

6-2015

# The Relationship between Attachment and Depression: The Mediation Role of Shame, Self-Esteem, and Social Support

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THE RELATIONSHIP BETWEEN ATTACHMENT  
AND DEPRESSION: THE MEDIATIONAL  
ROLE OF SHAME, SELF-ESTEEM,  
AND SOCIAL SUPPORT

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A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
General Experimental Psychology

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by  
Evelyn Estela Ayala

June 2015

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June 2015

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## ABSTRACT

According to the American College Health Association 31.3% of college students reported feeling depressed. Early parental attachment forms an internal working model that is used as reference for later relationships and experiences. Past research suggests that parental attachment is associated with depression. Low self-esteem was found to mediate the relationship between parental bonding (low care and overprotection) and depression. The cognitive schemas of defectiveness and shame were found to mediate the relationship between poor parental bonding and depression. Among cancer patients the relationship between anxious attachment and symptoms of depression was mediated by perceived social support.

Research is necessary to further understand the negative outcomes of insecure parental attachment as it relates to depression. Purpose of study is to simultaneously examine three potential mediators (shame, social support, and self-esteem) of the attachment and depression relationship. The results of the current study suggest that the relationship between insecure parental attachment and depression is indirect with shame, social support, and self-esteem each serving as mediators of this relationship.

## ACKNOWLEDGEMENTS

I would like to thank my committee members, Michael R. Lewin, David V. Chavez, and Manijeh Badiee for all their hard work and endless advice and guidance. Their support throughout this thesis process and journey as a student has been truly invaluable. I would also like to thank my family for all their support. In addition, throughout this process Elisha Barron and Elizabeth Casteneda have been extremely supportive in giving me advice and sitting with me for endless hours encouraging me along the way. I am so grateful to everyone who has given me support along the way.

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CHAPTER ONE  
PROPOSED MEDIATORS OF ATTACHMENT  
AND DEPRESSION

Introduction

Depression is common in our society and therefore it is important to learn about its development in order to establish effective prevention and intervention programs. The lifetime prevalence of depression is estimated to be 5-12% for men and 10-25% of women among the general population (DSM-5, 2013). According to the American College Health Association, 31.3% of college students reported that depressive symptoms interfered with their daily functioning during the past year (ACHA, 2013). Moreover, the deleterious consequences of depression affect academic/professional goals as well as familial relationships. Previous studies suggest that parental attachment, specifically insecure attachment, is related to increased rates of depression in adulthood (Kenny & Sirin, 2006; Avagianou, & Zafiropoulou, 2008; Cattell, 1970; Shah & Waller, 2000; O'Connell, 2008; Armsden & Greenberg, 1987; Grotmol et al., 2010; Oakley-Browne, Joyce, Wells, Bushnell, & Hornblow, 1995). Researchers suggest that secure attachment is related to high affection, respect, and closeness (Carranza, Kilmann, & Vendemia, 2009). Insecure attachment is related to their parents being cold, rejecting, distant, and unavailable (Carranza

et al., 2009). Children develop an insecure attachment from lack of responsiveness and accessibility of their primary caregiver. Therefore insecure attachment is related to higher levels of distress because the child lacks a secure base (Ainsworth, 1979; Lee & Hankin, 2009). According to Ainsworth, Blehar, Waters, and Wall (1978) the prevalence of insecure attachment (insecure 20% and resistant-insecure 10%) is high among American infants. In addition Main and Solomon (1990) suggest that 12-15% of American middle-class children have a disorganized attachment. Because of the high rates of both negative attachment and depression it is further important to understand this relationship by exploring possible intervening variables that can help clinicians better prevent and treat depression.

Depression affects individuals' daily lives and can have detrimental effects on interpersonal relationships and academic performance (Morley & Moran, 2011). Past research suggests that parental attachment is related to depression among adults (Kenny & Sirin, 2006). Thus life's earliest meaningful relationships, such as parental attachment, can form a depressive vulnerability (Bowlby, 1988). Early attachment bonds are important because they lead to the formation of cognitive structures called internal working models, which affect self and relationships (Bowlby, 1988). The internal working models developed from parental bonds are a reference for later relationships (Zaman & Fivush, 2013). The internal working models are the basis for developing relationships outside the family structure and forming intimate relationships (Bowlby, 1988). Thus, it is

important to understand the relationship between insecure attachment and depression further (Leondari & Klosseoglou, 2002) by exploring possible mechanisms by which the relationship takes place.

### Overview

Self-esteem (Rice & Cummins, 1996; Leondari & Klosseoglou, 2002), shame (Lutwak & Ferrari, 1997), and social support (Armsden et al., 1987; Mullis et al., 1999) have been found to be each individually related to attachment. Researchers also suggest that self-esteem (Tarlow & Haaga, 1996), shame (Andrews, Qian, & Valentine, 2002), and social support (Stice, Ragan, Randall, 2004) are each individually related to depression. Past researchers also suggest that insecure parental attachment is related to depression (Leondari & Klosseoglou, 2002).

Given the previous research it is important to explore the mediational role of shame, self-esteem, and social support among attachment and depression. Previous studies have assessed the mediators individually. Personality factors such as low self-esteem, introversion, distress, and emotional instability were found to mediate the relationship between parental bonding (low care and overprotection) and depression (Avagianou & Zafiropoulou, 2008). Defectiveness/shame, self-sacrifice, and insufficient self-control mediated the relationship between poor parenting and depression (Shah & Waller, 2000). As

part of a larger study assessing attachment security and disease effects of cancer on depression perceived social support mediated the relationship between anxious attachment and symptoms of depression (Rodin, et al., 2007).

### Purpose of The Study

To date, no study has examined shame, self-esteem, and social support as simultaneous mediators to the relationship between parental attachment and depression. The purpose of this study is to examine the contribution of shame, social support, and self-esteem as simultaneous mediators of the relationship between attachment and depression.

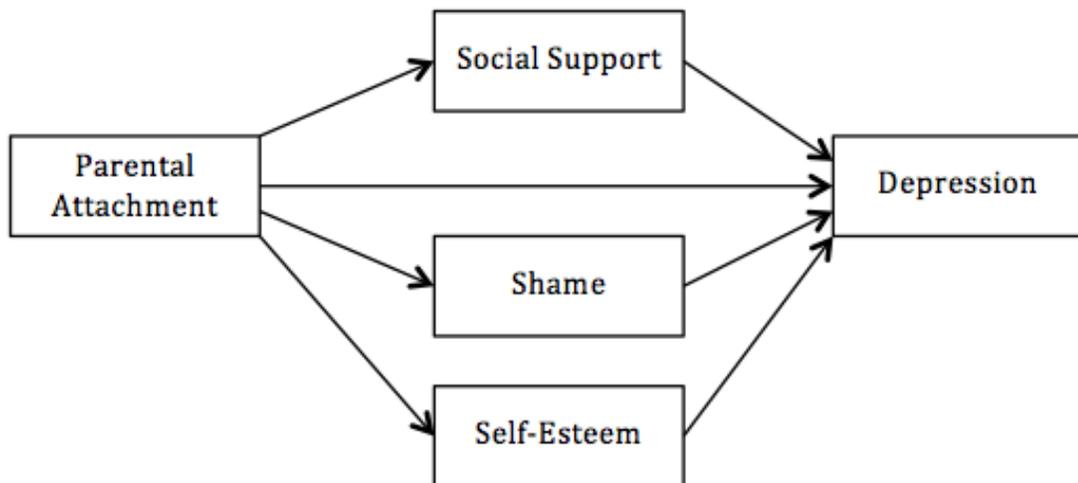


Figure 1. Shame, Social Support, and Self-Esteem as Simultaneous Mediators of the Relationship Between Attachment and Depression

## CHAPTER TWO

### LITERATURE REVIEW

#### Attachment

A parental attachment has been defined as the bond formed between a child and their primary caregiver (Bowlby, 1988; Ainsworth, 1979). A secure attachment forms when the child believes they are safe and protected from harm (Bowlby, 1988; Ainsworth, 1979; Lee & Hankin, 2009). Furthermore, a secure attachment forms when the attachment figure can provide the child with their basic needs. While researchers often refer to biological parents (particularly the mother), the attachment figure doesn't have to be a biological parent. Therefore, the bond is independent of biological ties (Ainsworth, 1979). Secure attachment is based on how responsive and accessible the primary caregiver is to the child's needs. Furthermore, the caregiver must be sensitive to the child's needs throughout their life not just in early childhood (Ainsworth, 1979). Moreover, insecure attachment is related to higher levels of distress because the child lacks a secure base, and parental attachment is a frame of reference persists through adulthood (Ainsworth, 1979; Lee & Hankin, 2009).

In particular, parental attachments are important because they lead to the formation of cognitive structures called internal working models that affect self and relationships (Bowlby, 1988). Parental attachments form an internal working

model that is a reference for later relationships (Zaman & Fivush, 2013). The internal working models are the basis for developing relationships outside the family structure and forming intimate relationships (Bowlby, 1988). In later life, attachment models are then generalized to other attachment relationships such as romantic attachment (Le Poire et al., 1997). Attachment is important for healthy socio-emotional interactions. Secure attachment leads to more intimate relationships in later life and results in higher rates of emotional well-being (Zaman & Fivush, 2013). The internal expectations among children lead to certain behaviors during attachment relevant situations such as the “strange situation paradigm”. The internal working model influences the anxiety level in school age children when separated from their primary caregiver (Zaman & Fivush, 2013). Insecure attachment can lead to negative developmental outcomes such as a predisposition for depression, low self-esteem, and anxiety (Riggs & Han, 2009; Lee & Hankin, 2009). It is presumed that insecure attachment leads to internalization of negative events based on the beliefs of unworthiness (Riggs & Han, 2009; Lee & Hankin, 2009). Internalization of events and self-blame in particular during stress has been associated with negative emotions (depression and anxiety) and outcomes such as depression (Riggs & Han, 2009).

## Depression

Clinical depression is one of the most commonly experienced psychological disorders (DSM-5, 2013). Depression is classified as a mood disorder in which affect and motivation are altered among individuals. Physical symptoms that are common are insomnia/hypersomnia, low mood, fatigue, anhedonia and reduced concentration. This disorder impacts daily life such as academics/career fulfillment, interpersonal relationships, as well as physical health. The impact of this disorder can result in long-term consequences such as loss of job and interpersonal relationships that can intensify the symptoms of depression (DSM-5, 2013).

### Attachment and Depression

Insecure attachment can increase the vulnerability to depression because of the individual's negative view of self and others (Kenny & Sirin, 2006). Parenting that is insensitive and unreliable can contribute to the child's internal working model of self as unworthy and regard others as untrustworthy. The internal working model is influenced by the parental attachment among emerging adults, and positive attachment is related negatively to depression. The influence of attachment on depression is through the internal working model of the self and this is independent of financial support or other direct mechanisms such as how often and how long parents call their child (Kenny & Sirin, 2006). Therefore, an attachment is based on the perception or internal working model rather than direct parental contribution in particular among young adult offspring.

Moreover, the internal working model shaped by the parental attachment can then lead to a vulnerability to depression (Kenny & Sirin, 2006; Beck, 1967, 1987). Aaron Beck theorized that some individuals become depressed as a result of stressful life events because they have a cognitive vulnerability (Beck, 1967, 1987). The underlying pathology of depression is individual's cognitive vulnerability to depression rooted in parental attachment early in childhood. Therefore, Beck concluded that depression is a disorder of cognition. Beck suggested that the symptoms of depression such as motivation, affect, and physical ailment are a result of how the individual perceives the future, the world, and themselves. He believed that people develop a self-concept, which include perceptions of the self, future, and world. The self-concept is developed during childhood and is based on messages from important people during the course of one's development (Beck, 1967, 1987). So the self-concept is then used to interpret situations, events, and behaviors of others. For example, an individual with a negative self-concept of self, future, and world will gravitate as well as focus on the disappointing parts of an event therefore reinforcing/solidifying their negative self-concept. The reinforcement and solidification process of the self-concept will yield a pervasive long-term cognitive structure or schema. However, a person's self-schema can be inactive but later triggered by stress and the process of interpreting events through the schema begins (Beck, 1967, 1987). The results of the study by Kenny and Sirin suggest that parental attachment is indirectly related to depression through self-worth as a mediator (2006). Self-

worth, a related construct to self-esteem, was associated positively to healthy parental attachment. Healthy parental attachment was negatively associated with depression (2006).

Consistent with Beck's theory the study by Shah and Waller (2000), participants with major depression recalled their childhoods as consisting of uncaring and overprotective parenting. In addition, young adults who report insecure attachment with their parents show higher rates of depression in comparison to the securely attached group (Armsden et al., 1990). Participants with major depression reported unhealthy levels of a wide range of unconditional core beliefs (Shah & Waller, 2000). These unconditional core beliefs transcend across situations and consist of constructs related to abandonment, defectiveness/shame, and inhibition of emotion. Three core beliefs were particularly associated with depression (i.e., defectiveness/shame, self-sacrifice, and insufficient self-control) and these core beliefs mediated the relationship between recollections of poor parenting and depression. Specifically, the relationship between parental overprotection and maternal bonding and depression was mediated by dependence/incompetence, failure to achieve, emotional inhibition, unrelenting standards and vulnerability to harm (Shah & Waller, 2000).

Similarly, a study examined the relationship between parental bonding such as lack of parental care, overprotection, or both and depression during adulthood (Avagianou & Zafiropoulou, 2008). Parental bonding is a similar

construct to parental attachment; Parental Bonding can be measured across four areas of bonding; optimal bonding (high care, low control), weak absent bonding (low care, low control), affectionate constraint (high care, high control)(Avagianou & Zafiropoulou, 2008). The objective of the study was to assess different personality dimensions as possible mediators of the relationship between parental bonding perceptions and depression. Results indicated that lack of parental care and overprotection were linked to depressive symptoms in adulthood. In addition, the results suggested that personality characteristics such as low self-esteem, introversion, distress and emotional instability were also linked with depressive symptoms. Parental high care and low protection was linked with increased self-confidence and less stress and less depressive symptoms (Avagianou & Zafiropoulou, 2008). The correlation between paternal bonding and depression was not significant after the care by father effect was removed, and care by the mother was controlled. Therefore, the results suggest that paternal bonding did not seem to influence the development of depression in adulthood. Parental bonding may predispose the development of later psychopathology through the effect of maternal bonding on the development of personality (Avagianou & Zafiropoulou, 2008). Maternal care and overprotection were significantly correlated with depressive symptoms. The mothering characteristics that are strongly related to their child's psychopathology are a lack of love or care as well as overprotective behavior that does not allow the child to make decisions. The personality traits that are correlated with parental

overprotection such as insecurity, high-stress levels, introversion, and the inability of adapting to new situations are factors that are related to future psychopathology. The personality factors play a mediating role between parental bonding and depression (Avagianou & Zafiropoulou, 2008).

Similar findings were found suggesting that adults with major depression remembered their parents during childhood as overprotective and uncaring (Shah & Waller, 2000). People with depression tend to have three core beliefs that differentiated them from non-depressed groups. The three core beliefs were defectiveness/shame, self-sacrifice, and insufficient self-control. The results of the study suggest that the core beliefs mediated the relationship between poor parenting and depression. Among people with depression the study also found that five core beliefs (vulnerability to harm, unrelenting standards, dependence/incompetence, emotional inhibition, and failure to achieve) were mediators of the relationship between parental overprotection as well as maternal bonding and levels of depression. Among people without depression a smaller mediational role was found in association to vulnerability to harm beliefs. Overall, maladaptive core beliefs have been associated with deficient parental care as well as overprotection from mothers (Shah & Waller, 2000).

In particular, parental attachment can be affected by parental mental health disorders. A study explored the relationship between maternal mental health disorders and their adult children's attachment (O'Connell, 2008). The results suggest that adults with mothers diagnosed with severe mental health

disorders (52.5% Schizophrenia, 47.5% depression) reported their own mental health disorders (52%). Specifically, 50% reported a history of depression.

Participants reported their mothers as unreliable and not feeling safe, this may be because of verbal or physical abuse. Participants also reported a lack of important adult figures in childhood and in adulthood believed that there were few trustworthy/consistent people in their lives (O'Connell, 2008).

A similar relationship was suggested between attachment quality and well-being specifically in relation to depression/anxiety, as well as resentment/alienation (Armsden & Greenberg, 1987). Attachment quality was measured through questions regarding current relationships between the adult child and parent. However, parent-child relationships have been found to be stable through childhood and adulthood. Parenting styles tend to persist and remain the same for both parents. Adolescents that reported parental attachments that were secure were more likely to be well adjusted. The results of the study suggest that these individuals tend to have higher self-esteem than average and tend to communicate with their family more frequently. Additionally, half of these individuals reported having high quality relationships with their peers. Individuals who reported insecure parental attachment also reported emotional and verbal detachment, as well as resentment/alienation, when describing the quality of their parental relationships. The findings of the study suggest that perceptions of family relationships still contribute to well-being among college students (Armsden & Greenberg, 1987).

Similarly, Grotmol et al. examined the relationship between parental bonding and depression among a nation-wide graduating cohort of physicians (2010). The results of the study suggest that severe symptoms of depression were related to low maternal care 4-9 years following graduation. A similar study also examined the relationship between parental bonding and depression among women with and without a history of depression (Oakley-Browne et al., 1995). Results revealed that low maternal care was significantly related to adult children's depressive symptoms. Specifically, low maternal care raised the risk for major depression onset by four times. The findings of the study suggest that negative parental attachments specifically lack maternal care is a significant risk factor later onset of depression among adults (Oakley-Browne et al., 1995). Although both male and female participants reported their mothers as more overprotective and caring in comparison to their fathers, maternal care was found to be a stronger factor in relation to depression than paternal care (Grotmol et al., 2010). Males reported higher rates of low parental care while female participants reported more positive parental attachment. However, there were no differences in rates of depression across genders. These results suggest that the parental attachment-depression relationship may be due to a self-critical view. This study also supports the schema theory of cognitive vulnerability development during childhood through parental attachment and later maladaptive outcomes such as depression. The participants that had depression also reported higher rates of neuroticism and self-criticism when compared to those without depression. Self-

esteem was found to partially mediate the relationship between parental attachment and depression (Grotmol et al., 2010).

### Self-Esteem

Self-esteem is a major part of the self-concept and has been referred to as the “affective and evaluative part of the self” (Blyth & Traeger, 1983, p. 91). Self-esteem in comparison to self-concept readily fluctuates making it more complex. Self-esteem has been seen as a global sense that is based on evaluations of the ability of success in areas that are important to the individual. Success in areas that one does not consider important does not influence self-esteem. Self-esteem is notably lower in girls especially during junior and high school years; this is associated with women’s tendency to develop negative perceptions of their attractiveness (Blyth & Traeger, 1983). Low self-esteem is a strong factor in relation to emotional and behavioral problems such as aggression, anxiety, addiction, and depression (Leary et al., 1995).

### Self-Esteem and Depression

Similarly depression is negatively correlated to self-esteem among a nonclinical sample (Tarlow & Haaga, 1996). Positive self-esteem was more strongly associated with positive affect in comparison to negative affect. Negative self-esteem is therefore associated with disengaging in positive

experiences, which is distinctive of depression (Tarlow & Haaga, 1996). Self-esteem has been associated with attachment (Rice & Cummins, 1996).

### Attachment and Self-Esteem

Furthermore, parenting that is caring and encouraging of autonomy among young adults and adolescents was associated with higher self-esteem (Rice & Cummins, 1996). In addition, the gender of the parent has been shown to influence self-esteem differently. Studies suggest that attunement between the child and mother is most important in relation to self-esteem (Rice & Cummins, 1996). As part of a larger study assessing parental attachment in relation to self-esteem, interpersonal efficacy, affect, parental control, and attachment were found to be related to self-esteem among young adults (Leondari & Klosseoglou, 2002). Likewise, parental attachment had a significant direct relationship on self-esteem (Laible, Carlo, & Roesch, 2004). Participants that reported secure attachments in comparison to insecure attachments reported higher rates of self-esteem (Laible et al., 2004). In addition, parental control was associated with self-esteem and participants' perceptions of family/parental control can result in development of low self-esteem as well as negative self-view. Secure parental attachment was also found to be associated to affective regulation, as well as higher self-efficacy (Leondari & Klosseoglou, 2002).

Similarly, as part of a larger study assessing the mediational role of attachment insecurity among adolescent perceptions of parental attachment and negative cognitive style, insecure parental attachment was found to increase the

risk for negative cognitive styles such as low self-esteem among youth (Gamble & Roberts, 2005). The results of the study also suggests that negative parent-child relationship attachments lead to cognitive vulnerabilities specifically negative self-beliefs, depression, and feelings of worthlessness (Gamble & Roberts, 2005).

Additionally, negative parent-child relationship attachments are often associated with parental alcoholism (Lease, 2002). As part of a larger study that assessed the relationship between parental drinking exposure, parental attachment, interpersonal attachment, and self-esteem among college students; the study also examined the relationship between retrospective reports of parental alcoholism as it relates to adult children's reports of depression and self-esteem (Lease, 2002). Paternal drinking behavior did not relate to their children's depression rates but did however indirectly relate to rates of self-esteem. Specifically, adult children's recall of drinking behavior characterized by loud, violent, and or abusive tendencies was especially linked with self-esteem. Participants that reported fearful attachment styles reported higher rates of depression and low self-esteem was found to mediate this relationship. Lease (2002) suggests that internal working models/negative cognitive styles are related to negative attachment styles as well as the later development of depression and low self-esteem (Lease, 2002).

Self-concept a related construct to self-esteem was assed as it relates to attachment and interpersonal trust (Carranza & Kilmann, 2000). Female

participants that reported fearful attachments in comparison to securely attached individuals were found to be self-critical and negatively described their appearance, health, and bodies. Participants who reported preoccupied attachments in comparison to those with secure attachments rated their self-identity more negatively and reported feeling more negative about their self, moral, and personal worth. Participants with preoccupied attachment rated higher in negative view especially when comparing themselves to others behaviors and opinions. Participants who reported dismissive attachments had lower interpersonal trust in comparison to securely attached individuals. Parenting that was described as absent and demanding was related to low self-esteem. The findings by Carranza and Kilmann (2000), suggest that insecure attachment styles are related to lower interpersonal trust and lower self-esteem. Laible et al. (2004) suggest that the findings are consisted with attachment theory such that healthy attachment styles with parents allow for the positive development of the self.

### Shame

Moreover, shame is defined as having overwhelming and at times debilitating negative feelings of powerlessness, inferiority, and hyper consciousness of self (Tangney, Miller, Flicker, & Barlow, 1996). According to past research, shame involves negative feelings regarding who one is and

incorporates others into these feelings by thinking that others are judging them or disproving of their behavior (Rahm, Renck, & Ringsberg, 2006). Shame is a person's negative evaluation about the whole self (Lewis, 1992). As a result feelings of inadequacy and defectiveness are often accompanied by wanting to disappear to avoid exposing perceived flaws (Lewis, 1992). Feelings of shame are found to be on a continuum where mild feelings of embarrassment and powerful feelings of humiliation are on opposite ends (Rahm et al., 2006). When a person continues to stay on the humiliation end of the spectrum for a long period of time they become at risk of developing chronic feelings of shame that can lead to social phobia, pathologically low self-esteem, and a propensity for isolation. Thoughts of shame have been found to be activated by rejection, criticism, or fear of rejection, discrimination, devaluation, moral condemnation, inattentiveness, and unrequited love. People who experience frequent shame often compare themselves to others and they see themselves negatively in comparison. Individuals who make these comparisons result in always seeing themselves as less than. Therefore, the comparison leads to lack of self-confidence and shame becomes painful/destructive. Researchers have distinguished two types of shame; overt and covert (Rahm et al., 2006). When shame is overt, a person feels ashamed or feels embarrassed and has physical expressions such as blushing, palpitations, sweating, and behaviors. Covert shame is more constant, which means the individual is in a state of shame, but it is unconscious and difficult to identify. Covert and overt shame affect one's life

as it relates to engagement in social relationships (Rahm et al., 2006). Shame prone individuals may avoid social situations. Shame proneness has been associated to negative outcomes such as suicidal behaviors in men, self-destructive behaviors among adolescents, suicide attempts, and substance abuse (Milligan & Andrews, 2005).

Likewise, predispositions to experience negative affect that contribute to the expression of mental health symptoms such as shame and guilt have been found among victims of aggression (Tangney & Dearing, 2002). Guilt is distinctive from shame because it is a predisposition to feel remorse and regret related to behavior that is perceived as bad. Shame, however, is the predisposition to criticize the global self. Shame is relatively stable and pathological because it is based on global self. Shame detrimentally impacts the self because it promotes self-blame leading to feelings of hopelessness because there is a perception that the internal self can't be changed. Shame is also associated with feeling that one is not good and a sense of humiliation and worthlessness. Shame is also associated with wanting to disappear and conceal the self from people (Tangney & Dearing, 2002). A broad range of mental disorders are associated with shame such as anxiety and depression (Shorey et al., 2011). People who are shame prone are therefore at higher risk of having mental health problems. Shame proneness has been associated with somatization and psychological symptoms. Additionally, concealment has been found to mediate the relationship between shame proneness and psychological

symptoms (Pineles, Street, & Koenen, 2006). Shame has been shown to influence immune functioning via the elevation of pre-inflammatory cytokine activity, and this has potential long-term negative health implications (Dickerson, Kemeny, Aziz, Kim, & Fahey, 2004).

### Attachment and Shame

Additionally, a similar study analyzed the association between parental bonding and shame among young adults (Lutwak & Ferrari, 1997). The results of the study found an association between shame and parental bonding. Moral affect is the person's feelings of what is right or wrong (Lutwak & Ferrari, 1997). Moral affect inhibits socially undesirable behavior and increases socially desirable behavior (Tangney, 1996). The moral affect aspect of shame is in particular due to shame prone individuals' feeling that people are evaluating them negatively, therefore, social situations maybe anxiety provoking (Lutwak & Ferrari, 1997). The moral affect component of shame was present when participants rated their parents as non-nurturing, demanding, and over-controlling. Participants that reported their parents as lacking affection, their mother as neglectful as well as controlling reported higher rates of shame. In addition, the study also found that shame was negatively related to the paternal care and maternal protectiveness and positively related to fear of negative social evaluation/avoidance. The study also found that shame was related to social anxiety, fear of social evaluation, and interpersonal avoidance (Lutwak & Ferrari, 1997).

## Shame and Depression

Furthermore, researchers suggest that shame is associated with the onset and development of depression among interview studies (Andrews et al., 2002). Several studies have reported an association between shame and depression (Andrews et al., 2002; Cheung et al., 2004). In particular the study by Cheung et al. (2004) found that the relationship between shame and depression was partially mediated by rumination. However, shame is significantly related to depression even after controlling for rumination. This means that shame is associated with depression (Cheung et al., 2004).

Similarly, further research assessed the relationship between shame regarding others evaluations of the individual/self-evaluations as they relate to psychopathology (depression and dysphoria) (Allan, Gilbert, & Goss, 1994). The results of the study suggest that shame relate to others, and self-evaluation is significantly related to measures of psychopathology specifically depression and dysphoria in comparison to event related shame. The study also suggests that shame regarding others evaluations specifically the emptiness part of this construct is also related to depression. The results support previous theories that suggest that shame has pathogenic outcomes because it is part of the global and stable part of the self-awareness interpretation of relationships with others (Allan et al., 1994).

In a similar study, examining the relationships among narcissism, guilt, shame, and depression in relation to gender (Wright & Leary, 1989). The results

of the study suggest that shame is significantly related to narcissism and depression. The relationship between shame and depression was stronger in comparison to guilt. Males were found to report higher rates narcissism and females reported higher rates of depression. However, gender differences in relation to shame and guilt were specific to self-image shame for women in comparison to men. The results of the study suggest that shame is a more important affective condition than guilt that people with depression struggle with. This is important to note as Wright and Leary (1989) noted clinician's previously believed that guilt was the central affective condition that depressed clients struggle with.

Likewise, a similar study analyzed the relationship between parental emotional neglect and emotional abuse with long-term maladaptive outcomes in adulthood such as depression, anxiety and disassociation (Wright, Crawford, & Del Castillo, 2009). When controlling for income, parental alcohol abuse, gender, and other childhood abuse, parental emotional neglect and emotional abuse continued to be related to the maladaptive outcomes (depression, anxiety and disassociation). Specifically, parental emotional neglect and emotional abuse were significantly related to anxiety and depression; vulnerability schemas such as shame, harm, as well as self-sacrifice mediated the relationship. The findings of the study are supportive of the authors theoretical perspective that parental negative experiences, in particular, emotional abuse/neglect disrupt attachment

security and, therefore, lead to maladaptive representations of the self (Wright et al., 2009).

### Social Support

A factor that has been found to contribute to the adjustment process is social support (Hyman, Gold, & Cott, 2003). Social support has been defined in the past literature as being assistance given to people that are coping with events that are stressful (Hyman et al., 2003). Social support acts as a buffer to high levels of stress and protects one from developing maladaptive behaviors and symptoms (Hyman et al., 2003). Past research suggest that social support has a buffering effect of the stressful event by changing the cognitive evaluation of the experience (e.g., a person with a social support system can call someone for help if their car breaks down), therefore lowering or eliminating one's reaction (Hyman et al., 2003).

Previous research also suggests that there are three main sources of social support; family support, formal support such as school, and informal support such as friends or adults (Mullis et al., 1999). The quality of social support relationships is directly affected by social skills and relational competence. Therefore, parental attachment has been theorized to affect directly individuals perceived social support. This is because parental attachment serves as a model of expectations for future relationships (Mullis et al., 1999).

## Attachment and Social Support

Furthermore, a secure parental attachment was related to well-being specifically self-esteem, and insecure parental attachment was associated with depression among adolescents and young adults (Armsden et al., 1987).

Adolescents with secure parental attachments reported higher self-esteem and also reported higher quality relationships with their peers. In comparison participants that reported insecure attachment rated higher on alienation and resentment towards their parents. In addition, insecurely attached participants reported feeling detached emotionally and verbal interaction quality with their parents is not interpreted as meaningful. However, there was a low correlation between parental attachment and relationship to peers (Armsden et al., 1987).

Similarly, a research study explored adolescents/young adults perception of attachment to their parents and how it relates to the perception of sources of social support (Mullis et al., 1999). Participants consisted of high school and college freshmen/ sophomores from a University. The results of the study found support for the attachment theory and the results suggest that higher attachment to their parents was related to higher rates of perceived social support from family members and friends. In particular maternal attachment, perception was the strongest in association to perceived social support especially among younger adolescents (Mullis et al., 1999). The results among young adults may be due to the developmental changes from parental control to individuation. Because they have a secure attachment to their family they can develop strong

social bonds with friends. The parental attachment may lead to more strong attachments to social support figures such as friends or family members throughout development (Mullis et al., 1999).

### Social Support and Depression

Withal, the role of lack of perceived social support in relation to depression was assessed using longitudinal data obtain from adolescent girls (Stice et al., 2004). The findings of the study suggest that parental support was associated with depression and the onset of major depression (Stice et al., 2004). However, peer support was not associated to depressive symptoms. Therefore, social support decreases the likelihood of depressive symptoms and that the relationship may be due to parental support in adolescence specifically. The results of the study also suggest that depression increases support erosion among peer support but not parental support. This may be due to depressive behaviors in which support erosion is promoted such as seeking reassurance excessively, complaints, dependency, and social inadequacy. People often reject and are less accepting of depressed individuals even among strangers. This suggests that depression can lead to higher levels of rejection among individuals who have not developed strong intimate relationships (Stice et al., 2004).

## Summary

In summation, insecure attachment can increase the vulnerability to depression through internal working models (Kenny & Sirin, 2006). Similarly depression is negatively correlated to self-esteem among a nonclinical sample (Tarlow & Haaga, 1996). Furthermore, parenting that is caring and encouraging of autonomy among young adults and adolescents was associated with higher self-esteem (Rice & Cummins, 1996). Additionally, there is an association between shame and parental bonding. (Lutwak & Ferrari, 1997). Furthermore, researchers suggest that shame is associated with the onset and development of depression among interview studies (Andrews et al., 2002). Therefore, a secure parental attachment was found to be related to well being specifically self-esteem, and insecure parental attachment was associated with of depression among adolescents and young adults (Armsden et al., 1987). A similar study suggests that social support decreases the likelihood of depressive symptoms and that the relationship may be due to parental support in adolescence specifically (Stice et al., 2004).

## Mediation Relationships

Given the previous research regarding the indirect relationships of parental attachment and depression it is important to explore the mediational role of shame, self-esteem, and social support. Previous studies have assessed

the proposed mediators individually. Related personality factors such as low self-esteem, introversion, distress, and emotional instability were found to mediate the relationship between parental bonding (low care and overprotection) and depression (Avagianou & Zafiropoulou, 2008). Likewise, the cognitive schemas of defectiveness/shame, self-sacrifice, and insufficient self-control were found to mediate the relationship between poor parental bonding and depression (Shah & Waller, 2000). As part of a larger study assessing the relationship between attachment security and depression in cancer patients, perceived social support mediated the relationship between anxious attachment and symptoms of depression (Rodin, et al., 2007).

### Hypotheses

Because past researchers suggests that parental attachment, self-esteem, shame, and social support are associated with depression among adults, further research is needed to explore these relationships (Kenny & Sirin, 2006; Rice & Cummins, 1996; Leondari & Klosseoglou, 2002; Tarlow & Haaga, 1996; Stice et al., 2004). Furthermore, past research has found shame (Shah & Waller, 2000), social support (Rodin, et al., 2007), and self-esteem (Avagianou & Zafiropoulou, 2008) as individual mediators of the relationship between attachment and depression. Based on the research literature, we have hypothesized that parental attachment will be related to depression. Additionally, we hypothesize that

parental attachment will be predictive of self-esteem, social support and shame. Self-esteem, social support, and shame will each be predictive of depression. Self-esteem, social support, and shame will each simultaneously mediate the relationship between parental attachment and depression. No other study to date has analyzed the above relationship, and this project is important in the development of prevention and intervention program development.

## CHAPTER THREE

### METHOD

#### Participants and Recruitment

Participants (101 males & 670 females) consisted of undergraduate students as well as participants from the general population. Participants from the general population were recruited through social media such as Facebook and Craigslist. Undergraduate participants were recruited from social and behavioral sciences courses. The mean age for participants was 24 (range 18-61) with a standard deviation of 9.52 and only participants who reported having maternal and paternal attachment figures were included in the analyses (N=771). Participants' were from diverse ethnic backgrounds including the following ethnicities: 52.9% Latino/a, 31.6% Caucasian, 9.9% African American, 8.5% Asian/Pacific Islander, and 2.2% American Indian, 3.9% identified as other. All participants were English speaking and undergraduate students were given four extra credit points for their participation in the study.

## Measures

Participants completed a series of online questionnaires containing 10 self-report measures, a demographics form, and an informed consent form. However, only the following five self-report measures were used for this study.

### Demographics Form

The form consisted of questions regarding age, gender, marital status, education, and yearly income.

### Parental Attachment Questionnaire

The Parental Attachment Questionnaire (PAQ; Kenny, 1990; Kenny & Hart, 1992) assesses attachment to parental figures and is based on Ainsworth's theory of attachment in which secure attachment is based on notions of parental fostering of autonomy and exploring of one's environment (Ainsworth et al., 1978). The PAQ has three subscales measuring parental fostering of autonomy, affective quality of attachment, and parental role in providing emotional support. The PAQ consists of 55 items, rated on a five-point Likert type scale from 1 (not at all) to 5 (very much) in which participants answer items in regard to both their maternal and paternal attachment figures. Total scores for maternal and paternal attachment were obtained. The total PAQ shows good internal consistency with a Cronbach's alpha of .92 for parental attachment (Kenny, 1990). The internal consistency for the PAQ affective quality of relationships subscale was good with a Cronbach's alpha of .96 (Kenny, 1990). The internal consistency for PAQ of parental emotional source of support subscale was good with a Cronbach's

Alpha of .88 (Kenny, 1990). The internal consistency for PAQ of parental fostering of autonomy subscale was also good with a Cronbach's Alpha of .88 (Kenny, 1990).

The concurrent validity of the PAQ was assessed using the Moos Family Environment Scale and the scales were theoretically expected to correlate (Kenny, 1988). The Moos Family Environment Scale (FES) assess family characteristics specifically focuses on 10 subscales (cohesion, expressiveness, Independence, control, conflict, Achievement Orientation, Intellectual-Cultural Orientation, Active-Recreational Orientation, Moral-Religious emphasis, and organization)(Moos, 1990)(Moos & Moos, 1983). The PAQ quality of attachment and FES Cohesion were significantly related (Kenny, 1988). PAQ parental fostering of autonomy and FES Expressiveness was also significantly correlated. Likewise, the PAQ parental fostering of autonomy and FES Independence was significantly associated. The PAQ parental fostering of Autonomy and FES Control were negatively related. The PAQ parental role in providing emotional support and FES Cohesion was also significant. PAQ parental fostering of autonomy and FES Expressiveness was significant. These relationships between the PAQ subscales and the FES subscales provides evidence of concurrent validity.

#### Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) is a 10-item questionnaire that measures general self-esteem. Items are answered on a five-

point Likert type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The self-esteem score has a possible range of 0 to 30 where higher scores are indicative of greater self-esteem. Internal consistency of the scale was demonstrated with a Cronbach's alpha coefficient of .91. The RSES was negatively correlated with depression, anxiety, and stress providing evidence of concurrent validity. The text is on the next line below. This is the text for the Interpersonal Support Evaluation List Revised

The Interpersonal Support Evaluation List Revised (ISEL-R; Cohen et al., 1983) is designed to assess perceived social support. The ISEL-R consists of 40 items that are rated on a five-point Likert type scale ranging from 1 (very unlikely) to 5 (very likely). The ISEL-R measures perceived support in the areas of: Appraisal, Belonging, Tangible Support, and Self-Esteem. The total ISEL-R demonstrated good internal consistency with a Cronbach's alpha of .88. The internal consistency for the sub scales was satisfactory with Cronbach's alphas as follows .70-.82 for Appraisal, .62-.73 for Self-Esteem, .73-.78 for Belonging, and .73-.81 for Tangible Support. Additionally, the ISEL was significantly correlated with the Moos Family Environment scale providing evidence of concurrent validity

#### Experience of Shame Scale

The Experience of Shame Scale (ESS; Andrews, 2002) consists of 25 items rated on a 4-point Likert type scale ranging from 1 (not at all) to 4 (very much). The ESS measures three areas of shame: Character (personal habits,

manner with others, what sort of person you are and personal ability), Behavior (Shame about doing something wrong, saying something stupid and failure in competitive situations), and Body (feeling ashamed of one's body or part of it). Each subscale includes frequency of experiencing, thinking, avoiding any of the 3 areas of shame in the past year. The total scale has a good internal consistency of Cronbach's alpha of .93. ESS shame scale correlates moderately with PANAS shame scale ( $r=.57$ ), resulting in satisfactory concurrent validity (Heaven, Ciarrochi, & Leeson, 2009).

#### Brief Symptom Inventory-18

The developer of SCL-90R created two scales 53-item BSI and the Brief Symptom Inventory-18 (BSI-18; Derogatis & Melisaratos, 1983)(Recklitis & Rodriguez, 2007). The BSI-18 assesses participants' depression, anxiety and somatization symptoms. This questionnaire is composed of 18 Likert-type items rated on the basis of distress over the last 7 days rated on a 5-point scale from 1 (not at all) to 5 (extremely). Greater scores indicate higher levels of psychiatric symptoms. For the study only the depression subscale was used. This depression subscale has good internal consistency with a Cronbach's alpha of .86. The SCL-90 and BSI-18 significantly correlate between .91 to .96 (Recklitis & Rodriguez, 2007). The correlation demonstrates satisfactory concurrent validity.

## Procedure

The SONA Research Management System was used at CSUSB and participants signed up for the available study to participate in the online survey. Non-student participants were recruited through Facebook and Craigslist. Participants were given an informed consent form, they also completed a demographic sheet, and they then carefully read and rated each of the questionnaires. After participants complete the survey that took 45 to 60 min, they were asked if they had any questions or concerns. After participation in the study participants were then thanked and given resources for abuse and mental health.

## Design

The study employed a non-experimental, correlational design. All study hypotheses were tested with regression and the Preacher and Hayes Bootstrapping analytic strategy to examine the simultaneous multiple mediation hypotheses.

## CHAPTER FOUR

### RESULTS

#### Preliminary Screening

All variables were screened for violations of assumptions: normality, homoscedasticity, linearity, outliers, and multicollinearity. The scatter plot of standardized predicted values, standardized residuals fit the pattern of a normal curve, linear trend, and homoscedasticity. Standardized residuals did show 10 outliers above three standard deviations and they were removed. The collinearity test, tolerance statistic of .965 indicates no multicollinearity.

#### Descriptive and Correlation Analysis

Refer to Table 1 for descriptive and correlation analysis information.

#### Simultaneous Multiple Regression Analysis

A regression analysis with all maternal and paternal attachment subscales of the Parental Attachment Questionnaire as predictors of depression was conducted. The results revealed that the model was significant ( $R^2 = .15$ ,  $F(6, 705) = 21.51$ ,  $p < .001$ ) with maternal affective quality of relationships ( $\beta = -.201$ ;

$t = -2.88, p < .01$ ), maternal facilitation of independence ( $\beta = .005; t = .08, p = .936$ ), maternal source of support ( $\beta = -.014; t = -.20, p = .837$ ), paternal affective quality of relationships ( $\beta = -.263; t = -4.01, p < .001$ ), paternal facilitation of independence ( $\beta = -.115; t = -1.95, p = .052$ ), paternal source of support ( $\beta = .149; t = 2.42, p < .05$ ) were predictive of depression. However, only paternal and maternal affective quality of relationships as well as paternal source of support were significant. A regression analysis with all of the proposed mediators (shame, self-esteem, and social support) was also analyzed predicting depression. The results of the model were significant ( $R^2 = .42, F(3, 581) = 137.50, p < .001$ ) and indicated that shame ( $\beta = .263; t = 6.62, p < .001$ ), self-esteem ( $\beta = -.327; t = -7.40, p < .001$ ), social support ( $\beta = .179; t = -4.59, p < .001$ ), each predicted depression.

### Multiple Mediation Analysis

All multiple mediation hypotheses were tested using the Preacher and Hayes bootstrapping analyses (2008). A non-parametric multiple mediator bootstrapping analysis was conducted using 10,000 bootstrapped resamples. These analyses test simultaneous, multiple mediators for indirect effects by generating confidence intervals where significant indirect effects occur when the value "0" does not fall between the upper and lower limits of the 95% confidence

interval for the indirect effect. Refer to Table 2 for confidence intervals and Sobel test z results for each multiple mediation analysis.

Maternal Affective Quality → Self-Esteem/Shame/Social Support → Depression

Results of a multiple mediator bootstrapping analysis revealed that the model was significant ( $R^2 = .42$ ,  $F(4, 557) = 103.26$ ,  $p < .001$ ). Specifically, the relationship between maternal affective quality and depression was indirect with self-esteem (95% CI: Lower Limit:  $-.03$  to Upper Limit:  $-.01$ ), shame (95% CI: Lower Limit:  $-.02$  to Upper Limit:  $-.01$ ), and perceived social support (95% CI: Lower Limit:  $-.01$  to Upper Limit:  $-.01$ ) each serving as mediators of this relationship. See Table 2 for confidence intervals and Figure 1 for a graphic representation of the model.

Paternal Affective Quality → Self-Esteem/Shame/Social Support → Depression

Results of a multiple mediator bootstrapping analysis revealed that the model was significant ( $R^2 = .42$ ,  $F(4, 547) = 97.61$ ,  $p < .001$ ). Specifically, the relationship between paternal affective quality and depression was indirect with self-esteem (95% CI: Lower Limit:  $-.03$  to Upper Limit:  $-.02$ ), shame (95% CI: Lower Limit:  $-.02$  to Upper Limit:  $-.01$ ), and perceived social support (95% CI: Lower Limit:  $-.02$  to Upper Limit:  $-.01$ ) each serving as mediators of this relationship. See Table 2 for confidence intervals and Figure 2 for a graphic representation of the model.

Maternal Emotional Support → Self-Esteem/Shame/Social Support →

Depression

Results of a multiple mediator bootstrapping analysis revealed that the model was significant ( $R^2 = .42$ ,  $F(4, 567) = 103.77$ ,  $p < .001$ ). Specifically, the relationship between maternal emotional support and depression was indirect with self-esteem (95% CI: Lower Limit:  $-.06$  to Upper Limit:  $-.02$ ), shame (95% CI: Lower Limit:  $-.03$  to Upper Limit:  $-.01$ ), and perceived social support (95% CI: Lower Limit  $-.05$ : to Upper Limit:  $-.01$ ) each serving as mediators of this relationship. See Table 2 for confidence intervals and Figure 3 for a graphic representation of the model.

Paternal Emotional Support → Self-Esteem/Shame/Social Support →

Depression

Results of a multiple mediator bootstrapping analysis revealed that the model was significant ( $R^2 = .41$ ,  $F(4, 547) = 94.68$ ,  $p < .001$ ). Specifically, the relationship between paternal emotional support and depression was indirect with self-esteem (95% CI: Lower Limit:  $-.05$  to Upper Limit:  $-.01$ ), shame (95% CI: Lower Limit:  $-.02$  to Upper Limit:  $-.01$ ), and perceived social support (95% CI: Lower Limit:  $-.05$  to Upper Limit:  $-.01$ ) each serving as mediators of this relationship. See Table 2 for confidence intervals and Figure 4 for a graphic representation of the model.

Maternal Fostering of Autonomy → Self-Esteem/Shame/Social Support →

Depression

Results of a multiple mediator bootstrapping analysis revealed that the model was significant ( $R^2 = .42$ ,  $F(4, 567) = 103.10$ ,  $p < .001$ ). Specifically, the relationship between maternal fostering of autonomy and depression was indirect with self-esteem (95% CI: Lower Limit:  $-.06$  to Upper Limit:  $-.02$ ), shame (95% CI: Lower Limit:  $-.04$  to Upper Limit:  $-.02$ ), and perceived social support (95% CI: Lower Limit:  $-.03$  to Upper Limit:  $-.01$ ) each serving as mediators of this relationship. See Table 2 for confidence intervals and Figure 5 for a graphic representation of the model.

Paternal Fostering of Autonomy → Self-Esteem/Shame/Social Support →

Depression

Results of a multiple mediator bootstrapping analysis revealed that the model was significant ( $R^2 = .41$ ,  $F(4, 547) = 96.63$ ,  $p < .001$ ). Specifically, the relationship between paternal fostering of autonomy and depression was indirect with self-esteem (95% CI: Lower Limit:  $-.06$  to Upper Limit:  $-.02$ ), shame (95% CI: Lower Limit:  $-.04$  to Upper Limit:  $-.01$ ), and perceived social support (95% CI: Lower Limit:  $-.04$  to Upper Limit:  $-.01$ ) each serving as mediators of this relationship. See Table 2 for confidence intervals and Figure 6 for a graphic representation of the model.

## CHAPTER FIVE

### DISCUSSION

Overall, the results of the study provided support for the hypothesis that the relationship between insecure parental attachment and depression is indirect with shame, social support, and self-esteem each serving as mediators of this relationship. Specifically, lower maternal and paternal affective quality (e.g., “is someone I can count on to listen to me”, “understands my problems and concerns”, “has an idea what I am feeling or thinking”) was associated with lower self-esteem, lower perceived social support, and higher shame proneness. Specifically, parenting that is attuned with their child’s emotions, problems/concerns, and feelings are important for good developmental outcomes. Results suggest that poor parental affective quality may lead to the development of negative views of self, the perception of the unavailability of significant others for support, and feelings shame regarding the self which may render individuals vulnerable to the development of depressive symptoms. Likewise, lower maternal and paternal emotional support (“gives me advice when I ask for it”, “gives me attention when I want it”, and “protects me from danger and difficulty”) was related to lower self-esteem, lower perceived social support, and higher shame proneness. Specifically, parenting that is supportive, affirmative, open to give advice, attention, and protection is protective against the

development of a negative self-image, shame, and poor coping skills in dealing with stress that may render one vulnerable to depression. Along these same lines, lower maternal and paternal fostering of autonomy (e.g., “respects my privacy”, “likes me to make my own decisions”, and “takes me seriously”) predicted lower self-esteem, perceived social support, and higher shame. Specifically, parenting that is respectful of privacy, supportive of their child making decisions, and generally supportive are important. Results suggest that parental overprotection and restriction of autonomy leads to negative self-esteem, shame proneness and lower reliance on others for support, all of which may serve as a vulnerability for depression. Overall, the results of the current study revealed that the possible mechanism through which insecure attachment is related to depression is through the development of a sense of powerlessness, inferiority, high self-consciousness, low evaluations of the self, and perceptions of not being able to rely on significant others for help during stressful situations. Moreover, results suggest that shame, social support, and self-esteem each play an independent role in this process and each may constitute vulnerability factors for depression.

The findings of the current study are consistent with previous research regarding the indirect relationships of parental attachment and depression. Similar results were found in a study assessing personality factors such as low self-esteem, introversion, distress, and emotional instability were found to mediate the relationship between parental bonding (low care and overprotection)

and depression (Avagianou & Zafiropoulou, 2008). Likewise, in line with current findings, the cognitive schemas of defectiveness/shame, self-sacrifice, and insufficient self-control were found to mediate the relationship between poor parental bonding and depression (Shah & Waller, 2000). The findings of the current study are supportive of the previous research assessing the relationship between attachment security and depression in cancer patients, where perceived social support mediated the relationship between anxious attachment and symptoms of depression (Rodin et al., 2007). Moreover, the results of the study are supportive of the previous theory on internal working models, specifically that problematic negative parental attachment can lead to cognitive vulnerabilities such as negative self-beliefs and depression (Gamble & Roberts, 2005). The results are also consistent with the findings suggesting that social support decreases the likelihood of depressive symptoms and that the relationship may be due to parental support (Stice et al., 2004). The current study is also consistent with previous findings suggesting that internal working models/negative cognitive styles are related to negative attachment styles as well as later development of depression and low self-esteem (Lease, 2002).

Furthermore, the current study revealed that both maternal and paternal attachments were predictive of depression; previous research has been inconclusive in regards to the role of paternal attachment (Lutwak & Ferrari, 1997). Likewise, the results of the current study show that contrary to previous studies suggesting that maternal versus paternal care/attachment was a stronger

predictor of depression (Grotmol et al., 2010) that both maternal and paternal attachment were related to depression and had similar developmental trajectories (e.g., leading to lower self-esteem, perceived social support and higher shame proneness). In addition, all attachment types (affective quality, emotional support, and fostering of autonomy) were found to be important types of attachments in the model. Thus suggesting that parental attachment in general is important in the relationship with depression through shame, social support, and self-esteem. The results of the may study may be due to internal working models of lack of confidence, pride, acceptance of self, and lack of comfort in reliance on others which are consequences of insecure attachment and should be targets of treatment for depression.

### Study Limitations

The limitations of the study include the exclusive reliance on retrospective report of distal information related to attachment with parental figures. Thus participant responses could be inaccurate due to memory errors in the recall of parental attachments growing up. Additionally, the study was cross-sectional versus prospective and thus retrospective recollections of distal parental attachment could be influenced by mood/perspective at the time of completing the surveys. Most of the participants were college students and a concern is that the sample may not be representative of the community or clinical populations.

This is especially a concern in assessing if the model would be representative of more extreme cases of clinical depression.

### Future Research

Future research should explore other developmental outcomes related to parental attachment and depression. Specifically, coping strategies, resilience, cognitive, and interpersonal schemas employed by participants could be additional mediators of the attachment – depression relationship. In addition a longitudinal or prospective study would help understand the course of the relationship between attachment, self-esteem, social support, shame proneness and depression. This type of longitudinal or prospective design would also help overcome potential mood confounds that can be found in cross-sectional designs (e.g., the effect of current mood on the recall of past events) and could give a more accurate understanding of the parental attachment – depression relationship. In addition future research should also focus on protective factors (e.g., resilience, problem solving, and coping) that may either stem from secure attachments or buffer the effects of insecure attachment on the development of depression. Research on resilience could also lead to the development of effective intervention programs that prevent the deleterious consequences of insecure attachment.

## Clinical Implications

Results of the current study have important implications in terms of prevention and treatment of depression. Given the negative side-effects of depression across important social/educational and occupational functioning, it is important for clinicians to develop effective prevention and intervention programs. Results would suggest that prevention programs should begin with effective parenting programs where parents learn how to provide a supportive, caring, affirming, and nurturing relationship with their children. Researchers suggest that secure attachment is related to high affection, respect, and closeness (Carranza et al., 2009). Thus helping parents develop supportive and nurturing skill would in turn help them develop secure attachments with their children. Specifically, positive parenting programs could reduce risk factors (low self-esteem, low perceived social support, and high shame proneness) for depression, change the developmental trajectory for depression by enhancing positive self-esteem, use of social support, and more self-acceptance versus shame. These prevention programs should focus on educating parents on healthy parenting to help parents form secure attachments with their children. In particular parenting education should focus on increasing maternal and paternal affective quality (e.g., listening to their children, being understanding, aware of concerns, and sensitive to their child's emotions), emotional support (open to giving advice rather than making decisions, give attention, and protection from danger/difficulty), and fostering of

autonomy (e.g., respect privacy, allows child to make their own decisions, and takes the child seriously). Education that promotes emotional support, fostering of autonomy, and affective quality of attachment fosters empowerment, equality, higher self-confidence, positive self-image, and use of social support for help during stressful situations.

Such parenting education efforts could prevent negative outcomes among their children in later life such as shame, low self-esteem, perceived lack of social support, and depression. Moreover, parenting promoting these areas of attachment would prevent a sense of powerlessness, inferiority, negative self-consciousness, evaluations of the self, and perceptions of not being able to ask others for help during stressful situations. Specifically, parenting education can serve as effective prevention program for the negative outcomes associated with insecure attachment.

Results of the current study also have important treatment implications. Treatment should include a focus on interventions that target identified mechanisms that render individuals vulnerable to depression. Interventions should be designed to enhance mechanisms such as self-esteem, the use of social support, and the acceptance of imperfections versus shame. Because the results of this study suggest that insecure parental attachment is indirectly related to depression this indicates that the consequences of insecure attachments (e.g., internal working models/cognitive schemas such as shame, low self-concept/self-esteem, and low perceived social support) are critical points

for intervention. Specifically, interventions should focus on changing or modifying internal working models/cognitive schemas in order to alleviate depression among individuals that are insecurely attached. For instance, clinicians should be aware of client's reluctance/inability to identify and seek social support during stress. This is important to note, as clients may be reluctant to seek help from the clinicians and other important social resources. Therefore, the present study can give clinicians a better understanding of the importance of seeing the client beyond their presented disorder. There is a need for clinicians to seek a deeper understanding of the client's relational background and internal mechanisms. This study shows that the internal mechanisms (shame, self-esteem, and perceived social support) provide the basis for understanding the way clients relate to others and interpret the world. However, future research should further explore additional mechanisms through which parental attachment and depression are related in order to provide a more comprehensive model of the client's internal working model.

APPENDIX A  
INSTITUTIONAL REVIEW BOARD APPROVAL



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College of Social and Behavioral Sciences  
*Department of Psychology*

## Childhood Experiences and Psychological Outcomes Informed Consent

The study in which you are about to participate in is designed to investigate childhood experiences and psychological outcomes. This study is being conducted by Evelyn E. Ayala, Ashlee L. Barker, and Laura M. Garcia under the supervision of Dr. David Chavez, Professor of Psychology, California State University, San Bernardino. This study has been approved by the Department of Psychology Institutional Review Board Sub-Committee of California State University, San Bernardino, and a copy of the official Psychology IRB stamp of approval should appear on this consent form. The University requires that you give your consent before participating in this study.

During this study you will be asked to complete a series of questionnaires designed to assess childhood experiences, including relationships and trauma, and psychological outcomes in adulthood. The survey should take 30-40 minutes to complete. All of the questionnaires can be completed online. If you are a CSUSB student, at your instructor's discretion, you may receive two units of extra credit.

All your responses will be kept anonymous. No identifying information will be kept with your responses. Although you will be asked to provide your SONA ID to receive credit, this information will be kept separate from your survey responses. Completed surveys will be stored in a locked lab at CSUSB that only the researchers will be able to access. Presentation of the results will be reported in group format only. The results from this study will be included in Evelyn Ayala's

undergraduate honor's thesis and might be presented at a conference or submitted for publication to a scientific journal. Data will be destroyed 5 years after publication. If you are interested in the results of this study you may contact Dr. David Chavez after the study has been completed April 1, 2013.

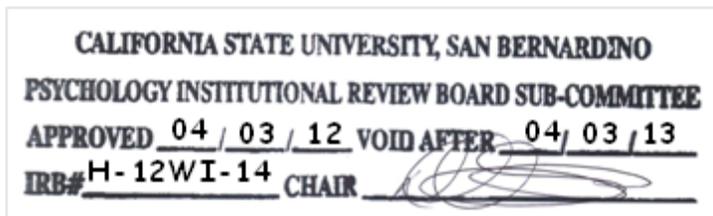
There are no direct benefits to you for participating in this research and this study involves no risks beyond those routinely encountered in daily life. Recollections of childhood experiences, however, may lead to feelings of discomfort for some individuals. If you would like to discuss any distress you have experienced, do not hesitate to contact the CSUSB Counseling Center (537-5040). Participation in this study is completely voluntary. You may withdraw from this study at any time without losing the extra credit points to which you are entitled.

If you have any questions concerning this study or your participation in this research, please feel free to contact Dr. David Chavez at [dchavez@csusb.edu](mailto:dchavez@csusb.edu) or 909 537-5572. You may also contact the CSUSB Department of Psychology Institutional Review Board Sub-Committee ([psyc.irb@csusb.edu](mailto:psyc.irb@csusb.edu)) if you have any questions or concerns about this study.

I acknowledge that I have been informed of, and understand the nature and purpose of the study, and I freely consent to participate. I acknowledge that I am at least 18 years of age.

Participant's X: \_\_\_\_\_

Date: \_\_\_\_\_



APPENDIX B

TABLE 1

Table 1. Descriptive and correlation analysis for parental attachment, shame, social support, self-esteem, and depression

Variable	Mean(SD)	Scale Alpha	Correlations												
			1	2	3	4	5	6	7	8	9	10			
1. Maternal Affective Quality of Relationship	103.67(22.34)	.94	1												
2. Maternal Facilitator of Independence	50.92(11.42)	.86	.80**	1											
3. Maternal Source of Support	43.42(10.49)	.87	.68**	.55**	1										
4. Paternal Affective Quality of Relationship	97.18(23.27)	.93	.31**	.26	.37**	1									
5. Paternal Facilitator of Independence	51.30(10.47)	.83	.27**	.33**	.27**	.79**	1								
6. Paternal Source of Support	40.02(11.00)	.74	.32**	.26**	.66**	.64**	.49**	1							
7. Shame	49.94(15.54)	.95	-.30**	-.29**	-.21**	-.32**	-.30**	-.17**	1						
8. Perceived Social Support	155.29(20.37)	.90	.38**	.33**	.42**	.37**	.32**	.35**	-.40**	1					
9. Self-Esteem	37.75(6.90)	.86	.37**	.33**	.30**	.36**	.32**	.20**	-.57**	.56**	1				
10. Depression	10.52(4.70)	.85	-.28	-.25**	-.19**	-.32**	-.30**	-.14**	.48**	-.47**	.36**	1			

\*\*Note: All correlations are significant at  $p < .01$

APPENDIX C

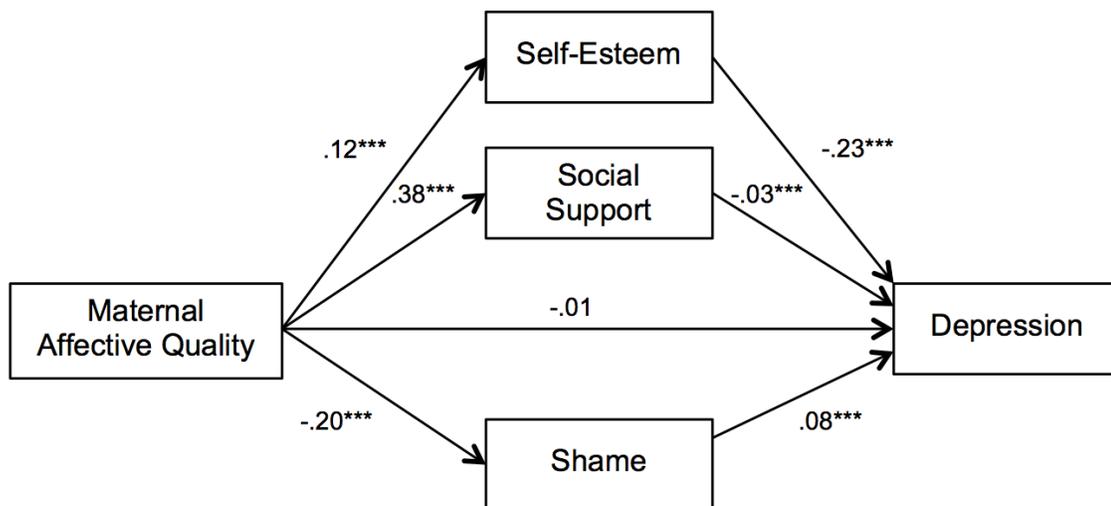
TABLE 2

Table 2. Multiple mediator bootstrapping analyses between parental attachment type and depression

Predictor Variables	Intervening Variables	Lower 95% CI	Upper 95% CI	Indirect Effect Coefficient	Sobel test z	p value
Maternal Affective Quality	Shame	-.02	-.01	-.03	-4.81	p < .001
	Social Support	-.01	-.01	-.01	-4.05	p < .001
	Self-Esteem	-.03	-.01	-.02	-5.95	p < .001
	Total			-.05		
Paternal Affective Quality	Shame	-.02	-.01	-.02	-4.88	p < .001
	Social Support	-.02	-.01	-.01	-3.49	p < .001
	Self-Esteem	-.03	-.02	-.01	-5.65	p < .001
	Total			-.04		
Maternal Emotional Support	Shame	-.03	-.01	-.03	-4.07	p < .001
	Social Support	-.05	-.01	-.03	-4.44	p < .001
	Self-Esteem	-.06	-.02	-.04	-5.49	p < .001
	Total			-.12		
Paternal Emotional Support	Shame	-.02	-.01	-.02	-3.30	p < .001
	Social Support	-.05	-.01	-.03	-3.89	p < .001
	Self-Esteem	-.05	-.01	-.02	-4.19	p < .001
	Total			-.07		
Maternal Fostering of Autonomy	Shame	-.04	-.02	-.03	-4.58	p < .001
	Social Support	-.03	-.01	-.02	-3.93	p < .001
	Self-Esteem	-.06	-.02	-.05	-5.60	p < .001
	Total			-.10		
Paternal Fostering of Autonomy	Shame	-.04	-.01	-.03	-4.71	p < .001
	Social Support	-.04	-.01	-.01	-3.51	p < .001
	Self-Esteem	-.06	-.02	-.04	-5.44	p < .001

APPENDIX D

FIGURE 1

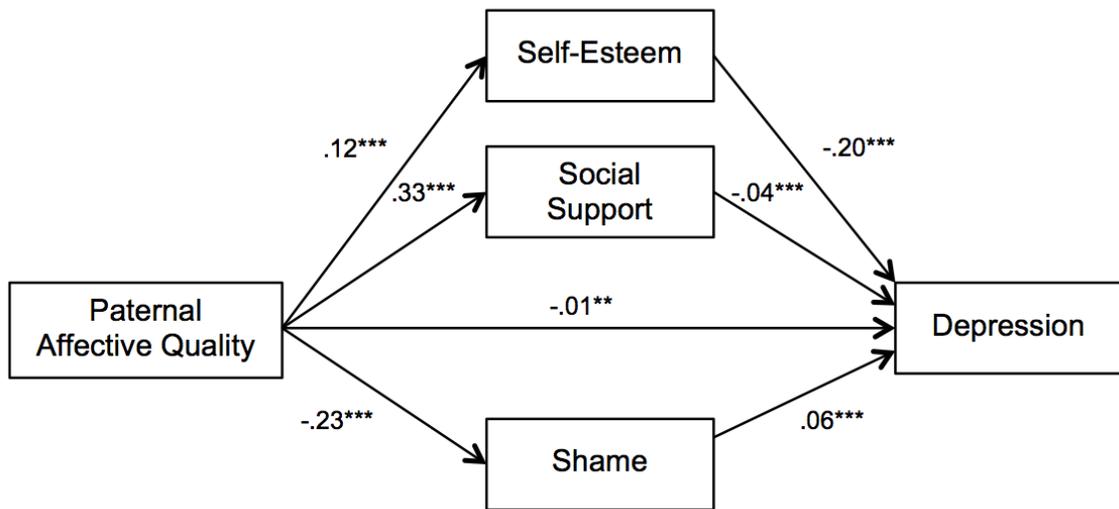


*Note.* Path coefficients are unstandardized betas.  
 \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Figure 1. Mediating effects of self-esteem, social support, and shame on the relationship between maternal affective quality and depression

APPENDIX E

FIGURE 2



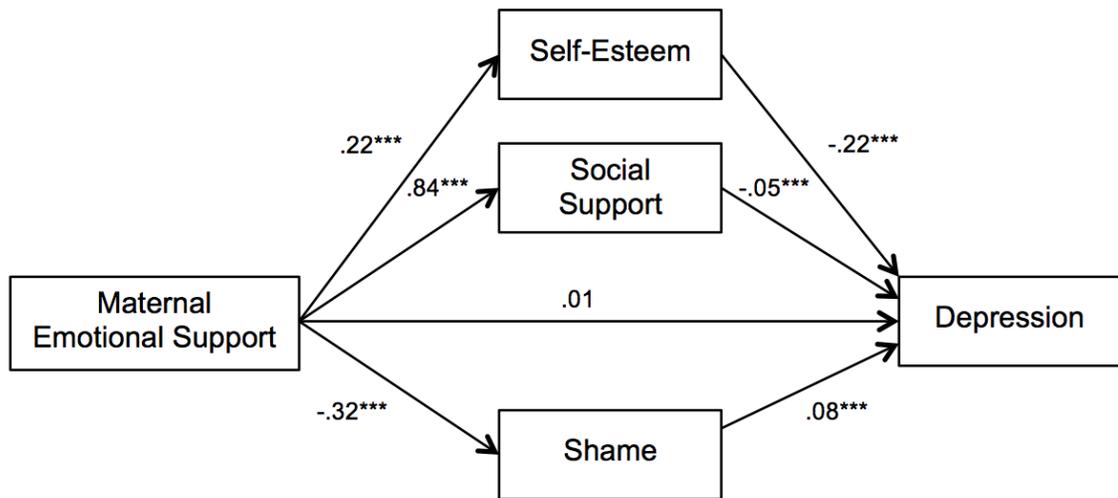
*Note.* Path coefficients are unstandardized betas.

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

Figure 2. Mediating effects of self-esteem, social support, and shame on the relationship between paternal affective quality and depression

APPENDIX F

FIGURE 3

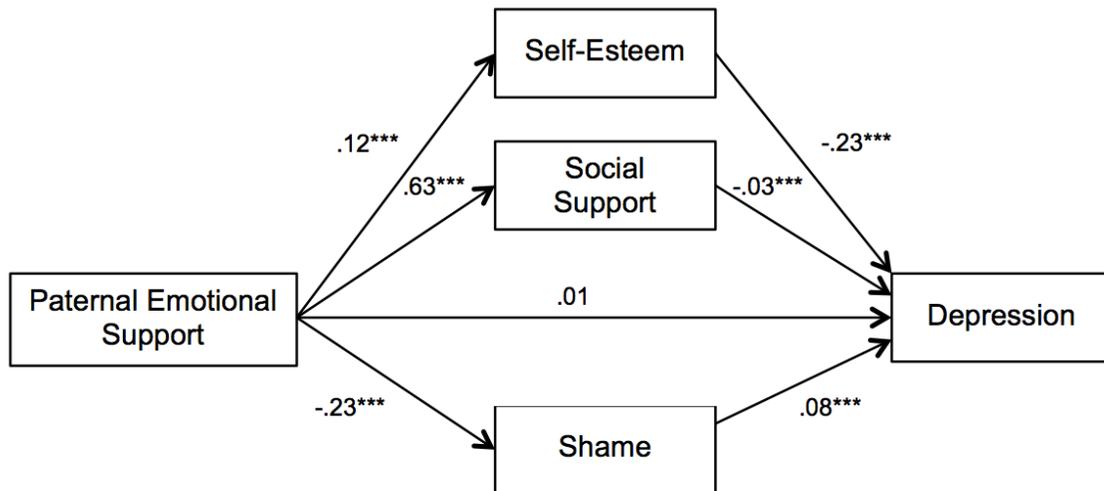


*Note.* Path coefficients are unstandardized betas.  
 \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Figure 3. Mediating effects of self-esteem, social support, and shame on the relationship between maternal emotional support and depression

APPENDIX G

FIGURE 4

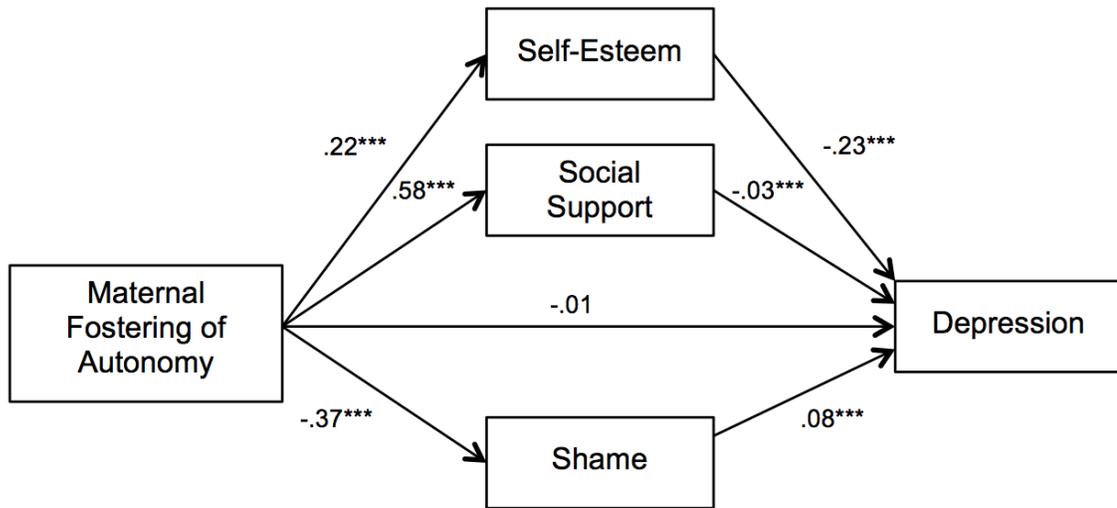


*Note.* Path coefficients are unstandardized betas.  
 \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Figure 4. Mediating effects esteem, social of self- support, and shame on the relationship between paternal emotional support and depression

APPENDIX H

FIGURE 5

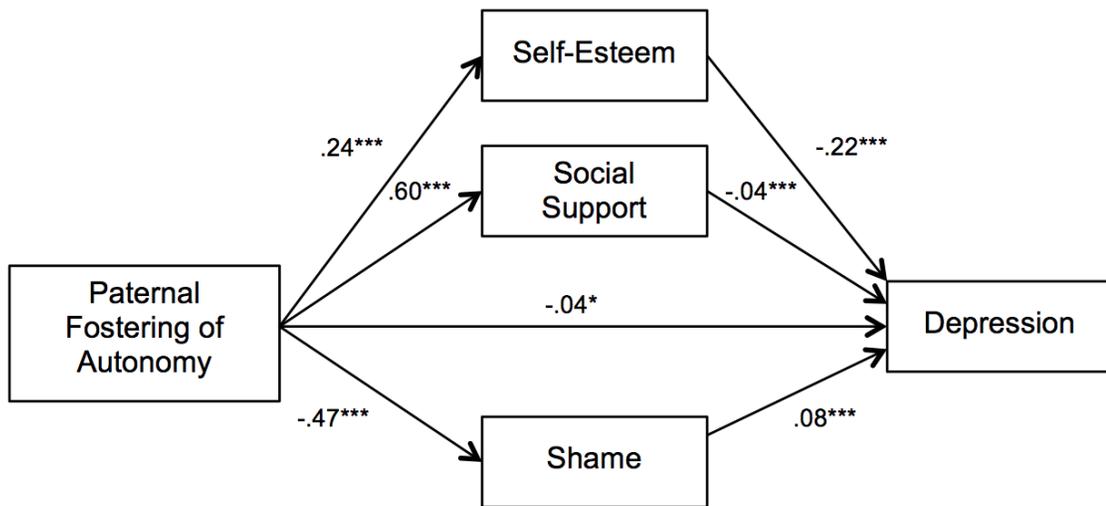


*Note.* Path coefficients are unstandardized betas.  
 \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Figure 5. Mediating effects of self-esteem, social support, and shame on the relationship between maternal fostering of autonomy and depression

APPENDIX I

FIGURE 6



*Note.* Path coefficients are unstandardized betas.  
 $^*p < .05$ ;  $^{**}p < .01$ ;  $^{***}p < .001$

Figure 6. Mediating effects of self-esteem, social support, and shame on the relationship between paternal fostering of autonomy and depression

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