotional distress in natural environments. This indicates that there may be a laboratory effect that is skewing results in the current study as well as that of Elzy (2014) as it was also a laboratory study. It is possible that other factors inherent in the study altered the mood of individuals in the current study as well.

Limitations

There are a number of limitations that could affect the results of this study. One such limitation is the population being sampled. The population being recruited is a non-clinical, college sample. These factors could limit the ability of the findings to be generalized to the general population; however, they may also offer an alternative perspective on the perceptions and effects of emotional invalidation on a nonclinical sample. A number of studies have investigated the relationship of emotional regulation and academic achievement (Kwon, Hanrahan, & Kupzyk, 2016; Singh & Singh, 2013), indicating the population examined in the

current study may differ from the general population in some factor affecting the ability to regulate emotions.

The power of the current study was limited and may be insufficient to find significance. This is particularly notable as many of the exploratory hypotheses were approaching significance. The current study also attempted to control for relationship type, however, it was noted by the coders that approximately 19 percent of participants who arrived together did not appear to know each other well or at all. Additionally, while the current study attempted to replicate real life interactions, the presence of cameras and the location may have altered individuals' emotions and emotional responses. Notably, coders for the current study reported that a number of participants would look at the cameras before responding, potentially altering their responses. Further, post-test affect may have been affected by the knowledge of the impending completion of the study.

The measure of perceived childhood emotional invalidation used in this study utilized retroactive recall by emerging adults. This data could have been influenced by current feelings towards childhood caregivers or overall current mood. The use of retroactive recall for perceptions of emotional invalidation in childhood are possibly different from actual emotional invalidation experienced, and could be largely independent of actual experience. Similarly, the current study relied on the use of undergraduate coders. These coders were all female, thus potentially entering bias into scores of emotionally invalidating behaviors. Relatedly, approximately 50 percent of the data was coded by multiple individuals, potentially allowing for additional bias on the coded scores of emotionally invalidating behaviors.

A final limitation that may be considered for the current study was the limited range of responses found for the measures. The SCIFF was found to be particularly skewed. The SCIFF

possessed a possible range of scores from 1-5, however, scores of the current study ranged from 1-2.5 (averaged between coders). This minimal level of emotionally invalidating behaviors present in the interactions makes it challenging to answer questions pertaining to the impact of invalidating behaviors. Alternative explanations may point to a lack of sensitivity on the part of the SCIFF to detect emotionally invalidating behaviors. A third possible explanation relates to the coders. The coders for the current study consisted exclusively of females, which may bias the coding based on expectations of different genders, as well as biases based solely on the gender of the coders. Similarly, the PEII had a range of possible scores from 10-50; however, data from the current study shows the mean score on the PEII to be on the low end of this range. This indicates a low level of perceived emotional invalidation occurring in the interaction. It may also be indicative of the aforementioned effects of the laboratory setting. Lastly, this may indicate a possible lack of engagement related to the relationship of the participants, as this was questionable in a number of cases.

Implications

The potential implications of this study include further understanding the mechanisms and effects of perceived emotional invalidation. This is a relatively unexplored process that may have implications for the development of a broad range of psychopathology. There is currently a paucity of research regarding how childhood perceptions of emotional invalidation affect young adult perceptions of emotional invalidation. Likewise there is little research to be found on the propagation of emotionally invalidating behaviors from caregivers to children and how that may materialize in emerging adult peer interactions.

Examining gender differences in the context of emotional invalidation was another novel aspect of the current study. Some of the only information currently available regarding gender

differences and emotional invalidation is prevalence data regarding psychopathology that research has indicated is related to emotional invalidation. The current study indicates that further investigation into gender differences and racial differences in perceptions of emotional invalidation and childhood emotional invalidation is warranted. Likewise, research regarding parent gender and emotional invalidation is rare. The male caregiver has historically been dismissed. The current study indicated that there was no interaction of child and caregiver gender on childhood emotional invalidation. As the current study utilized a non-clinical college population and did not possess the necessary power to investigate possible differences seen in different races, further investigation is warranted that includes clinical and community populations. The findings of the current study indicate that future research should focus on gender and race when investigating the development of psychopathology, particularly in regards to emotional invalidation and the perceptions of emotional invalidation.

Conclusions and Future Directions

The current study found that gender differences exist in perceptions of emotional invalidation, such that males perceived more emotional invalidation, though the causes for these gender differences is still unknown and warrants further investigation. This study also found that racial differences existed in perceptions of emotional invalidation as well as in reports of childhood emotional invalidation. However, the current study found that, contrary to expectations, retrospective reports of childhood emotional invalidation was not related to current perceptions of emotional invalidation or the propensity to engage in emotionally invalidating behaviors. As such, future research should investigate the mechanisms related to these findings. It should be noted, however, that the current study suffered from a lack of power, inter-rater reliability between coders, and the representativeness of the sample.

The current study proposes two potential explanations for these findings. The first of these explanations is that the reported racial differences found in current perceptions of emotional invalidation may, in part, be related to differential perceptions of emotional invalidation in childhood as those also varied significantly based upon race. Further, this proposed explanation includes that males are more sensitive to emotional invalidation than females, regardless of race. The second potential explanation for these findings exists in the gender of the other person in the interaction and the expectations of each gender. The current study utilized mixed gender pairs so every female interacted with a male, whereas female perceptions of an interaction with another female may be different. The sensitivity seen in the current study may be a sensitivity to emotional invalidation from females rather than by males. Future research should investigate these relationships using mixed and same gender dyads with equal numbers of males and females from each race.

The current study also examined differences in perceptions of emotional invalidation and invalidating behaviors observed by a coder and their influence on affect. The current study found no relation for either of the aforementioned factors, consistent with other laboratory research studies (Elzy, 2014) but contrary to other findings from natural environment studies (Yap, et al, 2008). Future research should investigate these differential findings more explicitly in natural settings observing the aforementioned differences as racial and gender differences are likely to exist within the influence of these factors as well. Particular attention should be paid to differences that may exist between individuals with BPD and nonclinical samples as this has important implications for the Biosocial Theory of BPD (Linehan, 1993).

References

Albritton, T., Angley, M., Grandelski, V., Hansen, N., & Kershaw, T. (2014). Looking for solutions: Gender differences in relationship and parenting challenges among low‐income, young parents. *Family Process*, *53*(*4*), 686-701.

Aldao, A., Jazaieri, H., Goldin, P. R., & Gross, J. J. (2014). Adaptive and maladaptive emotion regulation strategies: Interactive effects during CBT for social anxiety disorder. *Journal of Anxiety Disorders*, *28*(*4*), 382-389. doi:10.1016/j.janxdis.2014.03.005

American Psychiatric Association. (2013) *Diagnostic and Statistical Manual of Mental Disorders*. (5th ed.). Arlington, VA: American Psychiatric Association.

Bandelow, B., Krause, J., Wedekind, D., Broocks, A., Hajak, G., & Rüther, E. (2005). Early traumatic life events, parental attitudes, family history, and birth risk factors in patients with borderline personality disorder and healthy controls. *Psychiatry Research*, *134*(*2*), 169-179. doi:10.1016/j.psychres.2003.07.008

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*, *4*(*1, Pt.2*), 1-103. doi:10.1037/h0030372

Bem, S. L. (1974). The measurement of psychological androgyny. *Journal Of Consulting And Clinical Psychology*, *42*(*2*), 155-162. doi:10.1037/h0036215

Bögels, S., Stevens, J., & Majdandžić, M. (2011). Parenting and social anxiety: Fathers' versus mothers' influence on their children's anxiety in ambiguous social situations. *Journal Of Child Psychology And Psychiatry*, *52*(*5*), 599-606. doi:10.1111/j.1469-7610.2010.02345.x

Bradley, R., Jenei, J., & Westen, D. (2005). Etiology of Borderline Personality Disorder: Disentangling the Contributions of Intercorrelated Antecedents. *Journal Of Nervous And Mental Disease*, *193*(*1*), 24-31. doi:10.1097/01.nmd.0000149215.88020.7c

Buckholdt, K., Parra, G., & Jobe-Shields, L. (2014). Intergenerational Transmission of Emotion Dysregulation Through Parental Invalidation of Emotions: Implications for Adolescent Internalizing and Externalizing Behaviors. *Journal Of Child & Family Studies*, *23*(*2*), 324-332. doi:10.1007/s10826-013-9768-4

Budd, K. S., Behling, S., Li, Y., Parikshak, S., Gershenson, R. A., Feuer, R., & Danko, C. M. (2012). Measuring attitudes toward acceptable and unacceptable parenting practices. *Journal Of Child And Family Studies*, *21*(*2*), 247-261. doi:10.1007/s10826-011-9470-3

Caldwell, M. S., Rudolph, K. D., Troop-Gordon, W., & Kim, D. (2004). Reciprocal Influences Among Relational Self-Views, Social Disengagement, and Peer Stress During Early Adolescence. *Child Development*, *75*(*4*), 1140-1154. doi:10.1111/j.1467-8624.2004.00730.x

Chaplin, T. M., Cole, P. M., & Zahn-Waxler, C. (2005). Parental Socialization of Emotion Expression: Gender Differences and Relations to Child Adjustment. *Emotion*, *5*(*1*), 80-88. doi:10.1037/1528-3542.5.1.80

Conrade, G., & Ho, R. (2001). Differential parenting styles for fathers and mothers: Differential treatment for sons and daughters. *Australian Journal Of Psychology*, *53*(*1*), 29-35. doi:10.1080/00049530108255119

Craig, L., Powell, A., & Smyth, C. (2014). Towards intensive parenting? Changes in the composition and determinants of mothers' and fathers' time with children 1992–2006. *British Journal Of Sociology*, *65*(*3*), 555-579. doi:10.1111/1468-4446.12035

De Castella, K., Goldin, P., Jazaieri, H., Ziv, M., Heimberg, R. G., & Gross, J. J. (2014). Emotion beliefs in social anxiety disorder: Associations with stress, anxiety, and well‐being. *Australian Journal Of Psychology*, *66*(*2*), 139-148. doi:10.1111/ajpy.12053

Duncombe, M. E. (2012). The Contribution of Parenting Practices and Parent Emotion Factors in Children at Risk for Disruptive Behavior Disorders.*Child Psychiatry & Human Development*, *43*(*5*), 715-733.

Elzy, M. (2014). Emotional invalidation: An investigation into its definition, measurement, and effects. *Dissertation Abstracts International*, *74*,

Erceg-Hurn, D. M., & Mirosevich, V. M. (2008). Modern robust statistical methods: An easy way to maximize the accuracy and power of your research. American Psychologist, 63(*7*), 591-601. doi:10.1037/0003-066X.63.7.591

Feiring, C., Taska, L., & Lewis, M. (2002). Adjustment following sexual abuse discovery: The role of shame and attributional style. *Developmental Psychology*, *38*(*1*), 79-92. doi:10.1037/0012-1649.38.1.79

Freud, S. (1933). *New Introductory Lectures on Psychoanalysis*. Oxford, England: Norton & Co.

Foltz, C., Barber, J. P., Weinryb, R. M., Morse, J. Q., & Chittams, J. (1999). Consistency of themes across interpersonal relationships. *Journal Of Social And Clinical Psychology*, *18*(*2*), 204-222. doi:10.1521/jscp.1999.18.2.204

Gill, D., & Warburton, W. (2014). An investigation of the biosocial model of borderline personality disorder. *Journal Of Clinical Psychology*, *70*(*9*), 866-873. doi:10.1002/jclp.22074

Gryczkowski, M. R., Jordan, S. S., & Mercer, S. H. (2010). Differential relations between mothers' and fathers' parenting practices and child externalizing behavior. *Journal Of Child And Family Studies*, *19*(*5*), 539-546. doi:10.1007/s10826-009-9326-2

Haslam, M., Arcelus, J., Farrow, C., & Meyer, C. (2012). Attitudes towards emotional expression mediate the relationship between childhood invalidation and adult eating concern. *European Eating Disorders Review*, *20*(*6*), 510-514. doi:10.1002/erv.2198

Haslam, M., Mountford, V., Meyer, C., & Waller, G. (2008). Invalidating childhood environments in anorexia and bulimia nervosa. *Eating Behaviors*, *9*(*3*), 313-318. doi:10.1016/j.eatbeh.2007.10.005

Hastings, P. D., & De, I. (2008). Parasympathetic Regulation and Parental Socialization of Emotion: Biopsychosocial Processes of Adjustment in Preschoolers. *Social Development*, *17*(*2*), 211-238. doi:10.1111/j.1467-9507.2007.00422.x

Hersh, M. A., & Hussong, A. M. (2009). The Association Between Observed Parental Emotion Socialization and Adolescent Self-Medication. *Journal Of Abnormal Child Psychology*, *37*(*4*), 493-506.

Hosley, C. A., & Montemayor, R. (1997). Fathers and adolescents. In M. E. Lamb (Ed.), *The role of the father in child development* (pp. 162-178). New York: John Wiley.

Hudson, J. L., Comer, J. S., & Kendall, P. C. (2008). Parental Responses to Positive and Negative Emotions in Anxious and Nonanxious Children. *Journal Of Clinical Child & Adolescent Psychology*, *37*(*2*), 303-313. doi:10.1080/15374410801955839

Hughes-Scalise, A., & Connell, A. (2014). The roles of adolescent attentional bias and parental invalidation of sadness in significant illness: A comparison between eating disorders and chronic pain. *Eating Behaviors*, *15*(*3*), 493-501. doi:10.1016/j.eatbeh.2014.06.007

Kashdan, T. B., & Farmer, A. S. (2014). Differentiating emotions across contexts: Comparing adults with and without social anxiety disorder using random, social interaction, and daily experience sampling. *Emotion*, *14*(*3*), 629-638. doi:10.1037/a0035796

Katz, L., Shortt, J., Allen, N., Davis, B., Hunter, E., Leve, C., & Sheeber, L. L. (2014). Parental Emotion Socialization in Clinically Depressed Adolescents: Enhancing and Dampening Positive Affect. *Journal Of Abnormal Child Psychology*, *42*(*2*), 205-215.

Klimes-Dougan, B., Brand, A. E., Zahn-Waxler, C., Usher, B., Hastings, P. D., Kendziora, K., & Garside, R. B. (2007). Parental emotion socialization in adolescence: Differences in sex, age and problem status. *Social Development*, *16*(*2*), 326-342. doi:10.1111/j.1467-9507.2007.00387.x

Klimes‐Dougan, B., Pearson, T. E., Jappe, L., Mathieson, L., Simard, M. R., Hastings, P., & Zahn‐Waxler, C. (2014). Adolescent emotion socialization: A longitudinal study of friends' responses to negative emotions. *Social Development*, *23*(*2*), 395-412. doi:10.1111/sode.12045

Krause, E. D., Mendelson, T., & Lynch, T. R. (2003). Childhood emotional invalidation and adult psychological distress: The mediating role of emotional inhibition. *Child Abuse & Neglect*, *27*(*2*), 199-213. doi:10.1016/S0145-2134(02)00536-7

Kwon, K., Hanrahan, A. R., & Kupzyk, K. A. (2016). Emotional Expressivity and Emotion Regulation: Relation to Academic Functioning Among Elementary School Children. *School Psychology Quarterly*, doi:10.1037/spq0000166

Lenzenweger, M. F., Lane, M. C., Loranger, A. W., & Kessler, R. C. (2007). DSM-IV personality disorders in the national comorbidity survey replication. *Biological Psychiatry*, *62*(*6*), 553-564. doi:10.1016/j.biopsych.2006.09.019

Leong, L. M., Cano, A., & Johansen, A. B. (2011). Sequential and base rate analysis of emotional validation and invalidation in chronic pain couples: Patient gender matters. The Journal Of Pain, 12(*11*), 1140-1148. doi:10.1016/j.jpain.2011.04.004

Lindahl, K. M., & Malik, N. M. (2001). The System for Coding Interactions and Family Functioning. In P. K. Kerig, K. M. Lindahl, P. K. Kerig, K. M. Lindahl (Eds.) , *Family observational coding systems: Resources for systemic research* (pp. 77-91). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Linehan, M. (1993). *Cognitive behavioral treatment of borderline personality disorder*. New York: Guilford Press.

Luebbe, A. M., Bump, K. A., Fussner, L. M., & Rulon, K. J. (2014). Perceived maternal and paternal psychological control: Relations to adolescent anxiety through deficits in emotion regulation. *Child Psychiatry And Human Development*, *45*(*5*), 565-576. doi:10.1007/s10578-013-0425-3

McKinney, C., & Renk, K. (2008). Differential parenting between mothers and fathers: Implications for late adolescents. Journal Of Family Issues, 29(*6*), 806-827. doi:10.1177/0192513X07311222

Mountford, V., Corstorphine, E., Tomlinson, S., & Waller, G. (2007). Development of a measure to assess invalidating childhood environments in the eating disorders. *Eating Behaviors*, *8*(*1*), 48-58. doi:10.1016/j.eatbeh.2006.01.003

Nelson, J. A., O'Brien, M., Blankson, A. N., Calkins, S. D., & Keane, S. P. (2009). Family stress and parental responses to children's negative emotions: Tests of the spillover, crossover, and compensatory hypotheses. *Journal Of Family Psychology*, *23*(*5*), 671-679. doi:10.1037/a0015977

Oltmanns, T. F., Rodrigues, M. M., Weinstein, Y., & Gleason, M. J. (2014). Prevalence of personality disorders at midlife in a community sample: Disorders and symptoms reflected in interview, self, and informant reports. *Journal Of Psychopathology And Behavioral Assessment*, *36*(*2*), 177-188. doi:10.1007/s10862-013-9389-7

Paine, M. L., & Hansen, D. J. (2002). Factors influencing children to self-disclose sexual abuse. *Clinical Psychology Review*, *22*(*2*), 271-295. doi:10.1016/S0272-7358(01)00091-5

Ramsden, S. R., & Hubbard, J. A. (2002). Family Expressiveness and Parental Emotion Coaching: Their Role in Children's Emotion Regulation and Aggression. *Journal Of Abnormal Child Psychology*, *30*(*6*), 657-667.

Reeves, M., James, L. M., Pizzarello, S. M., & Taylor, J. E. (2010). Support for Linehan's biosocial theory from a nonclinical sample. *Journal Of Personality Disorders*, *24*(*3*), 296-341. doi:10.1521/pedi.2010.24.3.312

Reinelt, E., Stopsack, M., Aldinger, M., Ulrich, I., Grabe, H. J., & Barnow, S. (2013). Longitudinal transmission pathways of borderline personality disorder symptoms: From mother to child?. Psychopathology, 47(*1*), 10-16. doi:10.1159/000345857

Renk, K., McKinney, C., Klein, J., & Oliveros, A. (2006). Childhood discipline, perceptions of parents, and current functioning in female college students. *Journal Of Adolescence*, *29*(1), 73-88. doi:10.1016/j.adolescence.2005.01.006

Renk, K., Roberts, R., Roddenberry, A., Luick, M., Hillhouse, S., Meehan, C., & ... Phares, V. (2003). Mothers, fathers, gender role, and time parents spend with their children. *Sex Roles, 48(7-8*), 305-315. doi:10.1023/A:1022934412910

Robertson, C. D., Kimbrel, N. A., & Nelson-Gray, R. O. (2013). The Invalidating Childhood Environment Scale(ICES): Psychometric properties and relationship to borderline personality symptomatology. *Journal Of Personality Disorders*, *27*(*3*), 402-410. doi:10.1521/pedi_2012_26_062

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer Interactions, Relationships, and Groups. In N. Eisenberg, W. Damon, R. M. Lerner, N. Eisenberg, W. Damon, R. M. Lerner (Eds.) , *Handbook of child psychology: Vol. 3, Social, emotional, and personality development (6th ed.)* (pp. 571-645). Hoboken, NJ, US: John Wiley & Sons Inc.

Sanders, W. R. (2015). Child Regulation of Negative Emotions and Depressive Symptoms: The Moderating Role of Parental Emotion Socialization. *Journal Of Child & Family Studies*, *24*(*2*), 402-415.

Sauer, S. E., & Baer, R. A. (2010). Validation of measures of biosocial precursors to borderline personality disorder: Childhood emotional vulnerability and environmental invalidation. *Assessment*, *17*(*4*), 454-466. doi:10.1177/1073191110373226

Selby, E. A., Braithwaite, S. R., Joiner, T. J., & Fincham, F. D. (2008). Features of borderline personality disorder, perceived childhood emotional invalidation, and dysfunction within current romantic relationships. *Journal Of Family Psychology*, *22*(*6*), 885-893. doi:10.1037/a0013673

Shewark, E. A., & Blandon, A. Y. (2015). Mothers' and fathers' emotion socialization and children's emotion regulation: A within‐family model. *Social Development*, *24*(*2*), 266-284. doi:10.1111/sode.12095

Shields, A., Ryan, R. M., & Cicchetti, D. (2001). Narrative representations of caregivers and emotion dysregulation as predictors of maltreated children's rejection by peers. *Developmental Psychology*, *37*(*3*), 321-337. doi:10.1037/0012-1649.37.3.321

Shortt, J. W., Katz, L. F., Allen, N. B., Leve, C., Davis, B., & Sheeber, L. B. (2015). Emotion socialization in the context of risk and psychopathology: Mother and father socialization of anger and sadness in adolescents with depressive disorder.*Social Development*, doi:10.1111/sode.12138

Singh, P., & Singh, N. (2013). Difficulties in emotion regulation: A barrier to academic motivation and performance. *Journal Of The Indian Academy Of Applied Psychology*, *39*(*2*), 289-297.

Slavich, G. M., & Cole, S. W. (2013). The emerging field of human social genomics. *Clinical Psychological Science*, *1*(*3*), 331-348. doi:10.1177/2167702613478594

Spokas, M., & Heimberg, R. G. (2009). Overprotective parenting, social anxiety, and external locus of control: Cross-sectional and longitudinal relationships. *Cognitive Therapy And Research*, *33*(*6*), 543-551. doi:10.1007/s10608-008-9227-5

Sturrock, B. A., Francis, A., & Carr, S. (2009). Avoidance of affect mediates the effect of invalidating childhood environments on borderline personality symptomatology in a non-clinical sample. *Clinical Psychologist*, *13*(*2*), 41-51. doi:10.1080/13284200902936927

Tao, A., Zhou, Q., & Wang, Y. (2010). Parental reactions to children's negative emotions: Prospective relations to Chinese children's psychological adjustment. *Journal Of Family Psychology*, *24*(*2*), 135-144. doi:10.1037/a0018974

Thomas, R., DiLillo, D., Walsh, K., & Polusny, M. A. (2011). Pathways from child sexual abuse to adult depression: The role of parental socialization of emotions and alexithymia. *Psychology Of Violence*, *1*(*2*), 121-135. doi:10.1037/a0022469

Torgersen, S., Kringlen, E., & Cramer, V. (2001). The prevalence of personality disorders in a community sample. *Archives Of General Psychiatry*, *58*(*6*), 590-596. doi:10.1001/archpsyc.58.6.590

Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The panas scales. *Journal of Personality and Social Psychology, 54(6),* 1063-1070.

Wijsbroek, S. M., Hale III, W. W., Raaijmakers, Q. W., & Meeus, W. J. (2011). The direction of effects between perceived parental behavioral control and psychological control and adolescents' self-reported GAD and SAD symptoms.*European Child & Adolescent Psychiatry*, *20*(*7*), 361-371. doi:10.1007/s00787-011-0183-3

Yan, J., Han, Z. R., & Li, P. (2015). Intergenerational transmission of perceived bonding styles and paternal emotion socialization: Mediation through paternal emotion dysregulation. *Journal Of Child And Family Studies*, doi:10.1007/s10826-015-0199-2

Yap, M. H., Allen, N. B., & Ladouceur, C. D. (2008). Maternal socialization of positive affect: The impact of invalidation on adolescent emotion regulation and depressive symptomatology.*Child Development*, *79*(*5*), 1415-1431. doi:10.1111/j.1467-8624.2008.01196.x

Yeung, W. J., Sandberg, J. F., Davis-Kean, P. E., & Hofferth, S. L. (2001). Children's time with fathers in intact families.*Journal Of Marriage And Family*, *63*(*1*), 136-154. doi:10.1111/j.1741-3737.2001.00136.x

Zeman, J., & Shipman, K. (1997). Social-contextual influences on expectancies for managing anger and sadness: The transition from middle childhood to adolescence. *Developmental Psychology*, *33*(*6*), 917-924. doi:10.1037/0012-1649.33.6.917

Appendix A

Demographic Questionnaire

1) Gender: _____Male _____Female

2) Age: _____years old

3) Race: _____African American _____Caucasian

_____American Indian/Alaskan Native _____Hispanic/Latino

_____Asian/Pacific Islander

_____Other _____

4) How long have you known the person you arrived with today?
___ < 1 year, ___1 – 3 years, ___>3 years

5) What is the nature of your relationship with the person you arrived with?

___Married, ___Friends, ___Significant other/dating, ___Roommate

___Other (please explain) _____

6) Who was your primary male caregiver throughout childhood (eg. Father, Uncle,

Stepfather, Grandfather, etc…) _____

How often did you spend time with them? ___Daily ___Weekly ___Monthly

7) Who was your primary female caregiver throughout childhood (eg. Mother, Stepmother,

Aunt, Grandmother, etc…) _____

How often did you spend time with them? ___Daily ___Weekly ___Monthly

Appendix B

Invalidating Childhood Environment Scale (ICES)

The following questions address your experiences of how your parent(s)/caregiver(s) responded to your emotions when you were young. For each item, please choose the rating from 1 to 5 that most closely reflects your experience up to the age of 18years.

Because your parents may have been very different, please rate them separately. The left hand column is to rate your male caregiver and the right hand column is to rate your female caregiver.

1	2	3	4	5
Never	**Rarely**	**Some of the time**	**Most of the time**	**All of the time**

Primary Male Caregiver		**Primary Female Caregiver**
1 2 3 4 5	My parent/caregivers would become angry if I disagreed with them.	1 2 3 4 5
1 2 3 4 5	When I was anxious, my parent/caregivers ignored this.	1 2 3 4 5
1 2 3 4 5	If I was happy, my parent/caregivers would be sarcastic and say things like: “What are you smiling at?”	1 2 3 4 5
1 2 3 4 5	If I was upset, my parent/caregivers said things like: “I'll give you something to really cry about!”	1 2 3 4 5
1 2 3 4 5	My parent/caregivers made me feel OK if I told them I didn't understand something difficult the first time.	1 2 3 4 5
1 2 3 4 5	If I was pleased because I had done well at school, my parent/caregivers would say things like: “Don't get too confident”.	1 2 3 4 5
1 2 3 4 5	If I said I couldn't do something, my parent/caregivers would say things like: “You're being difficult on purpose”.	1 2 3 4 5
1 2 3 4 5	My parent/caregivers would understand and help me if I couldn't do something straight away.	1 2 3 4 5

1 2 3 4 5	My parent/caregivers used to say things like: "Talking about worries just makes them worse".	1 2 3 4 5
1 2 3 4 5	If I couldn't do something however hard I tried, my parent/caregivers told me I was lazy.	1 2 3 4 5
1 2 3 4 5	My parent/caregivers would explode with anger if I made decisions without asking them first.	1 2 3 4 5
1 2 3 4 5	When I was miserable, my parent/caregivers asked me what was upsetting me, so that they could help me.	1 2 3 4 5
1 2 3 4 5	If I couldn't solve a problem, my parent/caregivers would say things like: "Don't be so stupid — even an idiot could do that!"	1 2 3 4 5
1 2 3 4 5	When I talked about my plans for the future, my parent/caregivers listened to me and encouraged me	1 2 3 4 5

Appendix C

SCIFF Rating Scale

1 - **Very Low**. The parent does not reject or invalidate the child in any way throughout the interaction.
2 - **Low**. There are one or two times in the interaction when a parent makes rejecting or invalidating statements, such as put-downs, criticisms, etc., that appear to be mild in intensity, such that the comment is or the comments are about a child's behavior (and a relatively minor behavior, such as complaining, not putting clothes away or completing chores), rather than his or her personality. With regard to tone of voice, a rating of 2 should be given if the tone has a bit of a "bite" or "edge" to it, but it is not overtly attacking.
3 - **Moderate**. There are several instances when the parent makes rejecting and/or invalidating statements. These statements are mild in intensity, such that a put-down, critical comment, etc., is about a child's behavior (and a relatively minor behavior, such as complaining, not putting clothes away or completing chores), rather than his or her personality. As with a rating of 2, with regard to tone of voice, a rating of 3 should be given if the tone has a bit of a "bite" or "edge" to it, but is not overtly attacking. The difference between assigning a code of 2 or 3 is one of frequency, as noted above.
4 - **Moderately High**. The parent's rejecting and/or invalidating behavior at times reaches moderate intensity, though not more than one or two times. Moderately intense rejecting/invalidating statements include insults, put-downs, etc., that are about the child's personality or character, rather than behavior. The tone of voice used typically is such that the comment may come across as moderately attacking, disgusted, mocking, spiteful, and/or hostile (though a fairly rejecting and invalidating statement may be made without any overt change in tone of voice).
5 - **High**. There are three or more instances in the interaction when the parent's rejecting and invalidating behavior is of moderate to high intensity, and insults, put-downs, critical comments, etc., are about the child's character. The tone of voice used typically is such that the comment may come across as attacking, disgusted, mocking, and/or spiteful (though a very rejecting or invalidating statement may be made without any overt change in tone of voice). If a parent swears at the child, the parent should automatically be given a rating of 5.

Appendix D

Invalidating Behaviors Checklist and Record Sheet

	1st Set	2nd Set	3rd Set	4th Set	Comments:
Makes invalidating statements, put-downs, etc…. in the context of the other'sbehavior					
Makes invalidating statements in the context of the other's character					
Cursing at other person (not just cursing in course of conversation					
Negative response to direct display of emotion					
Matching raised voice					
Rolling eyes/sigh/snort					
Talking over other person					
Ignoring other person while talking (texting, playing with phone)					
TONE: Intensity = 1- No bite or edge, 2 - Bite or edge, 3 - attacking tone	1 2 3	1 2 3	1 2 3	1 2 3	
Who talked more: 1 - Male, 2 - Female, 3 - Equal	1 2 3	1 2 3	1 2 3	1 2 3	
SCIFF Rating:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	

Notes:

Appendix E

Perception of Emotional Invalidation Inventory (PEII)

Please read each item below and fill in the bubble that reflects how much you agree or disagree with the statement using the following scale:

1 – strongly disagree, 2 – disagree, 3 – neither agree or disagree, 4 – agree, 5 – strongly agree*. Thank you for your time and careful reflection of each*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
1)It seemed like my emotional reaction was wrong or incorrect because of the questioner's response.	●	●	●	●	●
2) I felt like I should forget about my feelings and move on because of the questioner's response.	●	●	●	●	●
3) It seemed like my feelings were minimized because of the questioner's reaction.	●	●	●	●	●
4) I felt insulted when I shared my feelings.	●	●	●	●	●
5) I felt like my feelings were irrational because of the questioner's response.	●	●	●	●	●

6) I felt the questioner was being critical of my feelings.

7) I felt like my feelings were my fault because of the questioner's response.

8) I felt ignored when I shared my feelings.

9_I felt like my feelings were unimportant because of the questioner's response.

10) I felt weak because of the questioner's response to my emotional reaction.

Appendix F

PANAS

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now. Use the following scale to record your answers.

1 - very slightly or not at all 2 - a little 3 - moderately 4 - quite a bit 5 - extremely

interested _____
distressed_____
excited _____
upset _____
strong _____
guilty _____
scared _____
hostile _____
enthusiastic _____
proud _____
irritable _____
alert _____
ashamed _____
inspired _____
nervous _____
determined _____
attentive _____
jittery _____
active _____
afraid _____

Appendix G

Discussion Questions

With your partner, please read the following questions. Discuss how each of you feel about each one and why.

Set 1

1. How do you feel about the fact that Corey and Topanga had this discussion in a public place, surrounded by people?
2. Was it acceptable that their friends kept trying to help?
3. Do you think that it was acceptable for Topanga to call Corey's job a little project, even if he was not being successful?

Set 2

4. Was Corey right to call out Topanga for being a "hoity toity, kiss Judy's tooshie"?
5. Did Topanga have a point about her doing what was necessary since Corey was not making any money?
6. Who actually won the argument? Why?

Set 3

7. Was this argument necessary to have at all or is it better to just keep quiet and let things work themselves out?
8. Did Corey overreact to being told he was not selling any magazines?
9. Who should apologize first? Why? Should anyone apologize?

Set 4

10. Should Corey have just accepted that Topanga was better at some things and been happy that she was making most of the money?

11. Should Corey, as the man, be making more money for the couple than Topanga?
12. Do you think Topanga was just being proud of her accomplishments or do you think that she was probably rubbing it in Corey's face that she was more successful?

Appendix H
Filler Questionnaire 1
Self TV-Viewing Habits

*Please read each item below and fill in the bubble that reflects how much **you** agree or disagree with the statement using the following scale: **1 – strongly disagree, 2 – disagree, 3 – neither agree or disagree, 4 – agree, 5 – strongly agree**.*

1. My favorite type of TV show is action/adventure.	○	○	○	○	○
2. I'd rather watch TV alone than with other people	○	○	○	○	○
3. I only enjoy watching TV shows that make me feel happy.	○	○	○	○	○
4. My favorite type of TV show is comedy/romantic comedy.	○	○	○	○	○
5. I'd rather watch situational comedies (sit-coms) than science fiction (scifi) TV shows.	○	○	○	○	○
6. My favorite type of TV show is drama/suspense.	○	○	○	○	○
7. I prefer watching my favorite TV shows over watching new TV shows.	○	○	○	○	○
8. I enjoy watching reality shows.	○	○	○	○	○
9. I like to watch TV shows while I eat.	○	○	○	○	○
10. I sometimes use TV shows to distract myself from other responsibilities, HW, chores, etc...).	○	○	○	○	○
11. I enjoy watching educational TV shows	○	○	○	○	○
12. Old TV shows seem to be better than the newer ones	○	○	○	○	○
13. II enjoy watching TV shows with characters that I can relate to.	○	○	○	○	○
14. I prefer on-demand services like Netflix over traditional cable/satellite to watch TV shows.	○	○	○	○	○
15. I enjoy watching TV shows more than movies.	○	○	○	○	○

Appendix I
Filler Questionnaire 2
Partner TV-Viewing Habits

*Please read each item below and fill in the bubble that reflects how much **you believe your partner** would agree or disagree with the statement using the following scale: **1 – strongly disagree, 2 – disagree, 3 – neither agree or disagree, 4 – agree, 5 – strongly agree**.*

1. Their favorite type of TV show is action/adventure.	○	○	○	○	○
2. They would rather watch TV alone than with other people	○	○	○	○	○
3. They only enjoy watching TV shows that make me feel happy.	○	○	○	○	○
4. Their favorite type of TV show is comedy/romantic comedy.	○	○	○	○	○
5. They would rather watch situational comedies (sit-coms) than science fiction (scifi) TV shows.	○	○	○	○	○
6. Their favorite type of TV show is drama/suspense.	○	○	○	○	○
7. They prefer watching my favorite TV shows over watching new TV shows.	○	○	○	○	○
8. They enjoy watching reality shows.	○	○	○	○	○
9. They like to watch TV shows while I eat.	○	○	○	○	○
10. They sometimes use TV shows to distract themself from other responsibilities, HW, chores, etc...).	○	○	○	○	○
11. They enjoy watching educational TV shows	○	○	○	○	○
12. Old TV shows seem to be better than the newer ones	○	○	○	○	○
13. They enjoy watching TV shows with characters that they can relate to.	○	○	○	○	○
14. They prefer on-demand services like Netflix over traditional cable/satellite to watch TV shows.	○	○	○	○	○
15. They enjoy watching TV shows more than movies.	○	○	○	○	○

Table 1

Demographics

Characteristic	*N*	%
N	74	100
Age (yrs)		
Mean	19.22	-
Range	18-25	-
Gender		
Male	37	50
Female	37	50
Race		
Caucasian	38	51.4
African American	26	35.1
Multiple	6	8.1
Hispanic	2	2.7
Asian	1	1.4
Other	1	1.4
Relationship with Partner		
Married	2	2.7
Dating	20	27.0
Friend	48	64.9
Other	4	5.4
Relationship Length (yrs)		
<1	36	48.6
1-3	14	18.9
>3	24	32.4
Significant Male		
Father	56	75.7
Grandfather	8	10.8
Step Father	3	4.1
Uncle	2	2.7
Brother	1	1.4
Family Friend	3	4.1
God Father	1	1.4
Significant Female		
Mother	68	91.9
Grandmother	5	6.8
Aunt	1	1.4

Table 2

Descriptive Statistics for Raw Scores of the Major Study Variables

Variable	*M*	*SD*	α	Possible Range	Observed Range
PrePosA	32.34	7.74	.86	10-50	11-49
Male	31.24	6.70			
Female	33.43	8.61			
PreNegA	17.04	7.84	.90	10-50	10-45
Male	17.08	8.33			
Female	17.00	7.45			
PostPosA	32.51	8.79	.89	10-50	14-50
Male	31.97	8.17			
Female	33.05	9.45			
PostNegA	13.88	5.10	.82	10-50	10-35
Male	14.46	6.20			
Female	13.30	3.67			
ICES Mother	27.32	7.61	.79	14-70	15-53
Male	27.14	7.31			
Female	27.51	7.99			
ICES Father	27.34	6.87	.73	14-70	16-46
Male	28.11	7.42			
Female	26.57	6.28			
PEII	15.51	6.72	.95	10-50	10-36
Male	17.08	7.39			
Female	13.95	5.65			
SCIFF				1-5	1-2.5
Male	1.05	0.26			
Female	1.12	0.38			

Note: PrePosA = Pretest Positive Affect Scale; PreNegA = Pretest Negative Affect Scale; PostPosA = Post-test Positive Affect Scale; PostNegA = Post-test Negative Affect Scale

Table 3
Correlations Between Major Study Variables

Variables	1	2	3	4	5	6	7	8	9	10
1. PrePosA	-	.03	.05	-.06	-.01	-.06	.87**	.01	-.01	-.21
2. PreNegA	-	-	.17	.10	.16	.18	-.07	.59**	.09	.08
3. ICES Mother	-	-	-	.44**	.87**	-.07	.08	.03	-.11	-.11
4. ICES Father	-	-	-	-	.83**	.08	.04	.08	-.06	-.11
5. ICES Total	-	-	-	-	-	.00	.07	.04	-.10	.-.13
6. PEII	-	-	-	-	-	-	-.13	.35*	.16	.26
7. PostPosA	-	-	-	-	-	-	-	-.06	-.09	-.25*
8. PostNegA	-	-	-	-	-	-	-	-	.08	.25*
9. SCIFF Provided	-	-	-	-	-	-	-	-	-	.51**
10. SCIFF Experienced	-	-	-	-	-	-	-	-	-	-

** $p < .05$, ** $p < 0.01$*

Table 4

Multiple Regression Analysis for Variables Predicting Current Perceptions of Emotional Invalidation – Maternal Sources

Variable	*B*	*SE B*	*β*
Model 1			
Inv. Behaviors	5.43	2.36	.26*
Model 2			
Inv. Behaviors	4.92	2.37	-.24*
Gender	-2.79	1.52	-.21
Maternal Invalidation	.13	0.33	.15
Gender X Maternal Invalidation	-.10	0.20	-.19
Total R^2		.12	
F		2.28	

*p < .05

Table 5

Multiple Regression Analysis for Variables Predicting Current Perceptions of Emotional Invalidation – Paternal Sources

Variable	*B*	*SE B*	*β*
Model 1			
Inv. Behaviors	5.43	2.36	.26*
Model 2			
Inv. Behaviors	5.18	2.37	.25
Gender	-2.67	1.53	-.2
Paternal Invalidation	.27	0.34	.28
Gender X Paternal Invalidation	-.13	0.23	-.20
Total R^2		.12	
F		2.44	

*p < .05

Table 6

Multiple Regression Analysis for Variables Predicting Engagement in Emotionally Invalidating Behaviors – Maternal Sources

Variable	*B*	*SE B*	*β*
Gender	0.07	0.08	.11
Maternal Invalidation	0.00	0.02	.10
Gender X Maternal Invalidation	0.01	0.01	-.23
Total R^2		.03	
F		.72	

*p < .05

Table 7

Multiple Regression Analysis for Variables Predicting Engagement in Emotionally Invalidating Behaviors – Paternal Sources

Variable	*B*	*SE B*	*β*
Gender	0.06	0.08	.10
Paternal Invalidation	0.02	0.02	.34
Gender X Paternal Invalidation	-0.01	0.01	-.40
Total R^2		.03	
F		.73	

*p < .05

Table 8

Multiple Regression Analysis for Variables Predicting Change in Positive Affect

Variable	*B*	*SE B*	*β*
Perceptions of EI	0.08	0.08	.13
Emotionally Invalidating Behaviors	1.33	1.62	.10
Total R^2		.03	
F		1.19	

*p < .05

Table 9

Multiple Regression Analysis for Variables Predicting Change in Negative Affect

Variable	*B*	*SE B*	*β*
Perceptions of EI	-0.03	0.12	-.03
Emotionally Invalidating Behaviors	-1.74	2.40	-.09
Total R^2		.01	
F		0.36	

*p < .05

Table 10

Multiple Regression Analysis for Racial and Gender differences on Perceptions of EI

Variable	*B*	*SE B*	*β*
Caucasian Female	-4.27	2.39	-.29
Caucasian Male	-5.53	2.47	-.36*
African American Female	-5.42	2.92	-.27*
All Other	-5.39	2.60	-.32
Total R^2		.08	
F		1.58	

*p < .05

Note: Control = African American Males

Figure 1. Relationship of race and gender on current perceptions of emotional invalidation